

Analysis of Factors that Effect Firm Value of Consumer Goods Industry Listed on Indonesia Stock Exchange

Jenny Rachel Soetjanto, Hakimam Thamrin
Mercubuana University, Jakarta. Indonesia

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Abstract: This study aims to examine and analyze the influence of capital structure, liquidity, profitability, and activity ratio on firm value of consumer goods sector listed on Indonesia Stock Exchange. Research data is the annual data for the 2013-2017 observation period obtained from the companies annual report. The sampling method used was purposive sampling. From a population of 42 companies, 22 companies met the criteria to be the sample. The method of analysis used in this study is regression with panel data using Fixed Effect Model with R2 value 97.80 percent. The results showed that capital structure and profitability have a positive influence to the firm value, while liquidity and activity ratio do not have any influence to the firm value. Profitability is the biggest variable in influencing firm value.

Keywords: capital structure, profitability, liquidity, activity ratio, firm value

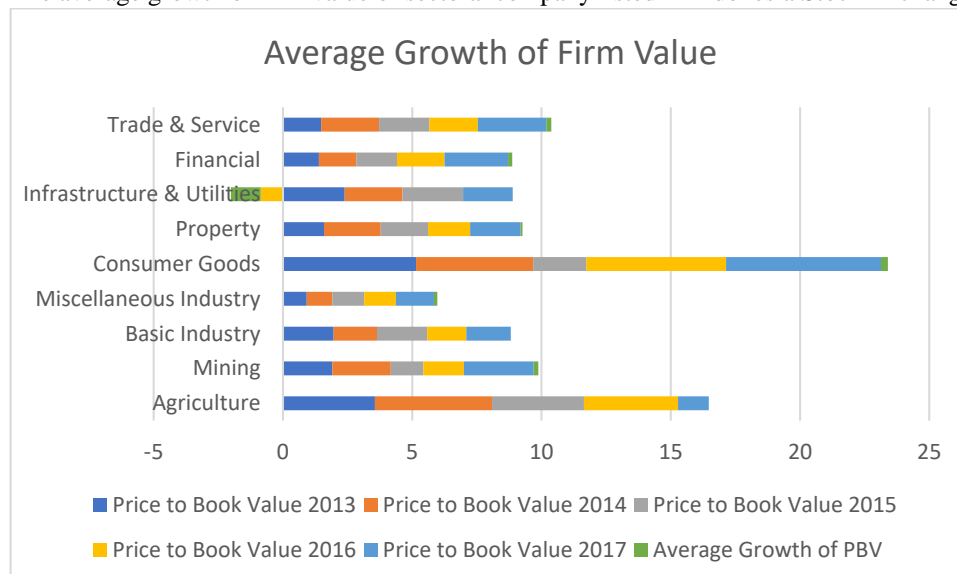
I. INTRODUCTION

To start investing on capital market, the investor require a lot of consideration so the information can mirroring to the capital market. The information is needed to make the best investment decision.

The development of capital market in Indonesia has become the attractive investment preference both from local and foreign investor. However, the uncertainty of investing in capital market encourage investors to more cautious of deciding which company that will be invested in order to maximized the return with certain risk level as stated by Hermuningsih (2013).

The aim of every company is to maximize the value of company. That objective will attract investor to invest in a good company that have a sustainability for a long term (Salvatore, 2011). Great number of company value will impact to teh investor trust as they see the company potential in future (Hermuningsih, 2013)

The average growth of firm value of sectoral company listed in Indonesia Stock Exchange



Based on the chart, consumer goods industry has the highest average growth of Firm Value from 2013 to 2017. Based on data from the Ministry of Industry, the consumer goods industry sector is also one of the biggest contributors in supporting the Indonesian economy.

To build the firm value, financial manager has to make the right investment decisions, funding decisions, and dividend decisions (Rodoni, et.al., 2014). The movement of firm value is affected by several factors. Based on previous research, there are many factors that can affect the value of the company including capital structure, liquidity, profitability, and activity ratios.

Susilaningrum (2016) states that capital structure has a positive effect on firm value, if the capital structure is increasing then the firm value will increase as long as the number of debt has not reached its optimal point. This result has a different result with the research of Sukoco (2013) which states that it has a negative effect on the firm value, the results of this study indicate that companies with large debt have a high risk of returning their debt costs, this affects investor interest in investing their funds into the company, decreasing interest investors will cause the cofirm value in the future. While research by Lubis et al. (2017) states that capital structure has no effect on firm value.

Liquidity has a positive effect on the firm value so that the higher the liquidity ratio of a company, the higher the liability of the company that is paid by current assets. It is increasing investor's trust (Susilaningrum, 2016). This result contradicts with Sudiani and Darmayanti (2016) which states that liquidity has a negative effect on firm value because the higher current assets indicate that there are idle funds in the company that should be utilized by the company in making profits. Misran et al. (2017) states that there is no effect of liquidity on firm value.

Sudiani and Darmayanti (2016) state that profitability has a significant effect on firm value. This means that the higher profit gained, the higher the firm value is. Because high profits will give an indication of good company prospects so that it can trigger investors to participate in increasing share demand. Rahayu and Sari's research results (2018) state that the profitability of a company has no significant effect on firm value. Hermuningsih (2012) states profitability has a negative effect on firm value.

The results of Misran et al. (2017) states that the ratio of company activity has a positive effect on firm value. The higher the level of activity in the company, the greater the cash flow received by the company means that the more effective in managing the transaction activities in the company, the higher the investor's trust which has an impact on the high value of the company. In contrast to Sianturi (2015) which states that the ratio of activity has no effect on firm value.

II. LITERATURE REVIEW

The firm value is the indicator how the investor view the company and that is often associated with stock prices. Maximizing the firm value is very important for a company, because maximizing the value of the company also means maximizing the wealth of shareholders which is the main goal of the company (Brigham and Houston, 2010:10)

In order to acknowledge the growth of firm value, the investor will focus on the stock market price or market value. This is due to the stock market prices reflecting potential earnings, company development, dividends, company risk, capital structure, and other factors such as management quality (Sartono, 2010: 371).

Husnan and Pudjiastuti stated, the firm value will be reflected in its share price. For companies that have not go public, the value of the company is a number of costs that are willing to be incurred by prospective buyers if the company is sold, while for companies that have go public, the value of the company can be seen from the value of shares in the capital. The firm value in this study refers to the research of Rahayu and Sari (2018), Lubis, et.al (2017), and Sudiani and Darmayanti (2016) using Price to Book Value (PBV). PBV is a ratio that describes how much the market appreciates the book value of shares of a company. PBV can be calculated by using formula below,

$$PBV = \frac{Price}{Book\ Value\ per\ Share}$$

There are several variables that affect the value of the company used in this study:

1. Capital Structure

Brigham and Gapenski in 2003 stated that capital structure is a proportion or comparison in determining the fulfillment of corporate spending needs, whether by using debt, equity, or issuing shares (Rodoni, et.al., 2014). The capital structure in this study refers to the research of Susilaningrum (2016), Haryadi (2016), and Sukoco (2013) using Debt to Equity Ratio (DER). Debt to Equity Ratio shows how much the company's assets are financed from debt or

how much the company's debt influences the management of assets (Sihombing, 2018: 24). The greater the Debt to Equity Ratio shows the greater the assets of the company financed through debt resources.

DER can be calculated by using formula below,

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$$

2. Liquidity

Liquidity Ratio is a ratio that measures a company's ability to meet its short-term debt obligations when it comes to maturity date. The level of this ratio will affect the interest of investors to invest their funds. Sihombing (2018) said the low level of liquidity will impact on the decline in the company's stock price but if it is too high it can reduce the company's profitability due to the large number of funds that are unused. Current Ratio can show the company's ability to pay short-term obligations or debts that are due immediately when billed as a whole. CR can be calculated by using formula below,

$$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

3. Profitability

Profitability ratio is a ratio that aims to be able to know the company's ability to generate profits during a certain period and provide an overview of the effectiveness of management in carrying out its operations. Profitability in this study refers to research Rahayu and Sari (2018), Sudiani and Darmayanti (2016), and Sianturi (2015) using the ROE (return of equity) ratio. Return of Equity Ratio shows the level of net profit that can be achieved by the owner of capital (Sihombing, 2018: 29). In other words, this ratio shows the efficient use of own capital. The higher this ratio shows that the company's performance is getting better. ROE can be calculated by using formula below,

$$ROE = \frac{EAT}{\text{Total Equity}}$$

4. Activity

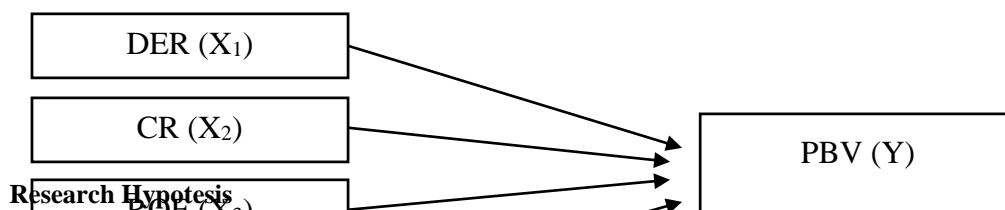
Activity ratio is the ratio used to measure the effectiveness of a company in using its assets. This ratio is used to measure the level of efficiency (effectiveness) in the utilization of company resources to gain profit (Sihombing, 2018: 21). The activity ratio in this study refers to the research of Putri (2015), Misran, et.al (2017), and Sianturi (2015) who use the Total Assets Turnover (TATO) ratio. If the number of Total Assets Turnover is low, it indicate that the company is not operating at a volume that is adequate for its investment capacity (Weston and Copeland, 2008: 139). TATO can be calculated by using formula below,

$$TATO = \frac{\text{Sales}}{\text{Total Assets}}$$

III. STUDY FRAMEWORK

Based on previous research, capital structure, liquidity, profitability, and activity ratios are used as independent variables in this study, to analyze their effect on the firm value of the consumer goods industry sector listed on the Indonesia Stock Exchange in 2013-2017.

Conceptual Framework



Research Hypothesis

Based on the theoretical basis and frame of mind and the formulation of the problem, the following hypotheses can be arranged:

- H1 : DER has significant effect to firm value
- H2 : CR has significant effect to firm value
- H3 : ROE has significant effect to firm value
- H4 : TATO has significant effect to firm value

IV. METHODOLOGY

This research is a quantitative research. The type of research used is causal associative. Associative research is a research question that asks the relationship between two or more variables. This research intends to conduct an analysis of factors affecting the firm value of the consumer goods industry sector listed on the Indonesia Stock Exchange in 2013 - 2017. The

population in this study are 42 companies. There are 22 sample out of 42 companies listed in the consumer goods industry sector during 2013-2017 that meet the criteria.

There are three panel data estimation techniques, common effects, fixed effects, and random effects. To choose the fit one, a test is needed. There are 3 test:

- (1) The Chow Test is performed compare or choose which panel data regression model is the best whether the Common Effect Model or Fixed Effect Model that will be used to perform panel data regression.
- (2) The Hausman test is performed to compare or choose which model is the best between the Fixed Effect Model and the Random Effect Model that will be used to perform panel data regression.
- (3) Lagrange Multiplier Test is a test to find out whether the Common Effect Model or the Random Effect Model is the most appropriate to use.

The coefficient of determination in multiple linear regression is used to determine the percentage contribution of the influence of the independent variables simultaneously on the dependent variable. R^2 shows how much percentage of the variation of the independent variables used in the model is able to explain the variation of the dependent variable.

F-Test

The F statistical test basically shows how independent variables entered in the model effect dependent variable simultaneously. The F test is carried out with the following hypotheses:

H_0 : The independent variables together do not affect the dependent variable.

H_1 : The independent variables together affect the dependent variable.

The level of significance applied in this study was $\alpha = 5\%$. This means that if the probability value is less than 5 percent, then the overall independent variable has a significant effect on the dependent variable.

t-Test

The t test statistic basically shows how far the influence of independent variable individually in explaining the variation of the dependent variable. done with hypotheses like the following:

H_0 : The independent variables partially do not affect the dependent variable.

H_1 : The independent variables partially affect the dependent variable.

The level of significance applied in this study was $\alpha = 5\%$. This means that if the probability value is less than 5 percent, then the overall independent variable has a significant effect on the dependent variable.

V. RESULT AND DISCUSSION

In this research, the data were analyzed descriptively to determine the initial picture of the case under study using independent variables debt to equity ratio (DER), current ratio (CR), return on equity (ROE) and total asset turnover (TATO). The regression model selection indicate that the best model of this research is fixed model. The hypotesis testing is based on the estimation result of fixed effect regression model.

Fixed Effect Model Result

Dependent Variable: PBV
 Method: Panel Least Squares
 Date: 04/17/19 Time: 15:54
 Sample: 2013 2017
 Periods included: 5
 Cross-sections included: 22
 Total panel (balanced) observations: 110

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.807107	2.197266	0.822435	0.4133
DER	4.202919	1.042871	4.030141	0.0001
CR	0.022424	0.053009	0.423025	0.6734
ROE	18.15852	3.342934	5.431910	0.0000
TATO	-1.684709	1.295454	-1.300478	0.1972

Effects Specification

Cross-section fixed (dummy variables)			
R-squared	0.977792	Mean dependent var	7.941321
Adjusted R-squared	0.970853	S.D. dependent var	13.52585
S.E. of regression	2.309214	Akaike info criterion	4.720845
Sum squared resid	426.5974	Schwarz criterion	5.374141
Log likelihood	-224.2048	Hannan-Quinn criter.	4.985629
F-statistic	140.8954	Durbin-Watson stat	1.282780
Prob(F-statistic)	0.000000		

Based on the result, the value of R-square (R^2) = 0.9780 which shows that 97.80 percent of the PBV variance can be explained by changes in the DER, CR, ROE, and TATO variables. While the remaining 2.20 percent is explained by other factors outside this research model. The F-test (simultaneous test) result of the panel regression analysis shows the significant value of the result of Prob (F-statistic) is 0.000000. Therefore the significant value is below 0,05 then H_0 is rejected. It can be concluded that the independent variables (DER, CR, ROE TATO) simultaneously affect the firm value. The t-test basically shows how far the influence of one independent variable (DER, CR, ROE, and TATO) individually in explaining the variation of the dependent variable (PBV). Based on the estimation result of panel regression model, the following result are:

- (1) The significant value of capital structure (DER) is 0.0001, it is smaller than 0.05 with a positive direction so that this variable is in the rejection area of H_0 which means that the DER has a positive effect on PBV of consumer goods companies listed on the Indonesia Stock Exchange in 2013-2017.
- (2) The significant value of liquidity (CR) is 0.6734, it is greater than 0.05 with a negative direction so that this variable is in the area of H_0 acceptance which means that CR has no effect on PBV of consumer goods companies listed on the Indonesia Stock Exchange in 2013-2017.
- (3) The significant value of profitability (ROE) is 0.0000, it is less than 0.05 with a positive direction so that this variable is in the rejection area of H_0 which means that ROE has a positive effect on PBV of consumer goods companies listed on the Indonesia Stock Exchange in 2013-2017.
- (4) The significant value of activity (TATO) is 0.1972, it is greater than 0.05 with a negative direction so that this variable is in the region of H_0 which means that TATO has no effect on PBV of consumer goods companies listed on the Indonesia Stock Exchange in 2013-2017.

VI. CONCLUSION AND RECOMMENDATION

This research was conducted to analyze the dependent variable (firm value) when measured by independent variables (capital structure, liquidity, profitability, and activity ratios). Determination of the sample is done by using purposive sampling technique so that 22 companies are obtained in the study period for five years namely in 2013 - 2017 with 110 data observations. From the data analysis, hypothesis testing, and discussion, the conclusions from this study can be drawn as follows:

- (1) Capital structure has a positive effect on the firm value in the consumer goods industry sector listed on the Indonesia Stock Exchange in 2013-2017. If the capital structure is below the optimal point, each additional debt will increase the firm value, as long as the company is able to balance the benefits and costs arising from debt.
- (2) Liquidity does not affect the firm value of the consumer goods industry sector in 2013-2017. The portion of idle funds that is too large on the asset side makes the company lose the opportunity to get additional profits, so the company's liquidity is considered not optimal by investors because the company has not been able to manage its assets properly.
- (3) Profitability has a positive effect on the firm value of the consumer goods industry sector in 2013 - 2017. The use of company equity to generate revenue has been effective and efficient. Contributions to increase profits can provide an indication for shareholders that the rate of return on investment is higher and a better picture of the company's prospects because of the potential for increased profits on the amount of capital provided by the company owner.
- (4) The ratio of activity does not affect the firm value of the consumer goods industry sector in 2013 - 2017. The company is considered not optimal in managing its assets. So that the high activity ratio will not affect the value of the company as long as the company has not been able to manage its assets to make a profit.

The suggestion that can be given to investor that want to invest on consumer goods industry has to concern about the composition of capital structure and the profitability rate. Companies has to consider using debt as first financing option since it can increase the firm value. Other than that, they have to maximize the using of current asset for investment because the high liquidity has a negative sight by investors

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AUTHORS

First Author – Jenny Rachel Soetjanto, Mercubuana University, Jakarta, Indonesia.

Email: jennyrachel25@gmail.com

Second Author – Hakiman Thamrin, Mercubuana University, Jakarta, Indonesia