Analysis Of The Effect Of Financial Ratios On Financial Performance In Food And Baverage Companies Listed On The Indonesian Stock Exchange In 2017-2021

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Received: 2 Juli 2023
Revised: 20 September 2023
Accepted: 29 September 2023

Abstract
Food and Baverage companies are one of the manufacturing industry companies, which have a role in economic growth in Indonesia. The purpose of this study was to analyze the effect of financial ratios on financial performance in food and beverage companies listed on the Indonesian stock exchange in 2017-2021. This research uses quantitative descriptive research, sampling technique with purposive sampling. Liquidity ratio has a negative and insignificant effect on financial performance. Profitability ratio has a negative and insignificant effect on financial performance. Solvency ratio has a positive and insignificant effect on financial performance. Activity ratio has a negative and insignificant effect on financial performance. Liquidity, profitability, solvency, and activity ratios together have a positive and significant effect on financial performance.

Keywords: Financial Ratios, Financial Performance, Food and Baverage Company

INTRODUCTION

Food and Baverage company is one of the manufacturing industry companies, which has a role in economic growth in Indonesia. This is due to the many basic needs of the community in the form of food and beverage products. Therefore, Food and Baverage companies are needed by the people of Indonesia. This results in greater demands, where companies must be able to meet consumer needs for food and beverage products. Where this will also affect the development of a financial position that has important meaning for the company. Because, to see whether a company is said to be healthy, it is not assessed through its physical condition alone, but also through the company's financial performance (Reino et al., 2020).

According to Esomar & Christianty, (2021) Financial performance can be described as the financial condition and welfare of the company in a certain period. To be able to assess the company's financial performance, interested parties need to know the company's
financial condition, which can be known through the company's financial statements which consist of a balance sheet, profit and loss statement, and statement of changes in capital. However, the financial statements alone still cannot provide the right information before analysing the financial statements. Measurement of financial performance in a company can be done by analysing financial statements using financial ratios. Financial ratios relate to the relationship between the importance of providing information to management, creditors, investors, and financial analysis in general and the company's financial performance which is also an indicator. If the company is measured using financial ratios and produces a high ratio value, it shows good financial performance.

According to Pattiasina, (2018) Financial ratio analysis is an analytical tool expressed in absolute terms to explain certain relationships between one element and another in a financial report. The financial ratio analysis used in this study is the ratio of liquidity, profitability, solvency and activity. Liquidity ratio is one of the important ratios for the company, because liquidity has a fairly close relationship with the company's ability to earn profits, namely liquidity shows the level of availability of working capital needed in operational activities. With sufficient working capital, it allows the company to continue operating optimally and not experience difficulties due to the financial crisis. So that the current ratio is one component of the liquidity ratio used in this study.

The profitability ratio is used in assessing financial performance because this ratio is the net result of a series of policies and decisions that show the combined effect of liquidity, asset and debt management on operating results. It can be concluded that the profitability ratio reflects the final result of financial policies and operational decisions. The profitability ratio illustrates the efficiency and effectiveness of the company in carrying out its operational activities by using all the capital owned, both assets and equity, so as to generate profits for the continuity of the company's life. The ratio used in measuring profitability is Net Profit Margin (NPM) (Andesfa & Masdupi, 2019).

According to (Sukmadewi et al., 2021) Solvency ratio is a ratio used to measure how far the company's assets are financed by debt. In this study, the solvency ratio is represented by the Debt to Asset Ratio (DAR) which is a debt ratio used to measure the ratio between total debt and total assets. The activity ratio is a ratio used to measure the company's effectiveness in using its assets. This ratio looks at several assets and then determines what the level of activity of these assets is at a certain level. In this study, the activity ratio is represented by Total Asset Turnover. Where Total Asset Turnover measures how much "work" we can do in working capital.
The related research regarding the analysis of the effect of financial ratios on financial performance is the results of research by Faisal et al., (2017) showing the results that the liquidity ratio from 2015 to 2016 has decreased. Current ratio from 2015 to 2016 increased by 0.5%. Quick ratio from 2015 to 2016 increased by 0.95%. The higher the current ratio, quick ratio, and cash ratio, the greater the company's ability to pay off its debts. The solvency ratio for debt to total asset ratio from 2015 to 2016 decreased by 7.2%, Debt to equity ratio decreased from 2015 to 2016 by 0.27%. This situation is detrimental to the company, where the greater the number of loans used. Profitability ratio, the company's ability is also efficient because in 2015 to 2016 for return on equity and return on assets increased, for return on equity of 17.28% and return on assets of 0.18%. The results of the study (Arsita, 2021) can be concluded that the financial performance of PT Sentul City Tbk in 2014-2019 where the liquidity ratio is in a liquid state. Solvency ratio is in good condition because it is above the standard financial ratio. The activity and profitability ratios are in a bad condition because they are below the standard financial ratios.

The purpose of this study is to analyse the effect of financial ratios on financial performance in food and beverage companies listed on the Indonesia Stock Exchange in 2017-2021."

RESEARCH METHODS

This type of research uses quantitative descriptive research. Descriptive method is a method that describes the situation or event. So quantitative descriptive analysis research is research that aims to describe an event, symptom, or phenomenon using numbers that describe the characteristics of the subject being studied.

In this study, the population taken is a company engaged in food and beverage management listed on the Indonesia Stock Exchange (IDX). The sample used is the quarterly financial statements of food and beverage companies listed on the IDX for the 2017-2021 period.

This research sampling method uses purposive sampling. Namely sampling technique in accordance with considering predetermined criteria. The predetermined criteria include:

1. Food and Beverage companies listed on the Indonesia Stock Exchange for the period 2017-2021.
2. Food and Beverage companies that have published audited financial statements for the period ending 31 December 2017 to 31 December 2021.
3. Food and Beverage companies that publish financial reports expressed in rupiah.
4. Food and Beverage companies that have positive profits in the financial statements during the study period.

The data in this study are quantitative, namely in the form of quarterly financial reports of food and beverage companies listed on the Indonesia Stock Exchange. The data source is the origin from which the data is obtained. The data from this study are food and beverage companies listed on the Indonesia Stock Exchange (www.idx.co.id). This research data analysis uses the Eviews 12 application.

Framework of Thought

Liquidity ratio analysis has a positive and significant effect on the company's financial performance.

Liquidity is the company's ability to seek profit or profit. Based on the results of Hasbiah, (2022), states that the liquidity ratio has a positive and significant effect on financial performance. In addition, other research was also conducted by Wardani, (2023) where the results of his research were that the liquidity ratio had an effect on financial performance. Based on the description above, the researcher formulates the following hypothesis:

H1: Liquidity ratio has a positive and significant effect on the company's financial performance.

Profitability ratio analysis has a positive and significant effect on the company's financial performance.
Profitability is the company's ability to seek profit or profit. In research by Harahap et al., (2020) states that profitability ratio analysis has a significant effect on financial performance. In addition, other research was also conducted by (Devi et al., 2020) where the results of the study were that profitability ratios had an effect on financial performance. Based on the description above, the researcher formulates the following hypothesis:

**H2**: Profitability ratio has a positive and significant effect on the company's financial performance.

**Solvency ratio analysis has a positive and significant effect on the company's financial performance.**

Solvency is the ability of a company to pay all its debts, both short-term debt and long-term debt. The company can be said to be in good condition, if the company can fulfil its obligations, both short-term (Liquid) and long-term (Solvable). In research conducted by (Simanjuntak, 2020) states that the solvency ratio affects financial performance at PT Ultra Jaya Milk. In addition, research conducted by (Aprilia et al., 2020) also found that the leverage ratio (solvency) affects financial performance. Based on the description above, the researcher formulates the following hypothesis:

**H3**: Solvency ratio has a positive and significant effect on the company's financial performance.

**Activity ratio analysis has a positive and significant effect on the company's financial performance.**

In research conducted by Ichsan et al., (2021) stated that the activity ratio has a positive and significant effect on financial performance. Based on the description above, the researcher formulates the following hypothesis:

**H4**: Activity ratio has a positive and significant effect on the company's financial performance.

**RESULT AND DISCUSSION**

**Classical Assumption Test**

1) **Normality Test**

The normality test has the aim of testing whether a regression model is normally distributed or not. The normality test in this study uses the Skewness and Kurtosis tests using Eviews 12. The Skewness value shows a normal value when it is in the range of -2 to 2.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
<td>1.239352</td>
</tr>
<tr>
<td>Skewness 3/5</td>
<td>1.8538811</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.744067</td>
</tr>
<tr>
<td>Normality</td>
<td>5.08797</td>
</tr>
</tbody>
</table>

Based on table 1 above, the normality value is 0.078638, which means that it is normally distributed, because it is in the range between -2 to 2.
2) Multicollinearity Test

There are two criteria for testing, namely if the centered VIF value > 10, meaning that there is multicollinearity in the regression model and if the centered VIF value < 10, meaning that there is no multicollinearity.

Table 2. Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Centered VIF</th>
<th>There is no multicollinearity problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity</td>
<td>1.197547</td>
<td>There is no multicollinearity problem</td>
</tr>
<tr>
<td>Profitability</td>
<td>8.069202</td>
<td>There is no multicollinearity problem</td>
</tr>
<tr>
<td>Solvency</td>
<td>1.532260</td>
<td>There is no multicollinearity problem</td>
</tr>
<tr>
<td>Activity</td>
<td>7.360265</td>
<td>There is no multicollinearity problem</td>
</tr>
</tbody>
</table>

Based on Table 2 above, the multicollinearity results show that the centred value of each variable is less than 10, which means that in this study the data does not occur multicollinearity.

2) Heteroscedasticity Test

Heteroscedasticity test has the aim of testing whether in the regression model there is an inequality of variance from one residual to another. In this heteroscedasticity test, this study uses the Glejser Test, with the test criteria being if the Prob value. Chi-Square value is more than 5, meaning that heteroscedasticity does not occur and vice versa.

Table 3. Glejser Test

| F-statistic | 1.226748 | Prob. F(4.95) | 0.3047 |
| Obs*R-squared | 4.911561 | Prob. Chi_Square | (4) 0.2965 |
| Scaled explained SS | 7.725721 | Prob. Chi_Square | (4) 0.1022 |

From the results of the above calculations Prob. Chi-Square has a value > 0.05, which means there is no heteroscedasticity problem.

a. Multiple Linear Regression Analysis

Multiple linear regression analysis in this study was used to determine the effect of the relationship between the independent variable and the dependent variable. Data processing using Eviews 12. Below are the test results obtained through multiple linear regression:

Table 4. Multiple Linear Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>5.588682</td>
<td>1.199758</td>
<td>4.408125</td>
<td>0.0000</td>
</tr>
<tr>
<td>Liquidity</td>
<td>-0.000192</td>
<td>0.004663</td>
<td>-0.041156</td>
<td>0.9673</td>
</tr>
</tbody>
</table>
Based on the above results, multiple linear regression is obtained as follows:

\[ Y = 5.588682 - 0.000192X_1 - 5.811994X_2 + 0.012652X_3 - 0.9339715X_4 \]

The multiple linear regression equation model can be interpreted as follows:

1) Constant Value

The constant result of the multiple linear regression equation above is worth 5.588682. This means that if the variables of liquidity, profitability, solvency and activity are considered constant or zero, then the financial performance is 5.588682.

2) The value of the liquidity variable regression coefficient

The result of the regression coefficient of the liquidity variable from the multiple linear equation above is negative -0.000192. This indicates a change in the opposite direction relationship between the liquidity variable and financial performance. That is, if the liquidity variable increases by one unit, the financial performance will decrease by -0.000192 units with the assumption that the basic variables, namely profitability, solvency and activity, are constant.

3) The regression coefficient value of the profitability variable

The result of the regression coefficient of the profitability variable above is negative amounting to -5.811994. This indicates a change in the opposite direction relationship between the profitability variable and financial performance. That is, if the profitability variable increases by one unit, the financial performance will decrease by -5.811994 units with the assumption that the basic variables, namely liquidity, solvency and activity, are constant.

4) The regression coefficient value of the solvency variable

The result of the regression coefficient of the solvency variable above is 0.012652. This shows that there is a unidirectional change in the relationship with the solvency variable on financial performance. This means that if the solvency variable increases by 0.012652 units assuming the independent variables of liquidity, profitability and activity are constant.

5) The regression coefficient value of the activity variable
The regression coefficient of the activity variable above is negative -0.9339715. This indicates a change in the opposite direction relationship between the activity variable and financial performance. That is, if the activity variable increases by one unit, the financial performance will decrease by -0.9339715 units with the assumption that the basic variables, namely liquidity, profitability and solvency, are constant.

**Hypothesis Test**

**T test**

This test is useful for knowing whether there is an influence of each independent variable on the dependent variable. With the basis of decision \( \alpha = 5\% \) or 0.05 and \( t_{table} = 1.986 \), the results of the t test through the help of the Eviews programme can be seen from the following table

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquidity</td>
<td>-0.000192</td>
<td>0.004663</td>
<td>-0.041156</td>
<td>0.9673</td>
</tr>
<tr>
<td>Profitability</td>
<td>-5.811994</td>
<td>5.621263</td>
<td>-1.033930</td>
<td>0.3039</td>
</tr>
<tr>
<td>Solvency</td>
<td>0.012652</td>
<td>4.920513</td>
<td>1.018726</td>
<td>0.3110</td>
</tr>
<tr>
<td>Activity</td>
<td>-0.9339715</td>
<td>9.984347</td>
<td>-0.935436</td>
<td>0.3520</td>
</tr>
</tbody>
</table>

**Liquidity Variable (X1)**

For testing with Eviews with the liquidity variable on financial performance, the t value is -0.041156, while the t table value is 1.986 because of this \( t_{count} < t_{table} \) (-0.041156 < 1.986), and obtained a significance value of 0.9673 greater than the significant tariff of 0.05 \((0.9673 > 0.05)\). So it can be concluded that the liquidity ratio has a negative and insignificant effect on financial performance.

**Profitability Variable**

For testing with Eviews with variable profitability on financial performance, the t value is -1.033930, while the t table value is 1.986 because of this \( t_{count} < t_{table} \) (-1.033930 < 1.986), and obtained a significance value of 0.3039 greater than the significant tariff of 0.05 \((0.3039 > 0.05)\). So it can be concluded that the profitability ratio has a negative and insignificant effect on financial performance.

**Solvency Variable**
For testing with Eviews with the liquidity variable on financial performance, the t value is 1.018726, while the t table value is 1.986 because of this tcount > ttable (1.018726 > 1.986). and obtained a significance value of 0.9673 greater than the significant tariff of 0.05 (0.3110 > 0.05). So it can be concluded that the solvency ratio has a positive and insignificant effect on financial performance.

Activity Variable

For testing with Eviews with the activity variable on financial performance, the t value is -0.935436, while the t table value is 1.986 because of this tcount < t table (-0.935436 < 1.986). and obtained a significance value of 0.9673 greater than the significant tariff of 0.05 (0.320 > 0.05). So it can be concluded that the activity ratio has a negative and insignificant effect on financial performance.

F test

The F test is a useful test to determine whether the independent variables jointly affect the dependent variable. With the basic decision a = 5% or 0.05 da Ftable = 2.47, so that the results of the F test through the help of the Eviews 12 programme can be seen from the table below.

<table>
<thead>
<tr>
<th>F-Statistic</th>
<th>Prob.(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.45993</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

From the results of calculations using Eviews, the calculated F value is 17.45993, because the calculated F value is greater than the F table, the consequence is that H0 is rejected and Ha is accepted. Thus there is a positive and significant influence between the variables of liquidity, profitability, solvency and activity on the financial performance of food and beverage companies listed on the IDX.

a. R² Test

The coefficient of determination analysis aims to determine how far the independent variables together in running the dependent variable. The results of the coefficient of determination test can be seen as follows:

<table>
<thead>
<tr>
<th>R-Square</th>
<th>Adjusted R-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.605513</td>
<td>0.570833</td>
</tr>
</tbody>
</table>
Based on the test of the coefficient of determination Table 7, the coefficient of determination is 0.605513, which means that there is a positive relationship between the liquidity ratio, solvency profitability and activity on financial performance by 60.5513% while the remaining 39.4487 is influenced by external factors.

**Discussion**

**Effect of Liquidity Ratio on Financial Performance**

Based on the results of this study, it shows that the liquidity ratio has a negative and insignificant effect on financial performance. This is supported by the regression coefficient of the liquidity ratio of -0.000192 and the partial test (t test) produces a t value of -0.41156. So that the previously stated hypothesis is rejected, because the liquidity ratio has a negative and insignificant effect on firm value.

Therefore, in this case it shows that the company has not been able to meet short-term obligations that will soon mature using its current assets, if the company can pay its short-term obligations according to the specified maturity, then the company will be able to easily obtain funding again from creditors to facilitate operational activities and these conditions can help the company increase net income which will have a good effect on the company's financial performance.

The results of this study are in line with Iskandar et al., (2020) which shows that the liquidity ratio has a negative and insignificant effect on the financial performance of Basic Industry and Chemical Sector Companies listed on the IDX for the 2014-2018 Period.

**Effect of Profitability Ratio on Financial Performance**

Based on the results of this study, it shows that the profitability ratio has a negative and insignificant effect on financial performance. This is supported by the regression coefficient of the profitability ratio of -5.811994 and the partial test (t test) resulting in a t value of -1.03930. So that the hypothesis stated earlier is rejected, because the profitability ratio has a negative and insignificant effect on financial performance.

Therefore, the company must increase its profitability value, because if the profitability of a company is low and the company is unable to meet the costs of its operational activities, the company will not last long.

The results of this study are in line with Ambarwati et al., (2019) in which there are results that the profitability ratio has a negative and insignificant effect on financial performance.
Effect of Solvency Ratio on Financial Performance

Based on the results of this study, it shows that the solvency ratio has a positive and insignificant effect on financial performance. This is supported by the regression coefficient of 0.012652 and the partial test (t test) produces a t value of 0.3110. So that the previous hypothesis is rejected, because the solvency ratio has a positive and insignificant effect on financial performance.

In the results of this test identify that the company has a high enough debt with a level of profit that has not been maximised. For this reason, companies need to control the use of debt again so that it is not too high. Because high debt will have an impact on the company's operational activities, where the company must bear or pay the interest costs incurred as a result of the debt.

The results of this test are in line with Yunita Singgalinnging, Tasya Monica, Ferico, Novianty, (2021) in which there are results that the solvency ratio has a positive and insignificant effect on financial performance in Manufacturing Companies on the Indonesia Stock Exchange.

Effect of Activity Ratio on Financial Performance

Based on the results of this study, it shows that the activity ratio has a negative and insignificant effect on financial performance. and this is supported by the regression coefficient of the activity ratio of -0.9339715, and the partial test (t test) produces a t value of 0.3520. So that the previously stated hypothesis is rejected, that the activity ratio has a negative and insignificant effect on financial performance.

Therefore, the higher the total asset turnover rate, the more effective the company is in managing its assets. This means that the turnover of current assets and fixed assets can be utilised and managed effectively by the company so as to produce a relatively high sales volume. With effective and efficient management utilising all assets owned by the company, it will increase sales.

The results of this study are in line with vena, (2022) in which there are results that the activity ratio has a negative and insignificant effect on financial performance.

The Effect of Liquidity, Profitability, Solvency, and Activity Ratios together on Financial Performance

Based on the results of this study indicate that the ratio of liquidity, profitability, solvency, and activity together has a positive and significant effect on financial performance.
This is supported by the F test of the ratio of liquidity, profitability, solvency, and activity with F count of 17.45993 so that the previously stated hypothesis is accepted, that the ratio of liquidity, profitability, solvency, and activity affects financial performance.

The results of this study are in line with the research of Rahmananda et al., (2022) in which it is explained that the ratio of liquidity, solvency, activity affects financial performance.

CONCLUSION

Based on data analysis, it is concluded that the liquidity ratio has a negative and insignificant effect on financial performance. Profitability ratio has a negative and insignificant effect on financial performance. Solvency ratio has a positive and insignificant effect on financial performance. Activity ratio has a negative and insignificant effect on financial performance. Liquidity, profitability, solvency and activity ratios together have a positive and significant effect on financial performance.

REFERENCE


