

## **Effect of Current Ratio and Debt to Equity Ratio on Return on Assets (ROA) in food and beverage sub-sector companies for the period 2015-2021**

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**Abstract:** This study aims to determine and examine the effect of Current Ratio (X1) and Debt To Equity Ratio (DER) (X2) on Return On Assets (Y) in food and beverage sub-sector companies for the 2015-2021 period. This study uses a quantitative approach and with an explanatory type. The object of this research is the Annual Financial Report of the Food and Beverage Sub-Sector Company which consists of PT. Akasha Wira Internasional Tbk, PT. Tiga Pilar Sejahtera Tbk, PT. Tri Banyan Tirta Tbk, PT. Campina Ice Cream Industry Tbk, PT. Nippon Indosari Tbk. The data used in this study is secondary data, namely the published financial statements of the Food and Beverage Sub- Sector Companies for the 2015-2021 Period. The population used in this study is the entire Annual Financial Statements of Food and Beverage Sub-Sector Companies, while the sample used is the Annual Financial Statements of 35 research periods of 7 years multiplied by 5 research objects. This research uses purposive sampling technique. The data analysis technique used is Descriptive Statistical Analysis, Classical Assumption Test, Multiple Linear Regression Analysis, and Hypothesis Testing. Results Based on research using the t test or partially on the variable Current Ratio (CR) to Return on Assets (ROA) has no significant effect. The Debt-to-Equity Ratio (DER) partially has no significant effect on Return on Assets (ROA). And the results of the simultaneous test (f test) it is known that the Current Ratio (CR) (X1) and Debt on Equity Ratio (DER) (X2) simultaneously have no significant effect on Return On Assets (ROA) is large the effect is only 3% the remaining 97%. influenced by other variables not examined in this study

**Keywords:** Current Ratio, Debt to Equity Ratio, Return on Asset.

### **INTRODUCTION**

The development of industry in the era of globalization has a lot of business competition, balanced with very advanced technological advances, all companies are required to develop their businesses as much as possible, accompanied by many new companies emerging and quite a few companies that have already been established have experienced setbacks because the competition is so much and fast. Food and beverage sub-sector manufacturing companies in Indonesia are developing very rapidly. The food and beverage sector is a business opportunity that has bright prospects in Indonesia because it has a large population with very large needs and high purchasing power. The national food and beverage industry makes a major contribution to economic growth in Indonesia. Therefore, the Ministry of Industry continues to encourage the development of the national food and beverage industry (Kemenprin, 2016). The current growth and development of the manufacturing industry has caused the economy to accelerate and consumer demand for products has increased.

This condition makes competition even tighter so that company managers are competing to find investors to invest their funds in these food and beverage companies. Consumer goods are an important industry for the



development of the Indonesian economy. The reason for choosing the Food and Beverage Sub Sector is because its shares are not vulnerable to monetary or economic crises compared to other sub sectors, because under these conditions some food and beverage products are still needed by consumers, because these products are a basic need for society, this is the condition which makes global competition can affect a company. A company must have good performance to be able to obtain maximum profits and reduce losses so that the company can maintain and manage its company. Companies must also be able to maintain and manage the continuity of their business in order to compete with competing companies. Apart from that, 2015-2021 was chosen because this period is a year that allows it to be used as a research population regarding the completeness of research data.

According to (Aziz, 2014) The food and beverage industry sector is one of the business sectors that will continue to experience growth. Apart from that, the food and beverage industry is a leading branch of the manufacturing industry. The food and beverage industry has an important role in the development of the industrial sector, especially its contribution to high-growing gross domestic income (GDP). Apart from that, the characteristics or traits of society tend to help maintain the consumer goods industrial sector. The company's financial performance itself can be used to determine the level of efficiency and effectiveness of the company in achieving the goals set by company management. Financial performance can be measured by analyzing and evaluating the company's financial reports.

Profitability has an important meaning for companies because it is one of the bases for assessing the condition of a company. According to (Kasmir, 2014) Profitability Ratios are ratios to assess a company's ability to make a profit. This ratio also provides a measure of the level of effectiveness of a company's management. According to (Hery, 2016) profitability ratios are ratios used to measure a company's ability to generate profits from normal business activities. The profitability level describes the company's performance as seen from the company's ability to generate profits. This is shown by the profits generated from sales and investment income. The point is that the use of this ratio shows the company's efficiency. The types of profitability ratios are gross margin (GPM), net profit margin (NPM), return on assets (ROA), return on investment (ROI), return on equity (ROE), return on sales ratio (ROS), return on employees (ROCE), Earnings per share (EPS).

The company's ability to earn profits shows whether the company has good prospects or not in the future. Profitability in this research is measured by Return on Assets (ROA) because it can show how the company's performance is seen from the use of all assets owned by the company to generate profits. According to (Fahmi, 2012) Return on Assets, namely this ratio, assesses the extent to which the investment that has been made is able to provide returns as expected. The increase and decrease in ROA is influenced by the Current Ratio and Debt To Equity Ratio (Herliana, 2021). Where the Current Ratio is included in the Liquidity Ratio and the Debt To Equity Ratio is included in the Solvency Ratio.

According to (Kasmir, 2014) the liquidity ratio aims to determine the company's financial ability to meet its short-term obligations and financial payment commitments. The liquidity ratio used for measurement is the Current Ratio (CR). According to (Kasmir, 2014) the Current Ratio is a ratio to measure a company's ability to pay short-term obligations or debts that are due soon. The current ratio calculation is done by comparing total current assets with total current liabilities. The lower the CR value, it will indicate the company's inability to fulfill its short-term obligations, so this can affect the company's level of profitability, where companies that are unable to fulfill their obligations will be subject to additional burdens on their obligations. If measuring the level of liquidity using CR as a measuring tool, then the level of liquidity or CR of a company can be increased by using certain current debt, making efforts to increase current assets and making certain current assets to reduce the amount of current debt (Syahrial, 2013).



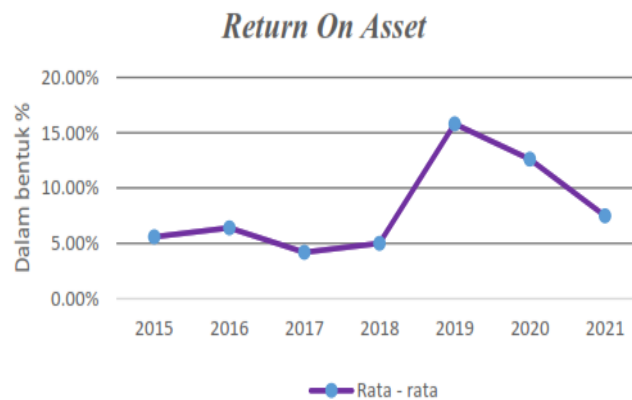
Solvency or Leverage Ratio according to (Hery, 2015) is a ratio that describes the company's ability to fulfill all its obligations. (Sunyoto, 2013) states that the solvency/leverage ratio is a ratio that measures the extent to which a company's assets are financed with debt. Solvency or Leverage is a comparison between debt and assets which shows several parts of assets used to guarantee debt. Leverage can be measured by the Debt-to-Equity Ratio (DER). According to (Kasmir, 2014) Debt to Equity Ratio is a ratio used to determine the comparison between total debt and own capital. This ratio is useful for knowing how much of a company's assets are financed from debt. Below we will present Return on Asset (ROA) research data based on annual reports in the food and beverage sub-sector listed on the Indonesia Stock Exchange for the 2015-2021 period.

Table 1. Return on assets of food and beverage sub-sector companies listed on the IDX for the 2015-2021 period

No	Code	Year						
		2015	2016	2017	2018	2019	2020	2021
1	ADES	5 %	7 %	5%	6%	10%	14%	20 %
2	AISA	4%	8%	3%	7%	56%	40%	0,5 %
3	ALTO	2%	2%	6%	3%	1%	1%	1%
4	CAMP	7%	5%	4%	6%	7%	4%	9%
5	ROTI	10%	10%	3%	3%	5%	4%	7%
Mean		5,6 %	6,4%	4,2 %	5%	15,8%	12,6%	7,5%

Source: BEI, 2022

Figure 1. Average Return on Assets for Food and Beverage Sub-Sector Companies listed on the IDX



Source: BEI, 2022

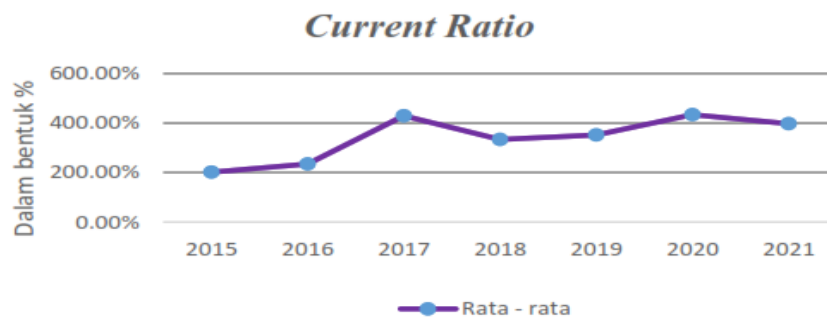
Based on the data above, there is a decrease and increase in Return on Assets every year. Then, looking at the average Return on Assets, the lowest average value was in 2017 (4.2%) and the highest average value was in 2019 (15.8%). According to (Ryan, 2016), Return on Assets (ROA) is a measure of income when compared to total assets. The decrease in Return on Assets was caused by unstable profits on sales, followed by a decrease in total asset turnover. This decline indicates that companies are increasingly ineffective in managing assets to generate profits (W. Stevani, 2021)

Table 2. Current Ratio of Food and Beverage Sub-Sector Companies listed on the IDX for the 2015-2021 period

No	Code	Year						
		2015	2016	2017	2018	2019	2020	2021
1	ADES	139%	164%	120%	139%	200%	297%	251%
2	AISA	162%	238%	116%	15%	41%	81%	60%
3	ALTO	158%	75%	107%	76%	88%	83%	82%
4	CAMP	342%	397%	1582%	1084%	1263%	1327%	1331%
5	ROTI	205%	296%	226%	357%	169%	383%	265%
Rata-rata		201%	234%	430%	334%	352%	434%	397%

Source: BEI, 2022

Figure 2. Average Current Ratio of Food and Beverage Sub-Sector Companies listed on the IDX



Source: BEI, 2022

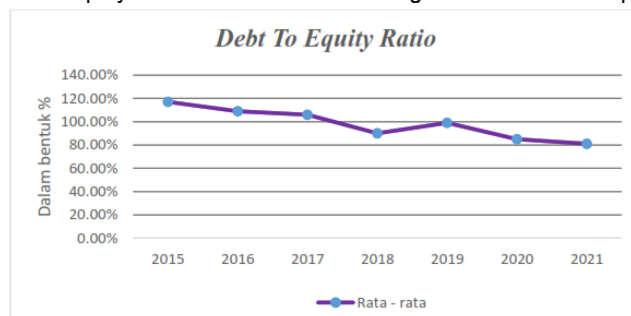
Based on the data above, there is a decrease and increase in the Current Ratio every year. Then, looking at the average Current Ratio, the lowest average value was in 2015 (201%) and the highest average value was in 2020 (434%). A Current Ratio that is too high indicates an excess of cash or other current assets compared to what is currently needed or a low level of liquidity compared to current assets and vice versa. The decreasing Current Ratio was caused by the large increase in current debt compared to current assets, this was because loans to banks increased from the previous period. (Ana Fitriana: 2019).

Table 3. Debt To Equity Ratio of Food and Beverage Sub-Sector Companies Listed on the IDX 2015-2021

No	Code	Year						
		2015	2016	2017	2018	2019	2020	2021
1	ADES	99%	100%	99%	83%	45%	37%	34%
2	AISA	128%	117%	159%	153%	213%	143%	115%
3	ALTO	132%	142%	165%	187%	190%	197%	199%
4	CAMP	99%	87%	45%	13%	13%	13%	12%
5	ROTI	128%	102%	62%	18%	36%	38%	47%
Rata-rata		117%	109%	106%	90%	99%	85%	81%

Source: BEI, 2022

Figure 3. Average Debt to Equity Ratio of Food and Beverage Sub-Sector Companies listed on the IDX



Source: BEI, 2022

Based on the data above, there is a decrease and increase in the Debt-to-Equity Ratio every year. Then looking at the average Debt To Equity Ratio, there is the lowest average value, namely in 2021 (81%) and the highest average value is in 2015 (117%). A Debt-to-Equity Ratio that is too high has a negative impact on company performance, because a higher debt level indicates that the company's interest burden will be greater and reduce profits. So, the greater the debt (DER) tends to reduce share prices (Putri, 2012).

According to (Armiansyah, 2019) Debt Equity Ratio and Total Asset Turnover (TATO) partially influence Return on Assets, while the Current Ratio has no influence on Return On Assets. And according to (Wartono, 2018) the results of the Current Ratio research have a regression coefficient of -1.391 and a significance level of 0.207. This means that H1 is rejected so it can be said that the Current Ratio has an effect but is not significant on Return on assets, the debt-to-equity variable has a regression coefficient of -0.811 and a significance level of 0.444. This means that H2 is rejected so it can be said that debt to equity has an effect but is not significant on Return on assets. Based on the research results, the F value is 0.994 with a significance level of 0.417. Because the significance level is greater than 0.05, it can be said that hypothesis H3 is rejected, namely Current ratio, debt to equity have an effect but are not significant on Return on assets

## LITERATURE REVIEWS

### Financial performance

According to (Fahmi, 2018) financial performance is an analysis carried out to see the extent to which a company has implemented financial implementation rules properly and correctly. Good company financial performance means that the implementation of applicable regulations has been carried out properly and correctly. According to (Isna and Ayu, 2015) financial performance is one of the most important issues to be studied in public sector organizations including government, since the implementation of performance-based budgeting, all governments have been required to be able to produce good government financial performance in order to pay attention to effectiveness, efficiency and economics. Conclusions that can be drawn from several performances are the results of work or comparisons in terms of quality and quantity, whether physical or mental, physical or non-mental, a picture of the company's financial condition, both regarding the collection and distribution of funds, which are usually measured by indicators of capital adequacy, liquidity and profitability, in realizing goals, objectives, vision and mission in improving the company

### **Return On Asset (ROA)**

This ratio is a profit ratio that connects profit with investment. According to (Syamsuddin, 2016) Return on Assets is a measurement of the company's overall ability to generate profits with the total amount of assets available within the company. The higher this ratio, the better the condition of a company. Based on this opinion, it can be seen that Return on Assets (ROA) shows the company's ability to manage company investments in an effort to gain profits. Apart from that, according to (Fahmi, 2012) states that "The Return on Assets (ROA) ratio looks at the extent to which the investment that has been invested is able to provide a profit return as expected, and the investment is actually the same as the company's assets invested. According to (Sawir, 2010) "Return on Assets (ROA) shows the company's ability to generate profits by managing all its assets". Return on Assets (ROA) is one of the profitability ratios. This ratio is most often highlighted, because it is able to show the company's success in generating profits. ROA is able to measure a company's ability to generate profits in the past and then project them into the future. The assets in question are all of the company's assets, which were obtained from its own capital or from foreign capital which the company has converted into company assets which are used for the company's survival.

### **Current Ratio (CR)**

According to (Kasmir, 2018) the current ratio is a ratio to measure a company's ability to pay short-term obligations or debts that are due immediately when they are billed in full. In other words, how much current assets are available to cover short-term liabilities that are due soon? According to (Hery, 2018), the current ratio is a ratio used to measure a company's ability to meet its short-term liabilities that are due soon using the total current assets that are due. available. In other words, this current ratio describes how much the company has available current assets compared to total current liabilities. Based on the definitions above, it can be concluded that the Current Ratio is a ratio to measure a company's liquidity in paying short-term debt with the company's current assets.

### **Debt To Equity Ratio (DER)**

The definition of Debt-to-Equity Ratio according to (Darsono and Ashari, 2010), namely Debt to Equity Ratio (DER) is a leverage or solvency ratio. The solvency ratio is a ratio to determine a company's ability to pay its obligations if the company is liquidated. This ratio is also called the leverage ratio, which assesses the company's limits in borrowing money. Horne and Machowicz as translated by (Fitriasari and Kwary, 2009) stated that "leverage is the use of fixed costs in an effort to increase (level up) profitability". Meanwhile, the meaning of Debt-to-equity ratio (DER) according to (Gibson, 2008) is "Debt equity ratio is another calculation that determines the entity's long-term debt-paying ability". That is, the debt-to-equity ratio is another computation that determines the long-term debt paying ability of an entity. According to (Sugiyono, 2009), states that: This ratio shows the comparison of debt and capital. This ratio is an important ratio because it is related to the issue of trading on equity, which can have a positive and negative influence on the profitability of own capital and the company. Meanwhile, according to (Kasmir, 2014), states that: Debt to equity ratio is a ratio used to assess debt versus equity. This ratio is found by comparing all debt, including current debt, with all equity. This ratio is used to determine the amount of funds provided by the borrower (credit) and the company owner. In other words, this ratio functions to find out every rupiah of own capital used as collateral for debt. Based on several definitions that have been described, it can be concluded that the debt-to-equity ratio is a ratio that measures the extent to which a company is financed by debt and the company's ability to fulfill its obligations with the equity it has.



## RESEARCH METHOD

The research approach used is a quantitative approach. The research design is explanatory research. The population used in this research is financial reports on food and beverage sub-sector companies that are listed on the Indonesian Stock Exchange (BEI) and publish complete financial reports for the period 2015 to 2021, totaling 26 sub-sectors listed on the Indonesian Stock Exchange. The sampling technique used in this research is purposive sampling so that the samples in this research are 5 companies in the food and beverage sub-sector which are listed on the Indonesia Stock Exchange. The research period was 7 years so the total research sample size was 35 financial reports of companies in the food and beverage sub-sector. The data collection method used by the author is secondary data. Data analysis used multiple linear regression analysis with the help of the SPSS 26.0 software program.

## RESULT AND DISCUSSION

### Multiple Linear Regression Analysis

Multiple Linear Regression is a linear regression model involving more than one independent variable. Based on the SPSS output results, it can be seen in the table below

Table 4. Regression Analysis Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.702	2.570		2.608	.016
	CR	.002	.007	.072	.273	.787
	DER	-.018	.014	-.347	-1.323	.199

Source: SPSS 26 data processing results, 2022

Table 4 shows that the mathematical equation of the multiple linear regression function model is expressed as follows:

$$Y = 6,702 + 0,002 (X1) - 0,018 (X2) + e$$

From the regression equation above, several things can be interpreted as follows:

1. The constant value in the data resulting from multiple linear regression is 6.702. This shows that if the CR and DER values have a value of 0, then the ROA variable is 6.702
2. The Current Ratio (CR) variable has a regression coefficient value of 0.002% and is positive, which will indicate a positive influence. If there is a 1% increase in the Current Ratio (CR) then the value for the Return on Assets (ROA) variable will increase by 0.002%
3. The Debt-to-Equity Ratio (DER) variable has a coefficient value of -0.018% and is negative which will indicate a negative influence. If there is a 1% increase in the Debt-to-Equity Ratio (DER) then the value for the Return on Asset (ROA) variable will decrease by -0.018% and vice versa



## Hypothesis test

### Partial Test Results (t)

The results in the t test are able to illustrate the extent of the influence of each independent variable on the dependent variable by comparing the calculated t-value with the t-table or sig value. with 0.05. The following are the results of partial testing which can be seen from the table below:

Table 5. Results of t test analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.702	2.570		2.608	.016
CR	.002	.007	.072	.273	.787
DER	-.018	.014	-.347	-1.323	.199

Source: SPSS Data Processing Results 26.0, 2022

- Shows a partial statistical test on the Current Ratio (CR) variable (X1) where the t value is 0.273. This states that the count value < from the table value which is 2.068, it can be concluded that the Current Ratio (CR) variable (X1) has no significant effect on Return on Assets (ROA) (Y). Then the same conclusion can be obtained by comparing the sig values. amounting to 0.787 > a value is 0.05 so it can be stated that the first hypothesis in this research is rejected
- Shows a partial statistical test on the Debt-to-Equity Ratio (DER) (X2) variable where the t value is - 1.323. This states that the count value < from the table value which is 2.068, it can be concluded that the Debt-to-Equity Ratio (DER) (X2) variable has no significant effect on Return On Assets (ROA). Then the same conclusion can be obtained by comparing the sig values. of 0.199 > a value of 0.05 so it can be stated that the hypothesis in this study is rejected

### Simultaneous Regression Test Results (F Test)

Table 6. Simultaneous Regression Test Results (F-Test)

#### ANOVA<sup>a</sup>

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	29.589	2	14.795	2.176	.136 <sup>b</sup>
Residual	156.411	23	6.800		
Total	186.000	25			

a. Dependent Variable: ROA

b. Predictors: (Constant), DER, CR

Source: SPSS 26.0 Data Processing Results, 2022

Based on the test results seen in table 6, it can be seen that the Count value is 2.176 > 3.42 Ftable but the sig. is 0.136 > 0.05. Based on the data above, H3 in this study is also rejected, which means that it simultaneously has no significant effect on Return on Assets (ROA).





### Coefficient of Determination

The coefficient of determination essentially measures the extent to which the model components explain variations in the independent variables. The coefficient of determination value is between zero and one. The coefficient of determination value can be seen in the table below:

Table 7. Determination Coefficient Values

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.399 <sup>a</sup>	.159	.086	2.608

a. Dependent Variable: ROA

b. Predictors: (Constant), DER, CR

Source: SPSS 26.0 Data Processing Results, 2022

Based on the SPSS 26 output in table 7 above, a statistical summary model will be described. Based on the SPSS version 26 results in the table above, it is known that the R value is 0.399 or 39.9% so that the level of relationship between Current Ratio and Debt To can be interpreted. The Equity Ratio to Return on Assets is weak because it is between 0.200-0.399. Then the coefficient of determination (R Square) is 0.159. This shows that the Current Ratio and Debt to Equity Ratio influence Return on Assets by 0.159 or 15.9% only and the rest is influenced by other variables not included in this research

### CONCLUSION

Based on the results of research and discussion in the previous chapter. So the conclusion of this chapter is as follows:

1. Current Ratio on Return on Assets in Food and Beverage Sub-Sector Companies for the 2015-2021 period. Based on the results of research using the t test or partially, it shows that the Current Ratio (CR) does not have a partially significant effect on Return on Assets (ROA)
2. Debt to Equity Ratio on Return on Assets in Food and Beverage Sub-Sector Companies for the 2015-2021 period. Based on the results of research using the t test or partially, it shows that the Debt-to-Equity Ratio (DER) does not have a partially significant effect on Return on Assets (ROA)
3. Current Ratio and Debt to Equity Ratio on Return on Assets in Food and Beverage Sub-Sector Companies for the 2015-2021 period. Based on the results of simultaneous testing (f test) shows that the Current Ratio (CR) (X1) and Debt on Equity Ratio (DER) (X2) has no significant effect on Return on Assets (ROA).

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