

# Effect of Current Ratio, Debt to Equity Ratio, Return on Assets and Net Profit Margin on Stock Prices

(Empirical Study of Food and Beverage Companies Listed on the Indonesia Stock Exchange 2017-2020)

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**Abstract:** This study aims to determine and analyze the effect of Current Ratio, Debt to Equity Ratio, Return on Assets and Net Profit Margin to share prices in food and beverage companies listed on the Indonesia Stock Exchange in 2017-2020. The research method used in this study is a quantitative method. The data used is secondary data in the form of financial statements of food and beverage companies listed on the Indonesia Stock Exchange from 2017 to 2020. The sampling method uses purposive sampling and obtained 13 companies. Thus, during the four years of observation (2017-2020) there were 52 samples analyzed. Hypothesis testing in this study using multiple regression analysis. The results showed that Current Ratio and Net Profit Margin influential, while Debt To Equity Ratio and Return On Assets has no effect on stock prices.

**Keywords:** Current Ratio, Debt To Equity Ratio, Return On Assets, Net Profit Margin, Stock price

## I. INTRODUCTION

In the era of globalization, almost all countries pay great attention to the capital market, because it has a strategic role in strengthening the country's economic activities. The capital market has two functions, namely as a means of funding and also as a means for companies to obtain funds from investors. The capital market is a meeting between parties who have excess funds and those who need funds by trading securities.

Minister of Industry Airlangga Hartanto (2018) said that the food and beverage industry has an important role in the development of the industrial sector and its contribution to gross domestic product (GDP). The food and beverage sub-sector has the largest role, amounting to 34.33% in 2017. This shows that the food and beverage sector has an important role in Indonesia's economic growth, so that this condition makes competition even tighter. Managers are competing to find investors who will invest their funds in food and beverage companies.

The sector that can survive during the global crisis is the consumption sector, especially the food and beverage industry. The reason is that since the global crisis occurred in mid-2008, only the food and beverage industry has been able to survive, because demand in this sector remains high. The food and beverage industry is the best and can survive not depending on export raw materials, but using more domestic raw materials.

With the food and beverage industry unaffected by the global crisis, stocks in the food and beverage group will attract more investors. This is because the level of public consumption will increase in line with the demands of increasingly complex human needs. One of the most important necessities is food and beverages as one of the largest taxpayers in Indonesia. This industry has an important role in economic activity in Indonesia. Apart from being one of the largest taxpayers in Indonesia, the food and beverage industry is also a sector that attracts investors to invest.

Data from the Central Statistics Agency (BPS) in 2018 shows that for the last 10 years the average per capita expenditure for one month for the food and beverage industry is 51% of total expenditure. Meanwhile, AC Nielsen's

study shows that 48% of Indonesia's total middle-class income spending is for fast moving customer goods (FMCG). Every food or beverage industry must have a business strategy that can help companies to get good opportunities in the eyes of the public and potential investors. If the business strategy carried out by the company has been running properly and properly, it will certainly have a good impact on a company.

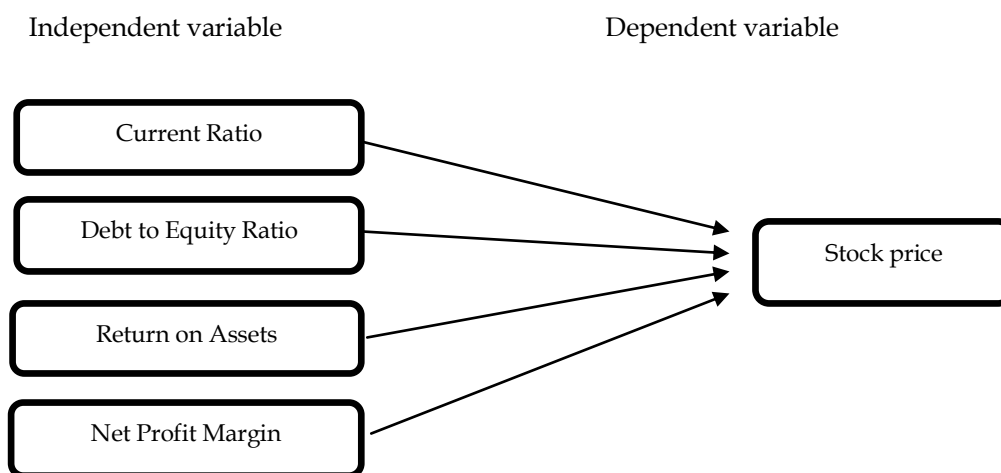
Based on this background, the authors are interested in conducting research with the title "THE EFFECT OF CURRENT RATIO, DEBT TO EQUITY RATIO, RETURN ON ASSET, AND NET PROFIT MARGIN ON STOCK PRICES OF SECTOR COMPANIES FOOD AND DRINK." Empirical Study on Food and Beverage Sector Companies Listed on the Indonesia Stock Exchange in 2017-2020.

## II. Headings

The stock price is the real price and the most easily determined price. The price of shares in the IDX is determined according to the law of supply and demand. If more people will buy shares, then the stock price will tend to increase. Conversely, if fewer people are interested in buying shares, the stock price will also decrease. Stock prices determine shareholder wealth, so information about stock prices is important for investors in the capital market.

### CR, DER, ROA and NPM ANALYSIS OF STOCK PRICES

The framework and hypotheses in this study are as follows:



#### 1) Current Ratio and Stock Price

Current Ratio is an important component in influencing stock prices. CR becomes a consideration for potential investors who will invest, the information in this analysis is used to determine the working capital position of a company. If a company's liquidity is weak, it will prevent the company from making a profit. This means that if the CR obtained by a company is low, there will be a decrease in stock prices. Conversely, if the CR obtained is high, then the stock price will increase, as a result investors will be interested in investing. Based on this description, the following hypotheses can be formulated:

H1: Current Ratio has an effect on stock prices.

#### 2) Debt to Equity Ratio and Stock Price

Debt to Equity Ratio becomes a consideration for investors when buying shares of a company. Any decrease or increase in DER will affect the stock price. Basically every company needs debt as operational capital assistance, the company is able to control debt. The greater the DER obtained, the higher the dependence of the company's capital on outside parties. Conversely, if the DER is low, the debt burden borne by the company will be less, so the stock price will also increase. Based on this description, the following hypotheses can be formulated:

H2: Debt to Equity Ratio has an effect on stock prices.

#### 3) Return On Asset and Stock Price

Return On Asset become one of the important factors that affect stock prices. A positive ROA indicates that the total assets used are able to provide profits to the company, while a negative ROA indicates that the total assets used by the company experience a loss. The greater the ROA obtained it can be said that the company has carried out operational activities well. A company that has a high ROA tends to have a stock price below the average, on the other hand, if the ROA is low, the stock price will increase. Based on this description, the following hypotheses can be formulated:

H3: Return on Assets has an effect on stock prices.

4) Net Profit Margin and Stock Price

Net Profit Margin is the ratio used as the main tool for investors to measure the company's financial ratios. If the NPM ratio obtained by a company is high, then the performance of a company is getting better in generating profits. Conversely, if the NPM obtained by the company is low, then the company has not achieved a good level of performance. Thus, it can be concluded that if the profit earned is high, then investors will be interested in buying shares. Based on this description, the following hypotheses can be formulated:

H4: Net Profit Margin has an effect on stock prices.

### III. Indentations and Equations

#### Types of research

The type of research used is quantitative research. This research focuses on theoretical testing through research variables in the form of numbers, then statistical data analysis is carried out, both manually and through the use of computer software.

#### Population and Sample

The population used in this study are food and beverage companies listed on the Indonesia Stock Exchange in 2017-2020. Determination of the sample in this study was done by purposive sampling method based on certain considerations and criteria.

#### Method of collecting data

The data collection method used is documentation by collecting documentary data sources such as company profiles and company annual reports that are the samples for this research. Data collection is obtained from internet media by downloading through the IDX website [www.idx.com](http://www.idx.com) websites such as [www.finance.yahoo.com](http://www.finance.yahoo.com) and journals.

#### Data analysis method

The data analysis technique used is descriptive statistical analysis and multiple regression analysis with the help of SPSS version 22 software.

The multiple regression model used is the following formula:

$$Y = a + 1X_1 + 2X_2 + 3X_3 + 4X_4 + e$$

Information:

Y	=Stock price
a	= Constant
1 - 4	= Regression Coefficient
X1	=Current Ratio
X2	=Debt to Equity Ratio
X3	=Return on Assets
X4	=Net Profit Margin
e	=error

### IV. Figures and Tables

#### Descriptive Statistical Analysis Results

Table 1 descriptive statistical analysis test results

DESCRIPTIVE STATISTICS

Variable	N	Minimum	Maximum	mean	Std. Deviation
Current Ratio	52	,007	8,638	2,39290	1.827420
Debt To Equity Ratio	52	,108	2,506	,85975	,606697
Rreturn on assets	52	,001	98.273	3.43110	16.677322
Net Profit Margin	52	,000	,390	,11094	,107254
Stock price	52	94	16000	3791.87	4095,911

Source: Secondary data processed by the author, 2022

**Classic assumption test**

**1) Normality test**

The normality test in this study uses CLT (Central Limit Theorem), the results show that the number of observations (N) is 52 samples, so it can be interpreted that the number of samples is 52, greater than 30. This indicates that the data can be said to be normally distributed and can be called as a large sample.

**2) Multicollinearity Test**

Table 2 Multicollinearity Test Results

Variable	Tolerance	VIF	Information
Current Ratio	0.589	1,698	There is no multicollinearity
Debt To Equity Ratio	0.715	1.398	There is no multicollinearity
Return On Assets	0.972	1.029	There is no multicollinearity
Net Profit Margin	0.791	1,265	There is no multicollinearity

Source: Secondary data processed by the author, 2022

Based on the table, the tolerance value of each variable is greater than 0.1 and the VIF value is less than 10, so it can be concluded that all variables do not have multicollinearity problems.

**3) Autocorrelation Test**

Table 3 Autocorrelation Test Results with Run Test

	Unstandardized Residual
Test Value	-652,16142
Cases < Test Value	26
Cases >= Test Value	26
Total Cases	52
Number of Runs	25
Z	-,560
asympt. Sig. (2-tailed)	0.575

Source: Secondary data processed by the author, 2022

In the table, it can be seen that the significance value (Asymp. Sig. 2-tailed) with a value of 0.575 > 0.05, thus indicating that the data does not have symptoms of autocorrelation in the regression model used.

**4) Heteroscedasticity Test**

Table 4 Spearman Rho . Heteroscedasticity Test

Variable	Sig. (2-tailed)	Critical Value	Information
Current Ratio	0.551	0.05	Heteroscedasticity Free
Debt To Equity Ratio	0.674	0.05	Heteroscedasticity Free
RreturnOn Asset	0.205	0.05	Heteroscedasticity Free
Net Profit Margin	0.785	0.05	Heteroscedasticity Free

Source: Secondary data processed by the author, 2022

Based on the table, it can be seen that the significance probability value is greater than 0.05, so it can be concluded that all variables do not occur heteroscedasticity.

**Hypothesis test**

**1) Multiple Regression Analysis**

Table 5 Multiple Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	3386,553	1167,272		2,901	0.006
Current Ratio	-1041.006	275,478	-0.464	-3.779	0.000
Debt To Equity Ratio	-771,284	752,912	-0.105	-0.945	0.350
Return On Assets	45.777	23,497	0.186	1,948	0.057
Net Profit Margin	30203,067	4050,495	0.791	7,457	0.000

Source: Secondary data processed by the author, 2022

Based on the table, the following equation can be arranged:

$$HS = 3386.553 - 1041.006 (CR) - 771.284(DER) +45,777 (ROA)+30203,067 (NPM) + \square e$$

Based on the regression equation can be interpreted as follows:

- 1) The constant value shows a value of 3386.553, indicating if the value of the variables CR, DER, ROA, and NPM does not change or is considered constant (value 0), then the stock price is 3386.553.
- 2) The regression coefficient for the CR variable is -1041.006. This shows that every 1 percent increase in CR will result in a decrease in the share price of Rp. 1041.006 units assuming other variables are fixed. On the other hand, if the CR falls 1 percent, the share price will increase by Rp. 1041.006.
- 3) The regression coefficient for the DER variable is -771,284. This shows that every 1 percent increase in DER will result in a decrease in the share price of Rp. 771,284 assuming other variables have a fixed value. On the other hand, if the DER decreases 1 percent, it will result in an increase in the share price of Rp. 771,284.
- 4) The regression coefficient of the ROA variable is 45,777. This shows that for every 1 percent increase in ROA, it will result in an increase in the share price of Rp. 45.777 assuming other variables have a fixed value. On the other hand, if ROA decreases by 1 percent, the stock price will decrease by Rp. 45.777.
- 5) The regression coefficient for the NPM variable is 30203,067. This shows that for every increase of Rp. 1.00 NPM, it will result in an increase in the share price of Rp. 30,203,067 with the assumption that other variables have a fixed value. On the other hand, if the NPM decreases by Rp. 1.00, then the stock price will decrease by Rp. 30,203.067

**2) Model Feasibility Test (F Test)**

Table 6 Model Feasibility Test (F Test)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	497861263.4	4	124465315.9	16,352	0.000b
Residual	357739732.6	47	7611483,673		
Total	855600996.1	51			

Source: Secondary data processed by the author, 2022

Based on the table shows that the probability value is 0.000 which means it is smaller than the significance level ( $\alpha = 0.05$ ), so it can be concluded that all independent variables simultaneously affect the dependent variable. It also shows that the regression model used is fit.

**3) Coefficient of Determination Test**

Table 7 Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.763a	0.582	0.546	2758,892

Source: Secondary data processed by the author, 2022

Based on the table, the coefficient of determination (Adjusted R2) is 0.546. This indicates that 54.6% of the stock price is influenced by independent variables (CR, DER, ROA, and NPM) and the remaining 45.4% is influenced by other variables.

4) Partial Test (t Test)

Table 8 Partial test (t test)

Variable	tcount	ttable	Sig.	Std. Sig.	Information
Current Ratio	-3.779	2.012	0.000	0.05	Significant
Debt To Equity Ratio	-0.945	2.012	0.350	0.05	Not significant
Return On Assets	1,948	2.012	0.057	0.05	Not significant
Net Profit Margin	7,467	2.012	0.000	0.05	Significant

Source: Secondary data processed by the author, 2022

Based on table 8, it can be explained as follows:

- 1) The CR variable is known to have tcount (-3.779) is greater than ttable (2.012) and a significance value of 0.000 is smaller than = 0.05, so it can be concluded that CR has a significant effect on stock prices.
- 2) VariableDERknown value of tcount (-0.945) is smaller than ttable (2.012) and a significance value of 0.350 is greater than = 0.05, so it can be concluded that DER has no significant effect on stock prices.
- 3) VariableROAknown value of tcount (1.948) is smaller than ttable (2.012) and a significance value of 0.057 is greater than = 0.05, so it can be concluded that ROA has no significant effect on stock prices.
- 4) VariableNPMknown value of tcount (7.467) is greater than ttable (2.012) and a significance value of 0.000 is smaller than = 0.05, so it can be concluded that NPM has a significant effect on stock prices.

Discussion of Research Results

1) Effect of Current Ratio on Stock Prices

Based on the results of the study indicate that the first hypothesis (H1) is accepted, which means that the Current Ratio variable has an effect on stock prices. The results showed that there was a relationship between CR and stock prices caused by several factors caused by the company, namely the company's performance is not enough just to be healthy independently but for the future it must also have good prospects. Therefore it can be concluded that the higher the level of CR the company will encourage an increase in the quality of stock prices. On the other hand, if the lower the CR the company will tend to lower its share price.

These results are in line with research conducted by Mujino and Prijati (2017), Monoppo, Tewal and Jan (2017), Fitrianiingsih and Budiansyah (2019) which states that CR has a significant effect on stock prices.

2) The Effect of Debt to Equity Ratio on Stock Prices

Based on the results of the study, it shows that the second hypothesis (H2) is rejected, which means that the debt to equity ratio variable has no effect on. These results indicate that investors in making decisions to purchase shares in food and beverage companies do not see a company's dependence on debt as a factor that must be considered, but pay more attention to how much the company's ability to generate income/profits is. So the size of the debt (which is indicated by the DER level) in food and beverage companies is not a consideration for potential investors to buy shares and for companies to increase or decrease their share prices.

The results of this study are in line with research conducted by Wahyuni and Suputra (2017) which shows that the DER variable does not have a significant effect on stock prices.

3) Effect of Return on Assets on Stock Prices

Based on the results of the study, it is shown that the third hypothesis (H3) is rejected, which means that ROA has no effect on stock prices. This shows that the company's ability to generate profits by utilizing and maximizing its assets has not been able to become a reference for investors to assess the company's management. With this, the size of a company's ROA does not affect the company's stock price itself. In

addition, investors or capital market participants often do not see ROA in making decisions to buy company shares.

This study is in line with research conducted by Supriantikasari and Utami (2019), Pratama and Erawati (2014), Monoppo, Tewel and Jan (2017) which concluded that ROA has no effect on stock prices.

#### 4) Effect of Net Profit Margin on Stock Prices

Based on the results of the study indicate that the fourth hypothesis (H4) is accepted, which means that the NPM variable has an effect on stock prices. This shows that the higher the NPM, the more investors will be interested in investing in the company. The existence of this means that NPM is able to describe the development and prospects of a company to generate income. Basically, a large income must also be balanced with a minimum of costs incurred. In this case, NPM has also been able to describe the rate of return that investors will receive from purchasing company shares.

The results of this study are in line with research conducted by Monoppo, Tewel and Jan (2017) and Roni (2019) which concluded that NPM has an effect on stock prices.

### V. Conclusion

Based on the results of research on the effect of CR, DER, ROA and NPM on food and beverage companies listed on the IDX in 2017-2020, the following conclusions can be drawn:

1. Current ratio effect (statistically significant) on stock prices, so that the H1 of this study is accepted.
2. Debt to equity ratio has no effect (not statistically significant) on stock prices, so H2 of this study is rejected.
3. Return on assets has no effect (not statistically significant) on stock prices, so H3 of this study is rejected.
4. Net profit margin effect (statistically significant) on stock prices, so H4 in this study is accepted.

### Limitations of Research and Suggestions

- 1) The sample in this study only used food and beverage companies listed on the Indonesia Stock Exchange in 2017-2020. For further researchers, it is hoped that they can increase the number of samples by using companies from other sectors listed on the IDX so that the results of research on stock prices will have a broad and accurate range.
- 2) This study only uses four independent variables, namely CR, DER, ROA and NPM, so that future researchers are expected to add other independent variables, in this study only explains 54.6% of the dependent variable, while the remaining 45.4% is explained by the variable other than the model under study.

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