The Effect of Liquidity, Sales Growth, Working Capital Turnover, and Leverage on the Profitability of Food and Beverage Companies Listed on the Indonesia Stock Exchange During the 2019–2023 Period

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Abstract

The rapid advancement of technology in the current era of globalization has triggered business competition among companies in Indonesia. Business competition is now more competitive across all sectors, including the food and beverage sector. The food and beverage industry plays a crucial role in Indonesia's economic growth.This study aims to examine the effect of liquidity, sales growth, working capital turnover, and leverage on the profitability of food and beverage companies from 2019 to 2023. This research employs a quantitative research method. The data used in this study are secondary data in the form of company financial statements. The population of this study includes all food and beverage sector companies listed on the Indonesia Stock Exchange (IDX) from 2019 to 2023. The results of this study indicate that liquidity (Current Ratio), sales growth, and working capital turnover have a significant impact on profitability (ROA). Meanwhile, leverage has no effect on profitability (ROA).

Keywords: Liquidity, Sales Growth, Working Capital Turnover, Leverage, Profitability.

1. INTRODUCTION

The rapid advancement of technology in the era of globalization has triggered increasingly competitive business dynamics across all sectors, including the food and beverage industry, which plays a vital role in Indonesia's economy. A study by (Ngabito, 2024) revealed that the average Return on Assets (ROA) of food and beverage companies declined from 7.76% in 2019 to 5.95% in 2023. The ROA recorded during the 2019–2023 period remained below the industry average of 30%, indicating inefficient asset utilization and profit fluctuations, which suggest suboptimal asset management.

To become leading companies, businesses must implement strategies to maximize profitability (Fitri Jayanti & Lestari, 2020). Profitability is crucial to ensure the sustainability of a company, as higher profitability increases the likelihood of long-term survival (Ngabito, 2024). Profitability refers to a company's ability to generate earnings from its capital, and is associated with sales, assets, and equity. One of the tools used to measure profitability is Return on Assets (ROA), which reflects the company's return on the capital invested. ROA is a ratio that shows the outcome of the assets utilized by a company and measures how effectively management handles investments. The lower the ROA, the poorer the company's operational efficiency.

Profitability is influenced by various factors that can be measured through financial ratios such as liquidity, sales growth, working capital turnover, and leverage, in order to assess each factor's impact on profitability. The first factor is **liquidity**, which indicates a company's ability to meet short-term obligations. Liquidity is measured by the **Current Ratio**, which reflects the company's ability to pay off short-term debts. The second factor is **sales growth**, which demonstrates the company's capability to increase its sales relative to total sales. The third factor is **working capital turnover**, which measures the efficiency of using working capital to support sales and growth. The fourth factor is **leverage**, which assesses the extent to which a company relies on debt financing, measured by the **Debt to Asset Ratio (DAR)**.

Due to inconsistencies in previous research findings, further studies are needed to generalize the results. In this study, leverage ratio serves as the distinguishing independent variable. This research aims to examine the effect of liquidity, sales growth, working capital turnover, and leverage on profitability.

2. METHOD

2.1 Population and Sample

The population in this study consists of food and beverage companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period, using a purposive sampling technique. Based on the applied purposive sampling criteria, a total of 26 companies were selected as the research sample. This study uses secondary data, namely financial statements obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and the official websites of the respective companies. The type of data used in this study is quantitative data.

2.2 Operational Definition of Variables

a. Dependent Variable
The dependent variable is the variable that is influenced by or is the result of the independent variable. In this study, the dependent variable is profitability. Profitability refers to the company's ability to generate profit through the use of its capabilities and resources, which originate from sales activities, asset utilization, and capital usage.In this study, the researcher uses the Return on Assets (ROA) ratio because ROA is a ratio that measures the overall ability of a company to generate profit from its total assets available, reflecting how effectively the company uses its assets to generate returns for shareholders (Nursyahbani & Sukarno, 2023).The formula for ROA is as follows:

$$Return\ On\ Assets = \frac{Net\ Income}{Total\ Assets} x\ 100\%$$

b. Independent Variable
An independent variable is a variable that causes or influences the dependent variable. In this study, four independent variables are used, namely:

1. **Liquidity**

   The liquidity ratio illustrates the extent to which a company can meet its short-term obligations. The ratio used to measure liquidity is the **Current Ratio (CR)**.

This ratio is used to determine the extent to which current assets can cover current liabilities. The calculation of the Current Ratio (CR) can be done using the following formula:

$$Current\ Ratio = \frac{\boldsymbol{Current\ Assets}}{\boldsymbol{Current\ Liabilities}} x\ 100\%$$

2. **Sales Growth**

According to (Nursyahbani & Sukarno, 2023), sales growth is an important indicator of market acceptance of the company's products and/or services, where the revenue generated from sales can be used to measure sales growth. The calculation of sales growth can be done using the following formula:

$$Sales\ Growth = \frac{Sales\ t - Sales\ t - 1}{Sales\ t - 1} x\ 100\%$$

3. **Working Capital Turnover**

Working Capital Turnover is a ratio used to measure or assess the effectiveness of a company's working capital over a specific period. The formula used to calculate working capital turnover is as follows:

$$Working\ Capital\ Turnover\ = \frac{Net\ Sales}{Working\ Capital}$$

4. **Leverage**

Leverage is the technique of using debt to increase potential profits. The ratio used is the **Debt to Asset Ratio (DAR)**. The Debt to Asset Ratio is a debt ratio used to measure the extent to which a company's assets are financed by debt or how much debt influences the management of the company's assets. The indicator used by the researcher in this study is the Debt to Asset Ratio (DAR), and the formula for DAR is as follows:

$$Debt\ To\ Assets\ Ratio = \frac{Total\ Debt}{Total\ Assets} x\ 100\%$$

2.3 **Data Analysis Method**

The data analysis method used in this study for hypothesis testing is the multiple linear regression analysis model. The regression model used in this study is as follows:

$$ROA = \alpha + \beta 1CR + \beta 2SG + \beta 3WCT + \beta 4DAR$$

Information:

CR = Current Ratio (Liquidity)

SG =Sales Growth

WCT = Working Capital Turnover

DAR = Debt to Aasets Ratio (Leverage)

2.4 The Effect of Liquidity on Profitability

The higher the liquidity level of a company, the higher the profitability that the company can achieve. Companies that have sufficient cash or current assets can meet short-term obligations without sacrificing profitable business opportunities. Furthermore, better liquidity tends to make the company more capable of leveraging market opportunities or reducing financial risks, which can support profitability performance.

This study aligns with agency theory. This theory suggests that the relationship between liquidity and profitability is also influenced by agency issues between management and shareholders. Managers with high liquidity may be more likely to make inefficient expenditures or make suboptimal investment decisions, which could negatively affect profitability.

H1 = Liquidity has a positive effect on profitability.

2.5 The Effect of Sales Growth on Profitability

Sales growth refers to the increase in sales from one year to the previous year, indicating a rise (Syafitri & Junaeni, 2022). By comparing the final sales with the sales used as the base year, the sales growth rate can be calculated. If the comparison results in a higher percentage, it indicates better sales growth compared to the previous period.

This study aligns with agency theory, where one of the main issues is the potential conflict of interest between shareholders as principals and managers as agents. Shareholders typically focus on long-term profitability growth, while managers tend to pursue short-term goals, such as increasing sales, in order to receive bonuses or rewards for their performance.

H2 = Sales growth has a positive effect on profitability.

2.6 The Effect of Working Capital Turnover on Profitability

Working capital turnover is the ratio between sales and working capital, where a higher ratio reflects a greater ability of the company to generate profit through sales.

In relation to agency theory, managers who have incentives tied to profitability (such as profit-based bonuses) will be more motivated to increase working capital turnover. Conversely, if managers are more focused on maintaining their job security, they may manage working capital more conservatively, which can reduce efficiency and profitability (Setianto & Pratiwi, 2019).

H3 = Working capital turnover has a positive effect on profitability.

2.7 The Effect of Leverage on Profitability

Leverage is another term for debt ratio. This ratio is used as a measure of the extent to which a company is able to cover its obligations in the form of debt relative to the capital it owns.

This study aligns with agency theory, which suggests that leverage has a dual effect on profitability. On the positive side, leverage can enhance managerial discipline, reduce free cash flow problems, and improve the efficiency of resource utilization. On the negative side, if leverage is too high, financial risk increases, which may negatively impact profitability.

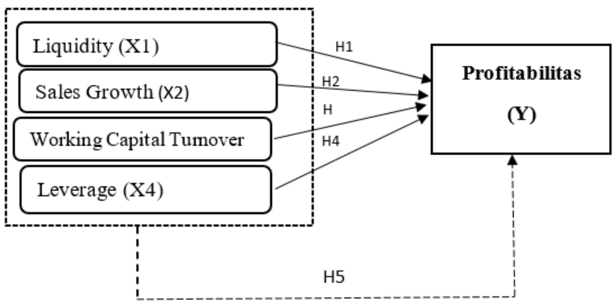
H4: Leverage has a positive effect on profitability.

2.8 The Effect of Liquidity, Sales Growth, Working Capital Turnover, and Leverage on Profitability

According to Cahyani & Sitohang (2020), liquidity is a ratio that describes a company's ability to meet its short-term obligations (debts). Sales growth refers to the increase in sales from one year to the previous year, indicating a rise (Syafitri & Junaeni, 2022). Working capital turnover is one of the ratios used to measure or assess the effectiveness of a company's working capital over a certain period.

H5 = Liquidity, Sales Growth, Working Capital Turnover, and Leverage simultaneously have a positive and significant effect on profitability in food and beverage sub-sector companies.

Imade 1.1 Conceptual Framewor



3. RESULTS AND DISCUSSION

The results of hypothesis testing in Table 1 using the t-Test were conducted to examine the effect of each independent variable (liquidity, sales growth, working capital turnover, and leverage) on the dependent variable (profitability). If the significance value (sig) is less than the significance level of 0.05, the hypothesis is accepted; whereas if the significance value (sig) is greater than 0.05, the hypothesis is rejected. The following are the results of the hypothesis test using the t-Test:

Table 1 using the t-Test

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,760	,342		-2,225	,028
	CR	,472	,061	,235	7,760	,000
	SG	,087	,004	,363	19,740	,000
	WTC	-2,704	,074	-1,131	-36,465	,000
	DAR	-,006	,009	-,012	-,621	,535

Coefficients[a]

a. Dependent Variable: ROA

Source: Processed data, 2025

Based on the table above, the multiple linear regression equation model can be formulated as follows:

Y = α + β1CR + β2SG + β3WCT + β4DAR

= -0,760 + 0,472 CR + 0,087 SG + -2,704 WCT + -0,006 DAR

1. The Effect of Liquidity on Profitability

   Based on the test results, it is found that the regression coefficient (B) for the Current Ratio (CR) is 0.472, with a t-value of 7.760 and a significance level of 0.000. Since the significance level is less than 0.05, it can be concluded that the Current Ratio has a positive and significant effect on Return on Assets (ROA). This indicates that an increase in the Current Ratio tends to drive an increase in the company's ROA.

2. The Effect of Sales Growth on Profitability

   The test results show that the regression coefficient (B) for Sales Growth (SG) is 0.087, with a t-value of 19.740 and a significance level of 0.000. Since the significance level is less than 0.05, it can be concluded that Sales Growth has a positive and significant effect on ROA. In other words, an increase in Sales Growth indicates that the higher the sales growth, the more optimal the company's ROA performance.

3. The Effect of Working Capital Turnover on Profitability

   The analysis results show that the regression coefficient (B) for Working Capital Turnover (WCT) is -2.704, with a t-value of -36.465 and a significance level of 0.000. Since the significance value is less than 0.05, it can be concluded that Working Capital

Turnover has a positive effect on Return on Assets (ROA). These findings indicate that the longer the cash management period, the more likely the company's ROA performance will decline.

4. The Effect of Leverage on Profitability

The test results show that the regression coefficient (B) for the Debt to Asset Ratio (DAR) is -0.006, with a t-value of -0.621 and a significance level of 0.535. Since the significance level is greater than 0.05, it can be concluded that DAR does not have a significant effect on ROA. This indicates that changes in DAR do not significantly affect the company's ROA performance.

5. The Effect of Liquidity, Sales Growth, Working Capital Turnover, and Leverage on Profitability

From the t-test results, Liquidity (Current Ratio), Sales Growth, and Working Capital Turnover have a positive effect on Profitability (ROA), as indicated by the t-values of 7.760 and a significance level of 0.000 for liquidity, a t-value of 19.740 and a significance level of 0.000 for sales growth, and a t-value of -36.465 and a significance level of 0.000 for working capital turnover. However, the t-test results for leverage show that it does not have an effect on Profitability (ROA), as indicated by a t-value of -0.621 and a significance level of 0.535. Since the significance level is greater than 0.05, leverage does not have an effect on ROA.

4. CONCLUSION

This study aims to determine the effect of liquidity, sales growth, working capital turnover, and leverage on profitability with the goal of testing the independent variables against the dependent variable. The data in this study consists of 910 observations from food and beverage companies listed on the Indonesia Stock Exchange (IDX) during the years 2019-2023 that met the criteria. Data analysis was performed using descriptive statistical tests, classical assumption tests, multiple regression analysis, and hypothesis testing. Based on the test results, the findings of this study can be summarized as follows:

1. Liquidity has a positive and significant effect on profitability.
2. Sales growth has a positive and significant effect on profitability.
3. Working capital turnover has a significant effect on profitability.
4. Leverage does not have a significant effect on profitability.
5. Liquidity (Current Ratio), Sales Growth, and Working Capital Turnover have a significant effect on Profitability (ROA), while leverage does not have an effect on profitability (ROA).

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NOVELTY

a. In this study, the author used four X (independent) variables and one Y (dependent) variable. It is recommended that future researchers consider adding other factors that influence company profitability, beyond those presented in this study.

b. It is suggested that the observation period be extended and that the sample size be increased, so that more robust conclusions can be drawn and generalized to a broader segment.

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