

## Effect of Current ratio and Debt Ratio on Return on Assets in Food and Beverage Companies Listed on the Indonesia Stock Exchange (2018-2021)

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### ABSTRACT

The food and beverage sector is an interesting matter to discuss, where this industry is the thing most needed by humans, besides that this industry is increasingly mushrooming as can be seen from the increase in its types listed on the Indonesia Stock Exchange. Data processing was carried out using the SPSS tool with a total sample data of ten industrial companies operating in the food and beverage sector listed on the IDX. Results of analysis with using the tools of Normality Test, Multicollinearity Test, Heteroscedasticity Test, Multiple linear Regression Test, Coefficient of Determination Test (R<sup>2</sup>), Partial Test (t test) and simultaneous test (F test) shows that there is no visible effect of the Current ratio and Debt ratio partially or simultaneously on Return on Assets.

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## 1. INTRODUCTION

Considering that food and beverages are a necessity for every level of society, the discussion of food and beverage companies is an interesting topic. Besides that, businesses that focus on this sector are increasing and diversifying, as can be seen from the addition to the Indonesia Stock Exchange. This shows that food and beverage industry companies are always profitable. Even though the Covid-19 outbreak hit countries in the world, this industry did not falter. This industry is also the most resistant to economic crises, because as we all know, food and beverages are a basic human need. In a public company, openness is needed, because it helps investors to be confident in investing. According to Siagian, December 2007, precisely on the 1st The Indonesia Stock Exchange begins trading opened with nine business fields, one of which is the consumer goods sector. The consumer product industry sector produces basic necessities for daily life such as food and beverages [1]. The role of the Indonesia Stock Exchange itself is as a place for world trade transactions, providing all securities instruments, analyzing liquidity instruments, business investment securities instruments, establishing provisions relating to world business activities, and informing the exchange transparently. [2] Ratio analysis is a technique of collecting data from a company's financial statements which aims to clarify the relationship between various components of financial statements (balance sheet & profit and loss). Standardizing the quantity and facilitating comparisons between businesses and years in one business can be done using this ratio study. [3] According to the idea of liquidity, the company's ability to pay off debt in the short term is determined by its liquidity the long-term sustainability of its activities is ensured by its profitability. Debt Ratio illustrates the primary function of debt financing for a company by showing what proportion of its assets are supported by debt, while a profitability check will give a general idea of how the intended organization is performing financially. [4]. Measuring tools used in this paper is the Current ratio, Debt Ratio and Return on Assets where the three have a relationship on the level of liquidity and solvency has an impact on how profitable a company is. In other words, the business will be more profitable if the liquidity and solvency are low, and vice versa, if the liquidity and solvency are high, it will result in a decrease in profitability. [5]. Liquidity does not affect profitability, nor does leverage, according to Alfred and Herlin's research, the company's ability to pay off short-term liabilities is not always strong, so the factors that make the leverage ratio have no impact on an organization's ability to increase profitability. This is because the current ratio in the form of current assets and current liabilities compared to determine the company's liquidity does not guarantee that the company will be able to increase its profitability. This is because not all assets that are already owned can boost profitability, because businesses with a strong rate of return on investment usually use less debt to finance themselves, most likely the company is funding itself mainly using its own money. [6]. On the research of Saint Wahyu Liza and friends look the amount of liquidity in a company has a large

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negative impact on profitability, so that the more liquidity a company has, the more current assets it accumulates, which will reduce overall profitability. On the other hand, if a corporation has less liquid assets, its profitability will increase. Since profitability is not affected by solvency, a decrease in solvency will have an impact on the profitability of the organization.[7] In the research that was completed by Sunarto Wage and friends, the results were obtained the return on assets of companies listed on the Indonesia Stock Exchange is beneficially affected by liquidity. Temporary. Both liquidity and solvency ratios have an impact on the profitability of the food and beverage sector for companies listed on the Indonesia Stock Exchange, while the solvency ratio has a negative impact on the profitability of companies on the Indonesia Stock Exchange. [8]. Another article written by Anis Fadhillah shows that Profitability is significantly impacted by both liquidity and solvency, and there is a favorable correlation between these two factors and profitability. In addition, profitability and solvency are positively correlated, which means that as a company's capacity to earn profits grows, its capacity to pay long-term debt will also increase. Solvability also has a substantial impact. In addition, if the results of simultaneous testing show that liquidity and solvency have a similar impact positively affect profitability, and there is a correlation between the two, then as a company's capacity to generate profits increases, so does its capacity to pay all of its debts. Profitability is significantly influenced by liquidity and solvency, and there is a favorable correlation between these two factors and the profitability of companies in the Food and Beverage Sub Sector which are listed on the Indonesia Stock Exchange. In addition, profitability and solvency are positively correlated, which means that as a company's capacity to earn profits grows, its capacity to pay long-term debt will also increase. Solvability also has a substantial impact. And if from the test results simultaneously then profitability is significantly affected by liquidity and solvency, and there is a positive relationship between liquidity and solvency and profitability, i.e. if a company can earn more profit, it will be able to pay off all its debts. both the ability to repay short-term debt and long-term debt.[9]. The terms "stock exchange" or "stock exchange" can be used to describe the locations where certain business entities carry out capital market securities trading activities. Ratio analysis of financial data intends to provide guidance on the financial activities of a particular organization. This is done using a set of indexes linked to assurance in the relevant financial reporting documents.[10] Financial ratios offer internal and external comparisons as two approaches to compare company financial data.[11]. Internal Comparison (Trend Analysis) Within the same company, analysts can compare current reports with historical and future reports. Classification of financial indicators over several years is possible analyst for find out whether the company's financial status and performance are improving or deteriorating by analyzing the composition of changes within the same company, the analyst can compare the current report with previous and future reports. Comparison of Segment Reporting Sources and External Sources Comparing the reports of several companies is the second comparison strategy. at the same time with comparable business or industry norms. This comparison highlights the health and financial performance of each company. This ratio also makes it easy to spot deviations from industry norms or averages. The liquidity ratio is a measuring tool used to evaluate a company's capacity to meet its obligations immediately with a deadline of under one year. A company is considered liquid when it has the solvency to meet its financial obligations. Evaluation of the numbers can be seen in the company's annual balance sheet. The following formula shows the capacity of the business to meet its current obligations with a number of current assets[12]

$$\text{Current ratio} = \frac{\text{Aktiva Lancar}}{\text{Hutang lancar}}$$

In general, it can be said that high liquidity is indicated by a high current ratio, and if liquidity is low, then the current ratio is also low. The level of liquidity of a company can be increased by: Increasing current assets (Current Ratio), current liabilities and assets are also reduced[13]

When a corporation is about to go into liquidation, its ability to settle both short-term and long-term pending debts is measured as "solvency".[14].

$$\text{Debt Ratio} = \frac{\text{Total Hutang}}{\text{Total Aset}}$$

The profitability ratio examines the measure of the level of profit created in relation to sales and investment as a measure of overall management effectiveness. According to a book written by Irham Fahmi. The profitability ratio serves as a better indicator of a company's capacity to generate large revenues.[15]

$$\text{ROA} = \frac{\text{Laba Bersih}}{\text{Total Aset}}$$

**2. METHOD**

This study took a sample of 10 business actors in the food and beverage sector on the Indonesian stock exchange, namely PT Akasha Wira International Tbk (ADES), PT Tri Banyan Tirta Tbk (ALTO), PT Campina Ice Cream Industry Tbk (Campina), PT Sariguna Primatirta Tbk (Cleo), Garuda Food, PT Indofood CBP Sukses Makmur Tbk (Indofood), Mayora Indah Tbk ( Mayora), PT Nippon Indosari Corpindo (Sari Roti), PT Siantar Top Tbk (STT) and PT Ultra JayaMilk Industry & Trading Company Tbk (Ultra Jaya) using four-year time series data starting from 2018 to 2021. This study uses SPSS 20 as a processing tool with the data to be analyzed are the Normality Test, Multicollinearity Test, Heteroscedasticity Test, Multiple Linear Regression Test, Coefficient of Determination Test ( R<sup>2</sup>), Partial Test (t test) and simultaneous test (F test).Data on names of food and beverage industry companies come from the IDX, namely <https://www.idx.co.id>

**3. RESULTS AND DISCUSSIONS**

This research obtained the following results

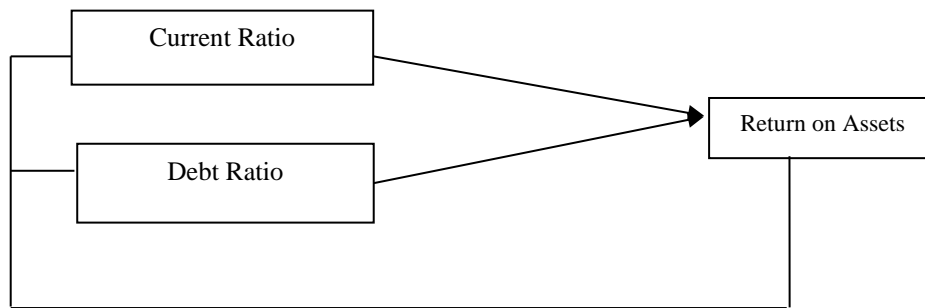


Fig.1 Conceptual Framework

Normality test

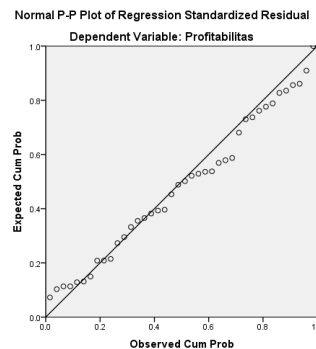


Figure 1. Normality Test

As Figure 1 illustrates how dots spread around the diagonal line and progress towards it. The regression model satisfies the normality assumption because the points spread in this way also run along the diagonal line.

Multicollinearity Test.

Table 1. Value Tolerance and Variance Inflation Factor

Variables	tolerance	VIF
Liquidity	0979	1,022
Solvability	0979	1,022

The price tolerance value and product quality of  $0.979 > 0.10$  can be seen from the multicollinearity test table above showing that there is no multicollinearity. occurs even though the VIF value for price tolerance and product quality is  $1.022 < 10$  Multicollinearity is not visible

#### Heteroscedasticity Test

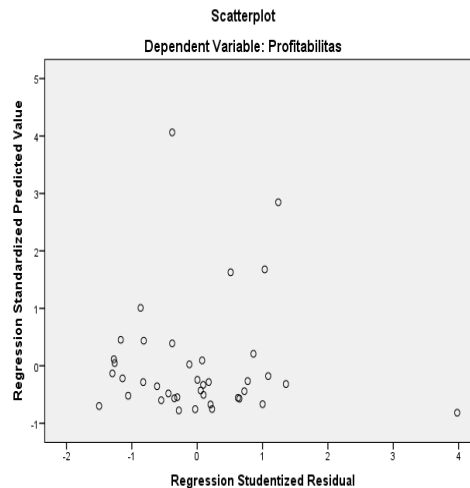


Figure 2. Heteroscedasticity Test

The distribution of the small circles above and below the number 0 on the Y axis is described in the form above using the results of the heteroscedasticity test. So, it can be concluded that the results of this test are homoscedastic.

#### Multiple Linear Regression Test

Table 2 Multiple Linear Regression

Model	Coefficientsa					Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	tolerance	VIF
	B	std. Error	Betas				
(Constant)	8,597	2,333		3,685	0.001		
1 Liquidity	0.509	0.986	0.083	0.517	0.609	0,979	1,022
Solvability	0.163	0.109	0.241	1,503	0.141	0,979	1,022

Dependent Variables: Profitability

Based on table 2, it can be seen that Profitability (Y) is affected by a constant value of 8,957 with the value of the Liquidity section (X1) being 0.509 and the Solvency result (X2) of 0.163. The regression equation is formulated:  $Y=8.957+0.509 X1+0.163X2$

#### Coefficient of Determination Test(R<sup>2</sup>)

Table 3 :Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.266a	0.071	0.020	6.27001

- a. Predictors: (Constant), Liquidity\_Solvability  
b. Dependent Variables: Profitability

Based on the test chart for the coefficient of determination R Square is 0.071, liquidity and solvency can only contribute 7.1% to consumer satisfaction; the remaining 92.9% is influenced by factors outside the scope of research, such as activity ratios, growth ratios, market value ratios, etc.

#### Partial Test (t test)

The t test seeks to ascertain the individual (partial) impact of each independent variable on the dependent variable. The regression equation describes the relationship between profitability and liquidity (X1) and solvency (X2) to profitability (Y). This equation is formed using 40 observations from a time series data set. 5% error rate when testing hypotheses.

1. In conclusion Liquidity has no visible impact on profitability, because the estimated t value of the Liquidity variable (X1) is 0.517 which is smaller than t table 2.026 or the significance value of the Liquidity variable is 0.609 which is more than 0.05 .
2. The results of the sig.t variable Product Quality of 0.141 is greater than 0.05, or the calculated t value of the Solvency variable (X2) of 1.503 is less than the t table of 2.026. hence, Solvability has no significant impact on Profitability.

#### Simultaneous Test (Test F)

The main purpose of the test is to determine whether the independence of the variables is significantly different from the dependent variable.

Table 4: Simultaneous Test

Model	Sum of Squares	df	Mean of Square	F	Sig
Total	110,571	2	55.285	1.406	0.258b
Residual	1454583	37	39,313		
Regression	1565.154	39			

The findings of Table 4 show that F count= 1.406 and a significance level of 0.258. F count < F table (1.406 < 3.24) when compared with F table at the 5% confidence level (= 0.05). Because F count < F table so in conclusion, the independent variable current ratio and debt ratio have no visible effect on the dependent variable profitability. The dependent variable has no major effect on liquidity and solvency when combined (Profitability)

## 4. CONCLUSION

The findings show that current ratio and solvency, either separately or together, have a small effect on the profitability of food and beverage listed on the Indonesia Stock Exchange. These results are different from the research by Sunarto Wage and Anis Fadhillah. But as the studies of Alfred and Herlin and Suci Wahyu Liza show, solvency results have little impact on profitability. For example, if the level of solvency decreases, it will affect how profitable the business is.

## REFERENCES

- [1] Abdul Haris Saepudin and Novi Permata Indah, "2022," vol. 10, p. 725–736, 2022.
- [2] M. Azmi and DB Kharisma, "Bei's Role in Protecting Capital Market Investors Against Public Company Bankruptcy," *J. Priv. law*, vol. 7, no. 2, p. 235, 2019, doi: 10.20961/privat.v7i2.39329.
- [3] Dr. Ely Siswanto, *Textbook of Basic Financial Management*, vol. 1, no. 1. 2021.
- [4] EYS Ony Kurniawati, "The Influence of Liquidity and Solvability on Profitability in Food and Beverage Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange (Bei)," *J. Exek. Vol. 18 No. June 1, 2021*, vol. 18, no. 1, pp. 51–63, 2021.
- [5] N. Made, R. Meilan, G. Putu, A. Jana, N. Luh, and W. Sayang, "Ni Made Riska Meilan Sari 1 , Gede Putu Agus Jana Susila 2 , Ni Luh Wayan Sayang Telagawathi 3," vol. 11, no. 2, 2020.
- [6] AK Herlin Tundjung Setijan, "The Influence of Liquidity, Efficiency of Working Capital, Leverage, and Company Size on Profitability," *J. Paradig. account.*, vol. 2, no. 2, p. 603, 2020, doi: 10.24912/jpa.v2i2.7625.
- [7] S. Wahyuliza and N. Dewita, "The Influence of Liquidity, Solvency and Working Capital Turnover on Profitability in Manufacturing Companies Listed on the Indonesian Stock Exchange," *J. Benefita*, vol. 3, no. 2, p. 219, 2018, doi: 10.22216/jbe.v3i2.3173.
- [8] S. Wage, H. Toni, and R. Rahmat, "The Influence of Liquidity, Solvability, Activity, and Company Size on Company Profitability on the Indonesian Stock Exchange," *J. Account. Barelang*, vol. 6, no. 1, pp. 41–49, 2022, doi: 10.33884/jab.v6i1.4558.
- [9] Anis Fadhillah, "The Influence of Liquidity and Solvency on Company Profitability in the Food and Beverage Sub-Sector listed on the Indonesia Stock Exchange for the period 2013 - 2016," *Rev. CENIC. Ciencias Biologicas*, vol. 152, no. 3, p. 28, 2016, [Online]. Available: [file:///Users/andreataquez/Downloads/guia-plan-de-mejora-institucional.pdf%0Ahttp://salud.tabasco.gob.mx/content/revista%0Ahttp://www.revistaalad.com/pdfs/Guias\\_ALAD\\_11\\_Nov\\_2013.pdf%0Ahttp://dx.doi.org/10.15446/revfacmed.v66n3.60060.%0Ahttp://www.cenetec](file:///Users/andreataquez/Downloads/guia-plan-de-mejora-institucional.pdf%0Ahttp://salud.tabasco.gob.mx/content/revista%0Ahttp://www.revistaalad.com/pdfs/Guias_ALAD_11_Nov_2013.pdf%0Ahttp://dx.doi.org/10.15446/revfacmed.v66n3.60060.%0Ahttp://www.cenetec).
- [10] DN Sahputra, *Sharia Financial Management*, vol. 4, no. 1. Medan: Undhar Press, 2557.
- [11] Erwinsdyah Astawinetu and Sri Handini, *Financial Management Theory & Practice*. Surabaya: Scopindo, 2020.
- [12] D. Suleman, R. Marginingsih, and I. Hidayat Susilowati, "Financial Management," *Ed. Second*, pp. 1–100, 2019, [Online]. Available: <https://repository.bsi.ac.id/index.php/repo/viewitem/20087>.
- [13] R. Sumardi and Suharyono, *Fundamentals of Financial Management: Equipped with examples of questions and answers*. 2020.
- [14] PMR Nurhikma, Tikollah, S. Pd, and M. Sa, "EFFECT OF SOLVENCY AND ACTIVITIES ON PROFITABILITY IN FOOD AND BEVERAGES COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE," no. 1392142008, 2019.
- [15] Irham Fahmi, *Introduction to Financial Management*, Sixth. Bandung: Alfabeta, 2018.