Effect of ROA, Growth and DER on Value Companies  
Study on Manufacturing Companies Listed on Indonesia Stock Exchange in 2017-2019

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ABSTRACT
The phenomenon that is the background of this study is that during 2017 to 2019 there are still many manufacturing industry companies listed on the Indonesia Stock Exchange, having a Price Book Value (PBV) smaller than one. Many studies produce different results about the factors that affect PBV. The question of determinant factors arises whether that affects the PBV. Whether PBV is affected by Profitability (ROA) sales growth (Growth), And Debt Equity Ratio (DER), this research was conducted to answer the question. The theories used in this study are: signaling theory, trade-off theory. This study used purposive sampling of 75 out of 110 manufacturing companies listed on the Indonesia stock exchange in 2019. The data used is panel data from 2017-2019. The results of this model are expected to make a new contribution to the field of financial management. The main findings of this study are, The direct effect of Growth and DER was not significant to PBV. The effect of ROA on PBV is significant.

Keywords: ROA, GROWTH, DER, PBV

INTRODUCTION

Financial management has the main task of managing the company's finances. Van Horne (2009) said that the objective of the firm seen from financial management is to always increase the value of the company. The value of the company for companies that have gone public can be seen from; increase in the company's share price, increase in price earning ratio or increase in the company's price book value (Ross, et. All, 2000). As for companies that have not gone public the value of the company can be seen from the book value of the company (Bambang Riyanto, 2014).

Efforts to increase the company's value can be made through various means, including through improving business efficiency, profit, competitive position and increasing shareholder prosperity (Brigham, Ehrhardt, 2002) and Tobin's Q (Van Horne,

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2009). One of the benchmarks of the company's value is the Price Book Value (PBV). PBV is a comparison between the price per share (stock's market value) with the book value per share. The higher the Price Book Value (PBV) the higher the value of the company, the higher the investor's valuation of the value of the shares (Van, Horne, and Wachchowicz. 2010). If the company's PBV value is high (greater than one) then the company can be said to be good in the investor's view, on the contrary if the company's PBV value is low (smaller than one) then the company is not in the view of the investor is not good (Van Horne, 2009).

Signaling theory has more to do with signals given to investors about the company's management policies and actual company fundamental factors (Brigham, Michael C. 2002). Signals are cues: First, the company's management policy deals with risk and return. Second, the upcoming plan becomes the company's goal.

Based on the concept, it can be said that: first, a company that has a large profitability will signal to investors that the company is well managed and able to generate a large return, good signal for investors will increase the value of the company (Van Horne., and Wachchowicz., 2001). Second, size can also signal to investors, large companies will be better able to take advantage of opportunities that arise from the business environment, so it will be more attractive for investors to invest in the company's stock.

Trade Off theory states that capital structure policy will create a dilemma between how much debt the company owes and how much the company's exusivity so that there is a balance between the costs and profits earned by the company (Husnan, Suad.2004). Trade-off theory actually shows the value of the company at the optimal capital structure. Management of the company, knowing that it can make decisions about debt equity ratio. Some conclusions that can be drawn related to debt based on trade off theory are as follows. (Van Horne and Wachowicz, 2001).

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The company's PBV is the ratio between the company's market value and its book value (Weston, J. Fred, Z and Copeland, Thomas E. 1992). PBV is one of the benchmarks of the value of a company's shares. The higher the PBV, the higher the share price of the company. PBV is effected by capital structure, profitability, asset size, and sales growth.

Different from Weston, J. Fred, Z and Copeland, Thomas E. 1992 argues that the company's funds are currently obtained for future profits or the success of the company's level in operationalizing its business which can be seen at the share price of the company itself or PBV. Price to Book Value can be calculated using the formula:

Profitability measures the company's ability to make a profit. There are several benchmarks of profitability, namely Return on Asset (ROA), Return on Investment (ROI) and Return on Equity, abbreviated as ROE (Brigham, and Michael C. 2002). Return on Asset (ROA) measures the company's ability to obtain business capital from the total assets used, ROI (Return On Investment) reflects management's ability to manage its assets as optimally as possible so that the desired net profit is achieved, while ROE (Return On Equity) shows the company's ability to generate net profit using its own capital (Van Horne, 2005).

ROA has a type of ratio that can be measured, consisting of: Gross Profit Margin (GPM) that provides information on the company's profit from sales, after reducing production costs for goods sold, and Asset turnover which is the turnover rate of assets used by the company within a year. Growth is an opportunity for the company's future capabilities and indicators that can reflect the growth of the company. Thus high growth of the company will be very efficient for the company to operate and choose to use the profit or resources it has, while low growth of the company will threaten losses for the company and use long-term debt.

Companies with high sales growth will provide signaling theory and information to investors about the company's future goals and high corporate growth (Van Horne, and Wachchowicz, 2001). DER reflects the company's financial policy related to the company's...
capital resources (Bambang Rianto, 2013). The capital structure can be calculated through leverage factors, i.e. the comparison between long-term debt and total assets, or through DER, is a comparison of own capital with long-term debt (Van Horne, 2005). Bambang Riyanto (2014) argues that the capital structure is a comparison between external capital and internal capital for the fulfillment of the company's operations. External capital is both long-term and short-term debt. While the internal capital is short-term debt or permanent with "own power" and divided on retained earnings with the inclusion of ownership of the company.

THEORETICAL BACKGROUND

Effect of Profitability (ROA) on PBV

ROA is one of the benchmarks of profitability. The higher ROA will reflect the company's high level of ability to profit from business. Based on signaling theory, profitability is a signal for investors of the company's prospects for better, so the value of the company will also increase (Briham and Houston, 2006).

This theory is also in line with the findings obtained by Kusuma Jaya (2011) and Pangilu (2014) revealed that the influence of ROA on the company's value is positive. Therefore hypothesis 1 of this study states that.

Hypothesis 1: Roa's influence on PBV is positive (Briham and Houston, 2006, Kusuma Jaya 2011, Pangilu 2014)

Effect of Growth on PBV

Growth is one of the signals of the company's prospects. Signaling theory says that high sales growth shows a good prospect for the company's growth. This condition provides a good signal for investors who want to buy shares of the company. Demand for shares is expected to rise and the share price will increase. The signal theory about growth's
influence on PBV is parallel to the findings of Jian Chen, and Roger Strange (2005), Awopetu et al. (2012) which states that Sales growth has a positive effect on PBV.

**Hypothesis 2: The effect of Growth on the value of the company is positive. (Jian Chen and Roger Strange, 2005, Awopetu et al 2012)**

**DER influence on PBV**

There are two different opinions about the influence of DER on PBV. The first opinion states that der's influence on the value of the company measured through PBV is negative (Suad Husnan, 2004). This opinion is in accordance with the signaling theory that the high DER signals to investors that the company has a high financial risk. Investors certainly don't like companies that are high risk, so the company's share price will fall (Brigham and Houston, 2006). This theory is echoed by the findings of Jian Chen's research, et al. (2005), Topaloglu, Macit. (2012) which found that DER significantly negatively impacted the company's value.

This opinion is different from the second opinion that is based on the theory of trade off. This opinion states that the influence of capital structure (as measured by leverage) on the value of the company is positive. The use of debt (within a certain limit) will increase the rentability of Own Capital (Return on Equity), through the reduction of tax expense that must be paid by the company, but after that point exceeded then the debt reduction will decrease the Return on Equity, thus lowering the value of the company. Der's influence on the company's positive value is supported by the results of studies from De Angelo, Marsulis (1980), Tahir, Izah Mohd, Razali, Ahmad Rizal (2011). Because there is controversy of the theory, the hypothesis 6 of this study, which relates to der murmuring on the value of the company is:

**Hypothesis 3: DER affects the value of the company. (Brigham and Houston, 2006, Jian Chen1, et.al. (2005), Tahir, Izad Moh Razali, Ahmad Rizal 2011). Topaloglu, Macit. (2012),**
METHOD, DATA AND ANALYSIS

Types and Data Sources
The type of data used in this study is secondary data. The data source is from the financial statements of manufacturing industry companies listed in the Indonesia Capital Market Directory in 2017-2019.

Population and Research Samples
This study will use purposive sampling. The population for this study is manufacturing companies go public which number 97 companies. The determination of manufacturing industry companies as the object of research is based on the consideration that the number of companies in the industry is the most number compared to other types of companies listed on the Indonesia Stock Exchange. From the population was sampled as many as 75 purposive companies. Sampling is based on the availability of data for variables studied for three years, i.e. from 2017 to 2019.

The data used is the data needed to measure PBV, ROA, Sales Growth and Debt Equity Ratio (DER). In detail the data used is data about:
1. ROA for 2017, 2018 and 2019
2. Data on Growth in 2017, 2018 and 2019 which is data on sales growth.
5. Data on the company's Price Book Value (PBV) in 2017, 2018 and 2019

Analysis Methods

Based on the theoretical frame of thought that has been built in chapter II and data from variables formulated in the theoretical irrigating framework, the model is formulated, the model will be processed by recursive method (Gujarati, 2009).

\[ \text{PBV} = \beta_0 + \beta_1 \text{ROA} + \beta_2 \text{GROWTH} + \beta_3 \text{DER} + \mu \]

PBV = A ratio that compares the price of a company's book value with stock market value
ROA = Comparison of EBIT with total assets
GROWTH = Sales growth
DER = Debt ratio compared to own capital

RESULT

Descriptive Statistics

Descriptive statistics provide an overview or description of a data that is seen from the maximum value, minimum value, mean, and standard deviation of dependent variables namely PBV and three independent variables namely ROA, GROWTH, DER. Descriptive statistical distributions for each variable are presented in the table below:

<table>
<thead>
<tr>
<th>Table 1. Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>PBV</td>
</tr>
<tr>
<td>ROA</td>
</tr>
<tr>
<td>GROWTH</td>
</tr>
<tr>
<td>DER</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
</tr>
</tbody>
</table>

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P-ISSN: 2580-6084, E-ISSN: 2580-8079
Source: SPSS output, processed secondary data

Based on table 1 the amount of data or n used in this study is 75. PBV as a dependent variable has an average value (mean) of 1,435 and a standard deviation of 0.88768 with a minimum value of 0.04 and a maximum value of 3.28.

The variable ROA (Return On Asset) in table 1 shows that the ROA in the quarter data during 2017-2019 has a minimum value of 10.06%, while for the maximum ROA value of 24.65%. The average value or mean of ROA is 14.09% with a standard deviation of 3.00%. The standard deviation value is lower than the mean value, this indicates that the deviation of data in roa variables is not very large, in other words the variation between the minimum and maximum values in the observation period is relatively low, so it can be said that it is good, because there is no relatively large gap in the minimum and maximum ROA.

Growth variables in table 1 indicates that the growth in the quarter data during 2017-2019 has a minimum value of 76.63% contained in manufacturing companies in the first quarter of 2017, while the maximum value of 106.50% owned by adhi karya TBK Indonesia in the second quarter of 2018. The average or mean value is 92.94% with the standard deviation of 7.46%. The standard deviation value is lower than the mean value, this indicates that the deviation of data on the Growth variable is not too large, in other words the variation between the minimum and maximum values in the observation period is relatively low, so it can be said that good, because there is no relatively large gap in the minimum and maximum growth.

The variable DER (Debt Equity Ratio) in table 1 shows that DER in the quarter data during 2017-2019 has a minimum value of 0.78% contained in Adhi Karya Indonesia in the fourth quarter of 2018, while the maximum value of 4.76% is also owned by Adhi Karya Indonesia in the fourth quarter of 2019. The average or mean value is 2.09% with the standard deviation it has of 0.95%. The standard deviation value is lower than the mean value, this indicates that the deviation of data in der variables is not very large, in other words the variation between the minimum and maximum values in the observation period
is relatively low, so it can be said that it is good, because there is no relatively large gap in the minimum and maximum DER.

DISCUSSION

Linear Regression Analysis

In this study, the hypothesis test was conducted with a statistical test t to determine the influence of each independent variable ROA (Return On Asset), Growth, DER (Debt Equity Ratio) on dependent variables namely Price Book Value (PBV)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>17,187</td>
<td>2,251</td>
<td>7,635</td>
<td>.000</td>
</tr>
<tr>
<td>PBV</td>
<td>-.046</td>
<td>.018</td>
<td>-.180</td>
<td>.022</td>
</tr>
<tr>
<td>ROA</td>
<td>.002</td>
<td>.006</td>
<td>.025</td>
<td>.557</td>
</tr>
<tr>
<td>GROWTH</td>
<td>.035</td>
<td>.062</td>
<td>.043</td>
<td>.580</td>
</tr>
<tr>
<td>DER</td>
<td>-.086</td>
<td>.008</td>
<td>-.975</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PBV

Source: SPSS output, processed secondary data

In table 2 indicates that the results that ROA (Return on Assets) has a significant effect on PBV manufacturing companies. This is due to the sig value smaller than 0.05 which is 0.022. The results of the regression equation indicate that the ROA variable has a negative regression coefficient, so it can be interpreted that ROA has the opposite relationship to PBV. Thus the first hypothesis that states ROA has a positive effect on PBV is unacceptable. High low ROA ratio has a significant effect on the rise or fall of profitability Manufacturing, ROA is very closely related to the capital owned by

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manufacturing because ROA is one of the capital ratios used to measure the adequacy of manufacturing capital. In this research period, the average ROA value of 14.98% was well above the minimum standard set at 8%. This high ROA value is not followed by the increase of PBV of manufacturing companies, because in the observation period the average PBV of Manufacturing Companies tends to fall in the period 2017-2019. The results of this study are supported by research conducted by Rindhatmono (2005), Sangia (2012) and Bachri et al. (2013).

Based on table 2 obtained results that GROWTH has no significant effect on pbv manufacturing companies. This is due to the sig value. 0.05 of 0.557. The results of the regression equation show that the growth variable has a positive regression coefficient, so it can be interpreted that growth has no influence on PBV. Thus the second hypothesis that states growth has a positive effect on PBV is unacceptable. The higher the growth of a manufacturing company is not the benchmark for high profitability. From the data in the research period the average growth of the whole is good, namely at 92.93%, but there are still banks namely Adhi Karya and Wijaya Karya in certain periods still have growth rates below 80%. This indicates that the function of manufacturing companies in channeling financing has not been done well by the entire Manufacturing Company studied. Therefore, in this study, growth as a benchmark for liquidity ratio does not affect the profitability of manufacturing companies. This result is supported by research conducted by Rindhatmono (2005) and Dewi (2010).

Table 2 shows that the Debt Equity Ratio (DER) has no significant effect on the PBV of manufacturing companies. This is due to the sig value. 0.05 which is 0.580. The results of the regression equation show that der variables have a positive regression coefficient, so it can be interpreted that DER has no influence on PBV. Thus the third hypothesis that der negatively affects PBV is unacceptable. The lower der value of a manufacturing company cannot be a benchmark for increasing profitability, can be seen in DER conditions from 2017 to 2018 also followed by a decrease in PBV. The decrease in PBV is caused by...
reduced third party refunds, third party funds that will then be channeled back to the community in the form of financing. So if the refund of this third party decreases then pbv also decreases. Third party funds decreased can be caused because the customer is unable to return its obligations to the bank in accordance with the specified time. This result is supported by research conducted by Sukarno and Muhamad (2006).

CONCLUSION

Based on the results of the analysis that has been done, the following conclusions are obtained:

1. ROA has a significant negative effect on the profitability of manufacturing companies projected with PBV. The significance value is 0.557 and the beta coefficient is -0.046. This indicates that roa variables partially negatively affect the Company's Value (PBV). Therefore, the high low ROA is proven to affect the Company's Value (PBV).

2. Growth has no positive significant effect on the Company's Value in manufacturing companies that are projected with PBV. The significance value is 0.580 and the beta coefficient is 0.002. This indicates that the growth variable partially has no significant positive effect on the Company's Value (PBV). Therefore, high low growth is not proven to affect the Company's Value (PBV).

3. Debt Equity Ratio (DER) has no positive significant effect on the Company's Value in Manufacturing companies that are projected with PBV. The significance value is 0.000 and the beta coefficient is 0.035. This indicates that the DER variable partially has no significant positive effect on the Company's Value (PBV). Therefore the high low der is not proven to affect the Company's Value (PBV).
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P-ISSN: 2580-6084, E-ISSN: 2580-8079
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