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#### **Research Article**

Influence of Liquidity, Leverage, Profitability And Company Size to Company Value (Empire Study on Food Sub-Sector Companies And Beverages Listed on The Indonesia Stock Exchange Period 2014-2017)

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#### **ABSTRAK**

The research aims to analyze the influence of liquidity, leverage, profitability and firm size on the firm value of food and beverage sub-sector company listed on the Indonesia Stock Exchange period 2014-2017. Variables that used tomeasure variable liquidity are current ratio (CR), variable leverage measured by debt to equity ratio (DER), variable profitability measured by return on equity (ROE), and firm size according to the total assets and firm value measure by (the ratio PBV). Sample of this research are food and beverage manufacturing company listed on the Indonesia Stock Exchange period 2014-2017 with the total 18 companies. By using the purposive sampling, it took 13 companies as the sample of research. Analysis technique used are descriptive analysis, test the assumption classical which includes normality test, multi-co linearity test, heteroscedasticity test and autocorrelation test, with a significance alpha 5 percent and 1 percent. Panel analysis data which multiple regression linear analysis and the hypothesis test includes f statistic test, t test statistic and determination test. The research result shows that the liquidity variable (CR) does not influence the firm value. Leverage variable (DER) has the positive influence and significantly to firm value (PBV). Profitability has the positive infuence and significantly to firm value (PBV) meanwhile the firm size variable (Ln Total Asset) has the negative influence and significantly to firm value (PBV).

Keywords: Debt to equity ratio (DER), Current Ratio (CR), Firm Size, (Ln Total Asset), Firm Value (PBV).

#### Introduction

Fahmi (2013:139) states that "company value is a condition that has been achieved by a company as an illustration of public trust in

the company after going through a process of activities for several years since the company was founded until now". To increase the value of the company, it can be done by implement-

ing good corporate governance and optimal financial management functions, where every financial decision taken will affect other financial decisions and have an impact on company value. The value of the company can be seen from its share price where the higher the share price, the higher the value of the company (Sartono, 2012). Therefore, someone who will invest his capital in a company must first see and analyze what the condition of the company's value is. This is done so that it can be known whether the investment will make a profit or not.

The dependent variable or the dependent variable in this study is firm value. Firm value is measured by Price Book Value (PBV). Price Book Value (PBV) is a comparison between market price and book value of shares (Brigham and Houston, 2011:152). Companies that run well will show a stock market value that is greater than its book value. The higher the PBV ratio owned by the company, the higher the value of the company is assessed by the investors relative to the funds invested by the company. A PBV value above one indicates that the company is in good condition, meaning that the market value or share price is greater than the company's book value (Subramanyam, 2010:47).

The value of PBV in a company can fluctuate because the stock price is always changing. PBV value fluctuations in this study occurred in food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange. The fluctuation of PBV value in the food and beverage sub-sector is due to the large number of investors' interest in investing in the food and beverage sub-sector. Referring to data from the Investment Coordinating Board (BKPM) for the food and beverage (food and beverage) industry, this sub-sector makes a major contribution to economic growth in Indonesia. This contribution can be seen in the first quarter of 2015 where the growth of the national food and beverage industry reached 8.16% or higher than the growth of the non-oil and gas industry of 5.21%.

National economic growth has been shown to reach 4.71% where the development of investment realization in the food and beverage industry sector in the first quarter of 2015 amounted to Rp. 6,167 billion for PMDN and PMA of USD 533.8 million. Furthermore, in the first quarter of 2016, the growth of the food and beverage industry was 7.55 percent or higher than the same period in 2015 which reached 7.54 percent. This achievement shows that the performance of the food and beverage industry exceeded the growth of the non-oil and gas industry in the first quarter of 2016 by 4.46 percent. Then in 2017 the growth reached 9.23% or up from 2016 which was 8.46% (www.kemenperin.go.id).

According to Brigham and Houston (2010:134) liquid assets are assets that are traded in the market so that they can be converted quickly into cash at current market prices, while the "liquidity position" of a company is related to a statement whether the company is able to pay off its debts when The debt matures in the following year. Liquidity can be measured by the liquidity ratio, which is a ratio that shows the relationship between cash and current assets of the company with other current liabilities.

According to Brigham and Houston (2010: 140) the leverage ratio measures the extent to which the company uses funding through debt. The leverage ratio is used to measure the company's ability to meet all of its obligations, both short-term and long-term (Heri in Ridho 2018). The leverage ratio measures how much the company is financed by debt. The use of debt that is too high will endanger the company because the company will fall into the category of extreme debt, namely the company is trapped in a high level of debt and it is difficult to release the debt burden.

According to Brigham and Houston (2010:146) profitability is a group of ratios that show the combination of the influence of liquidity, asset management, and debt on operating results. This ratio reflects the final result of all financial policies and operational decisions of the company. The profitability ratio shows the company's ability to earn profits in relation to sales, total assets, and own capital (Sartono, 2010:122).

According to Brigham and Houston (2010:4), company size is a measure of the size of a company which is indicated or

assessed by total assets, total sales, total profits, tax expenses and others. According to Torang (2012:93) company size is an organizational size that determines the number of members associated with the selection of ways to control activities in an effort to achieve goals.

Based on the phenomena described previously, the researcher intends to test and analyze the Effect of Liquidity, Leverage, Profitability and Firm Size on Firm Value (Empirical Study on Food and Beverage Sub-Sector Companies Listed on the Indonesia Stock Exchange 2014-2017).

# Theoretical Basis *Liquidity*

Liquidity has a positive effect on firm value where this statement is in accordance with research from Ignatius et al., (2017) and Rompas (2013). This explains that high liquidity can pose a risk of low cost of capital if the funds in the company can be used properly, so investors will see it as a positive signal. This condition indicates that the value of current assets which is greater than short-term debt will have a positive influence in increasing firm value.

#### Leverage

Leverage has a positive and significant effect on firm value where this statement is in accordance with the research of Ridho et al., (2018) and Linawati (2017). This is because companies with high leverage ratios are actually considered companies that have the ability to control financial risk well. Based on these conditions, the market will give a high assessment of the company, which means that the positive relationship between leverage and firm value refers to signal theory. This explains that the use of debt is a signal conveyed by managers to the market. If the manager believes that the company's prospects are good and wants the stock price to increase, the manager will communicate this to investors.

#### **Profitability**

Profitability has a positive influence on firm value where this statement is in accordance with research by Ulfa and Wihandaru (2016) and Alfredo et al., (2012). This explains that the better the company's profitability growth will result in the company's prospects in the future being judged to be better. If the company's ability to generate profits increases, investors will be interested in investing in companies that have high profits, so it will increase the number of shares. An increase in the number of company shares causes the share price to increase. The increase in the stock price will result in a better position of the company to cover the investment used, so that it will be a positive signal for investors and can increase the value of the company.

#### Company Size

The results of Prasetyo's research (2013) state that firm size has a positive and significant effect on firm value, but it is inversely proportional to Oktaviani's research (2019) which states that firm size has a negative and significant effect on firm value. This is because large companies tend to be less focused on controlling their assets, which will result in less effective and efficient use of assets. This is different from small companies where managers are more focused on controlling and using company Managers' decisions in managing assets will have an impact on the company's profits. Usually investors see companies that are more competent in managing their assets regardless of the size of the company.

#### Research Methods

The sampling technique used in this research is purposive sampling method. Purposive sampling method is a sampling technique that is carried out by taking based on certain goals.

The following shows the criteria for determining the companies that are used as samples in this study.

- 1. Food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange at least before the closing of the stock exchange from 2014 to 2017.
- 2. Manufacturing companies in the food and beverage sub-sector that publish complete

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and consecutive financial reports from 2014-2017.

3. Food and beverage companies that issue financial statements in rupiah during the period 2014-2017.

The population of this study there are 18 companies, while the sample used based on the above criteria there are 13 companies.

The data used in this study are in the form of financial statements of manufacturing companies in the food and beverage subsector listed on the BEI (www.idx.co.id). The type of data used in this study is secondary data obtained through literature studies, journals and encyclopedias. The source of data in this study is the annual financial statements of food and beverage companies listed on the Indonesia Stock Exchange for the period 2014-2017.

#### Variable Operational Definition

#### 1. Dependent Variable

The value of the company Price to book value is a ratio to measure the company's financial performance. The formula for calculating PBV is (Hermuningsih and Wardani, 2009)

 $PBV = \frac{Harga\ Pasar\ per\ lembar}{Nilai\ buku\ per\ Lembar\ Saham}$ 

#### 2. Independent Variable

a. Liquidity

Current Ratio compares the total current assets and current liabilities (Prastowo: 2011)

 $CR = \frac{Aktiva\ Lancar}{Utang\ Lancar}$ 

b. Leverage

DER (Debt to Equity Ratio) is a comparison of the amount of long-term debt with own capital or equity used as company funding (Prastowo: 2011).

 $DER = \frac{Total\ Hutang}{Total\ Ekuitas}$ 

c. ROE or profitability of own capital is a ratio to measure net profit after tax with own capital (Kasmir: 2014).  $ROE = \frac{Laba \ Setela \ h \ Pajak}{Laba \ Setela \ h \ Pajak}$ 

Total Equity

d. Company Size

Company size is the average total net sales for the year to several years. Size = Ln Total assets.

#### Data analysis method

#### 1. Classical Assumption Test

a. Normality test

Testing for normality through graphical analysis is by analyzing a normal probability plot graph that compares the cumulative distribution of the normal distribution.

b. Autocorrelation Test

The autocorrelation test can be seen from the Durbin-Watson (DW) test and the Run test, the test results are determined based on the DW value.

c. Heteroscedasticity Test

To find out, a scatter plot graph is used, namely by looking at certain patterns on the graph (Ghozali, 2018).

d. Multicollinearity Test

To find out whether there is multicollinearity in the regression, it can be seen from the tolerance and the value of the variance inflation factor (VIF). The multicollinearity-free regression model is the one that has a tolerance value > 0.1 or VIF < 10. If the tolerance is below 0.1 and the VIF is above 10, then multicollinearity occurs (Ghozali, 2018).

#### 2. Linear Regression Analysis

Multiple linear analysis was used to determine the effect of liquidity, leverage, profitability, and company size on firm value in food and beverage companies listed on the Indonesia Stock Exchange (IDX) in the 2014-2017 period. The regression model used in this study:

#### $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$

Description:

Y = Firm Value

 $\alpha$  = Constant

 $\beta_1$  s/d  $\beta_4$ = Coefficien

 $X_1$  = Liquidity

 $X_2$  = Leverage

 $X_3$  = Profitability

X<sub>4</sub>= Firm Size

e = error

#### 3. Test Statistics

a. T Uji test

If sig. t is greater than 0.05 then Ha is accepted, meaning that there is a significant effect of the independent variable on the dependent variable (Ghozali, 2018).

#### b. F Uji test

The F test is used to test the independent variables together or simultaneously on the dependent variable. If the calculated f value is greater than f table, then Ho can be rejected and H1 accepted. On the other hand, if f is smaller than f table, then Ho can be accepted and H1 is rejected. If based on the probability value, the probability is > 0.05 (< 0.05), then Ho is accepted (rejected) (Ghozali, 2018).

c. Determination Test (R2)

The coefficient of determination (R<sup>2</sup>) basically measures how far the ability of the independent variable to explain the dependent variable.

## Research Results And Discussion Classic Assumption test results

1. Normality Test

Based on the P-P plot, the data is normally distributed and follows a diagonal line. 2. Autocorrelation Test This test is conducted to test whether there is an autocorrelation problem in multiple linear regression equations. Testing is done through the Durbin Watson test. And the results of research using SPSS obtained a d value of 2,465.

#### 2. Heteroscedasticity Test

This test uses a Scatterplot graph. From the figure, it can be seen that the points spread randomly above and below zero, so it can be concluded that there is no heteroscedasticity problem in the regression model used. 4. Multicollinearity Test The Multicollinearity test is calculated through the SPSS program. The existing

VIF value has a value above 1 and below 10 or has a tolerance value that exceeds 0.01 and does not exceed 1.

#### Discussion

#### 1. Multiple Linear Regression Test Results PBV = 19,491+1,190CR+18,084DER +0,052ROE-1,432Size

From the regression equation, it can be seen that:

- a. If the variables of liquidity, leverage, profitability, and firm size are constant or zero, the firm value will be 19.491.
- b. Liquidity (CR) of 1.190 and a significant value of 0.183 states that liquidity has no effect on firm value.
- c. Leverage (DER) is 18.084 and a significant value is 0.00 which states that if leverage (DER) has increased by 1 unit while other variables are considered constant, the firm value (PBV) has increased by 18.084.
- d. Profitability (ROE) is 0.052 and the significant value is 0.012 which states that if profitability (ROE) has increased by 1 unit and other variables are considered constant, the firm value (PBV) has increased by 0.052.
- e. the size of the company (Ln total assets) is -1.432 and the significant value is 0.00 which states that if the size of the company increases by 1 unit while other variables are considered constant then the value of the company decreases -1.432.

#### 2. Statistical Test Results

a. Determination Test

Table 1. Results of the Coefficient of Determination

Adjusted R	Std. Error of the		
Square	Estimate		
0,700	8,01047		

(Source: Data processed, 2019)

Based on table 1, it can be seen that the value of Adjusted R Square (R2) is 0.700. This value indicates the magnitude of the influence of the independent variable on the dependent varia-

ble of 0.700 or 70%. Thus there are other variables that are not explained in this study which also affect the firm value by 30% (obtained from 100% -70% = 30%).

#### a. F Test

Table 2. F Test Result

Model		F	Sig.
1	Regression	30,690	0,000a
	Residual		
	Total		

(Source: Data processed, 2019)

Based on table 2, it can be seen that the F value is 30.690 while the significant value is 0.00 which is smaller than 0.05. Therefore, simultaneously the alternative hypothesis

states that liquidity, leverage, profitability and firm size have a positive effect on the value of food and beverage companies listed on the Indonesia Stock Exchange.

#### a. T Test

Table 3. T Test Result

	Model	В	T	Sig.
1	(Constant)	19,491	2,870	0,006
	CR	1,190	1,350	0,183
	DER	18,084	5,963	0,000
	ROE	0,052	2,608	0,012
	Ln_total_asset	-1,432	-7,080	0,000

#### 1) Effect of Liquidity on Firm Value

The t-count value is 1.350 while the significance level is 0.183, which is greater than the significant level, which is 0.05. This means that liquidity (CR) has no effect on the value of food and beverage companies listed on Indonesia Stock Exchange. So that the first hypothesis is said to be rejected. The results of this study are in line with the results of research conducted by Aulia (2018) which states that liquidity has no effect on firm value. This is because during the research period many companies have high liquidity values. Reflecting that the company does not allocate its current assets optimally, does

not utilize current assets efficiently and may not manage its capital properly, so this can reduce the value of the company in the eyes of investors.

### 2) The Effect of Leverage on Company Value

The t-count value is 5.963 while the significance level is 0.00 which is smaller than the significant level of 0.05. This means that leverage (DER) has a positive and significant effect on the value of food and beverage companies listed on the Indonesia Stock Exchange. So it can be said that the second hypothesis is accepted. The results of this study are in line with the results of research by Ridho (2018) and Linawati (2017) which state

that leverage has an effect on firm value. This condition identifies that financing through debt is important for the company in carrying out its operations. In this case, the smaller the leverage, the better the condition of the company, meaning that investors pay attention to the company's funding through debt and see how the company uses debt effectively and efficiently to develop the company and achieve added value for the company.

### 3) The Effect of Profitability on Firm Val-

The t-count value is 2.608 and the significant value is 0.012, the significant value is less than 0.05 (0.012 < 0.05). So it shows that profitability (ROE) has an effect on firm value (PBV) and H3 is accepted. So it can be concluded that profitability has a positive and significant effect on firm value. The results of this study are in accordance with the results of research by Ulfa (2016) and Alfredo (2012) which state that profitability has an effect on firm value. Companies that are able to manage their equity optimally will be able to increase the welfare of their shareholders. Therefore, the large ROE of the company will increase the interest of investors to invest in the company and at the same time increase the value of the company.

#### 4) The Effect of Firm Size on Firm Value

The t-count value is -7.080 and the significant value is 0.00, the significant value is less than 0.00 (0.00 < 0.05). So it shows that profitability (ROE) has an effect on firm value (PBV) and H4 is accepted. So it can be concluded that firm size has a negative and significant effect on firm value. The results of this study are in accordance with the results of Marista's research (2019) which states that company size has a negative and significant effect on firm value. If the company has large total assets, it will be easier to carry out the company's operations. However, the operational activities that are carried out and managed may not necessarily run effectively and efficiently in accordance with the wishes of the shareholders.

#### Conclusion

- 1. Liquidity has no effect on firm value.
- 2. Leverage has a positive and significant effect on firm value.
- 3. Profitability has a positive and significant effect on firm value.
- 4. Firm size has a negative and significant effect on firm value.
- 5. Liquidity, leverage, profitability and firm size simultaneously affect firm value.

#### **Suggestion**

- 1. Researchers who will conduct future research to expand the object of research, not only focus on food and beverage subsector companies. Such as involving the entire company that has gone public, so it is hoped that the more samples, the more valid the results.
- 2. Future researchers should add independent variables that affect firm value such as managerial ownership, GCG, CSR and sales growth.
- 3. Further researchers can use other proxies to calculate firm value such as Price Earning Ratio, Tobin's Q, and Market to Book Value to Assets (MBVA).

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