

Managerial Ownership as a Moderator of the Effect of Profitability and Solvency on Financial Distress

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ABSTRACT: The aims of this study to analyze the effect of profitability and solvency on financial distress, with managerial ownership as a moderating variable, in food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2023 period. The research method used was quantitative with a moderated regression analysis approach. The results show that profitability has a significant negative effect on financial distress, while solvency has a significant positive effect. Managerial ownership strengthens the effect of profitability on reducing financial distress, but does not moderate the relationship between solvency and financial distress. The implications of this study emphasize the importance of corporate governance and ownership structure in strengthening financial performance and reducing the risk of financial distress.

KEYWORDS: Profitability, Solvency, Financial Distress, Managerial Ownership

I. INTRODUCTION

One of the sectors most influential in Indonesia's economic growth is the food and beverage industry. However, fierce competition, fluctuating raw material prices, and changing consumer behavior make businesses in this sector face financial challenges. Financial distress, a condition where a business faces financial problems that can lead to bankruptcy, is a common problem. The two most commonly used financial metrics to predict a financial crisis are solvency and profitability. Profitability indicates how well a company can generate profits from its assets. Companies with high profitability are better able to maintain positive cash flow, pay liabilities, and mitigate the risk of financial distress (Brigham & Houston, 2020). Conversely, declining profitability can indicate decreased operational efficiency and the possibility of financial difficulties (Ross et al., 2019).

Meanwhile, solvency indicates an organization's ability to meet its long-term obligations with its assets. A company with a high solvency ratio indicates its reliance on debt-based financing. This can increase the risk of financial distress due to high interest expenses and payment obligations (Gitman & Zutter, 2015). Previous studies have shown that solvency has a positive effect on financial distress. However, other research has found that solvency does not always have a significant effect on financial distress, depending on industry conditions and company financing policies (Ningrum & Fauziah, 2023).

The inconsistency of previous research results indicates the need to consider other factors that may influence the relationship between profitability, solvency, and financial distress. One factor that has the potential to be a determining factor is managerial ownership. Based on agency theory, management

share ownership can align the interests of managers and shareholders and encourage more efficient decision-making (Jensen & Meckling, 1976), improve company performance (Subhan, 2025), thereby increasing the efficiency of asset management and reducing the risk of financial distress (Fama & Jensen, 1983). Therefore, this study aims to analyze the effect of profitability and solvency on financial distress with managerial ownership as a moderating variable.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial distress is defined as a condition where a company is unable to meet its financial obligations on time (Outecheva, 2007). Profitability ratios such as ROA illustrate the ability to generate profits from the assets used (Brigham & Houston, 2019). Solvency or leverage indicates the extent to which a company relies on debt to finance its assets. According to signaling theory, high profitability provides a positive signal of a company's financial stability (Spence, 1973). Conversely, a high level of solvency signals increased financial risk. Agency theory (Jensen & Meckling, 1976) explains that managerial ownership can align the interests of managers and shareholders, thus making managers more cautious in financial decision-making. The research hypotheses are formulated as follows:

H₁: Profitability influences financial distress.

H₂: Solvency influences financial distress.

H₃: Managerial ownership strengthens the effect of profitability on financial distress.

H₄: Managerial ownership weakens the effect of solvency on financial distress.

III. RESEARCH METHODOLOGY

This study uses a quantitative approach with a causal-comparative design. The study population includes all food and beverage companies listed on the Indonesia Stock Exchange (IDX) for the 2019–2023 period. The sampling technique used purposive sampling, with the criteria being companies that published complete annual financial reports and had not experienced delisting during the observation period. The dependent variable is financial distress, measured using the Altman Z-score model, while the independent variables are profitability (ROA) and solvency (DER). Managerial ownership is used as a moderating variable. The analytical model used is Moderated Regression Analysis (MRA) with the following equation:

$$FD = \alpha + \beta_1PROF + \beta_2SOLV + \beta_3MO + \beta_4(PROF*MO) + \beta_5(SOLV*MO) + \varepsilon$$

IV. RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistical analysis was used to provide an overview of the characteristics of the research variables, namely profitability, solvency, managerial ownership, and financial distress in food and beverage companies listed on the IDX during the 2019–2023 period.

Table 1. Descriptive Statistics of Research Variables

Variabel	Min	Max	Mean	Std. Deviation
Profitability (ROA)	-0,07	0,28	0,085	0,067
Solvency (DAR)	0,22	0,85	0,548	0,137
Managerial Ownership (%)	0,00	0,28	0,041	0,082
Financial Distress (Z-Score)	0,89	5,64	2,847	1,062

Source: processed data, 2024

Based on Table 1, the average profitability (ROA) value of 0.085 indicates that the company is able to generate a profit of 8.5% of its total assets. The average solvency ratio (DAR) of 0.548 indicates that most companies are financed by debt, amounting to 54.8%, indicating a relatively high level of dependence on external funds. Managerial ownership remains low (average 4.1%), indicating that management's share ownership structure is not yet optimal as an internal governance mechanism. The average Z-Score of 2.847 places most companies in the gray area, meaning their financial condition is still stable but potentially under pressure in the event of an economic shock.

Classical Assumption Test Results

The Kolmogorov–Smirnov normality test showed a significance value of 0.102 (>0.05), indicating a normal distribution of the

data. The multicollinearity test showed a VIF value <10 and a tolerance value >0.1, indicating no signs of multicollinearity. Heteroscedasticity and autocorrelation tests (Durbin-Watson = 1.87) also indicated that the model met the classical assumptions. Therefore, the data were suitable for analysis using moderated regression.

Moderated Regression Analysis (MRA) Results

Table 2. Moderated Regression Test Results

Variable	Coefficient (β)	Sig.	Description
Constant	2,512	0,000	
Profitability(X ₁)	-1,842	0,003	Significant
Solvency (X ₂)	1,676	0,006	Significant
Managerial Ownership (Z)	-0,432	0,040	Significant
Profitability* Managerial Ownership (X ₁ Z)	-0,814	0,048	Significant
Solvency* Managerial Ownership (X ₂ Z)	0,556	0,052	Not Significant
R ² = 0,631	Sig. F = 0,000		

Source: processed data, 2024

Based on the results in Table 2, the R² value of 0.631 indicates that 63.1% of the variation in financial distress can be explained by the variables of profitability, solvency, managerial ownership, and the interaction between the variables. A significance value of less than 0.005 (0.000 < 0.05) indicates that the simultaneous regression model is significant.

Discussion of Research Findings

The Effect of Profitability on Financial Distress

The test results show that profitability has a significant negative effect on financial distress (β = -1.842; Sig. = 0.003). This means that the higher the level of profitability, the less likely a company is to experience financial distress. This finding supports agency theory, where managers with high profitability performance demonstrate the ability to efficiently manage assets to increase company value.

These results are consistent with research by Putra & Yanti (2023) and Hapsari & Wiratno (2020), which states that profitability is a key indicator of a company's financial stability.

The Effect of Solvency on Financial Distress

The solvency variable has a significant positive effect on financial distress (β = 1.676; Sig. = 0.006). This indicates that the higher a company's debt level, the greater the likelihood of financial distress. These results support the findings of Kristanti et al. (2019) and Dewi & Hermanto (2022) stated that

dependence on debt reduces a company's financial flexibility and increases interest expenses, which impacts the risk of default.

The Effect of Managerial Ownership on Financial Distress

Managerial ownership has a significant negative effect on financial distress ($\beta = -0.432$; Sig. = 0.040). This finding indicates that the greater the proportion of shares owned by management, the lower the likelihood of a company experiencing financial distress. This aligns with the view of Jensen & Meckling (1976) that managerial ownership can reduce agency conflicts because managers are motivated to improve performance and maintain the company's financial stability.

The Moderating Role of Managerial Ownership in the Relationship Between Profitability and Financial Distress

The interaction between profitability and managerial ownership has a significant effect on financial distress ($\beta = -0.814$; Sig. = 0.048). These results indicate that managerial ownership amplifies the negative effect of profitability on financial distress. When managers own shares, they are more cautious in making operational decisions and focus more on maintaining company profitability to avoid a decline in their share value.

This finding aligns with Prasetya & Rahayu (2022) and Yuliana & Hasanah (2023), who stated that managerial ownership can strengthen the positive relationship between financial performance and company sustainability.

The Moderating Role of Managerial Ownership in the Relationship Between Solvency and Financial Distress

The interaction between solvency and managerial ownership did not significantly influence financial distress ($\beta = 0.556$; Sig. = 0.052). This indicates that managerial ownership is unable to significantly weaken the positive effect of solvency on financial distress. One reason is that the level of managerial ownership in food and beverage companies is generally low (averaging only 4.1%), so its influence on financing decisions is not very strong. This result is consistent with Dewi & Hermanto (2022), who found that low managerial ownership is not an effective control mechanism for corporate debt policy.

V. CONCLUSIONS AND RECOMMENDATIONS

This study concludes that profitability has a negative effect on financial distress, while solvency has a positive effect. Managerial ownership has been shown to strengthen the effect of profitability on financial distress but does not moderate the effect of solvency. The theoretical implications support agency and signaling theories, while practically encouraging companies to improve financial performance and strengthen managerial ownership structures. Future research is recommended to add variables such as liquidity, firm size, or macroeconomic factors to make the financial distress prediction model more comprehensive.

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