Effect of Ownership Structure, Company Size on Company Performance with Dividend Policy as a Mediating Variable in Companies in Mineral and Other Metal Sub-Sectors that are listed on the Indonesia Stock Exchange for the Period 2011-2015

(Case Study on Selected Companies that Register on the Indonesia Stock Exchange 2011-2015)

Abstract—This research is meant to find out the influence to the performance of the company and firm size with the ownership structure as the moderating on sub-sector minning and the other mineral companies which are listed in Indonesia Stock Exchange during the 2010-2015 periods. The samples have been selected by using purposive sampling technique so 6 sub-sector minning and the other mineral companies which meet the criteria have been selected as samples. The regression equation in this research is the Path Analysis which is applied to test wether the intervening variable can strength then or weaken the correlation among the independent variables to the dependent variable. The analysis technique has been carried out by using multiple regression with the support at SPSS version program. Based on the result at multiple regression analysis with the significant rates is 5%, therefore this result shows that : 1) the first hypothesis, the influence of correlation between ownership structure to the performance of the company not contained significant influence with its significant rates is 0,000 to negative direction 2) the second hypothesis, the influence of the correlation between firm size to the performance of the company can be accepted with its significant rates is 0,021 to positive direction. 3) the third hypothesis, the influence of the correlation ownership structure to the dividend policy not contained significant influence. 4) the fourth hypothesis, the influence of correlation between firm size to the dividend policy not contained significant influence with its significant rates is 0,220 to negative direction, 5) the fifth hypothesis, the influence of the correlation dividend policy to the performance of the company can be accepted with its significant rates is 0,051 to positive direction.

Keywords: ownership structure, company size, company performance, dividend policy, companies mineral, metal sub-sectors

I. INTRODUCTION

In the current era of globalization, the tight competition to dominate the market is important to be watched by companies. This can be a positive impetus by always providing the best products and services for outside stakeholders. But it can also have a negative impact, which is the poor performance of the company due to losing competition in terms of the company's financial statements.

Company performance is an important thing that must be achieved by every company everywhere, because performance is a reflection of the company's ability to manage and allocate its resources. Company performance is the company's ability to explain its operations (Rini, 2015). According to Ajeng's research (2014), it shows that the control function of the owner is very crucial in improving company performance. Supervision carried out on the company will increase along with high institutional ownership and if management can act in accordance with the wishes of shareholders, the company's performance will increase.

Bankruptcy analysis is important to do with consideration, the bankruptcy of a publicly listed company (going public). Mineral Value Added hereinafter referred to as mineral PNT aims to increase and optimize the value of a commodity in the mining sector, the availability of raw materials in the country, as well as increase labor absorption and state revenue. The mining sector in Indonesia is divided into three types of sub-sectors, namely the oil and gas sector, and the non-oil and gas sector which consists of general mining sub-sectors (metals and non-metal industries which include gold, silver, nickel and so on, and coal mining). This sector is considered as one of the must pillars in economic development because of its role in providing energy sources that are needed for the country (Soelistijo et al., 2015).

In 2011, the company's performance in the mineral and other metals sub-sector experienced a decline, this was due to a decrease in production and the emergence of a number of conditions that did not support this industrial sector, including the mining and other metals sub-sector which experienced a decline due to the land expansion process. In addition, low levels of mineral ore and high rainfall also hampered productivity in the majority of the mining sub-sectors of minerals and other metals so that production declined (Indonesia Commercial Newsletter, 2011).
II. RESEARCH VARIABLE

A. Company Performance

Company performance is an important thing that must be achieved by every company everywhere, because performance is a reflection of the company's ability to manage and allocate its resources. Company performance is the company's ability to explain its operations (Tri Hastuti, 2015).

\[
\text{ROE} = \frac{\text{Laba bersih}}{\text{Ekuitas}}
\]

B. Ownership Structure

The ownership structure is the type of institution or company that holds the largest share in a company (Rini Tri Hastuti and Rousilita Suhendah, 2015). The ownership structure will have different motivations for monitoring the company and its management and board of directors. The ownership structure is believed to have the ability to influence the running of the company which in turn can affect the company's performance.

\[
\text{MOWN} = \frac{\text{Jumlah saham yang dimiliki manajerial}}{\text{Total saham beredar}}
\]

C. Company Size

Company size is an indicator that can show a condition or characteristics of an organization or company where there are several parameters that can be used to determine the size (size / size) of a company.

\[
\text{SIZE} = \ln \text{Total Asset}
\]

D. Dividend Policy

Dividend policy is a policy owned by a company to share its profits with shareholders (Gede Riyan, 2015).

\[
\text{DPR} = \frac{\text{Dividen per lembar saham}}{\text{Laba per lembar saham}}
\]

III. METHOD

A. Hypothesis

H1: Ownership structure has a positive effect on company performance
H2: Company size has a positive effect on company performance
H3: Ownership structure has a positive and significant effect on dividend policy
H4: Firm size has a positive influence on dividend policy
H5: Positive dividend policy is significant on company performance

B. Research Methods

This research uses quantitative research methods. Quantitative methods are defined as research methods for researching a particular population or sample, collecting data using research instruments, analyzing quantitative / statistical data with the aim of testing hypothetical predetermined. There are 9 (nine) mineral sub-sector companies. The sample in this study there were 6 (six) companies determined using purposive sampling technique. The type of data used is secondary data. The data taken and used in this study are data sourced from the Indonesia Stock Exchange (IDX) and the Indonesian Capital Market Directory 2010-2015. The study uses several methods, namely library and documentation methods.

IV. RESULTS AND DISCUSSION

A. Classic Assumption Test

1) Normality test

<table>
<thead>
<tr>
<th>TABLE 1. ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal Parameters(^{a,b})</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

\(^{a}\) Test distribution is Normal.
\(^{b}\) Calculated from data.

Testing the normality of the data using the Kolmogorov-Smirnov test shows that the Asymp.Sig value is 0.852 where the results show a significance level above 0.05, this means that the data are normally distributed.

2) Multicollinearity Test

<table>
<thead>
<tr>
<th>TABLE 2. VIF CALCULATION RESULTS COEFFICIENTS(^{a})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\) Dependent Variable: ROE.
Based on the calculation results in table 4.3 shows that the MIF VIF value is 1.211, the LNROE VIF is 1.268 and the DPR VIF value is 1.053. Whereas the MOWN tolerance value is 0.825, the LNTA tolerance is 0.789 and the DPR tolerance value is 0.950. This shows that the VIF value is less than 10 and or the tolerance value is more than 0.10, it can be concluded that there is no multicollinearity problem so the test results can be said to be reliable.

3) Heteroscedasticity Test

Based on SPSS output indicates that autocorrelation occurs. However, the autocorrelation test can be overcome by changing the MOWN, DPR and ROE variables into natural logarithms, namely changing into LNMOWN, LNDPR, LNROE except Total Assets because they are in the form of logarithms, namely changing into LNTA. Based on the table above the t value of 2.423 with t table -1.654, this shows that t arithmetic is greater than t table and the significance value of 0.021 is smaller than the value of the significance level used by 0.05. Thus the hypothesis is accepted. From this value, it is stated that company size has no effect on dividend policy. The above results prove that the hypothesis was rejected.

4) Autocorrelation Test

Based on the above calculation with the Sig. The MOWN variable is 0.335, which shows that there is no heteroscedasticity. This was also shown in the LNTA variable with the Sig. 0.940 and the DPR variable with the Sig. 0.885. So that it can be concluded in this regression model that there is no similarity in variance from one observation to another or the data does not occur heteroscedasticity symptoms.

1) Managerial Ownership (MOWN) Test of Return on Assets (ROE)
Based on the table above the value of t -4.040 with t table -1.654, then this shows that t arithmetic is smaller than t table and the significance value of 0.000 is smaller than the significance value used of 0.05. From this value, it is stated that hypothesis one is rejected. This shows that Managerial Ownership (MOWN) has a negative effect on Company Performance (ROE).

2) Company Size Test (LNTA) of Return On Assets (ROE)
Based on the table above the value of t 2.423 with t table -1.654, this shows that t arithmetic is greater than t table and the significance value of 0.021 is smaller than the value of the significance level used by 0.05. Thus the hypothesis is accepted. From this value, it is stated that company size (LNTA) has a positive effect on Company Performance (ROE).

3) Managerial Ownership Test (MOWN) of Dividend Payout Ratio (DPR)
Based on the table above the value of t count 0.145 with t table -1.654, this shows that t count is smaller than t table and the significance value of 0.220 is greater than the value of the significance level used by 0.05. This shows that managerial ownership has no effect on dividend policy. The above results prove that the hypothesis was rejected.

4) Company Size Test (LNTA) against Dividend Payout Ratio (DPR)
Based on the figure above the value of t arithmetic -1.250 with t table -1.654 then this shows that t arithmetic is greater than t table and the significance value of 0.220 is greater than the value of the significance level used by 0.05. This shows that the hypothesis is rejected, then the size of the company has no effect on dividend policy. The above results prove that the hypothesis was rejected.

5) Test of Dividend Policy (DPR) on Company Performance (ROE)
Based on the figure above the value of t arithmetic 2.029 with t table -1.654 then this shows that t arithmetic is greater than t table and the significance value of 0.051 is greater than the value of the significance level used by 0.05. This shows that the hypothesis is accepted, then it can be stated that the dividend policy has a positive effect on company performance.

B. Hypothesis testing

Based on the calculation results in table 3.4 shows that the R Square Adjusted value is 1.436 a,190,101 1,03982 1,726

TABLE 3. HETEROCEDASTICITY TEST RESULTS COEFFICIENTS

<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>9,565</td>
<td>4,891</td>
<td>1,956</td>
<td>.059</td>
</tr>
<tr>
<td>MOWN</td>
<td>-588</td>
<td>.600</td>
<td>-1.80</td>
<td>.098</td>
</tr>
<tr>
<td>LNTA</td>
<td>-042</td>
<td>.546</td>
<td>-0.014</td>
<td>.076</td>
</tr>
<tr>
<td>SPR</td>
<td>5,896</td>
<td>3,595</td>
<td>-2.81</td>
<td>-1.640</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ABSRES_1

B. Hypothesis testing

B. Hypothesis 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>-8,114</td>
<td>8,075</td>
<td>1,005</td>
<td>.323</td>
</tr>
<tr>
<td>MOWN</td>
<td>-4,004</td>
<td>.991</td>
<td>-615</td>
<td>.000</td>
</tr>
<tr>
<td>LNTA</td>
<td>2,186</td>
<td>.902</td>
<td>378</td>
<td>2,423</td>
</tr>
<tr>
<td>DPR</td>
<td>12,040</td>
<td>5,935</td>
<td>.288</td>
<td>2,029</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ROE

TABLE 4. AUTOCORRELATION 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>Constant</td>
<td>.614</td>
<td>.211</td>
<td>2,907</td>
<td>.006</td>
</tr>
<tr>
<td>MOWN</td>
<td>.004</td>
<td>.029</td>
<td>.027</td>
<td>.145</td>
</tr>
<tr>
<td>LNTA</td>
<td>-032</td>
<td>.026</td>
<td>-2.33</td>
<td>-1.250</td>
</tr>
</tbody>
</table>

a. Dependent Variable: DPR
C. Path Analysis

1) Path Analysis Structure 1
Structural path analysis 1 is the relationship between the MOWN and LNTA variables to the DPR. The following calculation table uses SPSS:

<table>
<thead>
<tr>
<th>Summary Model</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.223a</td>
<td>.050</td>
<td>-.008</td>
<td>27382</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), LNTA, MOWN

Berdasarkan perhitungan diatas dapat dirumuskan sebagai berikut:

\[
\text{DPR} = 0.027 \text{ MOWN} (-0.233) \text{ LNTA} + e_1
\]
\[
e_1 = \sqrt{1 - r^2} = \sqrt{1 - 0.05^2}
\]

2) Path Analysis Structure 2
Structural path analysis 1 is the relationship between the MOWN and LNTA variables to the DPR. The following calculation table uses SPSS:

<table>
<thead>
<tr>
<th>Summary Model</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.622a</td>
<td>.387</td>
<td>.330</td>
<td>9,33530</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), DPR, MOWN, LNTA

Berdasarkan perhitungan diatas dapat dirumuskan sebagai berikut:

\[
\text{DPR} = (-0.615 \text{ MOWN}) + (0.378 \text{ LNTA}) + 0.288 \text{ DPR} + e_1
\]
\[
e_2 = \sqrt{1 - r^2} = \sqrt{1 - 0.387^2} = 0.783
\]

3) Path Analysis Full Model
The path analysis of the full model structure is the overall relationship of models 1 and 2 seen from Figures 4.6 and 4.7 above. Where the variable MOWN, LNTA to ROE with the DPR as an intervening variable. The following calculation table uses SPSS:

Based on the picture above can be seen the value of Standardized coefficients or Beta values, namely the relationship between MOWN and ROE shows the value of -0.615. This shows that the relationship between managerial ownership and company performance is not significant. In contrast to the results shown by the MOWN variable on the DPR which is equal to 0, 27 which states that the relationship between managerial ownership and dividend policy has a significant positive effect.

The relationship between the DPR's variables on ROE also showed significant effect with a value of 0.288 which means an increase in dividend policy has a positive effect on company performance. LNTA variable on ROE also produces a positive value of 0.378, this shows that company size has a significant positive effect on company performance. In the relationship between the LNTA variable and the DPR, the value did not have a significant effect of -0.233, which means there was no influence between company size and dividend policy.

D. Mediation Test

1) Path Mediation Test
This regression equation looks at whether the DPR variable can mediate the relationship between MOWN and ROE.

From the picture above can be formulated:

Direct relationship = \( p_1 = -0.615 \)

Indirect effect = \( p_2 \times p_3 = 0.27 \times 0.288 \)

Total influence = \( (-0.615) + 0.0777 = -0.537 \)

Based on the calculation above, it is stated that there is a direct influence between the MOWN variable on ROE, but the DPR variable cannot mediate between variables that can be of a value of -0.537. In his explanation that the increase or decrease in dividend policy does not mediate between the managerial ownership structure of company performance.
2) Path Mediation Test 2

In the structure 2 regression equation it can be seen whether the intervening variable, namely the DPR, can mediate the relationship between the LNTA variable and ROE.

![Figure 6. Path Mediation Test 2](image)

- Direct relationship: $p_4 = 0.378$
- Indirect effect: $p_5 \times p_3 = (-0.233) \times 0.288$
- Total influence: $0.378 + (0.067) = 0.311$

Based on the calculation results above states that there is a direct influence between the LNTA variable on ROE but the DPR variable cannot mediate between the variables indicated by the value of 0.311.

To test the significance of intervening variables, researchers use the Sobel Test (Imam Ghozali, 2004), with the equation structure 1 as follows:

$$Sp^2 p_3 = \sqrt{(0.082)^2 (0.0008)^2 + (0.073)^2 (35.22)^2 + (0.028)^2}$$

$$= \sqrt{(0.0000656 + 2.571352 + 0.0281) = 2.5995}$$

**t hitung** = $\frac{(-0.233)(0.288)}{1.391} = -0.0482$

**t tabel** = -1.6883

Based on the above calculation, $t$ count is -0.0482 while $t$ table is -1.6883 then this result shows that $t$ count is smaller than $t$ table. It can be concluded that the DPR's intervening variable cannot mediate between the LNTA variable to ROE.

The results show $t$ arithmetic < $t$ table, it can be concluded that the DPR intervening variable cannot mediate the LNTA variable against ROE.

V. DISCUSSION

A. The Effect of Managerial Ownership on Company Performance.

From the calculation of the results of the regression equation test it can be seen that the MOWN variable has a coefficient of -0.615 with a significance value of 0.000. Based on the value of $t$ -4.040 with $t$ table -1.654, this shows that $t$ count is smaller than $t$ table and the significance value of 0.000 is smaller than the value of the significance level used by 0.05. From this value, it is stated that hypothesis one is rejected. This shows that Managerial Ownership (MOWN) has a negative effect on Company Performance (ROE) in the mineral and other metal subsectors in 2010-2015. This means that high managerial ownership will reduce company performance, this is adjusted to secondary data where managerial ownership is constant every year and some are not yet stable, sometimes increasing and decreasing.

3.5.2. Effect of company size on company performance.

Based on calculations that the size of the company which is proxied by LNTA shows a significant value of 0.021 with a coefficient value of 0.378 with a significance level of 0.05, meaning the significance value is smaller than the specified significance level value. This shows that the results are significant, which means the hypothesis is accepted that company size variables have a significant effect on company performance. The size of the company that shows the size of a company is an important factor in the formation of profits. From the results of the $t$ value of 2.423 with $t$ table 1.654, this shows that $t$ arithmetic is greater than $t$ table and the significance value of 0.021 is smaller than the significance level used of 0.05. Thus the hypothesis is accepted. From this value, it is stated that company size (LNTA) has a positive effect on Company Performance (ROE).

B. Effect of Managerial Ownership on Dividend Policy.

Managerial ownership has a coefficient value of 0.027 with a significance value of 0.885 with a significance level of 0.05. This shows that the significance value is greater than the significance level value specified. Based on the value of $t$ count 0.145 with $t$ table 1.654, this shows that $t$ count is smaller than $t$ table and the significance value of 0.885 is smaller than the significance value used of 0.05. This shows that managerial ownership has no effect on dividend policy. These results are not in accordance with the hypothesis of researchers who state that managerial ownership affects the performance of the company, then this shows that the hypothesis is rejected. The conclusion above shows that
managerial ownership has no effect on company performance, where managers tend to have personal interests compared to achieving company performance.

C. Effect of Company Size on Dividend Policy.

The size of the company has a coefficient of -0.233 with a significance value of 0.220. With a significance level of 0.05, it indicates that the significance value of 0.220 is greater than the significance level specified. Based on the value of $t$ count -1.250 with $t$ table -1.654, this shows that $t$ count is greater than $t$ table and the significance value of 0.220 is greater than the value of the significance level used at 0.05. This shows that the hypothesis is rejected, then the size of the company has no effect on dividend policy.

The absence of influence between company size variables on dividend policy, this is caused by the economic situation that is not yet stable, so that the management of funds carried out by the company in running its business has not been stable. The resulting profit is not yet optimal, such a situation makes both small and large companies will be more oriented to the growth of the company.


Dividend policy which has a coefficient value of 0.288 with a significance value of 0.051. With a significance level of 0.05, it indicates that a significance value of 0.051 is greater than the significance level specified. Based on the value of $t$ arithmetic 2.029 with $t$ table -1.654 then this shows that $t$ arithmetic is greater than $t$ table and the significance value of 0.051 is greater than the significance level used by 0.05. This shows that the hypothesis is accepted, then it can be stated that the dividend policy has a positive effect on company performance.

An increase in dividends is usually a signal to investors that the company's management is predicting a good income in the future. Conversely, a decrease in dividends or an increase in dividends below normal is believed by investors as a sign (signal) that the company is facing a difficult time in the future, so that market demand for the company's shares will decline (Budhi Pamungkas Gautama, 2014).

VI. CONCLUSIONS AND SUGGESTION

A. Conclusions

H1: first hypothesis the effect of the relationship between ownership Structure on company performance is rejected with a significant level of 0.000 in the negative direction.

H2: the second hypothesis of firm size on firm performance can be accepted with a significant level of 0.021 in a positive direction.

H3: third hypothesis. The effect of ownership structure on dividend policy is rejected.

H4: fourth hypothesis, the relationship between firm size and dividend policy is rejected with a significant level of 0.220 in the negative direction.

H5: fifth hypothesis. Dividend policy on company performance can be accepted with a significant level of 0.051 in a positive direction.

B. Suggestion

Considering that company policy is not only the company's performance, in future research it is necessary to consider other policies included in a better model so that the results obtained are in accordance with the hypothesis. The addition of the year period and company sample are also needed in future studies related to tilapia and residuals that will bring great consequences to the research results, namely reducing the predictive ability of the model.

It is necessary to examine several other variables that affect company performance in addition to managerial ownership and company size. Intervening variables are recommended to be replaced by variables that are more influential on company performance such as leverage variables.

REFERENCES


