# THE EFFECT OF FINANCIAL VARIABLES ON THE COMPANY'S <br> VALUE (Study on Food and Beverage Companies that are listed on Indonesia Stock Exchange Period 2008-2011) 

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#### Abstract

This study analyzes and explains the effect of financial variables on the value of Food and Beverage Companies that are listed on Indonesia Stock Exchange period 2008 - 2011. The samples of this research are 11 Food and Beverage Companies that have complete financial reports period 2008-2011. The financial variables used are CR, ROE, EPS, DER, PBV, and ROA and Stock price as representative of company's value. Based on multiple linear regression analysis, simultaneously, all independent variables significantly affect the stock prices. But partially, only ROE, EPS and PBV that affect stock price of Food and Beverage Companies in the period 2008-2011. The analysis also stated that EPS has the largest beta coefficient value, means the EPS variables have the most dominant influence on stock prices of Food and Beverage Companies in the period 2008-2011 than other financial variable mentioned above.


Keywords: Financial Variables, Company's Value, Food and Beverage Company

## 1. INTRODUCTION

Capital market is an important role in supporting the economical development of a country because it enhances production and productivity, greater employment opportunities, and improved macroeconomic stability. Company that sale its equity or debt securities to get capital is called "go public" company. After issuing an IPO (initial public offering) a company officially became go public and it can provide additional funds from capital market.

One of the value measurements of a company is the market value of all its outstanding shares and it is reflected in stock price. Stock assessment is basically to determine the fair value and after that it can be assessed if the stock price over value or under value. The Stock that has too low price in certain periods would increase; while stock that has too high price at some point will decrease until it reaches the point of market equilibrium (market value). The assessment usually refers to the estimated intrinsic value of a company or its shares. Intrinsic value is
the true value of a stock. If the performance of public enterprises increases, the value will be higher and will be appreciated by the market in the form of rising stock prices, the opposite case, bad news about the company's performance will be followed by a decline in stock prices.

Fama (1965) mentioned in his research that all assume that the past behavior of a security's price is rich in information concerning its future behavior. History repeats itself in that "patterns" of past price behavior will tend to recur in the future. Thus, if through careful analysis of price charts one develops an understanding of these "patterns," this can be used to predict the future behavior of prices and in this way increase expected gains.

The Purpose of this study is to analyze and explain the effect of financial variables on the value of Food and Beverage Companies that are listed on Indonesia Stock Exchange period 2008-2011. The researcher is motivated to do a study on Food and Beverage Companies that listed on the Indonesia Stock Exchange because of Food and Beverage Company has significant contribution to Gross Domestic Product (GDP), its national employment is very high compared with other types manufacturing firms, and it has the highest amount of company rather than another manufacturing industries. The samples of this research are 11 Food and Beverage Companies that have complete financial report period 20082011. The financial variables used are CR, ROE, EPS, DER, PBV, and ROA and Stock price as representative of company's value.

## 2. PREVIOUS RESEARCH

Wu and Xu (2006), use both rough set theory and neural networks approach to get an effective model of stock price movement for China's young stock market. The model is modified and tested by the most recent 6 years of data collecting from China's stock market to make sure it is updating and withstanding in a long time. The results stated that the strong fundamental analysis can predict stock prices. This Research showed that Return Ratio on Asset (RRA), Earning Per Share (EPS), Current Ratio (CR), Quick Ratio (QR), Debt to Asset Ratio (DAR), Net Cash Flow per Share (NCFS), and Account Receivable Turnover (ART) and other financial variables have significant effect on stock price changes.

Martani, Mulyono and Khairurizka (2009) in their study examined the value relevance of accounting information in explaining stock return. The study uses profitability, liquidity, leverage, market ratio, size and cash flow as proxies of accounting information. The samples of the study are listed companies in manufacturing industries that actively trading in period 2003-2006 on Indonesia

Stock Market. The study finds that NPM, ROE, DER, PBV have positive effect to the market adjusted return as stock return variable.

Chowdhury (2010) researched the impact of capital structure on the value of firm, this study analyzed 77 companies from four different dominant sectors of Bangladesh capital market, i.e. pharmaceuticals and chemicals, fuel and power, food, and engineering industry which are listed in Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE) of Bangladesh. This research put value of the firm (share price) as dependent variable; Firm size (share capital), profitability (EPS), public ownership (in percentage), capital structure ( ratio of long term debt to total assets), dividend payout (at actual), efficiency (fixed asset turnover), growth rate (sales growth rate), liquidity (current ratio), and business risk (operating leverage) were taken as independent variables. The research showed that Long Term Debt to Asset Ratio, Dividend Payout, EPS, and CR have positive correlation with Firms’ Stock Price.

Kabajeh, Nu'aiamat, and Dahmash (2012) examined the relationship between the ROA, ROE and ROI ratios together and separately with Jordanian insurance public companies share prices during the period (2002-2007). Based on the empirical evidence, the results showed a positive relationship between the ROA, ROE and ROI ratios together with Jordanian insurance public companies share prices. The results also showed a positive but low relationship between each of ROA ratio separately and ROI ratio separately with Jordanian insurance public companies share prices.

Saqafi and Vakilifard (2012) investigate the role of variables in fundamental stock analysis on the future stock Returns. Research data involves financial variables of 120 companies listed in the Tehran Stock Exchange for the past 6 years; including Return On Asset (ROA). Result indicated a significant relationship between ROA and stock return.

Previous researches above are emphasis on fundamentals. So, it is highly difficult to detect how deep the independent variables can explain the variation in the dependent variable (stock price) so as to give opportunities for further research in both replicative and development. Relate to previous studies, it is explained the position of the study are as follows:

1. This study entitled The Effect of Financial Variables on The Company's Value.
2. Independent variables are CR, ROE, DER, EPS, PBV, and ROA.
3. Dependent variable is the stock price as an appreciation of the value of the company.
4. The data is the financial report of Food and Beverage Company listed on the Indonesia Stock Exchange in the period 2008-2011.
5. The analytical tool used is multiple linear regressions.

## 3. RESEARCH METHODOLOGY

This research is explanatory research, which is research that explains the causal relationships between variables through hypothesis testing. The purpose of explanatory research is to explain the relationship of the object studied variables to be more causal, so the research is looking for how big the effect of independent variables on the dependent variable. Causal models typically use regression analysis to determine which variables significantly affect the dependent variable. Characteristics of the study is replication where the research is conducted to develop existing research and hypothesis test results are supported by previous studies were repeated with other conditions that are more or less the same. This type of research use data in the form of numbers with statistical analysis and an explanation for the results.

The method of analysis used in this study is a multiple linear regression analysis. Regression analysis is an analysis that measures the effect of independent variables on the dependent variable. Measuring influence among variables involving more than one independent variable ( $\mathrm{X} 1, \mathrm{X} 2, \mathrm{X} 3, \ldots, \mathrm{Xn}$ ) is called multiple linear regression analysis. Said to be linear because any estimate of the value is expected to experience an increase or decrease in a straight line. Multiple regression analysis is used to determine whether a financial variable which is the independent variable are able to measure the stock price as the dependent variable.

Linear regression equation is:
$Y=\alpha+\beta_{1} X_{1}+\beta_{2} X_{2}+\beta_{3} X_{3}+\beta_{4} X_{4}+\beta_{5} X_{5}+\beta_{6} X_{6}+e$
Description:
Y = Value of firm
$\alpha=$ constant numbers
$\beta_{1}, \beta_{2}, \beta_{3}, \beta_{4}, \beta_{5}, \beta_{6}=$ regression coefficient of the independent variable. $\mathrm{X}_{1}, \mathrm{X}_{2}, \mathrm{X}_{3}, \mathrm{X}_{4}, \mathrm{X}_{5}, \mathrm{X}_{6}=\operatorname{Predictor}(\mathrm{CR}$, ROE, DER, EPS, PBV, and ROA). $\mathrm{e}=$ confounding factor (error)

The purpose of this analysis is to show the effect financial variables Current Ratio (CR), Return On Equity (ROE), Debt Equity Ratio (DER), Earning

Per Share (EPS), Price Book Value (PBV) and Return on Asset (ROA) on firm value.

The researcher determines the sample by Full Sample Technique. Full sample technique is when all members of the population are used as samples. This is usually done when the population is relatively small. Another term of full sample is census, which all members of the population become sample. The companies sampled must meet the following criteria:

1. Food and Beverage Company which has been publicly traded on the Stock Exchange, listed as issuers from 2008 to 2011 continuously (never experienced delisting).
2. The company issued financial statements ending December 31 and using rupiah as the reporting currency.
3. The company has stock price data (at the time the financial statements submitted to the Securities and Exchange Commission) during 2008 to 2011.

After diversified 16 Food and Beverage Companies, four of those companies are just listed in 2010 and 2012, so they did not publish their financial statement completely from 2008 to 2011. And another one company did not publish its financial report completely in year 2011. For those reasons, the samples of this research are the rest 11 Food and Beverage Companies that are listed on Indonesia Stock Exchange period 2008-2011.

## 4. RESULTS

Descriptive statistics of each variable in this research is shown in table 1. It can be seen from descriptive statistics that most variables are fluctuate.

Table 1. Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CR | 44 | 51.39 | 735.07 | 214.4420 | 150.89020 |
| ROE | 44 | -59.03 | 449.09 | 35.7777 | 70.31792 |
| DER | 44 | 20.00 | 844.00 | 136.8864 | 129.01870 |
| EPS | 44 | .00 | 10.09 | 4.8320 | 2.58782 |
| PBV | 44 | 54.00 | 3545.00 | 335.3182 | 573.29743 |
| ROA | 44 | -16.56 | 55.74 | 13.0236 | 13.36305 |
| Stock Price | 44 | 4.38 | 12.79 | 7.4168 | 2.34497 |
| Valid N | 44 |  |  |  |  |

Before running the regression, In order to meet the requirements of multiple linear regression analysis techniques that reasonably accurate and close to reality, the analysis must conduct the classical assumptions, those are normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The results are normal, no multicollinearity between variables, no autocorrelation, and no heteroscedasticity.

The result of multiple linear regressions is shown in table 2. Multiple linear regression analysis is used to measure the effect of the dependent and independent variables. Independent variables are $C R\left(X_{1}\right), \operatorname{ROE}\left(X_{2}\right), D E R\left(X_{3}\right)$, $\operatorname{EPS}\left(\mathrm{X}_{4}\right), \operatorname{PBV}\left(\mathrm{X}_{5}\right)$, and ROA $\left(\mathrm{X}_{6}\right)$ and the dependent variable is the value of the company (Y) which is appreciated by the stock price. The analysis also shows the adjusted coefficient of determination (Adjusted R Square) is 0.963 , which means that the independent variables can explain the variation in the dependent variable changes by $96.3 \%$ while the remaining $3.7 \%$ is explained by variables beyond the variables used in this study.

According to the table 2 the regression equation can be written as follows:

$$
\begin{aligned}
& \quad Y=2.908+0.00005938 X_{1}-0.020 X_{2}+0.000 X_{3}+0.893 X_{4}+0.003 X_{5}- \\
& 0.001 X_{6}+e
\end{aligned}
$$

Table 2. Multiple Linier Regression Analysis Result

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients |  | Sig. | Conclusion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error | Beta |  |  |  |
| 1 | (Constant) | 2.908 | . 250 |  | 11.656 | 000 |  |
|  | CR | $5.938 \mathrm{E}-005$ | . 001 | . 004 | . 108 | 915 | Insignificant |
|  | ROE | -. 020 | . 004 | -. 587 | -5.285 | . 000 | Significant |
|  | DER | . 000 | . 001 | . 018 | . 237 | . 814 | Insignificant |
|  | EPS | 892 | 057 | . 984 | 15.713 | 000 | Significant |
|  | PBV | . 003 | . 000 | . 620 | 7.161 | . 000 | Significant |
|  | ROA | -. 001 | . 016 | -. 004 | -. 045 | . 965 | Insignificant |

According to the table 2 the regression equation can be written as follows:
$Y=2.908+0.00005938 X_{1}-0.020 X_{2}+0.000 X_{3}+0.893 X_{4}+0.003 X_{5}-$ $0.001 \mathrm{X}_{6}+\mathrm{e}$

The equation shows that if the value of coefficient regression of each variable is considered zero (0), then the amount of the company's stock price of
food and beverage will be an increase of 2.908 point. Based on the above regression model it can be expressed as the following matters:
a. CR has positive effect on stock prices. Increase of one CR unit will raise the stock price by $5.938 \mathrm{E}-005$ or 0.00005938 units if the other independent variables in the model remain constant. This is consistent with the theory that CR has positive effect on stock prices, which CR may explain the company's ability to meet its short-term obligations that are proportionally effect on stock prices.
b. ROE has a negative effect of the stock price. It is inconsistent with the theory that ROE positive influence stock prices. ROE shows the company's ability to generate earnings by using the capital, so the amount ROE itself indicates the level of efficiency in managing the company's own capital to generate profits. Increase of one unit of ROE will reduce the stock price by 0.20 units if the other independent variables in the model remain constant.
c. DER has positive effect of the stock price. This is inconsistent with theoretical expectations, which increases the variable DER unit will lower the share price. Increase of one unit of DER will reduce the stock price by 0.000 units if the other independent variables in the model remain constant.
d. EPS has positive effect of stock prices. The regression results are consistent with the theoretical expectations, where the value of EPS will positively effect on stock prices. This means that during the period of study, the shareholder of Food and Beverage Companies make profits as the basis of ownership of these shares. If EPS increase one unit, stock price will increases 0.892 units if the other independent variables in the model remain constant.
e. PBV has positive effect of stock prices. These results are in accordance with theoretical expectations, which PBV variable support stock prices. The increase in one PBV units will increase the stock price 0.003 units, if the other independent variables in the model remain constant.
f. ROA has negative effect of stock prices. These results are not in accordance with theoretical expectations, which ROA variable support stock prices. The increase in one ROA units will decrease the stock price into 0.001 units, if the other independent variables in the model remain constant.

Based on the F test by referring to the value of $\mathrm{F}_{\text {table }}$ and probability values, it can be expressed simultaneously that the financial variables, $\mathrm{CR}, \mathrm{ROE}$, DER, EPS, PBV, and ROA affect the stock prices of Food and Beverage

Companies in the period 2008-2011. The stock price is used to appreciate the value of the company. Based on the $t$ test, the partial variables that have significant effect on the stock price is ROE, EPS and PBV; and EPS is the largest standardize beta coefficient, 0.984. It means EPS has the most dominant effect on company stock prices.

The analysis results show CR has insignificant relation with the value of the company because CR is relate to operational activity of the company, the current ratio includes cash, account receivable, inventory, marketable securities, and current liabilities; not relate to profit. The result is supported by previous research conducted by Martani, Mulyono, and Khoirurizka (2009) And Chowdhury (2010). The result is contrast with Wu and Xu (2006).

Based on the t-test result, partially, ROE has significant effect to the stock prices of Food and Beverage Company that are listed on Indonesia Stock Exchange period 2008-2011. Based on linier regression model, ROE has negative effect to the stock prices. It means investors in Indonesia are using ROE as a decision factor to invest their money in food and beverage company that listed in period 2008-2011. But, they are more interested to profit in the short term through capital gains than dividend. The study is in contrast to research conducted by Martani, Mulyono, and Khoirurizka (2009) and Kabajeh, Al Nu'aimat, and Dhamash (2012).

DER has insignificant effect on the stock prices and has a negative value. The result is supported by Martani, Mulyono, and Khoirurizka (2009). Investors in Indonesia are not using DER as a decision factor to invest their money in Food and Beverage Company that listed in period 2008-2011. Because most investors are prefer to short-term profits in the form of capital gains than dividend.

Based on the t-test and linear regression analysis, EPS has significantly relationship with the stock price of the listed Food and Beverage Companies in period 2008-2011 because higher value of EPS indicates that the company is able to provide a better level of welfare to the shareholders, while lower value of EPS indicates that the company failed to provide benefits as expected to the shareholders. This analysis result supported by Wu and Xu (2006) and Chowdhury (2010).

PBV has significant and positive effect on the stock price because the higher PBV makes the market has higher expectation to the company's prospect. The results supported by Martani, Mulyono, and Khoirurizka (2009).

The insignificant effect between ROA and the stock price means that the company is unable to generate profits with their own asset that could benefit the shareholders. This trend suggests that investors are more interested to see the theoretical analysis than fundamental, especially for investors who want to profit in the short term through capital gains compared with a dividend. The research result contrast with Kabajeh, Nu'aiamat, and Dahmash (2012) and Saqafi and Vakilifard (2012)

## 5. CONCLUSIONS AND LIMITATIONS

Based on linear regression analysis, simultaneously, all independent variables significantly affect the stock prices. But partially, only ROE, EPS and PBV that affect share prices of Food and Beverage Companies in the period 20082011. The results of the regression analysis also stated that EPS has the largest beta coefficient value, it means EPS have the most dominant influence on stock prices of Food and Beverage Companies than the other financial variables.

The limitations of this research are first, small numbers of financial variables; second, theoretically, the higher profits that will enhance shareholder value, but in fact during the study period many companies that have low profit or even a loss; and the this study does not consider the size effect, firm size affects the ability for the company to earn a profit, which in turn can affect the level of return that may affect the level of return that would be obtained investor.

