The Effect of Company Size, Profitability, and Leverage on Profit Management (Empirical Study of Manufacturing Companies in the Food and Beverage Subsector Listed on the Indonesia Stock Exchange 2020-2024)

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Abstract. This research aimed to examine the influence of company size, profitability, and leverage on profit management in manufacturing companies in the food and beverage subsector listed on the Indonesia Stock Exchange (IDX) during the 2020-2024 period. The research used a quantitative approach with a descriptive type of research. The research population was 95 companies, with a sample of 39 companies selected using the purposive sampling method. The dependent variable was profit management which was measured using the De Angelo (Non-Discretionary Accruals/NDA) model. Meanwhile, independent variables included company size (SIZE) measured using the natural logarithm of total assets, profitability using Return on Assets (ROA), and leverage using Debt to Asset Ratio (DAR). The data analysis technique used multiple linear regression and classical assumption tests. The results showed that company size, profitability, and leverage partially had no significant effect on profit management. It showed that these three variables were not the dominant factors influencing profit management practices in the food and beverage subsector during the research period.

Keywords: Company Size, Profitability, Leverage, Earnings Management, De Angelo Model.

1 INTRODUCTION

Over time, economic and business development has accelerated. Fierce competition in the business world drives companies to compete effectively, leveraging strengths in their respective sectors. Manufacturing companies process raw materials into semi-finished or finished products using machinery, human labor, and technology. With population growth, changing lifestyles, and increasing health awareness, this industry continues to evolve, with product innovation, production efficiency, and the implementation of appropriate quality and food safety standards.

Frequent phenomena related to economic growth are caused by external and internal factors within each entity, both directly and indirectly. One internal factor is earnings management, a concept employed by companies to manage financial reports to enhance the appearance of quality (Bestavino, 2013). For example, the earnings management case at PT. Garuda Food Putra Putri Tbk (GOOD) in 2020 experienced fluctuations of 0.46%. Garuda Food experienced a significant decline in net profit due to the impact of the pandemic, yet the company reported a relatively small profit decline compared to similar entities in the industry. The phenomenon of earnings management in Indonesia is attracting increasing attention, particularly in the context of food and beverage companies. The impact of the COVID-19 pandemic has placed significant pressure on these companies, forcing many to adjust their accounting policies to maintain financial stability amidst economic uncertainty (Firda & Amrullah, 2021).

Earnings management is generally defined as efforts by company managers to intervene in or influence information contained in financial reports with the aim of deceiving stakeholders who want to know the company's performance and condition (Sulistyanto, 2014:6). Earnings information is often the target of manipulation by management to maximize personal interests, potentially harming investors. As one way for companies to increase share prices and reduce corporate risk, companies often engage in earnings management (Panjaitan & Muslih, 2019).

Statement of Financial Accounting Concept (SFAC) No. 1 states that profit is used as a benchmark for assessing and holding management accountable for performance. Profit information is used to estimate a company's ability to generate future profits and evaluate its performance efficiency (earning power), which is acceptable to both owners and external parties. Earnings management practices result from information manipulation, delayed disclosure, and information concealment aimed at shaping certain perceptions of a company's financial performance (Medyawati, 2016). Earnings management variables are likely related to several variables, including company size, profitability, and leverage. Larger companies tend to have more resources and greater incentives to manage their financial performance to remain attractive to investors (Emt & Marisha, 2023). Companies with high profitability may feel more motivated to manage earnings to maintain a

positive financial image, especially when there is pressure to meet market expectations (Putra & Hasibuan, 2022). Leverage influences profit management practices, where companies with high levels of leverage tend to carry out profit management as an effort to maintain creditor trust, due to the risk of being unable to fulfill debt obligations.

The reason researchers chose these three variables is because company size is often associated with a company's ability to strategically manage and present financial information. Large companies have greater access to resources and public pressure, which encourages earnings management practices. Meanwhile, profitability reflects a company's ability to generate profits. Companies with high or low profitability levels may be encouraged to engage in earnings management to maintain a positive performance image. Leverage, meanwhile, indicates the extent to which a company finances its assets with debt. Companies with high leverage are more susceptible to earnings management to meet financial obligations and maintain creditor confidence. Therefore, there is still room to investigate how these three factors interact and influence earnings management practices in a more contemporary context and within this specific industry.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Agency Theory

Earnings management occurs due to conflicting interests. Jensen & Meckling (1976) stated that a company is viewed as a collection of contacts (nexus of contracts) involving relationships between agents (managers) and principals (owners of economic resources). This relationship relates to the control and utilization of resources based on agency theory. Agency theory assumes that conflict between principals and agents arises because each individual is motivated by self-interest. Agency theory is a development of a theory that studies contract design in which agents work or act on behalf of the principal. When their desires or goals conflict, conflict arises (Scott, 2009). Scott explains that companies engage in various forms of contracts, such as loan contracts between creditors and the company, and employment contracts between managers and the company.

2.2 Profit Management

To manage a company's unstable profits due to fluctuating sales, preventing it from achieving its profit targets, companies manipulate profits to achieve these goals. This action, undertaken solely to maximize company profits and without any positive impact on other parties, is called earnings management. Scott states that earnings management is a strategic choice in establishing accounting policies to achieve specific objectives set by the company. This practice is carried out through the application of accounting policies, changes in recording methods, and the use of accrual-based transactions to influence the presented earnings information. The purpose of these actions is to mislead stakeholders regarding the company's true economic performance or to influence contractual outcomes based on reported accounting figures. In this study, the researchers used the De Angelo Model to measure earnings management in companies because it can project earnings management better than other models.

2.3 Company Size

Company size refers to the scale or magnitude of a business entity, which can be identified through various indicators, such as total assets or profits generated. In other words, a company's size can be assessed by the number of assets owned or the level of profit earned. The larger the company, the greater its tendency to use external funding sources. This is due to the high need for funds in large companies, one alternative for which is external financing, such as debt (Suryani, 2018). The size of a company, measured by total assets, company value, or equity value, is referred to as company size, as stated by Bambang Riyanto (2013) in Rahmadani et al., 2022. Company size can be assessed using several indicators, such as total assets, market capitalization, and other indicators that reflect the company's scale. In this study, company size was measured using the natural logarithm (Ln) of total assets.

2.4 Profitability

Profitability is an element in establishing company value, reflecting the company's future prospects and an indicator of the company's ability to fulfill its obligations to stakeholders. According to Kasmir (2019:114), the profitability ratio is used to assess a company's ability to generate profits over a specific period. This ratio reflects the level of management effectiveness, as demonstrated by profits earned from sales and investment income. According to Prihadi (2020:166), profitability is the ability to generate profits. Companies generally prioritize profitability over profit, as high profits alone do not necessarily indicate effective and efficient operation. In this study, profitability was measured using the return on assets (ROA) ratio. ROA is a profitability indicator that measures the extent to which a company is able to optimize the use of all its assets to generate profits. Higher profits increase the company's attractiveness to potential investors, as it demonstrates a high rate of return. Therefore, ROA motivates management to engage in earnings management (Trisnawati et al., 2016).

2.5 Leverage

To run a business, a company requires significant funds. These funds can be obtained from several sources,

including owner capital or loans from third parties. If the owner's capital is insufficient to run the business, the company borrows from third parties. The business is then financed by debt. Debt can motivate managers to be more creative and proactive in managing the company, as they have access to greater funds to support operations and business development (Hidayat, 2018). Kasmir explains that leverage is a ratio used to assess the extent to which a company's assets are financed by debt. This ratio measures a company's ability to meet its obligations by comparing total debt to total assets. The greater the debt, the higher the risk of default, so investors will demand a higher rate of return to compensate for this risk (Trisnawati et al., 2016). Therefore, managers are more likely to engage in earnings management practices. This study uses a consistent debt-to-asset ratio, the Debt-to-Asset Ratio (DAR), because this ratio reflects how much of a company's total assets are funded by liabilities or debt. Its purpose is to illustrate the company's capital structure and capture financing decisions. In other words, DAR is the result of dividing total debt by total assets.

2.6 Hypothesis

2.6.1 Company Size

Agency theory states that the larger a company, the greater the potential for conflicts of interest between principal and agent. Large companies typically face greater pressure from investors and creditors to demonstrate strong financial performance. The operational complexity of large companies also increases the likelihood of asymmetric information. Consequently, managers of large companies tend to engage in more earnings management practices to meet stakeholder expectations. The larger the company, the greater the likelihood of gaining access to resources, as large companies generally have better profit-generating capabilities (Kusmawardhani, 2010). Therefore, the following hypothesis can be proposed:

H1: Company size influences earnings management

2.6.2 Profitability

Agency theory explains that profitability is an important indicator of a manager's success in managing a company. High profitability can encourage managers to maintain a positive corporate image in the eyes of principals. Conversely, when profitability is low, managers may be motivated to engage in earnings management to increase reported earnings and avoid sanctions or negative judgment from principals. Therefore, the following hypothesis can be proposed:

H2: Profitability has no effect on earnings management.

2.6.3 Leverage

Agency theory also explains that high leverage creates additional pressure on managers to demonstrate the company's ability to meet its debt obligations. High leverage often increases the risk of bankruptcy, thus encouraging managers to engage in earnings management to demonstrate good financial stability to creditors and investors. In this context, earnings management is one strategy used by managers to manipulate information in financial statements, with the aim of creating a positive perception among stakeholders regarding the company's condition and performance. Therefore, the following hypotheses can be proposed:

H3: Leverage has an effect on earnings management

3 RESEARCH METHODS

This study uses a quantitative approach, which aims to determine the relationship between variables using statistical methods. In this study, the independent variables (X) are: Company Size, Profitability, and Leverage. Meanwhile, the dependent variable (Y) is: Earnings Management. The subjects of this study are 95 manufacturing companies in the Food and Beverage subsector listed on the Indonesia Stock Exchange (IDX) from 2020 to 2024.

The sampling technique applied is using the Purposive Sampling method, sampling is carried out selectively based on certain considerations or criteria as follows: Food and beverage sub-sector manufacturing companies listed on the IDX during the research period, namely 2020-2024, food and beverage sub-sector manufacturing companies that report annual financial reports during the research period, namely 2020-2024, food and beverage sub-sector manufacturing companies that report audited financial reports during the research period, namely 2020-2024, food and beverage sub-sector manufacturing companies that do not experience losses during the research period, namely 2020-2024, food and beverage sub-sector manufacturing companies that report financial reports in Rupiah (IDR) currency. There are 39 company samples that fall into the predetermined criteria.

Secondary data is data that is already available and obtained indirectly from the research object. The secondary data used is the audited and published annual financial reports of food and beverage manufacturing companies listed on the Indonesia Stock Exchange (IDX). Data processing and analysis were performed using IBM Statistical Package for Social Sciences (SPSS) software. The data analysis methods used were:

1. Descriptive Statistical Analysis Test: Descriptive analysis includes calculating the mean, standard deviation, maximum, and minimum values. Descriptive statistics play an important role in providing a representative numerical picture of sample data, so that the results can be understood more contextually by the reader.
2. Multiple Regression Analysis Test: Multiple regression analysis is a technique used to examine the

relationship between two or more independent variables with one dependent variable. The purpose of this analysis is to determine the direction of the relationship between each independent variable and the dependent variable, whether it is positive or negative. In addition, this analysis is also useful for predicting the value of the dependent variable based on changes in the values of the independent variables. The model used in multiple regression aims to test the effect of company size, profitability, and leverage on earnings management in this study is: $NDA = a + \beta_1 [SIZE] + \beta_2 [ROA] + \beta_3 [DAR] + e$

3. Classical Assumption Test

- Normality Test The normality test is conducted to determine whether the data on the dependent and independent variables in the regression model have a normal distribution (Ghozali, 2006 in Ningsaptiti, 2010). The test used is the non-parametric Kolmogorov-Smirnov (K-S) statistical test. If the significance value of Kolmogorov-Smirnov > 0.05 then the data is normally distributed, which is assisted by SPSS.
- Multicollinearity Test: Multicollinearity can be detected by examining the tolerance value and the Variance Inflation Factor (VIF) value. A regression free from multicollinearity is one in which the VIF value is less than 10 and the tolerance value is above 0.10, indicating no signs of multicollinearity (Randika, 2012).
- Heteroscedasticity Test. A regression model is said to be good if it does not contain symptoms of heteroscedasticity (Ghozali, 2013 in Yatulhusnah, 2015). In this study, heteroscedasticity testing was conducted using the Glejser method. If the variable's significance value is greater than the 5% significance level, it can be concluded that the regression model is free from indications of heteroscedasticity.
- Autocorrelation Test: Detecting autocorrelation in panel data can be done using the Durbin-Watson test. The Durbin-Watson test value is compared with the Durbin-Watson table value to determine the presence of a positive or negative correlation. The decision regarding the presence of autocorrelation is as follows: If d < dl, there is positive autocorrelation. If d > (4-dl), there is negative autocorrelation. If du < d < (4-dl), there is no autocorrelation. If dl < d < du or (4-dl), there is no conclusion.

0. Hypothesis Testing

- Statistical Test t Ha is rejected, namely if the significant value t > 0.05 or if the significant value is more than 0.05, meaning that the independent variable individually has no effect on the dependent variable and Ha is accepted, namely if the significant value t < 0.05 or if the significant value is less than or equal to 0.05, meaning that the independent variable individually has an effect on the dependent variable.
- Determination Coefficient Test (R^2 Test) To find out the proportion of influence between the independent variables and the dependent variables included in the research model, the Adjudted R Square (Adj R2) value must be used because there is more than one independent variable and if there is only one independent variable, then use R Square (R2) to explain the influence of the independent variable (Ghazali, 2016 in Fauziah, 2019).

4 RESULTS AND DISCUSSION

4.1 Normality Test

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		187
Normal Parameters[a]	Mean	,0000000
	Std. Deviation	,06048273
Most Extreme Differences	Absolute	,060
	Positive	,051
	Negative	-,060
Kolmogorov-Smirnov Z		,816
Asymp. Sig. (2-tailed)		,518
a. Test distribution is Normal.		

Source: Processed data, 2025

The Asymp.Sig value from the data processing results is 0.518, which is > 0.05, so the research data can be concluded to be normally distributed.

4.2 Multicollinearity Test

Table 2. Multicollinearity Test Results

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Ukuran Perusahaan	.843	1.000
	Profitabilitas	.843	1.187
	Leverage	.842	1.187
a. Dependent Variable: Manajemen Laba			

Source: Processed data, 2025

The test results show that the VIF value for the Firm Size variable is 1.000, Profitability is 1.187, and Leverage is 1.187. Meanwhile, the tolerance value for the Firm Size variable is 0.843, Profitability is 0.843, and Leverage is 0.842. Thus, all variables in the regression model do not exhibit multicollinearity, as each has a tolerance value > 0.10 and a VIF < 10.

4.3 Heteroscedasticity Test

Table 3. Heteroscedasticity Test Results

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,032	,015		2,176	,031
	Ukuran Perusahaan	,001	,001	,106	1,445	,150
	Profitabilitas	,038	,058	,053	,660	,510
	Leverage	-,015	,016	-,075	-,939	,349
a. Dependent Variable: ABS_RES						

Source: Processed data, 2025

Based on the table above, it can be seen that the variables Company Size, Profitability, and Leverage have significant values exceeding the 5% confidence level or 0.05. Therefore, it can be concluded that the regression model in this study is free from heteroscedasticity.

4.4 Autocorrelation Test

Table 4. Autocorrelation Test Results

Model Summary[b]					
Model	R	R Square	Adjusted R Square	d. Error of the Estimate	Durbin-Watson
1	,115[a]	,013	-,003	,06098	1,820
a. Predictors: (Constant), Leverage, Ukuran Perusahaan, Profitabilitas					
b. Dependent Variable: Manajemen Laba					

Source: Processed data, 2025

Based on the table above, the Durbin Watson value is 1.820. Meanwhile, from the DW table with a significance of 0.05, the number of data (n) is 187, and k is 3 (k is the number of independent variables), dL is 1.728 and dU is 1.793. So 4-dL = 2.272 and 4- dU = 2.207. Therefore, dU < DW < 4-dL = 1.793 < 1.820 < 2.272. From the table above, it is known that there is no autocorrelation.

4.5 Hypothesis Test (t-Test)

Table 5. T-Test Results

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,005	,023		,206	,837
	Ukuran Perusahaan	-,001	,001	-,099	-1,345	,180
	Profitabilitas	-,070	,089	-,063	-,788	,432
	Leverage	-,010	,025	-,032	-,397	,692
a. Dependent Variable: Manajemen Laba						

Source: Processed data, 2025

. The Influence of Company Size on Profit Management

Based on the table above, the Company Size variable has a significance level of 0.180 with a negative direction, meaning the t-value is greater than its significance level of 0.05. Thus, it can be concluded that H1 is rejected, meaning Company Size has a partial negative and insignificant effect on Earnings Management. This means that companies, regardless of the size of their assets, are not always encouraged to engage in Earnings Management. This could be because large companies tend to have stricter oversight, reputations to maintain, and higher public and regulatory pressure than small companies.

b. The Influence of Profitability on Profit Management

Based on the table above, the Profitability variable has a significance level of 0.432 with a negative direction, meaning the t-value is greater than the significance level of 0.05. Thus, it can be concluded that H2 is accepted, meaning Profitability has a partial, insignificant negative effect on Earnings Management. This means that companies that have high or low profits managed by the company do not directly encourage managers to engage in Earnings Management. Profitable companies may be motivated to maintain financial stability, but they do not necessarily manipulate financial statements because market expectations are not too high.

c. The Effect of Leverage on Profit Management

Based on the table above, the Leverage variable has a significance level value of 0.692 with a negative direction, meaning the significant value of t is greater than the significance level of 0.05. Thus, it can be concluded that H3 is rejected, meaning Leverage has a partial, insignificant negative effect on Earnings Management. This means that the company's debt burden (leverage) is not strong enough to encourage managers to carry out Earnings Management as an effort to fulfill financial obligations to creditors. This indicates that internal factors such as accounting policies or managerial ethics may play a greater role, and the company may already have a governance system that prevents Earnings Management, despite having a high level of debt.

4.6 Test of the Coefficient of Determination

Table 6. Results of the Determination Coefficient Test

Model Summary				
Model	R	R Square	Adjusted R Square	d. Error of the Estimate
1	,115[a]	,013	-,003	,06098
a. Predictors: (Constant), Leverage, Ukuran Perusahaan, Profitabilitas				

Source: Processed data, 2025

Based on the table above, the R-Square value is 0.013 or 1.3%. This means that the variables in this study, namely Company Size (SIZE), Profitability (ROA), and Leverage (DAR), have an influence on Earnings Management (NDA) of 1.3%, while the remaining 98.7% is influenced by other factors outside this study, such as corporate governance (GCG), tax pressure, audit quality, or managerial ownership.

5 CONCLUSION

5.1 Conclusion

Based on the test results applied multiple linear analysis through the help of SPSS, it can be concluded that Company Size does not have a significant effect on Earnings Management, with a significance value of 0.180 > 0.05. The results obtained prove that the proposed hypothesis is rejected. Profitability does not have a significant effect on Earnings Management, with a significance value of 0.432 > 0.05. The results obtained prove that the proposed hypothesis is accepted. Leverage does not have a significant effect on Earnings Management, with a significance value of 0.692 > 0.05. The results obtained prove that the proposed hypothesis is accepted.

5.2 Suggestion

The researcher proposes the following suggestions: This study only used company size, profitability, and leverage as independent variables. Future researchers can add other factors, such as corporate governance (GCG), free cash flow, company age, audit quality, institutional or managerial ownership, board of commissioners size, and audit committee size, as these other factors may have a greater influence on earnings management variables. It is recommended that future research extend the observation period and use more comprehensive and accurate methods and testing tools to obtain more valid conclusions.

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