

Conference Paper

The Effect of Return on Asset, Debt to Equity Ratio and Company Size on Company Value in Manufacturing Companies in the Food and Beverage Sub-Sector on the IDX for 2014-2018

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ORCID:Dihin Septyanto: <http://orcid.org/0000-0002-0020-3954>**Abstract**

The purpose of this study was to determine the extent to which the factors of return on asset (RoA), debt-to-equity ratio (DER) and company size have an influence on company value as proxied by PBV (price to book value). The population in this study was food and beverage sub-sector manufacturing companies listed on the Indonesian Stock Exchange (IDX) in 2014-2018. This study included eight companies with a total of 32 data points, and selection was carried out by applying the purposive sampling method. The return on asset, debt to equity ratio and company size simultaneously affected company value, while the return on asset variable individually had a positive and significant effect on company value and the debt-to-equity ratio variable did not. This means that investors usually preferred a low debt-to-equity ratio because their interests are better protected in the event of a business downturn. The company size variable also did not have a significant effect, which means that company size is not a factor that investors consider in investments.

Keywords: Signal Theory, Trade off Theory, Return on Assets, Debt to Equity ratio, Company Size, Company Value.

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1. Introduction

The food and beverage companies is one of the mainstay manufacturing sectors that makes a major contribution to national economic growth. It can be seen at the end of 2018 in terms of industrial growth, the sub-sectors with the highest average growth included food and beverages at 8.71%, metal goods, computers, electronic goods, machines and equipment by 4.02%, transportation equipment by 3.67% %,

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and chemistry 3.40% (Kementrian Perindustrian RepublikIndonesia).Getting a profit is the main goal of a business activity in every company. In addition to earning a profit, increasing company value is a company goal too, where an increase in company value is expected to increase the prosperity of shareholders. Company value can describe the condition of the company and reflect the company's performance which can affect investors' perceptions of the company. With good company value, the company will be viewed favorably by potential investors, and vice versa (Sri Hermuningsih, 2012). Price to book value (PBV) is a measuring tool that can be used to measure company value. According to Brigham and Houston (2011), PBV is a comparison of the stock price to the company's book value, where the company's book value is a comparison between total equity and the number of shares of the company in circulation, the higher the PBV means the market believes in the company's prospects..

One of the factors that is thought to influence firm value is profitability. Profitability ratio is a ratio to assess the company's ability to seek profit or profit in a certain period. This ratio also provides a measure of the level of management effectiveness of a company as indicated by the profit generated from sales and investment income of the company (Kasmir, 2016). The profitability ratio used in this study is Return On Assets (ROA).

The higher the ROA value of a company, the better the company's ability to manage its assets (Kasmir, 2016). The next factor that is thought to affect firm value is the Debt to Equity Ratio (DER). DER is the ratio used to measure the debt used by a company to its own capital. The increase and decrease in the level of debt has an influence on market value. Companies that have high leverage can have an impact in the form of a greater risk of loss opportunities due to the obligation to pay interest which will reduce the company's net profit, but the use of debt can also provide an opportunity to get large profits (Kasmir, 2016).

The third factor that is thought to affect firm value is company size. Company size is considered capable of influencing firm value. Because the larger the company size or company scale, the easier it will be for the company to obtain funding sources, which can then be used by management for the purpose of increasing company value (Racmawati and Hanung, 2007).

2. Methods an Equipment

2.1. Methods

2.1.1. Signaling theory

Signaling theory is an action taken by management of a company that provides instructions for investors about how management assesses the company's prospects (Brigham and Houston 2013). Signaling theory explains why companies have the urge to provide financial statement information to external parties. According to (Jogiyanto, 2010), information published as an announcement will provide a signal for investors in making investment decisions. If the announcement contains a positive value, it is expected that the market will react to the announcement being accepted by the market.

2.1.2. Trade Off Theory

The trade off theory is referred to as the leverage exchange theory, in which companies exchange the tax benefits of debt financing for problems posed by potential bankruptcies ((Brigham & Houston, 2011). According to (Hartono 2003) the trade off theory illustrates that the company's capital structure is the result of tax advantages obtained by using debt with costs that will arise as a result of the use of debt.

2.1.3. Company Value

Company value is the investor's perception of the company which is often associated with stock prices. High corporate value is the desire of company owners, because with a high value indicates that the prosperity of shareholders is also high (Hemastuti, 2014). It can be said that company value is the investor's perception of the company, the higher the firm's value will make market players believe in the company's performance and management's performance in managing the company so that it will cause the company to have high selling value.

2.1.4. Return on Assets

Return on assets is a profitability measurement ratio that is often used by financial managers to measure overall effectiveness in generating profits with available assets. According to (Fahmi, 2014), return on assets (ROA) ratio looks at the extent to which the investment that has been invested is able to provide returns as expected.

2.1.5. Debt to Equity Ratio

The leverage ratio is used to measure the company's ability to meet its long-term obligations. This ratio can see how far the company is financed by debt or external parties with the company's ability which is described by capital (equity). A good company should have a larger capital composition than debt (Harahap, 2009). Debt to Equity Ratio is a ratio used to assess debt to equity. This ratio illustrates the ratio of debt and equity in company funding and shows the company's own capital ability to meet all of its obligations. The amount of debt to equity ratio shows the higher level of corporate financial risk.

2.1.6. Company Size

Company size is the amount of assets owned by a company. According to (Brigham & Houston, 2010), company size is the average total net sales for the year concerned until several years later. According to (Prasetyorini, 2013), company size is a scale where the size of the company can be classified according to various ways, including total assets, log size, stock market value, and others.

2.1.7. Relationship Return on Assets, Debt to Equity Ratio, Company Size simultaneously on Company Value.

Return on assets is a ratio to assess the company's ability to seek profit or profit in a certain period. The better the profitability growth, the better the company's prospects in the future, which means the better the company's value in the eyes of investors. Leverage is an alternative that can be used to increase profits.

The use of debt in investment as an addition to funding company assets is expected to increase the profits that the company will get, because company assets are used to generate profits. The company size is reflected in the signaling theory which discusses the ups and downs of market prices such as stock prices, bonds and so on, so that it will influence investors' decisions. The response of investors to positive and negative signals is that they greatly affect market conditions, they will react in various ways by responding to these signals, such as hunting for stocks that are sold or taking actions in the form of not reacting such as wait and see or wait and see new developments. then take action (Fahmi, 2014).

H1: return on assets, debt to equity ratio, and company size simultaneously has an effect company value.

2.1.8. Relationship Return on Assets and Company Value.

Profitability is a group of ratios that shows a combination of the effect of liquidity, asset management and debt on operating results (Brigham & Houston, 2011). Profitability can provide an overview of how the performance of management in managing a company. Return on assets can reflect the advantages of financial investment, meaning that return on assets has an effect on company value

H2: return on assets has an effect on company value

2.1.9. Relationship Debt to Equity Ratio and Company Value

Debt to equity ratio (DER) reflects a company's ability to pay or fulfill its obligations with its own capital. Companies that use debt can be seen as companies that are confident in future prospects because the use of debt can increase company value.

H3: Debt to equity ratio has an effect on company value.

2.1.10. Relationship Company Size and Company Value

The company size category is divided into 3, namely: income, total assets, and total capital. The greater the value of the three measures, the stronger the company is (Fahmi, 2014). The size or size of a company is usually based on the number of assets it owns. Increased demand for company shares will be able to spur an increase in share prices in the capital market.

H4: Company size has an effect on company value.

The population in this study were manufacturing companies in the food and beverage sub-sector listed on the Indonesia Stock Exchange in 2014-2018. Sampling was done by purposive sampling. The goal is to get a sample that can represent the population according to the specified criteria. The criteria for determining the sample are as follows:

1. Manufacturing companies that publish financial reports as of December 31, 2014-2018.
2. There are data needed as a measurement of the variable return on assets, debt to equity ratio, company size, and company value in 2014-2018.

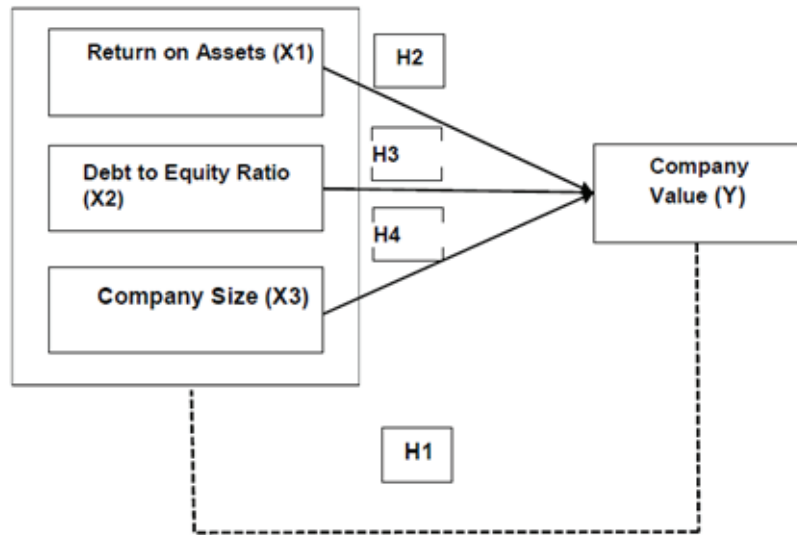


Figure 1: Research Model

This research was conducted to examine the effect of return on assets, debt to equity ratio, and firm size on firm value. The variables in this study consisted of three independent variables and one dependent variable. The independent variable in this study is return on assets, debt to equity ratio, and company size and the dependent variable in this study is firm value. The operational variables are shown in Table 1 below:

TABLE 1

	Variable	Proxy	Scale
Y	Company Value	$PBV = \frac{\text{Stock price per share (t+1)}}{\text{Book value per share}}$	Ratio
X1	ROA	$ROA = \frac{\text{Net profit}}{\text{Total Asset}}$	Ratio
X2	DER	$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$	Ratio
X3	Company Size	Firm Size = Ln (Total Sales)	Ratio

The analysis model was chosen because this study was designed to examine several independent variables that affect the dependent variable. The multiple linear regression equation can be formulated as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Description:

Y: Company value

α : Constant

β_1 - β_3 : regression coefficient

X1: Return on Assets

X2: Debt to Equity Ratio

X3: Company Size

ϵ : Error term model

3. Result

The sample used is the financial statements of food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in 2014-2018. Based on the sample criteria, 8 company financial reports are obtained per year so that the total sample in this study is 32 company financial reports.

3.1. Deskriptive Statistics

The variables used in this study are return on assets, debt to equity ratio, company size, and company value. The results of descriptive statistics are shown in Table 2:

TABLE 2

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
ROA	32	1,59	17,51	7,6469	3,72681
DER	32	,09	1,72	,9516	,38350
SIZE	32	27,25	31,88	29,3706	1,49545
PBV	32	,82	9,09	3,4097	2,28217
Valid N (listwise)	32				

In Table 2 it can be seen that the maximum value of return on assets (ROA) of 17.51 is owned by PT Wilmar Cahaya Indonesia (CEKA) and a minimum value of 1.59 is owned by PT Sekar Bumi Tbk (SKBM), and an average of 7, 6469. It can be concluded that the average food and beverage company has a relatively high company value. The maximum debt to equity ratio of 1.72 is owned by PT Sekar Bumi Tbk (SKBM), and a minimum value of 0.09 is owned by PT Indofood Sukses Makmur Tbk. (INDF), and the average value is 0.9516. This shows that the DER value distribution or leverage is good. This means that the company is able to pay off its debt with its own capital. Company size maximum value of 31.88 is owned by PT Indofood Sukses Makmur Tbk. (INDF), the minimum value of 27.25 is owned by PT Sekar Laut Tbk. (SKLT), and the average value is 29.3706. This means that the distribution of Size values is good. total sales, which means that the food and beverage companies listed on the Indonesian Stock Exchange (IDX) are large companies.

The company value proxied by price to book value shows a maximum value of 9.09 owned by PT Mayora Indah Tbk. (MYOR), and a minimum value of 0.82 owned by PT Wilmar Cahaya Indonesia (CEKA), and an average value of 3, 4097. It can be concluded that the average food and beverage company has a relatively high company value.

Based on the results of multiple regression analysis, the regression equation is obtained as following:

$$Y = \alpha + \beta_1 ROA + \beta_2 DER + \beta_3 SIZE + e$$

$$Y = -12.021 + 0.309(ROA) + 2.077(DER) + 0.378(SIZE) + e$$

3.2. Simultaneous Test

The simultaneous test is a test of the overall significance of the regression line that is observed and estimated, whether Y is linearly related to X1, X2, and X3 according to (Ghozali, 2018).

TABLE 3

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.768	3	17.589	4.531	.010 ^a
	Residual	108.690	28	3.882		
	Total	161.457	31			

a. Predictors: (Constant), SIZE, ROA, DER

b. Dependent Variable: PBV

On table 3, it is obtained that F count is 4.531 and the level of Sig. 0.010 < 0.05. So it can be concluded that the variables return on assets, debt to equity ratio, and company size together have a significant effect on Company Value. H1 is accepted.

3.3. Partial Test

According to Ghozali (2011) partial test is used to find out how far the influence of each independent variable is on the dependent variable. The test was carried out with a significance level of 95% or $\alpha = 0.05$.

TABLE 4
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.021	8.350		-1.440	.161
	ROA	.309	.099	.504	3.107	.004
	DER	2.077	1.056	.349	1.966	.059
	SIZE	.378	.270	.247	1.401	.172

a. Dependent Variable: PBV

3.3.1. The Effect of Return on Assets on Company Value

Based on the results of the partial test in Table 4, it can be seen that ROA has a positive and significant effect on Company Value, marked by a significance level of $0.004 < \alpha 0.05$ and a regression coefficient β of 0.309 in a positive direction. The second hypothesis (H2) in this study is accepted.

3.3.2. The Effect of Debt to Equity Ratio on Company Value

Based on the results of the partial test in Table 4, it can be seen that DER has no effect on firm value, marked by a significance level of $0.059 > 0.05$ and a regression coefficient value β of 2.077. The third hypothesis (H3) in this study is rejected.

3.3.3. The Effect of Company Size on Company Value

Based on the results of the partial test in Table 4, it can be seen that company size has no influence on company value, marked by a significance level of $0.172 > 0.05$ and a regression coefficient value β of 0.378. The fourth hypothesis (H4) in this study is rejected.

3.4. Result of Determination coefficient

TABLE 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.572 ^a	.327	.255	1,97022

The results of determination coefficient show the value of Adjusted R² of 0.255. This means that the ability of the independent variables, namely return on assets, debt to equity ratio, and company size explains the dependent variable, namely Company Value is 25.5% and the remaining 74.5% is explained by other factors not included in this regression model.

4. Discussion

4.1. The Effect Return on Assets, Debt to Equity Ratio, and Company Size on Company Value

On Table 3, it is obtained that F count is 4.531 and the level of Sig. 0.010 < 0.05. So it can be concluded that the variables return on assets, debt to equity ratio, and company size together have a significant effect on Company Value. These results support previous research conducted by I Gusti Ayu Diah Novita Yanti & Ayu Darmayanti (2019) proving that Profitability, company size, capital structure and liquidity have a positive and significant effect on company value.

4.2. The Effect of Return on Assets on Company Value

Based on the results of the partial test in Table 4, it can be seen that ROA has a positive and significant effect on Company Value, marked by a significance level of 0.004 < α 0.05 and a regression coefficient β of 0.309 in a positive direction. This is because the information obtained from ROA is considered by investors as positive information if there is an increase and vice versa.

These results also support the signaling theory, namely the company as a provider of information through financial reports where if the ROA increases, it shows that the profits owned by the company have increased. These results are consistent with research conducted by Hermuningsih (2013), Purwohandok (2017), and I Gusti Ayu Diah Novita Yanti & Ayu Darmayanti (2019) proving that profitability has a positive and significant effect on company value.

4.3. The Effect of Debt to Equity Ratio on Company Value

Based on the results of the partial test in Table 4, it can be seen that DER has no effect on firm value, marked by a significance level of 0.059 > 0.05 and a regression coefficient

value β of 2.077. This shows that investors do not see how much debt the company has. Investors look more at how much profitability is generated, with high profitability, it is expected that dividend payouts will be high. This research is not in line with research conducted by Purwohandok (2017) and Rehman (2016) which states that capital structure has a positive and significant effect on company value.

4.4. The Effect of Company Size on Company Value

Based on the results of the partial test in Table 4, it can be seen that company size has no influence on company value, marked by a significance level of $0.172 > 0.05$ and a regression coefficient value β of 0.378. This is because investors in buying shares are not only viewed from the size of the company's assets, but investors are more likely to see the profitability generated by companies with high dividend payouts. This research is in line with research conducted by Henri (2014) which proves that the company size variable is not influence on the company value.

5. Conclusions

5.1. Conclusions

1. The variables Return on Assets, Debt to Equity Ratio, and Company Size, simultaneously have an effect on Company Value in the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period
2. The variable Return on Assets partially affects Company Value in the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period..
3. The variable Debt to Equity Ratio has no effect on Firm Value in the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.
4. Company Size Variable has no effect on Firm Value in the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange for the 2014-2018 period.

5.2. Recommendation

1. Future research can use other measurements such as liquidity, company growth, etc. to get better research results.
2. Adding the number of years of research and using research objects from other types of companies as additional company references in seeing the company's value.
3. Management is expected to pay more attention to indicators on the achievement of the company's financial performance, particularly the increase in profits. This is because investors tend to look at the company's profitability.

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