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The Effect of Current Ratio, Debt to Equity Ratio and Return on Asset on Dividend Payout Ratio in Sub-sector Automotive and Component Listed in Indonesia Stock Exchange in Period 2012–2016

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Abstract

The aim of this research was to find the effect of current ratio, debt to equity ratio, and return on asset on dividend payout ratio in subsector automotive and component-listed Indonesia Stock Exchange in the period 2012–2016. The sample selection in this research is done using purposive sampling method and six companies that matched the criteria were chosen. The research data is obtained from Indonesia Stock Exchange. The method used in this research is panel data regression analysis, and it was found that the more appropriate model to be used is a random effect. From the result of research got a value of adjusted R-Square equal to 68.69%. The result shows that debt to equity ratio and return on asset have a significant effect on dividend payout ratio with a regression coefficient equal to –0.065189 and 0.679691. However, the result of current ratio has no significant effect on the dividend payout ratio with a regression coefficient of 0.037200.

Keywords: dividend payout ratio, current ratio, debt to equity ratio, return on asset, automotive industry

1. Introduction

The development of a good automotive industry attracts investors to invest in this industry. The current investment grows into one of the lifestyles in modern society. Both individuals and groups who have excess resources will do this activity. In the capital market activity, investors have expectations of the investments they make, which are capital gains and dividends. The percentage of revenues to be paid to shareholders as cash dividend is called the dividend payout ratio. Dividend payout ratio is the number of dividends relative to the company's net income or earnings per share (Keown,2005:607).

2. Literature Review

2.1. Financial statement analysis

According to Brigham and Houston (2016) describes how ratios are used to analyze the financial statement to identify weaknesses that need to be strengthened to maximize the stock price. The financial statement analysis is the art of transforming data from financial statements into information that is useful for informed decision making (Horne and Wachowicz,2009:128). So, the financial statement analysis can be defined as an application of analytical tools and techniques to general purpose financial statements and related data to derive estimates and inferences useful in business analysis.

According to Subramanyam K.R (2014) ratio analysis is among the most popular and widely used tools of financial analysis. Analysis of ratio can reveal important relations and bases of comparison in uncovering conditions and trends difficult to detect by inspecting the individual components that make up the ratio also ratios often are most useful when they are future-oriented. This means we often adjust the factors affecting ratio for their probable future trend and magnitude. The use of ratio will eliminate the size of a problem because the size will be effectively divided. Financial ratio is usually group into the following categories such as liquidity ratios, financial leverage, profitability ratios, turnover or asset management ratios, and market value ratios.

2.2. Dividend payout ratio

Dividend payout ratio is one of the group in market value ratios. According to K. R. Subramanyam (2014), dividend payout ratio is referred to the proportion of earnings distributed. It is often expressed as a ratio or a percentage of net income. Keown, Martin, Petty, and Scott JR (2005) said that dividend payout ratio is the number of dividends relative to the company's net income or earnings per share. Added by Ross, Westerfield, Jaffe, Lim, Tan, and Wong (2015) dividend payout ratio is the amount of cash paid to shareholders expressed as a percentage of earnings.

$$\text{Dividend Payout Ratio } (DPR) = \frac{\text{Cash Dividend}}{\text{Net Income}}$$

According to Rodoni and Ali (2010) the factors that affect the payment of dividends of a company are as follows: Liquidity, that is, if the retained earnings are invested in fixed assets, such as machinery and equipment, materials and supplies and other goods, it may indicate a low liquidity position and the possibility that the company can no longer pay dividends. In this research, the liquidity ratio used is Current Ratio.

Leverage, this factor reflects the company in fulfilling all its obligations indicated by some part of own capital used to pay the debt. The greater this ratio indicates the greater the liability. And the lower this ratio will show the higher the company's ability to fulfill its obligations. In this research, the leverage ratio used is Debt to Equity Ratio. Profitability is the ability of companies to earn profits in relation to sales, total assets, and own capital. Thus for long-term investors will be very concerned with this profitability analysis for example for shareholders will see the benefits that will actually be received in the form of dividends. In this research, profitability ratios used are Return On Assets.

2.3. Current ratio

According to Brigham and Houston (2016) current ratio is the ratio calculated by dividing current asset by current liabilities. It indicates the extent to which current liabilities are covered by those assets expected to be converted to cash in the near future. Subramanyam K.R (2014) said that current ratio is a relevant and useful measure of liquidity and short-term solvency, it is subject to certain limitations we must be aware of. A high current ratio generally indicates a very strong, safe liquidity position, it might also indicate that the firm has too much old inventory that will have to be written off and too many old account receivable that may turn into bad debts. To a creditor, particularly a short-term creditor such as a supplier, the higher the current ratio is the better. To the firm, a high current ratio indicates liquidity, but it also may indicate an inefficient use of cash and other short-term assets.

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current Liabilities}}$$

2.4. Debt to equity ratio

According to Horne and Wachowicz (2009), that debt to equity ratio is ratios that show the extent to which the firm is financed by debt. The ratio tells us that creditors are providing the amount of financing for the company. While, Sugiarto (2015) said that Debt to Equity Ratio (DER) reflects the company's ability to meet all its obligations, which is shown by how much a part of their own capital is used to pay the debt.

The ratio tells us that creditors are providing the amount of financing for each money being provided by shareholders. Creditors would generally like this ratio to be low. The lower the ratio, the higher the level of the firm's financing that is being provided by shareholders, and the larger the creditor cushion (margin of protection) in the event

of shrinking asset values or outright losses. A comparison of the debt-to-equity ratio for a given company with those of similar firms gives us a general indication of the creditworthiness and financial risk of the firm.

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

2.5. Return on asset

According to Ross, Westerfield, Jaffe, Lim, Tan, and Wong (2015) return on asset is net income divided by total assets. It measures the profit per dollar of assets. Added by Brigham and Houston (2016) return on asset is the ratio of net income to the total asset. While, Sugiarto (2015) said that ROA is a profitability ratio, that is, the ratio that indicates how effectively the company is operating so as to produce profit/loss for the company. Return on asset is obviously better to have a higher than a lower return on assets. A low ROA can result from a conscious decision to use a great deal of debt, in which case high-interest expenses will cause net income to be relatively low.

$$\text{Return On Asset} = \frac{\text{Net Income}}{\text{Total Asset}}$$

2.6. Research methods

This study uses a survey to analyze the effect of Current Ratio, Debt to Equity Ratio, and Return on Asset on Dividend Payout Ratio. The analytical method used in this study is panel data regression analysis with the help of software Eviews 9.0 and SPSS. EViews and SPSS is a computer program used to process statistical data and econometric data, EViews and SPSS can be used to solve problems in the form of time series, cross section, or data Panel.

The survey was conducted in Indonesia. The population in this research is automotive and component sub sector listed in Indonesia Stock Exchange amounted to 13 companies and the research sample is 6 companies. Here is the framework of thinking of independent and dependent variable can be described as follows:

Hypothesis 1: It is suspected that current ratio has a significant effect on dividend payout ratio.

Hypothesis 2: It is suspected that debt to equity ratio has a significant effect on dividend payout ratio
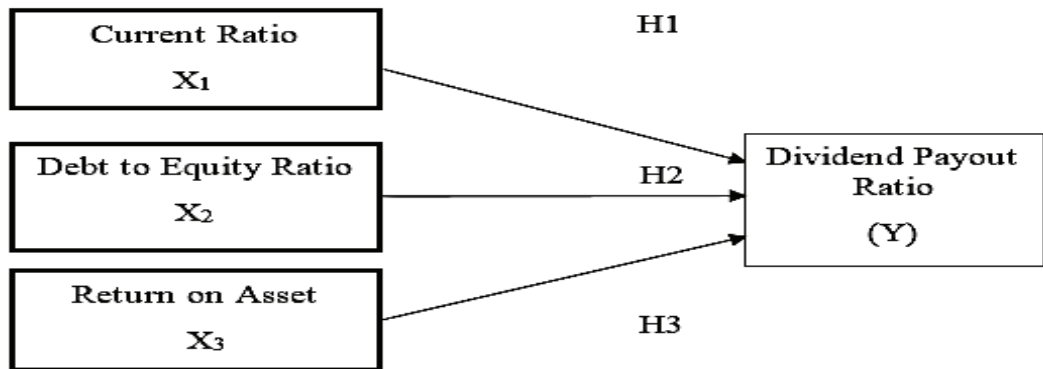
Figure 1: Framework of thinking.

Hypothesis 3: It is suspected that return on asset has a significant effect on dividend payout ratio.

3. Result

3.1. Stationary test

According to Gujarati and Porter (2012), testing stationarity data is one of the important types of data used in empirical analysis is time series data. The stationary test can be done by unit root test. There are two kinds of root test units that can be generally chosen include Augmented Dickey Fuller (ADF) and Philips Peron (PP). Here is the results of stationary:

TABLE 1: Stationary test result.

No.	Variable	Unit Root Test in	ADF Test Statistic	Prob.	Critical Value 5%	Information
1	DPR	1st difference	−6.614357	0.0000	−2.971853	Stationary
2	CR	1st difference	−5.374018	0.0001	−2.971853	Stationary
3	DER	1st difference	−4.663940	0.0009	−2.971853	Stationary
4	ROA	1st difference	−4.810230	0.0008	−2.971853	Stationary

Source: Secondary data processed (2017).

Based on Table 1 ADF test results, If the probability is smaller or equal to 0.05 then the time series data is stationary, otherwise, if the probability is greater than 0.05 then the time series data is not stationary. From the test results obtained that all variables in this study have been stationary on the degree of level integration. With the explanation as follows:

Probability DPR (0,0000) < Alpha (0.05), so the data is stationary.

Probability CR (0,0001) < Alpha (0.05), so the data is stationary.

Probability DER (0,0009) < Alpha (0.05), so the data is stationary.

Probability ROA (0,0008) < Alpha (0.05), so the data is stationary.

3.2. Panel data regression analysis model

Random effect model is an estimation method of panel data regression model with the assumption of regression coefficient (slope) constant and intercepts different between time and between individual (random effect). The random effect approach assumes that each company has a different intercept, which is a random variable. In the random effect approach in Table 2, it can be seen that the adjusted R squared results of 0.686993 or 69%. so it can be interpreted that the independent variables in this study can describe the dependent variable, dividend policy of 69% while the remaining 32% explained by other research. Based on these results, it can be seen that the variables whose probability values are < α (0.05) are significant are Debt to Equity Ratio (DER) and Return On Asset (ROA), while for the Current Ratio (CR) variable is not significant. From the Eviews 9.0 processing the following result are obtained:

TABLE 2: The test result of random effect.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.306541	0.173439	1.767426	0.0089
CR	0.037200	0.061076	0.609090	0.5478
DER	−0.065189	0.064707	−1.007453	0.0230
ROA	0.679691	0.332036	2.047041	0.0409
Cross-section random			0.130175	0.6559
Idiosyncratic random			0.094289	0.3441
Weighted Statistics				
R-squared	0.773340	Mean dependent var.		0.073462
Adjusted R-squared	0.686993	S.D. dependent var.		0.101696
S.E. of regression	0.097883	Sum squared resid.		0.249109
F-statistic	1.767679	Durbin–Watson stat		1.417446
Prob(F-statistic)	0.048052			
Unweighted Statistics				
R-squared	0.201813	Mean dependent var.		0.238387
Sum squared resid.	0.657461	Durbin–Watson stat		0.537064
Source: Secondary data processed (2017).				

3.3. Model selection test of panel data

3.3.1. Chow test

Table 3: The test result of Chow test.

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.436794	(5,21)	0.0009
Cross-section Chi-square	27.877037	5	0.0000

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.657731	0.117344	5.605173	0.0000
CR	−0.083826	0.046475	−1.803689	0.0829
DER	−0.173690	0.039739	−4.370728	0.0002
ROA	−0.831504	0.377886	−2.200410	0.0369

R-squared	0.425967	Mean dependent var.	0.238387
Adjusted R-squared	0.359732	S.D. dependent var.	0.168532
S.E. of regression	0.134854	Akaike info criterion	−1.045680
Sum squared resid.	0.472827	Schwarz criterion	−0.858853
Log likelihood	19.68519	Hannan-Quinn criter.	−0.985912
F-statistic	6.431186	Durbin-Watson stat	1.092792
Prob(F-statistic)	0.002100		

Source: Secondary data processed (2017).

Based on the results of chow test conducted in Table 3, it can be seen that the value of chi-square < α (0.05) that is equal to 0.0000, thus Ha accepted so the right model is following fixed effect model. In other words, the fixed effect model is better used in estimating panel data than the ordinary least square model (common effect). Then proceed with Hausman test to choose whether to use fixed effect or random effect model to be used in panel data regression.

TABLE 4: The test result of Hausman test.

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.019974	3	0.1703
Source: Secondary data processed (2017).			

3.3.2. Hausman test

Based on Table 4 shows that the probability value of chi-square is 0.1703 > alpha (0.05). Then H_0 is accepted and H_1 is rejected. So, in this research, the random effect model is better used in estimating panel data compared with fixed effect model. Based on some tests of panel data model selection that has been done and decided in choosing test to estimate panel data regression, the result can be seen in Table 5:

TABLE 5: The test result of panel data.

Method	Testing	Prob.	Result
Chow Test	Common Effect vs Fixed/Random Effect	0.0009	Fixed Effect
Hausman Test	Fixed Effect vs Random Effect	0.1703	Random Effect
Sources: Tables 3 and 4.			

In chow test, the model of choosing panel data is common or fixed/random effect.

H_0 = common

Ha = fixed/random

Prob. = 0.0009

It means H_0 is rejected because the probability is less than 0.05, so the model is fixed/random effect and continue into Hausman test. In Hausman test, the model of choosing panel data is fixed or random effect.

H_0 = random

Ha = fixed

Prob. = 0.1703

It means H_0 is accepted because the probability is more than 0.05, so the model is random effect.

4. Discussion

From the output in Random Effect, the regression equation model is as follows:

Y = a + bx1 + bx2 + bx3

DPR = 0.306541 + 0.037200 CR − 0.065189 DER + 0.679691 ROA

Analysis of coefficient panel data regression

H_a = model is true

H_0 = model is not true

Criteria probability is less than 0.05.

Effect of current ratio on dividend payout ratio:

The significant is 0.5478. It means the H_0 is accepted because it is more than 0.05. So, it also means that the increasing or decreasing dividend payout ratio is not influenced by current ratio.

Effect of debt to equity ratio on dividend payout ratio:

The significant is 0.0230. It means the H_0 is rejected because it is less than 0.05. So, it also means that the increasing or decreasing dividend payout ratio is influenced by debt to equity ratio.

Effect of return on asset on dividend payout ratio:

The significant is 0.0409. It means the H_0 is rejected because it is less than 0.05. So, it also means that the increasing or decreasing dividend payout ratio is influenced by return on asset.

5. Conclusion

Based on the analysis of current ratio, debt to equity ratio and return on asset to dividend payout ratio in automotive sub-sector and component listed in IDX, it can be concluded as follows:

Current Ratio has no effect on dividend payout ratio in sub sector automotive and component of period 2012–2016.

Debt to Equity Ratio has an effect on dividend payout ratio in sub sector automotive and component of period 2012–2016.

Return on Asset has an effect on dividend payout ratio in sub sector automotive and component of period 2012–2016.

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