

The Impact of Economic Value Added (EVA), Debt Equity Ratio (DER), Financial Leverage Toward Stock Return of Indonesia Food and Beverage Companies Listed in Indonesia Stock Exchange (IDX) Within Period 2012 – 2017

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Abstract - In the investment world, the parties who put the capital in the stocks of companies listed on the stock exchange have a goal to get return and avoid risk. The one of many ways to assess the company's performance to be invested is using the Economic Value Added, Debt Equity Ratio, and Financial Leverage.

The population of this research is the Food and Beverage Company. Sampling technique is purposive sampling, with the number of samples of 13 Food and Beverage companies listed on the Indonesia Stock Exchange period 2012-2017. The data analysis technique used is the Data Panel with the Common Effect Model. Hypothesis testing using T-tests for partial testing, F-Test for simultaneous testing and coefficient of determination. The results of this study show that a partial Economic Value Added and Financial leverage has no influence on the return of shares, while Debt Equity Ratio has an influence on the return of shares. And for simultaneous testing, Economic Value Added, Debt Equity Ratio, and Financial Leverage have an influence on the share return simultaneously. Furthermore, coefficient of determination is the result of 0.180781 or in other words, the stock return variable can be explained by Economic Value Added, Debt Equity Ratio and Financial Leverage by 18.1%. While the other 81.9% is explained by other factors outside this research.

Keywords - Economic Value Added, Debt Equity Ratio, Financial Leverage, Stock Return

1. Introduction

Investment in Indonesia processed food and beverage industry is expected to grow at least ten percent to IDR 55 trillion (\$4.6 billion) in 2015 from an estimated investment realization of IDR 50 trillion in 2014. Adhi Lukman, General Chairman of the Indonesian Food and Beverage Association (GAPMMI), said that investments in this sector have been solid due to the rising consumption of food and beverages in Southeast Asia's largest economy. Particularly foreign investments have been strong in 2014 and are expected to continue next year.

Companies selected by the writer have listed companies in IDX sector Food and Beverage period of 2012 - 2017. Company sectors of Food and Beverage is a company engaged in the field of food and drink. In Indonesia already many companies sectors of Food and beverage can prove there are 18 companies listed at the IDX in the year 2018. The company's first sector food and beverage in Indonesia are Delta Djakarta which first offered shares to the investor namely in 1984.

Economic Value Added is similar to the concept of profit also residue. Differentiate, in the calculation of the residual profit, there is a minimum estimate of the return set out based on a target as a deduction over the operating profit. While the annual cost of capital as a deduction the real unused operating profit [1].

Giving a loan to the debtor who has a level of debt equity ratio is high gives rise to consequences for the debtor's financial failure. This course is a very disadvantage for creditors. Conversely, if the creditors give a loan to the debtor who has a level of debt equity ratio is low (which means the debtor funding levels comes from the owner's capital) then it can have the risk of the debtor's financial failure. In other words, it would be safer for creditors in providing loans to the debtor who has a level of debt equity ratio that is low because this would mean that a large amount of capital will be more owners who can serve as collateral for debt [2].

Financial leverage is the use of assets and source of funds by the company that owns the fixed costs with the intent to increase potential profits of shareholders. The purpose of the financial leverage is the advantage gained is greater than the cost of the asset and the source of the funds, thereby increasing the profits of shareholders. If the company has no debt, the value of his company going up because there is no risk of the interest must be paid for. Then the value of the company will go down, because of limited funds, so these should be owed to company operations [3].

In accordance with the background of this study, the questions that can be made are: How are Economic Value Added, Debt Equity Ratio, Financial Leverage, and Stock Return growth in Food and Beverage Company period 2012-2017, Does Economic Value Added have an impact to Stock Return in Food and Beverage Company listed 2012-2017, Does Debt Equity Ratio have an impact to Stock return in Food and Beverage Company listed 2012-2017, Does Financial Leverage have an impact to Stock return in Food and Beverage Company listed 2012-2017, Do Economic Value Added, Debt Equity Ratio, and Financial Leverage have an impacted to Stock return in Food and Beverage Company listed 2012-2017

Based on the background above, therefore this research is given the title " The Impact of Economic Value Added (EVA), Debt Equity Ratio (DER), Financial Leverage Toward Stock Return of Indonesia Food and Beverage Company Listed in Indonesia Stock Exchange (IDX) Within Period 2012 – 2017"

2 Theoretical Review

2.1 Stock Return

In the financial market where stock and bond are sold, net user of money, such as companies that make investments, have to compete with one another for capital. To obtain financing for project that will benefit firm's shareholders, a company must offer investors a rate of return that is competitive with the next best investment alternative available to the investor. Rate of return on the next best investment alternative to the saver is known as the investor's opportunity cost of fund [4].

$$\text{Stock Return} = \frac{P_t - P_{t-1} + D_t}{P_{t-1}} \quad (1)$$

P_t = Share prices of the current year
 P_{t-1} = Share prices of previous year
 D_t = Dividend

2.2 Economic Value Added

Economic Value Added (EVA) is the operating profit after tax is reduced by the total annual cost of capital. If a positive EVA, these have created wealth. If it is negative, then the companies have wasted capital. In the long run, the only company that produces capital, or wealth, which can survive. EVA is a dollar figure, not a percentage rate of return. However, EVA also produces a rate of return such as the ROI (Return on Investment) because connecting net income. (return) and capital employed. EVA'S core is its emphasis on operating net profit and the cost of the actual capital [5].

$$EVA = \text{NOPAT} - (\text{WACC} \times \text{Total Assets}) \quad (2)$$

Where

NOPAT = Net Operation after Tax

WACC = *Weighted Average Cost of Capital*

2.3 Debt Equity Ratio (DER)

Debt Equity Ratio used to measure the magnitude of the proportion of debt to capital. This ratio is calculated as total debt between results with capital. This ratio is useful to know the magnitude of the comparison between the amounts of funding that comes from the owner of the company. In other words, this ratio serves to know how each part of the capital was made rupiah as collateral for debt. This ratio gives general instructions about the creditworthiness and financial risk of the debtor [2].

$$\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Equity}} \quad (3)$$

2.4 Financial Leverage

Financial Leverage is the use of a source of funds arising from the fixed charge financial. Debt is a source of funds that pose a financial burden remained, namely the interest must be paid regardless of the company's profit level [3].

$$DFL = \frac{EBIT}{EBIT - I} \tag{4}$$

I = Interest

2.5 Theoretical Framework and Hypothesis

Based on the description in the introduction, a framework that is developed in this research shown in Figure

1. While the hypothesis of this research are:

1. Economic Value Added has the influence on the stock return of Food and Beverage company listed in Indonesia Stock Exchange period 2002-2017.
2. Debt Equity Ratio partially has the influence on the stock return of Food and Beverage listed in Indonesia Stock Exchange period 2002-2017.
3. Financial Leverage has not influence on the stock return of Food and Beverage company listed in Indonesia Stock Exchange period 2002-2017.
4. Economic Value Added, Debt Equity Ratio, and Financial Leverage simultaneously have the influence on the stock return of Food and Beverage company listed in Indonesia Stock Exchange period 2002-2017.

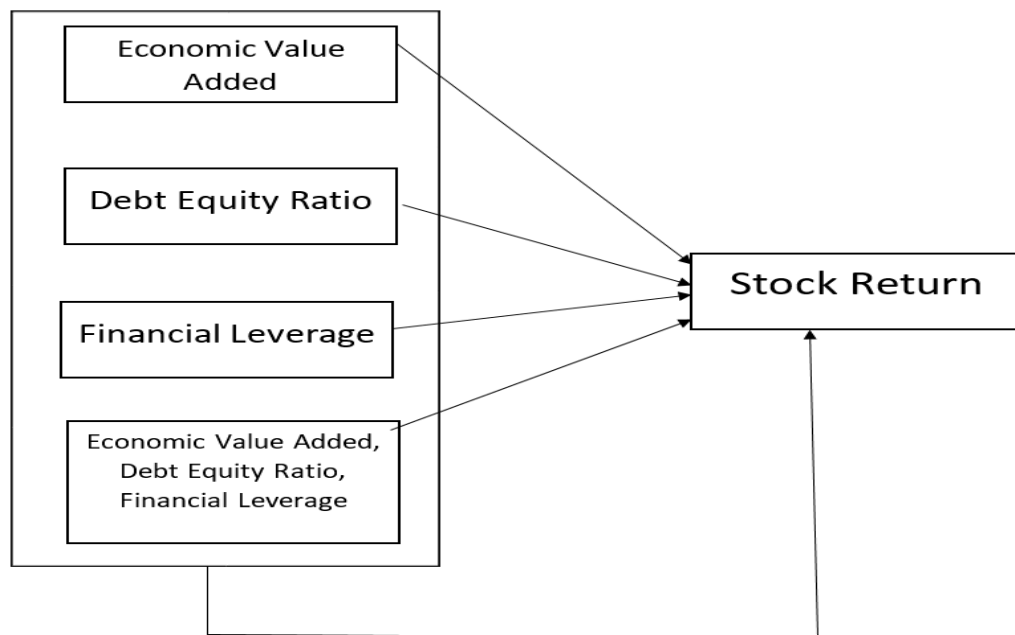


Figure 1 Theoretical Framework

3 Results and Discussions

3.1 Descriptive Statistics

Based on the data that is produced with Eviews 9, and using Data Panel analysis, the result of descriptive statistics is as follows:

Table 1. Descriptive Statistics

| | Return | EVA | DER | Financial Leverage |
|---------------|---------|----------------|---------|--------------------|
| Mean | 37.07% | -756,986.72 | 99.66% | 77.55% |
| Median | 17.04% | -10,774.37 | 103.16% | 83.09% |
| Maximum | 813.19% | 8,741,604.56 | 302.86% | 260.60% |
| Minimum | -98.69% | -15,364,863.55 | 17.14% | -399.56% |
| Obeservation | 78 | 78 | 78 | 78 |
| Cross Section | 13 | 13 | 13 | 13 |

From Table 1 it can be seen that during the period of this study which is 2012-2017, there are 78 number of observations obtained from multiplication of the number of food and beverage companies that become sample, as many as 13 companies, with the number of periods used in this study of 6 years ($13 \times 6 = 78$). Based on data in Table 17, it can be seen also that the maximum value of the stock return of the 13 companies incorporated in the Indonesia Stock Exchange is 8,13 or 813.19% and the minimum value is -0,98 or -98% with an average is 0,37 or 37%. Variable Economic Value Added (EVA) has a maximum value of Rp 8,741,604.56 and the minimum value of Rp -15,364,863.55 with an average of Rp -756,986.72. Variable Debt Equity Ratio (DER) has a maximum value of 302.86% and the minimum value of 17.14% with an average value of 99.66%. Variable Financial Leverage has a maximum value of 260.60% and the minimum value of -399.56% with an average value of 77.55%.

3.2 Model Testing

Chow test was done as a tester with the following procedure statistics:

- a. Compiling of equations with Pooled Least Square (Common Effect Model)
- b. Compiling of equations with Fixed Effect Model
- c. Choose between pooled least Square and Fixed Effect Model by means of the Chow Test based on the following hypotheses:

H0 = Pooled Least Square (intercept same)

H1 = Fixed Effect (intercept different)

The decision was taken based on the fulfillment of one of the statements below:

- a. Accept H0 if F-test value probability > alpha 5%
- b. Accept H1 if F-test value probability < alpha 5%

If the test results show that the model H1 is accepted (fixed Effect Model), then the model will be tested again with a random effects model [6].

The result of Chow Test result is stated in Table 2.

Table 2
Chow Test/ likelihood Ratio and LM Test

| Redundant Fixed Effects Tests | | | |
|----------------------------------|-----------|---------|--------|
| Equation: Untitled | | | |
| Test cross-section fixed effects | | | |
| Effects Test | Statistic | d.f. | Prob. |
| Cross-section F | 0.551630 | (13,67) | 0.8828 |
| Cross-section Chi-square | 8.541392 | 13 | 0.8066 |

Based on Chow Test/Likelihood Ratio on Table 21 probability value cross-section F is 0,8828, that number is bigger than the significance level 5% or 0,05. In accordance with the decision making criteria, it can be concluded that H0 is accepted so the model that used is [6].

Based on LM Test on table 21 probability value cross-section Chi-Square is 0.8066, that means is bigger than the significant level 5% or 0.05. in accordance with decision making criteria, it can be concluded that H0 is accepted so the model that use is common effect model [6].

3.3 Data Panel Regression Equation

Based on the test that has been done, the model that is used in this study is Common Effect Model. The equation can be seen in Table 3.

Table 3. Common Effect Model

Dependent Variable: Y
 Method: Panel Least Squares
 Date: 07/22/19 Time: 18:48
 Sample: 2012 2017
 Periods included: 6
 Cross-sections included: 14
 Total panel (balanced) observations: 84

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|----------|
| C | 36.53039 | 9.964965 | 3.665882 | 0.0004 |
| X1 | -8.97E-07 | 1.29E-06 | -0.693861 | 0.4898 |
| X2 | -31.39517 | 7.407717 | -4.238170 | 0.0001 |
| X3 | -4.334415 | 5.434624 | -0.797556 | 0.4275 |
| R-squared | 0.185472 | Mean dependent var | | 1.807044 |
| Adjusted R-squared | 0.154927 | S.D. dependent var | | 37.76087 |
| S.E. of regression | 34.71276 | Akaike info criterion | | 9.978540 |
| Sum squared resid | 96398.04 | Schwarz criterion | | 10.09429 |
| Log likelihood | -415.0987 | Hannan-Quinn criter. | | 10.02507 |
| F-statistic | 6.072122 | Durbin-Watson stat | | 2.498488 |
| Prob(F-statistic) | 0.000890 | | | |

The equation of common effect model regression can be interpreted as follows:

Stock Return = 36.53039 - 8.97E-07EVA - 31.39517DER - 4.334415Financial Leverage.

a. Intercept coefficient of 36.53039, means that if there are no changes in EVA, DER, and Financial Leverage, the stock return of Food and Beverage industry will increase by 368.6%.

b. EVA coefficient of -8.97E-07 or - 0,0000897 which means that if the EVA increases by 1% (assuming another variable is constant), so the stock return of Food and Beverage industry will decrease by 0,0000897.

c. DER coefficient of -31.39517 which means that if the DER increases by 1% (assuming another variable is constant), so the stock return of food and beverage industry will decrease by 31.39517.

d. Financial Leverage coefficient of -4.334415 which means that if the Financial Leverage increase by -1% (assuming another variable is constant), so the stock return of food and beverage industry will decrease by -4.334415.

Coefficient of Determination

Coefficient of determination indicates the percentage of total variation of dependent variables explained by independent variables. According to Table 22, the R²(R-square) is 0.185472 or 18.5%. From the result, it can be concluded that the independent variables consisted of Economic Value Added, Debt Equity Ratio, and Financial Leverage can explain the dependent variable which is stock return of Food and Beverage Industry by 18.5%, while the rest is 81.5%, is explained by other variables outside this research.

F test

F test basically is used to determine whether all independent variables included in the model have influence together on the dependent variable. The decision making criteria in simultaneous test is when the probability value (F- statistics) ≥ 0.05 (significance level 5%) then H₀ is accepted, which means that the independent variables do not have a significant influence on the dependent variable simultaneously. Otherwise, if the probability value (F statistics) < 0.05 then H₀ is rejected, which means that the independent variables have a significant influence on the dependent variables simultaneously. Based on Table 20 that has been featured before, the result of probability value (F statistics) is (0.000890 < 0.05). In accordance with the decision making criteria, then H₀ is accepted that means there is the significant influence of Economic Value Added, Debt Equity Ratio, and Financial Leverage simultaneously to the stock return of Food and Beverage Industry.

T test

Variable Economic Value Added (X1) has a probability value (p-value) 0.4898 > 0.05. In accordance with the decision making criteria, then H₀ is accepted, that means Economic Value Added has no significant influence to the stock return of Food and Beverage Industry.

Variable Debt Equity Ratio (X2) has a probability value (p-value) 0.0001 < 0.05, In accordance with the decision making criteria, then H₀ is rejected, that means Debt Equity Ratio has significant influence to the stock return of Food and Beverage Industry.

Financial Leverage (X3) has a probability value (p-value) 0.4275 > 0.05, In accordance with the decision making criteria, then H₀ is accepted, that means Financial Leverage has no significant influence to the stock return of Food and Beverage Industry.

3.4 Discussions

The Influence of Economic Value Added to the Stock Return

From the research use data panel, indicate that Economic value added does not impact to return stock. Reason Economic Value Added does not impact to stock return is may because the market stock price food and beverage in 2012 – 2017 has many decrease value from 2012-2017.

Same with another research from Pradhono and Christian (2004) stated that Economic Value Added is not a significant effect against the return of shares. Sunardi research (2010) stated that Economic Value Added has no effect against the return of shares.

The Influence of Debt Equity Ratio to the Stock Return

The higher the DER, the smaller the amount of owner capital that can be used as a debt guarantee. General provisions are debtor should have DER less than 0.5 but need to remember that provisions can vary, depending on each type of industry (Hery, 2017:24). from the research use data panel indicates that DER affects the stock return, same with research another research.

The Influence of Financial Leverage to the Stock Return

According to Sutrisno (2007:201) financial leverage these occur due to using funds from debt that is causing the company must bear fixed charge. For the use of debt funds, companies incur interest charges every year. From the results of research using the data panel, Financial Leverage is not a significant effect against the Stock Return.

The Influence of Economic Value Added, Debt Equity Ratio, and Financial Leverage to the Stock Return

Based on research findings, it indicates that EVA, DER, and Financial Leverage together (simultaneously) have an influence on the stock returns received by shareholders.

4 Conclusions and Suggestions

4.1 Conclusions

Based on the analysis and discussions that have been done in the previous chapter, the conclusions of this research are:

1. Average Performance Economic Value added of 13 food and beverage company period 2012-2017 is fluctuate, except from year 2013 to 2014 and 2015 to 2016 average EVA have decrease value until Negatif position. Average Debt Equity Ratio of 13 food and Beverage company period 2012-2017 growth is random growth, highest DER in year 2014. Average performance Financial Laverage of 13 food and beverage company periode 2012-2017 have a random growth . performance in year 2014 until 2015 Financial Leverage 13 food and beverage company is decrease. Average performance Stock Return of 13 food and beverage company is decrease from 2013 until 2015 and have a negatif value in year 2015.
2. Economic Value Added has not an significant impact to Stock Return of food and beverage company period 2012-2017.
3. Debt Equity Ratio has significant an impact to Stock Return of food and beverage company period 2012-2017.
4. Financial Leverage has not significant an impact to Stock Return of food and beverage company period 2012-2017.
5. Economic Value Added, Debt Equity Ratio, and Financial Leverage Simultameously have significant an impact to Stock Return of food and beverage company period 2012-2017 through F test using Panel Data Analysis.

4.2 Suggestions

4.2.1 Theoretical Suggestions

For further research, it will be better to do research with following suggestions:

1. More number of samples, not only food and beverage industry but with other industry that listed in the Indonesia Stock Exchange in order to get clear of the stock market of Indonesia.
2. Longer periods of study, can be 10 years or more in order to obtain valid results.
3. Future studies may use external factors as well as other internal factors to find the variables that affect stock returns received by investors. External factors such as foreign exchange rate, inflation rate, interest rate, oil prices, and other factors. While internal factors can be like profitability ratios such as Return on Assets, Return on Equity, Net Profit Margin, etc.

4.2.2 Practical Suggestions

The result showed that Debt Equity Ratio and simultaneously Economic Value added, Debt Equity Ratio, and Financial Leverage of 13 food and beverage company period 2012-2017 have an impact to Stock return then both prospective investor and existing investor will have a risk if do perform the analysis of Debt Equity Ratio and simultaneously before making an investment decision. Investor and prospective investor are advise to consider with other factor , internal factors and external factors. Internal factors such as Return on Assets, Return on Equity, Net Profit Margin, etc. While external factors as currency exchange rate, condition of country, etc.

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