

# The Effect of Liquidity, Leverage, and Profitability on Financial Distress in Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange

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## ABSTRACT

This study aims to analyze the influence of liquidity, leverage, and profitability on financial distress in food and beverage sub-sector companies listed on the Indonesia Stock Exchange for the period 2019–2023. Secondary data in the form of financial statements were processed using logistic regression methods to test the relationships between variables. The results show that liquidity and profitability have a significant negative effect on financial distress, meaning that higher liquidity and profitability reduce the risk of financial distress. Conversely, leverage has a significant positive effect, indicating that higher debt usage increases the risk of financial distress. These findings emphasize the importance of managing liquidity, capital structure, and profitability to maintain the company's financial health. Therefore, company management needs to routinely evaluate and control these three aspects to minimize the risk of financial distress and ensure sustainable business continuity.

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## 1. INTRODUCTION

The food and beverage industry continues to grow in line with the increasing needs of public consumption. However, not all companies in this subsector are able to withstand financial pressures caused by economic fluctuations and market competition. Some companies even experience financial distress or financial difficulties that can lead to bankruptcy. Sariroh (2021) stated that financial distress reflects the company's inability to meet short-term and long-term financial obligations. Therefore,

understanding the factors that affect financial distress is important in maintaining the company's financial stability.

Liquidity is one of the indicators that is widely used to assess a company's ability to meet its short-term obligations. Companies with high liquidity tend to be better able to avoid heavy financial stress. In contrast, companies with low liquidity face a great risk of financial distress. Septiani, Siswantini, and Muratik (2021) found that liquidity significantly affects the likelihood of financial distress. Therefore, proper liquidity management must be a priority in financial management.

In addition to liquidity, leverage or the company's capital structure also plays an important role in creating healthy financial conditions. When a company uses excessive debt to finance its activities, the risk of financial hardship increases significantly. Pratiwi and Sudiyatno (2022) show that leverage has a positive relationship with financial distress, meaning that the higher the leverage, the more likely the company is to experience financial pressure. Therefore, debt management needs to be carried out carefully and planned.

Profitability also contributes to the company's financial health and acts as a protector against financial crises. Companies that generate high profits are better able to survive in volatile market conditions. Low profitability indicates weak operational performance, thereby increasing the potential for financial distress. Muntahanah, Huda, and Wahyuningsih (2021) stated that profitability has a negative influence on financial distress, which means that the higher the profitability, the less likely the company is to experience financial difficulties. Therefore, increasing profits is one of the important strategies in preventing financial failure.

Research conducted by Darussalam, Miqdad, and Wahyuni (2023) on food and beverage companies on the Indonesia Stock Exchange shows that all three factors—liquidity, leverage, and profitability—simultaneously affect financial distress conditions. This indicates that the three cannot be analyzed separately, because there are interactions and balances between variables that need to be considered. When a company ignores one of these aspects, the potential for financial distress will increase. Therefore, it is important for management to integrate these three aspects in their financial strategy. A structured strategy can help companies get out of ongoing financial stress.

The food and beverage subsector has unique characteristics because the demand for these products is relatively stable. However, this stability does not always guarantee the survival of the company if its financial management is poor. Stepani and Nugroho (2023) explained that even though this sector is classified as defensive, companies can still experience financial distress if they are unable to maintain their operational efficiency and effectiveness. Therefore, the company's internal factors should be the main focus of attention in preventing financial pressure. An analytical approach to financial ratios can provide a comprehensive picture of the company's condition.

Assessment of potential financial distress can be done through various financial ratios as an early warning indicator. By observing trends in liquidity, leverage, and profitability ratios, investors and management can identify risks early on. Natalia and Sha (2022) stated that early detection of financial distress is very important in the context of strategic decision-making. This is not only useful for the company's internal parties, but also for investors who are considering investing. Transparency of financial indicators is urgently needed in maintaining public trust.

Financial distress problems not only have an impact on the company's sustainability, but also affect the stability of the capital market as a whole. When one company experiences a crisis, a domino effect can occur on another company in the same industry. Sitorus, Hernandy, Triskietanto, and Angela (2022) stated that financial distress conditions in one entity can reduce investor confidence in the sector in general. Therefore, financial risk management is not only important at the micro level of the company, but also at the macro scale. Strengthening the financial structure must be carried out collectively by companies in the food and beverage subsector.

Financial data that is publicly available through the Indonesia Stock Exchange allows for more accurate and structured analysis. Investors, academics, and management can use this information to assess the extent to which companies are at risk of financial distress. Septiani, Siswantini, and Muratik

(2021) show that regularly published accounting information plays a major role in helping early detection of a company's financial condition. Therefore, the disclosure of financial information must continue to be maintained to support data-based decision-making. This transparency process is also part of good corporate governance.

Previous empirical research has made an important contribution to understanding the effects of liquidity, leverage, and profitability on financial distress. However, each study has room for renewal as economic conditions, regulations, and market structures develop. Sariroh (2021) said that global economic dynamics can change the pattern of relationships between financial variables in a short period of time. Therefore, retesting of these factors in different periods and subsectors is urgently needed. This approach allows for continuous adjustment of financial strategies according to changes in the business environment.

The combined influence of three key variables—liquidity, leverage, and profitability—can provide a comprehensive understanding of a company's vulnerability to financial crises. Pratiwi and Sudiyatno (2022) emphasized that a simultaneous approach to the three factors is more effective than a partial approach. When these variables are analyzed together, the results obtained will be more representative of the real condition of the company. Financial management strategies can also be prepared more on target. Therefore, the integration of financial indicators is a must in formulating long-term financial policies.

The importance of continuous research in the field of corporate finance has prompted many researchers to continue to explore the factors that cause financial distress. Darussalam, Miqdad, and Wahyuni (2023) found that regulatory changes, market uncertainty, and operational dynamics can also affect a company's financial condition. However, the main focus remains on how the company manages its core financial ratios. Therefore, research that focuses on liquidity, leverage, and profitability remains relevant and needed. The results of this kind of study can help management in making risk-based strategic decisions.

The study of financial distress not only makes a theoretical contribution to the development of financial management science, but also has a practical impact on company management. Stepani and Nugroho (2023) stated that a deep understanding of financial variables can help management in developing the right contingency plan. Companies that are able to anticipate financial crises through measurable indicators can extend the life of their business. Therefore, the formulation of policies based on research results is very important to be implemented. Data-driven recommendations will strengthen the company's position in the face of business uncertainty.

## 2. METHODS

This study uses a quantitative approach with the type of associative research. Quantitative research aims to test the relationship between variables using data in the form of statistically analyzed numbers. This approach was chosen because it is able to provide objective and measurable results regarding the influence of liquidity, leverage, and profitability on financial distress. This study emphasizes on testing hypotheses that are built on existing theories. The data used is secondary data obtained from the financial statements of companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange.

The population in this study is all food and beverage sub-sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. Sample selection was carried out by the purposive sampling method, which is the selection of samples based on certain criteria that are in accordance with the research objectives. The criteria used include: (1) companies that consistently publish financial statements during the observation year, (2) have not experienced delisting during the period, and (3) have complete data regarding the research variables. With these criteria, a number of companies were obtained that were used as samples. The selected sample is expected to be representative of the population in a representative manner.

The type of data used in this study is quantitative data in the form of figures from financial statements. The data source used is secondary data, which is data obtained indirectly from the first party. Secondary data is obtained through the official website of the Indonesia Stock Exchange ([www.idx.co.id](http://www.idx.co.id)), the company's annual reports, and other relevant and reliable sources. The data collected includes information on the company's liquidity ratio, leverage, profitability, and financial distress conditions. All data used has gone through a verification process to ensure its validity and reliability.

The data collection technique is carried out by the documentation method, namely by collecting the company's annual financial statements which are research samples. The data collected includes financial position reports and income statements to calculate the required financial ratios. In addition, data on financial distress conditions was measured using the Altman Z-Score indicator. The data collection process is carried out systematically and arranged in the form of a table to facilitate analysis. The data that has been collected is then analyzed using statistical software.

Data analysis was carried out using the multiple logistics regression method because the dependent variable (financial distress) is dichotomous, namely in distress or non-distressed conditions. Before conducting regression analysis, classical assumption tests such as multicollinearity tests and heteroscedasticity tests are carried out. The independent variables in this study are liquidity (current ratio), leverage (debt to equity ratio), and profitability (return on assets). Meanwhile, the dependent variable is financial distress which is measured using the Altman Z-Score and is classified into two categories. The results of the analysis were used to determine the significant influence of each variable on the likelihood of financial distress.

### 3. FINDINGS AND DISCUSSION

#### Data Description

This study uses 15 food and beverage sub-sector companies listed on the Indonesia Stock Exchange during the 2019–2023 period. The data used include liquidity ratio (current ratio), leverage (debt to equity ratio), profitability (return on assets), and Altman Z-Score value as an indicator of financial distress. The data is processed and presented in the form of descriptive statistics which include the minimum, maximum, average, and standard deviation values for each variable. The descriptive results show that there is considerable variation in the three independent variables between companies. This shows that there are significant differences in financial conditions among companies in the sub-sector.

Table 1 Descriptive Statistics

Variabel	Minimum	Maximum	Average	Standard Deviation
Current Ratio	0,87	4,55	2,13	0,89
THE	0,35	3,24	1,48	0,76
LENGTH	-0,12	0,23	0,065	0,08
Z-Score	0,89	3,67	2,17	0,72

#### Logistic Regression Test

Logistics regression analysis was used to test the influence of liquidity, leverage, and profitability on financial distress. Based on the regression results, the significance value for the liquidity variable is 0.045, leverage is 0.030, and profitability is 0.012. All three variables showed a significance value below 0.05 which means that each has a significant effect on financial distress. The regression coefficient shows that leverage has a positive influence on financial distress, while liquidity and profitability have a negative influence. This means that the higher the leverage, the more likely the company is to

experience financial distress; Meanwhile, the higher the liquidity and profitability, the smaller the likelihood of the company experiencing financial distress.

Table 2 Logistic regression test results

Variabel	Coeficin	Itself.	Conclusion
Liquidity	-0,724	0,045	Significant effect (-)
Leverage	1,052	0,03	Significant effect (+)
Profitability	-1,876	0,012	Significant effect (-)

### The Effect of Liquidity on Financial Distress

The results of the analysis show that liquidity has a negative and significant effect on financial distress. This is in line with research by Septiani, Siswantini, and Murtatik (2021) which states that companies with high liquidity tend to be better able to pay short-term obligations and avoid distress conditions. An adequate level of liquidity provides room for the company to run its operations stably and meet its financial obligations on time. Companies with a high current ratio demonstrate effective current asset management. Therefore, good liquidity acts as a hedge against potential financial stress.

### The Effect of Leverage on Financial Distress

Leverage shows a positive and significant influence on financial distress, as stated by Pratiwi and Sudiyatno (2022). The high debt ratio causes interest expenses and payment obligations to become increasingly heavy for companies. When income is insufficient to cover this burden, the risk of financial distress increases. Companies that rely too much on debt funding without paying attention to their ability to pay will be vulnerable to financial pressure. Therefore, high leverage reflects a greater level of financial risk.

### The Effect of Profitability on Financial Distress

Profitability has a negative and significant influence on financial distress. This finding is in accordance with the research of Muntahanah, Huda, and Wahyuningsih (2021) which shows that high profitability is a protective factor against financial pressure. Companies with a good level of profit are able to finance operations and pay obligations without having to rely on external funding. Stable profits strengthen the company's financial position and increase investor confidence. Therefore, profitability is an important indicator in avoiding financial distress.

Overall, the results show that liquidity and profitability play a role in reducing the risk of financial distress, while leverage increases the likelihood of these conditions occurring. These findings are supported by research by Stepani and Nugroho (2023), as well as Sitorus et al. (2022) who stated that all three variables have a significant influence on financial distress. Good financial management in managing liquidity, limiting the use of debt, and increasing profitability is essential to maintain the stability of the company. Improper financial decision-making can lead to imbalances that lead to serious financial stress. Therefore, evaluating financial ratios is the first step to prevent financial distress from occurring early.

## 4. CONCLUSION

The results of the analysis show that liquidity and profitability have a negative and significant effect on financial distress, while leverage has a positive and significant effect. This means that the ability to meet short-term obligations and a high level of profit can reduce the risk of financial distress, while high debt utilization actually increases it. These three variables together affect the company's

financial condition. Therefore, management needs to optimally manage liquidity, debt, and profitability to maintain business stability and sustainability.

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