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ANALYSIS OF THE EFFECT OF LIQUIDITY RATIOS, SOLVABILITY RATIOS AND PROFITABILITY RATIOS ON FIRM VALUE IN GO PUBLIC COMPANIES IN THE AUTOMOTIVE AND COMPONENT SECTORS

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Abstract: The research objective to be achieved in this study is to determine the effect of financial ratios on firm value in publicly listed companies in the automotive and component sub-sectors. The financial ratios used for analysis are the current ratio (CR), debt to total asset ratio (DAR) and return on assets (ROA). To measure the value is the price to book value (PBV). The method of analysis in this study is quantitative data analysis, to quantitatively estimate the effect of independent variables simultaneously (together) or partially (individually) on the dependent variable. From the results of the partial analysis test, the results show that CR and DAR do not affect the value of the company in automotive and component companies because it has a significance value greater than 0.05, 0.0875 and 0.084. While ROA has a significance value of 0.00> 0.05, this means that ROA affects the firm's value. Simultaneous test results show that jointly affect the value of the company in automotive and component companies, this is evidenced by the value of F has a coefficient of 0,000.

Keyword : *Current Ratio, debt to total asset ratio, return on Assets, price to book value.*

1. Introduction

The development of the automotive world is now increasingly rapid, especially in Indonesia. The need for vehicles is increasing so that the automotive industry is demanded to be more sensitive by investing so that it can meet the needs of the community. These efforts are inseparable from the costs or capital used to carry out product development and promotion costs.

Financial statements are a structured presentation of the financial position and financial performance of a company. Analysis of financial statements is one way of assessing the company's ability to carry out its operations so that information will be obtained about the condition and financial performance of the company both in the past, present and possibly in the future by using financial ratios (financial ratios)

According to Riyanto (2010: 329-331) financial ratio analysis is the process of determining the important operations and financial characteristics of a company from accounting data and financial statements. Financial ratio analysis that can be used by investors includes liquidity ratios, solvency ratios, profitability ratios, and activity ratios (Harahap, 2011: 217). The purpose of this analysis is to determine the efficiency of company managers' performance which is manifested in financial records and financial statements

Kasmir (2012: 129) revealed that the liquidity ratio is used to describe how liquid a company is and the company's ability to settle its short-term liabilities using current assets so this ratio is used to measure the company's ability to pay obligations that are due soon. Liquidity

ratios describe the company's financial performance in terms of liabilities that can affect investor valuations to give confidence to the company to invest.

The solvency ratio is used to measure the company's ability to pay off all obligations, both short and long term if the company is liquidated/liquidated (Kasmir, 2012: 130). That means that how much debt burden is borne by the company compared to its assets. A good solvency ratio will affect public trust, especially investors in a company, thereby increasing the value of the company

Ratio is a ratio to measure the efficiency of the use of company assets in generating profits (Husnan, 2014: 72). Investors invest stocks in companies to get returns. The higher the company's ability to earn profits, the greater the return expected by investors, thus making the company's value better.

The bjective to be achieved in this study is to determine the effect of liquidity ratios, solvency and profitability partially and simultaneously on the value of the company in the automotive and component sector publicly traded companies.

2. Literature Review

2.1 Company Value

According to Sugiarto (2011) the value of the company is an investor's perception of the company's success rate in managing resources. The value of the company will be reflected in the price of shares, rising share prices mean more prosperous for shareholders

Brigham and Houston (2011: 152) define company value as a market value because the value of the company can provide maximum prosperity for shareholders if the company's stock price increases. The higher this ratio means the higher the level of market confidence in the company's prospects.

2.2 Liquidity Ratio

According to Kasmir (2012: 129) the liquidity ratio is a ratio that illustrates the ability of a company to meet short-term obligations (debt). Some types of liquidity ratios are: current ratio, quick ratio or acid test ratio, cash ratio

Current ratio is a measure of financial balance sheet performance against company liquidity. The current ratio shows the company's ability to meet short-term debt obligations. The quick ratio is a measure of a company's ability to meet its short obligations by using the most liquid assets (the most liquid) or assets that approach cash (fast assets). The cash ratio is the ratio or ratio between the company's total cash and cash equivalents with current liabilities. This ratio is to determine whether the company can meet its short-term obligations.

2.3 Solvability Ratio

Harahap (2011: 303) states that the Solvability ratio is the ratio that illustrates the company's ability to pay its long-term obligations if the company is liquidated. Types of Solvability Ratios include debt to equity ratio (DER) Ratio of total debt to total assets (DAR), times interest earned.

According to Sawir (2008: 13) debt ratio is a ratio that shows the proportion between the liabilities owned and the entire wealth owned. This ratio is the ratio between total debt and total assets. This ratio shows the extent to which debt can be covered by assets. The Solvability ratio used in this study is the debt to total asset ratio (DAR).

Time interest earned is a comparison between net income before interest and taxes and interest expense and is a ratio that reflects the number of financial guarantees to pay long-term debt interest.

2.4 Rasio profitabilitas

Profitability ratio according to Sartono (2012: 122) is the company's ability to obtain profits related to sales, total assets, and own capital. This ratio is used to measure a company's ability to generate income related to sales, assets, and equity. Some of the profitability ratios that are often used to measure the ability of the company profit include gross profit margins, net profit margins, return on assets, return on equity, return on sales, return on employed capital

In this study, the profitability ratio is proxied by the ratio of return on assets (ROA). ROA is the ratio that investors pay attention to analyzing the company's financial performance reports. ROA is a measure of the company's overall ability to create profits by using all assets owned. ROA is used to measure the overall efficiency of a company's operations (Sabrin et.al., 2016).

2.5 Hypothesis Development

H_1: There is a partial effect of liquidity on firm value

Liquidity is proxied by the current ratio which shows the company's ability to meet short-term debt obligations. Based on the results of Jariyah's research (2016) proves that liquidity affects the value of manufacturing companies in Indonesia through dividend policy. Similar results were obtained by Fitri et. al (2018)

H_2: There is a partial solvency effect on firm value

Solvability ratio are ratios that describe a company's ability to pay long-term obligations when a company is liquidated (Harahap (2011: 303). Research that shows that solvency affects on corporate value has been carried out, among others, by Jariyah (2016).

H_3: There is a partial effect of profitability on firm value

This profitability ratio is used to measure a company's ability to generate profits from revenue related to sales, assets and equity. The greater the company can create profit, the more prosperity of investors will also increase investor interest to buy company shares. This shows that profitability affects the value of the company. The results of research from Sianturi (2015), Putri et.al (2016), Putra and Juliarini (2017) prove that profitability affects company value.

2. Research Methodology

The population of this study are companies in the Automotive sub sector and components listed on the Indonesia Stock Exchange for the period 2012-2016. The sampling technique in this study is purposive sampling technique, which is the data selected based on certain criteria. Source of data in this study is secondary data, where secondary data is a source that does not directly provide data to data collectors (Sugiyono, 2011: 137). Retrieval of data sources in this study was taken from the official website of the Indonesia Stock Exchange (www.idx.co.id).

The dependent variable in this study is firm value. Brigham and Houston (2011: 152) define the value of the company is the market value where the value of the company can provide maximum prosperity for shareholders if the company's stock price increases.

Company value is calculated using Price to Book Value (PBV) with the formula (Wiagustini, 2010: 81):

$$Price\ to\ Book\ Value = \frac{\text{Price per Share}}{\text{Book Value Per Share}} x100\%$$

The independent variables in this study are the ratio of liquidity, solvency and profitability. Liquidity ratio is a ratio that describes the ability of a company to meet short-term obligations (debt) Kasmir (2008: 129).

According to Munawir (2008: 72) Current ratio is calculated using the following formula:

$$Current\ Ratio = \frac{\text{Curren Asset}}{\text{Current Liability}} x100\%$$

Solvability ratio are ratios used in measuring the extent to which a company's assets are financed with debt and measuring the company's ability to pay all of its obligations, be it short-term or long-term periods if the company is liquidated or dissolved (Kasmir (2008: 150). In this study, the solvability ratio is proxied using a debt ratio or debt to total asset ratio (DAR) Debt Ratio. According to Sawir (2008: 13) is a ratio that shows the proportion between liabilities owned and all assets owned.

The formula of the debt ratio or debt to total assets (DAR) ratio is:

$$Debt\ to\ Total\ Assets = \frac{\text{Total liability}}{\text{Total Asset}}$$

If the debt ratio is less than 0.5 times, it means that most of the company's assets are financed through equity. If the ratio is greater than 0.5 times, most of the company's assets are financed through debt. The normal value of the Debt Ratio is usually 0.6 to 0.7 times.

Profitability ratio according to Sartono (2012: 122) is the company's ability to obtain profits related to sales, total assets and own capital. Profitability ratios are proxy using the Return On Asset (ROA) ratio. According to Munawir, (2010; 89) return on assets (ROA) profitability ratios are intended to measure the ability of the company with all funds used for company operations to generate profits

The formula used to calculate ROA is as follows:

$$Return\ on\ Asset = \frac{\text{Earning Before Tax}}{\text{Total Asset}} x100\%$$

The method used in quantitative data analysis in this study is to use a computer assistance program, namely SPSS 21.0 for windows:

Hypothesis testing either partially or jointly, is done after the regression model used is free from the classic assumption test. It aims to make the research results precise and efficient. The regression equation used is as follows (Ghozali, 2016: 97):

$Y = \alpha + \beta 1X1 + \beta\ 2X2 + \beta 3X3$

Information:

α	= Constanta
Y	= Dependent Variable
β1 β2 β3	= Regression Coefficient Value
X1	= 1st Independent Variable
X2	= 2nd Independent Variable
X3	= 3rd Independent Variable

T test is used to determine whether the variables partially affect the dependent variable. T test results are accepted if the significance value> 0.05 (α) or T arithmetic <T table. The significant degree used is 0.05 (5%).

This F test is used to find out whether the regression model can be used to know simultaneously whether the dependent variable is influential or not. The significant degree used is 0.05 (Nachrowi & Usman, 2006). The basis of decision making is as follows: If F arithmetic> F table or significance value <0.05 (α) means the hypothesis is proven then the hypothesis is accepted if carried out simultaneously.

The coefficient of determination (R^2) is used to find out how far the model's ability to explain variations in the dependent variable (Ghozali, 2011: 97). This test aims to determine the percentage of total variation of the dependent variable explained by the independent variable. Adjusted R^2 calculation results can be seen what percentage can be explained by the independent variables of the dependent variable. While the rest is influenced or explained by other variables not included in the research model.

4. Results and Discussion

4.1 Result

Based on the selection criteria for the research sample there were only 12 because the company PT. Garuda Metalindo is incomplete in publishing financial statements for 5 years in a row. Companies. The total number of companies during 2012-2016 totaled 60 companies.

Analysis techniques in this study used multiple linear regression analysis, aimed at testing the effect of the independent variables on the net income of case studies in automotive companies and components in 2012-2016. Hypothesis test results can be seen from the table below:

Table
Summary of Hypothesis Test Results

Variable	b	t_{hitung}	Sig	Conclusion
Constans	0,888			
x.1_CR	0,038	0,16	0,874	Not significant
x.2_DAR	-0,337	-1,758	0,084	Not significant
x.3_ROA	10,078	5,743	0,000	Significant influence
F_{count}		15,291	0,000	Significant influence
Adjusted R Square				0,421

Source: research results processed, 2019

Based on the results of multiple linear regression testing can be made the following regression equation:

$$Y = 0,888 + 0,038\ X_1 - 0,337\ X_2 + 10,078\ X_3 + e$$

Based on the results of the multiple linear regression equation above, it can be seen that the two independent variables, namely liquidity (CR) and profitability (ROA), have a positive effect on firm value, while one independent variable is object solvability (DAR) which has a negative effect on firm value.

2.1 Partial test (t test)

2.1.1 The results of the t test (partial test) in the table above show that

a. Effect of liquidity (CR) on firm value

On the CR variable the result of tcount (0.16) <ttable 1.670) with a significance of 0.874> 0.05 means that Ho is accepted so that partially liquidity does not have a positive and significant effect on firm value in the automotive and component companies going public in 2012- 2016.

b. Effect of solvability (DAR) on the firm value

In the solvabiliy variable (DAR), the value of t-count (-1,758)> ttable (1,670) with a significance of 0.084> 0.05 means that Ho is accepted so that partially solvability does not have a positive and significant effect on the value of the company in the automotive and component companies going public 2012-2016.

c. Effect of profitability (DAR) on the firm value

In the profitability variable (ROA) the results of tcount (5.745)> ttable (1.670) with a significance of 0.000 <0.05 means that Ho is rejected so that partially ROA has a positive and significant effect on the value of the company in the automotive and component companies going public in 2012 -2016.

2.1.1 F test

According to Ghozali (2016) the F test here aims to find out whether the independent variable jointly influences the dependent variable. Criteria for the decision of the model fit test are rejected if α> 0.05 and the model fit test are accepted if α <0.05

F test results are known to the value of Fcount> Ftable (15.291)> (2.53) with a significance of 0.000 <0.05, then it can be concluded that Ho is rejected, meaning that the variable liquidity (CR), solvency (DAR) and profitability (ROA), simultaneously positive effect on the net profit of the case study in the publicly traded companies in the automotive sector and components in 2012-2016.

4.1.2 R Test

The results of the regression calculations can be seen that the coefficient of determination (R2) obtained at adjusted R Square of 0.421. This shows that the influence of liquidity, solvency and profitability variables on firm value is 42.1%

4.2 Discussion

According to Kasmir (2008: 134). The current ratio can be used to see a company's value and to show the company's ability to pay these debts. From the t-test results obtained on the variable liquidity ratio which is proxied by the current ratio (CR) the significance value of 0.0875> 0.05. It shows that the liquidity variable does not affect the value of the company which is predicted by price to book value (PBV).

The results of the research prove that the ability of companies to go public in the automotive sub-sector and components in paying their current debt using the company's current assets does not affect firm value. This condition can be interpreted that, the value of current assets (which can soon be used as money) with a ratio of short-term debt does not have a positive influence in increasing the value of the company, although the current ratio also shows the company's ability to pay short-term debts (Kretarto, 2005: 55).

The results of this study support the research of Putri et.al (2016) with the result that the liquidity ratio measured using CR and QR has no significant effect on firm value.

This study contradicts the results of the Jariyah research (2016) with the results of research that liquidity (current ratio) (X1) has a significant effect on firm value (Y2). This is evidenced by obtaining the calculated t value of (-2.801) <-t table (-2.042) and sig (0.009) <α (0.05).

T-test results on the variable debt to total asset ratio (DAR) have a significance value of 0.084> 0.05 then the debt to total asset ratio (DAR) does not affect the price to book value (PBV). That means DAR affects the value of the company. In other words, the solvency ratio of a company proxied by DAR does not affect the value of the company proxied by PBV.

Solvability/Leverage shows how a company's debt funds its assets (Van Horne et al, 2012: 170). With the debt that the company has, it is expected that the company will be able to fund and manage its assets to make a profit so that the company's value will increase. The results show that the solvency that is proxied using the debt to total asset ratio does not affect the firm's value. This shows that automotive sector companies and components in financing their assets tend not to use debt, thereby reducing the proportion of debt. The use of excessive debt will reduce the benefits received from the use of debt because the benefits received are not proportional to the costs incurred so that a low proportion of debt can increase the value of the company and conversely an increase in debt can reduce the value of the company.

The results of this study are in line with research Prasetyorini (2013), research on the influence of company size, leverage, price earning ratio and profitability on firm value. The study was conducted on companies going public in the basic industrial and chemical sectors. The results of the study prove that the leverage/solvability variable does not affect the firm value. The same results were obtained from the research of Novari and Lestari (2016). Contrary to the results of research conducted by Hasibuan et.al (2016) and jariyah (2016) which proves that the variable leverage/debt to total asset ratio has a significant effect on firm value.

T-test results for profitability variables that are proxied using return on assets (ROA) provide evidence that ROA affects the firm's value. This is evidenced by the coefficient of a value of 0,000 <0.05.

The more the level of profitability of a company, the greater the level of prosperity that the company provides to shareholders. The greater the level of prosperity provided by the company will attract investors to own the company and will have a positive influence on stock prices in the market. This means it will increase the value of the company. The results of this study prove that the ability of companies in the automotive sub-sector and components in obtaining better profits will increase the value of the company and if the profit decreases, it will impact the decline in corporate value. This research supports the results of research Pratama and Wirawati (2016), daughter et. al (2016), Novari and Lestari (2016), Putra and Juniariani (2017) with the results of statistical tests showing that profitability (ROA) affects the firm's value.

The determinant test results (R2) obtained adjusted R2 values of 0.421. The results of the determinant test prove that the influence of liquidity, solvency, and profitability variables affect the value of the company which is proxied by price to book value (PBV) of 42.1%, the remaining 47.9% is influenced by other variables outside the research variable.

5. Conclusions and Recommendation

5.1 Conclusion

The variable liquidity ratio which is proxied by the Current Ratio (CR) does not affect firm value. This is evidenced by the results of the t-test has a significance value of 0.0875> 0.05

T-test results on the solvability variable measured using debt to total asset ratio (DAR) have a significance value of 0.084> 0.05, then solvency does not affect the company's supply

The profitability variable (ROA) affects the value of the company. This is evidenced by the coefficient of t value of 0,000 which means it is smaller than 0.05.

In a joint test that is the F test obtained a significance value of 0,000 which means that the variable liquidity, solvency, and profitability together affect the value of the company. So that the model used is appropriate with a depth of influence of 0.421 this is seen from the adjusted R2 value of 0.421. In other words that the variables of liquidity, solvency, and profitability affect the value of the company by 42.1% the remaining 47.9% is influenced by other variables outside the variables used in the study.

5.2 Recommendation

For further researchers, with this research, it is expected that further researchers can research other sectors such as the banking, automotive or companies indexed both in conventional and sharia by using other factors that can affect company performance. In measuring a variable one can use another measure for the firm's dependent variable such as Price Earning Ratio, Tobin's Q.

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