Analysis of Cash Ratio, Firm Size and Return on Assets that Influence Dividend Payout Ration SOE Companies Listed on the Indonesia Stock Exchange

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ABSTRACT

This study aims to determine whether the influence cash ratio, firm size and return on assets influence simultaneously and partially to the dividend payout ratio at the state-owned company listed on the Indonesia Stock Exchange. The method of this thesis is a descriptive statistical analysis, the classic assumption test, and hypothesis testing. Independent variables in this study is the cash ratio, firm size and return on assets while Dependent variable is the dividend payout ratio with a sample size of this study as many as 54 by using purposive sampling acquired 18 companies over three years. The type of data used is secondary data. The results of this study demonstrate that, in simultaneous cash ratio, firm size and return on assets has no effect simultaneous dividend payout ratio in the state-owned company. In partial cash ratio, and return on assets have no effect and firm size affect the dividend payout ratio.

Key words:
Cash Ratio;
Firm Size;
Return On Assets;
Dividend Payout Ratio.

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1. INTRODUCTION

Cash Ratio is a measure of the liquidity ratio, which is the company's ability to meet its current liabilities through the amount of cash (and cash equivalents, such as demand deposits or other deposits in banks that can be withdrawn at any time) owned by the company. The higher the CR indicates the company's cash ability to meet (pay) its short-term obligations (Brigham, 1983). With the increasing cash ratio, it can also increase the confidence of investors to pay dividend.

Firm Size reflects that an established and large company has easier access to the capital market, while a small company is the opposite. Companies that can easily access the capital market will be able to get funds in a relatively fast time. Therefore, companies with a larger size are expected to have the ability to generate greater earnings, so that they will be able to pay higher dividends compared to small companies (Hatta, 2002).

Many studies have been done related to dividends. From these studies, there are several research gaps, including: Marlina and Danica (2009), in their research results show that ROA has a positive and significant influence on the DPR. This is in accordance with research conducted by Puspita (2009). The results of this study contradict the results of research conducted by Nuringsih (2005) which states that ROA has a negative effect on dividends. Meanwhile, research conducted by Sunarto (2004) states that partially ROA does not have a significant influence on the DPR. Research conducted by Sunarto and Kartika (2003) states that the Cash Ratio does not show a
significant influence on the DPR, while research conducted by Puspita (2009) states that the Cash Ratio has a positive and significant effect on the Dividend Payout Ratio. Permatasari (2009) stated that Firm Size had a positive and significant effect on the DPR. Wardhani (2009) stated that Firm Size had a negative and insignificant effect on the DPR, while Habibie (2009) stated that Firm Size had no significant positive effect on the DPR.

2. RESEARCH METHOD
The type of research conducted is causal associative research. According to Umar (2003:30) "causal associative research is research that aims to analyze the relationship between one variable and another variable or how one variable affects other variables".

2.1 Analysis Techniques
a. Descriptive Statistical Analysis
Descriptive statistical analysis is a descriptive technique that provides information about the data held and does not intend to test hypotheses. This analysis is only used to present and analyze data accompanied by calculations in order to clarify the circumstances or characteristics of the data in question. The measurements used in this descriptive statistic include the number of samples, minimum value, maximum value, average value (mean), and standard deviation (Ghozali, 2011).

b. Classic assumption test
The data analysis method used in this study was a multiple regression analysis model using SPSS for Windows software. The use of regression analysis method in testing the hypothesis, first tested whether the model meets the classical assumptions or not. The classical assumption test is a model that is said to be quite good and can be used as a predictive tool if it has the best linear unbiased estimator (BLUE) properties.

3. RESULTS AND DISCUSSIONS
3.1 Research result
a. Descriptive Statistical Analysis
Descriptive statistics provide an explanation of the minimum value, maximum value, average value (mean), and standard deviation values of the independent variables and dependent variables.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividend Payout Ratio</td>
<td>54</td>
<td>10</td>
<td>55</td>
<td>25.28</td>
<td>9,488</td>
</tr>
<tr>
<td>CR</td>
<td>54</td>
<td>1.09</td>
<td>757.00</td>
<td>1.384E2</td>
<td>106.73116</td>
</tr>
<tr>
<td>SIZE</td>
<td>54</td>
<td>5.96</td>
<td>28.06</td>
<td>16.1231</td>
<td>4.75907</td>
</tr>
<tr>
<td>ROA</td>
<td>54</td>
<td>-5.50</td>
<td>17.40</td>
<td>4.7426</td>
<td>4.61318</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS processed data, 2016

From table 4.1, several things can be explained as described below:

a) The dividend pay out ratio (Y) variable has a minimum value of 10 and a value of 55 with an average of 25.28 and a standard deviation of 9.488 with a total of 54 observations.
b) The cash ratio variable (X2) has a minimum value of 1.09 and a maximum value of 757, with an average of 1.384 and a standard deviation of 106.73116 with a total of 54 observations.
c) Firm size variable (X3) has a minimum value of 5.96 and a maximum value of 28.06, with an average of 16.1231 and a standard deviation of 4.75907 with a total of 54 observations.
d) The Return on Assets (X1) variable has a minimum value of -5.50 and a maximum value of 17.40 with an average of 4.7426 and a standard deviation of 4.61318 with a total of 54 observations.
b. Classical Assumption Test

To produce a good regression model, regression analysis requires classical assumption testing before testing the hypothesis, so in this study it is necessary to test the classical assumptions first which includes: data normality test, multicollinearity test, heteroscedasticity test and autocorrelation test which are carried out as follows:

c. Data Normality Test

The normality test aims to test whether the residual variables are normally distributed or not. The statistical test that can be used to test whether the residuals are normally distributed is the Kolmogorov-Smirnov (KS) non-parametric statistical test by making the following hypotheses:

\[ H_0 : \text{residual data is normally distributed} \]
\[ H_a : \text{residual data is not normally distributed} \]

If the significance value is greater than 0.05 then \( H_0 \) is accepted and vice versa if the significance value is less than 0.05 then \( H_0 \) is rejected or \( H_a \) is accepted.

<table>
<thead>
<tr>
<th>Table 2. Normality Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Sample Kolmogorov-Smirnov Test</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>negative</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
</tr>
<tr>
<td>asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

Test distribution is Normal.
Source: SPSS processed data, 2016

From the results of data processing in table 2, it is obtained that the Kolmogorov-Smirnov value is 0.926 and is significant at 0.358. The significance value is greater than 0.05, then \( H_0 \) is accepted, which means the residual data is normally distributed. The normally distributed data can also be seen through histogram graphs and normal data plot graphs.

![Figure 1. Histogram](image)

The histogram graph in Figure 1 shows a normal distribution pattern because the graph is neither left skewed nor right skewed. Thus it can be concluded that the regression model has met the assumption of normality. Similarly, the results of the normality test using the normal p-plot graph.
In Figure 2 the normal p-plot graph shows that the data spreads around the diagonal line and follows the direction of the diagonal line, it can be concluded that the regression model has met the assumption of normality.

d. Multicollinearity Test

The multicollinearity test aims to test whether there is a correlation between the independent variables in the regression model. If multicollinearity occurs in the regression model, then the regression coefficient cannot be estimated and the standard error value becomes infinity. Detection of multicollinearity in a model can be seen, namely if the Variance Inflation Factor (VIF) value is not more than 10 and the Tolerance value is more than 0.1, the model can be said to be free from multicollinearity (Priyatno, 2013:56).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>37.442</td>
<td>5.140</td>
<td>-.002</td>
</tr>
<tr>
<td>CR</td>
<td>-.002</td>
<td>.012</td>
<td>-.017</td>
</tr>
<tr>
<td>SIZE</td>
<td>-.691</td>
<td>.285</td>
<td>-.347</td>
</tr>
<tr>
<td>ROA</td>
<td>-.170</td>
<td>.289</td>
<td>-.083</td>
</tr>
</tbody>
</table>

From the data in Table 3, it can be concluded that there is no symptom of multicollinearity between the independent variables as indicated by the tolerance value of each independent variable greater than 0.1 and the VIF value less than 10.

e. Heteroscedasticity Test

The heteroscedasticity test aims to see whether in the regression model there is an inequality of variables from the residual of one observation to another observation. A good regression model is that there is no heteroscedasticity. According to Nugroho (2005:62) how to predict the presence or absence of heteroscedasticity in a model can be seen from the scatterplot image pattern of the model. The analysis on the Scatterplot image which states that the multiple linear regression model does not have heteroscedasticity if:

1) The data points spread above and below or around the number 0,
2) The data points do not collect just above or below,
3) The spread of data points must not form a wavy pattern that widens then narrows and widens again,
4) The spread of data points should not be patterned
f. **Autocorrelation Test**

The autocorrelation test aims to test whether there is a correlation between the confounding error in a period and the confounding error of the previous period in the regression model. If there is autocorrelation in the regression model, it means that the correlation coefficient obtained is inaccurate, so that a good regression model is a regression model that is free from autocorrelation. The way to detect the presence or absence of autocorrelation is to perform the Durbin Watson (DW) test, there is no autocorrelation if the value of $du < dw < 4 - du$.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.339a</td>
<td>.115</td>
<td>.062</td>
<td>9.191</td>
<td>1.693</td>
</tr>
</tbody>
</table>

Table 4 presents the results of the Durbin Watson test using the SPSS program. The results of the autocorrelation test above show the Durbin Watson statistical value ($dw$) of 1.693. This value will be compared with the table value using a significance of 5%, the number of observations ($n$) is 54, and the number of independent variables is 3 ($k = 3$).

### 3.2 Multiple Regression Analysis

Table 5 presents the value of the regression coefficient, as well as the value of the $t$ statistic for partial effect testing.

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>37.442</td>
<td>5.140</td>
<td>-</td>
<td>7.285</td>
</tr>
<tr>
<td>ROA</td>
<td>-.002</td>
<td>.012</td>
<td>-.017</td>
<td>-.125</td>
</tr>
<tr>
<td>CR</td>
<td>.691</td>
<td>.285</td>
<td>-.347</td>
<td>2.424</td>
</tr>
<tr>
<td>SIZE</td>
<td>-170</td>
<td>.289</td>
<td>-.083</td>
<td>-1.987</td>
</tr>
</tbody>
</table>

Table 5. Multiple Regression Test Results

To test the hypothesis, the researcher used multiple regression analysis. The data is processed using the SPSS program. Based on the results of data processing with the SPSS program, the following results were obtained:

a. **Simultaneous Significance Test (F-Test)**

This test is conducted to determine whether all independent variables have a joint influence on the dependent variable. To find out whether there is a simultaneous significant effect between audit committee independence, audit committee size, audit committee competence, number of audit committee meetings, and sales growth on earnings management in Manufacturing companies
listed on the Indonesia Stock Exchange, it can be done by looking at the level of significance (α) =5%. Simultaneous test results through SPSS processing can be seen in the following table:

### Table 6. F-Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>547,285</td>
<td>3</td>
<td>182,428</td>
<td>2.160</td>
<td>.104a</td>
</tr>
<tr>
<td>Residual</td>
<td>4223,853</td>
<td>50</td>
<td>84,477</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4771,138</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: SPSS data processing, 2016

**b. Partial Significance Test (t-test)**

The t-test was conducted to determine how far the influence of one independent variable on the dependent variable is partially. This test is carried out by comparing the significance of tcount with ttable with the following conditions:

1) If tcount < t table, then H0 is accepted and Ha is rejected for = 5% or significance > 0.05,
2) If tcount > t table, then Ha is accepted and H0 is rejected for = 5% or significance < 0.05.

### Table 7. T-Test Results

<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></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>37.442</td>
<td>5.140</td>
<td>7.285</td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td>-.002</td>
<td>.012</td>
<td>-.017</td>
</tr>
<tr>
<td></td>
<td>SIZE</td>
<td>.691</td>
<td>.285</td>
<td>.347</td>
</tr>
<tr>
<td></td>
<td>ROA</td>
<td>-170</td>
<td>.289</td>
<td>-.083</td>
</tr>
</tbody>
</table>

Source: SPSS processed data, 2016

Statistical test results t The calculation in Table 7 can be explained as follows:

1) Testing on the cash ratio variable. Based on Table 7, it can be determined that the cash ratio variable has no effect on the dividend pay-out ratio with a significance level of 0.901. Thus, H0 is accepted, meaning that the cash ratio variable partially has no effect on the dividend pay-out ratio in BUMN companies on the Indonesia Stock Exchange in 2013-2015 at a 95% confidence level.

2) Testing on firm size variable. Based on Table 7, it can be determined that the firm size variable has an effect on the dividend pay-out ratio with a significance level of 0.019. Thus, H0 is accepted, meaning that the firm size variable partially affects the dividend pay-out ratio in BUMN companies on the Indonesia Stock Exchange in 2013-2015 at a 95% confidence level.

c. **Coefficient of Determination (R²)**

The value of the correlation coefficient R shows how big the correlation or relationship between the independent variables and the dependent variable. The correlation coefficient is said to be strong if the R value is above 0.5 and close to 1.

Coefficient determination (R²) show how much big variable independent explains the dependent variable. The adjusted R square value is zero to one. If the adjusted R square value is getting closer to one, then the independent variables provide all the information needed to predict the dependent variable. On the other hand, the smaller the adjusted R square value, the more limited the ability of the independent variables in explaining the variation of the dependent variable. The adjusted R square value has a weakness, namely the adjusted R square value will increase every time there is an addition of one independent variable even though the independent variable has no significant effect on the dependent variable.
The value of Adjusted R Square in Table 8 shows the relationship between the variables of cash ratio, firm size and return on assets to the dividend pay-out ratio of 0.062 or equal to 62%, which means it has a high level of relationship. Thus the variable cash ratio, firm size and return on assets simultaneously are able to provide an explanation of the dividend pay-out ratio of 62% and the rest is influenced by other variables outside of this research variable.

4. CONCLUSION

Based on the results of hypothesis testing, it shows that simultaneously cash ratio, firm size and return on assets have no effect on the dividend pay-out ratio, where the significance level is greater than 5%, so the hypothesis is rejected.

Based on the results of hypothesis testing, partially cash ratio and return on assets have no effect on dividend pay-out where the significance level is greater than 5%. So the hypothesis is rejected.

While the firm size variable has a partial effect on dividend pay-out with a significant level less than 5%.

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