



The Effect of Company Performance, Company Complexity, Company Size on the Board of Commissioners Structure Moderated by Managerial Ownership

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Abstract: The role of the Board of Commissioners is very important to minimize agency problems so that shareholder wealth maximization can be achieved. Under one board, a number of studies have investigated the effect of the effectiveness of the Board of Directors on their company's performance. In Indonesia, existing research related to the effectiveness of the Board of Commissioners investigates the effectiveness of the Board of Commissioners as one of the determining factors for the possibility of financial distress and investigates effectiveness. This study aims to examine the effect of Company Performance, Company Complexity, Company Size on the Structure of the Board of Commissioners and examine whether there is a role of Managerial Ownership as a moderation in the influence of Company Performance, Company Complexity, Company Size on the Structure of the Board of Commissioners carried out by the company. This study took the research population from financial sector companies listed on the Indonesia Stock Exchange for the period 2019-2022. The type of data used in this study is secondary data in the form of company financial reports that are used as samples. The research method used in this study is a quantitative research method. The sample was selected using the purposive sampling method. For hypothesis testing, this study uses multiple linear regression analysis. Based on the results of the study, it shows that company performance has a significant effect on the Board of Commissioners Structure, then Company Complexity and Company Size do not have a significant effect on the Board of Commissioners structure. Managerial Ownership strengthens the influence of Company Performance on the Board of Commissioners Structure. Managerial Ownership does not strengthen the influence of Company Complexity and Company Size on the Board of Commissioners Structure.

Keywords: Company Performance, Company Complexity, Company Size, Board of Commissioners Structure, Managerial Ownership

INTRODUCTION

The role of the Board of Commissioners is very important to minimize agency problems so that shareholder wealth maximization can be achieved. Under one board, a number of studies have investigated the effect of the effectiveness of the Board of Directors on their company

performance (Hermalin and Weishbach 1991; Bhagat and Black 2001; Yermack 1996; Eisenberg et al. 1998). In Indonesia, existing studies related to the effectiveness of the Board of Commissioners include Wardhani (2006) who investigated the effectiveness of the Board of Commissioners as one of the determinants of the possibility of financial distress and Hermawan (2009) who investigated the effectiveness of the Board of Commissioners as one of the determinants of the information content of income. A number of studies have stated and found that company performance has an effect on the size of the board of directors. For example, companies that perform poorly may experience high director turnover, as existing board members are replaced by new members (Hermalin and Weisbach 1988). This finding is also supported by Gilson (1990), Yermack (1996), and Peng et al. (2015): their research results show that board of directors turnover tends to increase after the company experiences poor performance/results. Gilson (1990) also found that companies tend to increase the size of the board of directors when they experience financial difficulties.

Company complexity is related to the complexity of transactions in the company. This complexity can come from transactions using foreign currency, the number of subsidiaries and branches of the company, or the existence of business operations abroad (Rukmana et al., 2017). Company size is a picture of the size of a company as indicated by total assets, sales volume, average total sales and average total assets (Immanuel, 2014). As for the size of the KAP, KAPs included in the Big Four KAPs are believed to be able to produce financial reports with better quality. This is because the Big Four KAPs are considered to have a higher level of effectiveness and efficiency and are accustomed to providing services to many clients, and are more careful in detecting errors (Immanuel, 2014).

Large companies have the potential to create agency problems in greater financial reporting. This study reuses the independent variables and size variables from the study conducted by Greco (2011) except for CEO duality. This is because Indonesia adopts a two-tier board system where the Board of Commissioners cannot act as the Board of Directors as well, so this variable cannot be used. Therefore, the larger the company, the greater the need for supervisory activities. Research by Sutaryo, et al. (2010), Greco (2011) and Feng Yin, et al. (2011) can prove that the size variable has a significant positive effect on the Board of Commissioners Structure. Thus, it is expected that size has a positive effect on the Board of Commissioners Structure in Indonesia.

Furthermore, although higher managerial ownership increases the incentives of large shareholders to monitor managers, it can also increase the incentives of large shareholders to take over the company's assets if there is a difference between control rights and ownership/share rights (Claessens et al., 2002b). So far, there has been no research examining the impact of takeover risk on board size and the relationship between performance and board size. We argue that better monitoring, as represented by a larger board, is necessary to reduce takeover risk and therefore we suggest that managerial ownership has a direct impact on board size.

Agency Theory

According to Jensen and Meckling (1976), agency theory is a theory that explains the contractual relationship between the party that provides the delegation, namely the principal, and the party that receives the delegation, namely the agent. Agency theory focuses on determining contracts that can affect the relationship between the principal and the agent (Sa'diah, et al., 2021). Agency theory determines the importance of shareholders giving company management to more professional people who understand and understand more about running their daily business (Sutedi, 2016). Coase (1973), Jensen and Meckling (1976) and Fama and Jensen (1983) in Putra (2019), state that an agency relationship is a contract between the principal and the agent in which there is a separation between ownership and control. The principal employs an agent to carry out tasks in the interests of the principal, including delegating decision-making authority from the principal to the agent.

Stewardship Theory

Stewardship Theory departs from the perspective of management accounting thinking which is largely based on psychological and sociological theories. In the management of Stewardship Theory, organizational management is focused on the harmonization between capital owners (principles) and capital managers (stewards) in achieving common goals. Stewardship theory in accounting explains a construct of leadership patterns and communication relationships between shareholders and management, or it can also be the relationship between top management and managers below them in a corporate organization with situational mechanisms that include management philosophy and differences in organizational culture, and leadership in achieving common goals without hindering each other's interests.

METHOD

Research Object

The variables used in this study are independent variables, dependent variables, and intervening variables. Independent variables are variables that cause or influence dependent variables. Independent variables in this study are Company Performance, Company Complexity, Company Size. Dependent variables in this study are Board of Commissioners Structure. Moderation variables in this study are Managerial Ownership.

Table 1. Research Object

Variable	Indicator	Formula	Scale
Y	Board of Commissioners	<i>Struktur Dewan Komisaris</i> = <i>Jumlah Dewan Komisaris</i> Obeng et all (2020)	Ratio
X1	Company performance	$ROA = \frac{Net\ Income}{Total\ Asset}$ Oktifia et.al (2020)	Ratio
X2	Company Complexity	<i>Kompleksitas Perusahaan</i> = <i>Jumlah Anak Perusahaan</i> Nicolin & Sabeni, (2019)	Nominal
X3	Firm Size	$Size = Ln (Total\ Aset)$ (Setiawan & Purwanti, 2021)	Ratio
X4 (Variabel Moderating)	Managerial ownership	<i>Kepemilikan Manajerial</i> = $\frac{\sum\ saham\ dimiliki\ direksi\ dan\ komisaris}{\sum\ Jumlah\ total\ saham\ biasa} \times 100\%$ (Learemia et al., 2019)	Ratio

Hypothesis:

- a. H1: Company Performance affects the Structure of the Board of Commissioners
- b. H2: Company Complexity affects the Structure of the Board of Commissioners
- c. H3: Company Size affects the Structure of the Board of Commissioners
- d. H4: Managerial Ownership strengthens the influence of Company Performance on the Structure of the Board of Commissioners
- e. H5: Managerial Ownership strengthens the influence of Complexity on the Structure of the Board of Commissioners
- f. H6: Managerial Ownership strengthens the influence of Company Size on the Structure of the Board of Commissioners

Data Analysis Methods

Normality Test

According to Ghozali (2020), the normality test is used to determine whether the data used is normally distributed. One way to see normality is to use a histogram by comparing observations with a distribution that approaches a normal distribution. If the data distribution is normal, the line that describes the data will follow its diagonal line. Normality testing in research is carried out using the Kolmogorov-Smirnov statistical test.

Multicollinearity Test

The multicollinearity test is used to test whether the regression model finds a correlation between independent variables. The multicollinearity test is carried out using the tolerance value and Variance Inflation Factor (VIF) (Choiriyah and Damayanti 2020). A good regression model should not have a correlation between independent variables. The basis for making decisions based on multicollinearity is as follows:

- If VIF <10 and tolerance > 0.1 then there is no multicollinearity
- If VIF > 10 and tolerance <0.1 then there is multicollinearity

Multiple Linear Regression Analysis

The data analysis method used in this study is multiple linear regression. According to (Sugiyono, 2015) Multiple linear regression analysis is used by researchers, if researchers intend to predict how the condition (rise and fall) of the dependent variable (criterion), if two or more independent variables as predictor factors are manipulated. According to Imam Ghozali (2013:98) Regression analysis is used to measure the strength of the relationship between two or more variables, also shows the direction of the relationship between the dependent and independent variables. The accuracy of the sample regression function in estimating the actual value can be measured from its goodness of fit. Statistically, at least this can be measured from the coefficient of determination, F statistic value and t statistic value (Ghozali, 2013)

Hypothesis Testing

According to (Sugiyono, 2018) Hypothesis is a temporary answer to the formulation of research problems, usually arranged in the form of a question sentence. It is said to be temporary because the answers given are only based on relevant theories, not yet based on empirical facts obtained through data collection.

Data analysis in this study was carried out using the Structural Equation Modeling (SEM) method using Partial Least Square (PLS) assisted by smartPLS 3.0 software. The advantage of using PLS is that PLS is a powerful analysis method because it does not assume that data must be on a certain scale and the number of samples is small (Ghozali, 2011) This analysis is used to determine the effect of several independent variables (X) on the dependent variable (Y). Multiple linear analysis was conducted using determination coefficient test, t test, and F test. The regression model in this study is as follows:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon \dots\dots\dots (i)$$

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3 X_3 + \beta_4X_1*X_3 + \beta_5X_2*X_3 + \beta_6X_2*X_3 + \epsilon \dots\dots (ii)$$

- Description:
- Y = Board of Commissioners Structure
 - α = Constant
 - β1...β8 = Regression Coefficient
 - X1 = Company Performance
 - X2 = Company Complexity
 - X3 = Company Size
 - X4 = Managerial Ownership
 - ε = error term

Error tolerance (a) is set at 5% with a significance level of 95%

Partial Effect Test (t-Test)

According to (Ghozali, 2018) the t-test is used to determine whether two unrelated samples have different average values and the t-test basically shows how far the influence of one independent variable is individual in explaining the variation of the dependent variable. The t-test is done by comparing the difference with the standard error. The null hypothesis (H0) to be tested is whether a parameter (bi) is equal to zero, or H0: bi = 0, meaning whether an independent variable is not a significant explanation of the independent variable. The alternative hypothesis (Ha) of a variable parameter is not equal to zero or Ha: bi≠0.

The test is carried out using a significance level of 0.05 (α=5%). Acceptance or rejection of the hypothesis is carried out with the following criteria: Criteria for accepting the hypothesis:

- 1) If the significant value is < 0.05 and t count > t table, then H1 is accepted
- 2) If the significant value is > 0.05 and t count < t table, then H1 is rejected

Simultaneous Influence Test (F Test)

According to (Ghozali, 2018) The f statistical test basically shows whether all independent variables included in the model have a joint influence on the dependent variable. To test these two hypotheses, the F statistical test is used:

- a) Quick look: if the F value is greater than 4 then Ho can be rejected at a 5% confidence level, in other words we accept the alternative hypothesis, which states that all independent variables simultaneously and significantly affect the dependent variable.
- b) Comparing the calculated F value with the F value according to the table in the following manner:
 - 1) If Fcount > Ftable or probability < significant value (Sig ≤ 0.05), then the research model can be used.
 - 2) If Fcount < Ftable or probability > significant value (Sig ≥ 0.05), then the research model cannot be used.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 2. Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Company Performance	107	0,12200	0,75500	0,4598	2,55191
Company Complexity	107	2,00	6,00	4,54	1,96367
Company Size	107	1,5432	8,57467	4,4094	1,05676
Managerial ownership	107	0,45600	0,66500	0,6803	1,71293
Board of Commissioners Structure	107	4,00	9,00	6,7165	2,41982
Valid N (listwise)	107				

Normality Test

The following are the results of the normality test.

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandar dized Residual
N		107
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	.84524092
Most Extreme Differences	Absolute	.256
	Positive	.154

Negative	-.256
Test Statistic	.356
Asymp. Sig. (2-tailed)	.987 ^a
a. Test distribution is Normal.	
b. Calculated from data.	

Source: Data processed by Researchers (2024)

Based on the research results, we can see that the significance value (Asymp. Sig. (2-tailed)) is 0.987 or greater than 0.05, which means that the data used for this study is normally distributed.

Heteroscedasticity test

The following are the results of the heteroscedasticity test

Table 4. Heteroscedasticity test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.404	.630		.483	.630
KIN_PER	-.293	.059	-.746	-3.280	.761
KOM_PER	.568	.225	1.599	2.077	.383
UK_PER	.671	.082	.812	3.312	.319
KEP_MAN	-.289	.203	-1.694	-2.899	.533

Source: Data processed by Researchers (2024)

From the table above, it can be seen that the significant value of the t-test of all independent variables with Absolute Residual (ABS_RES) is more than 0.05. So it can be concluded that in the regression model of this study there is no heteroscedasticity problem.

Multicollinearity Test

The following are the results of the multicollinearity test

Table 5. Multicollinearity test

Coefficients ^a							
Model	Unstandardized Coefficients		Standardized Coefficients	T	Collinearity		Sig. Statistics
	B	Std. Error	Beta		Tolerance	VIF	
(Constant)	5.291	1.063		4.980	.000		
KIN_PER	.583	.320	.602	5.451	.000	.709	3.391
KOM_PER	.868	.380	1.838	4.918	.000	.793	3.521
UK_PER	.540	.138	-.466	-3.913	.000	.719	3.906
KEP_MAN	.374	.343	-1.138	-4.010	.000	.761	3.019

Source: Data processed by Researchers (2023)

In the table above, we can see that there are no independent variables that have a Tolerance value of less than 0.1 and there are no independent variables that have a Variance Inflation Factor (VIF) value of more than 10. So it can be concluded that there is no multicollinearity between independent variables in the regression model.

Autocorrelation Test

The following are the results of the Autocorrelation test

Table 6. Autocorrelation Test

Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.894 ^a	.800	.795	.957	1.913

a. Predictors: (Constant), KIN_PER, KOM_PER, UK_PER, KEP_MAN
 b. Dependent Variable: DEW_KOM

Source: Data processed by Researchers (2023)

The Durbin Watson value (d) in the data processing of this research result is 2.103, which means $du < d < 4-du$, namely: $1.6932 < 1.913 < 2.3068$, this result shows that there is no autocorrelation in this research model.

Hypothesis Test

The following are the regression results.

Table 7. Regression Test

Model	Coefficients ^a		Standar		
	Unstandardized Coefficients		dized Coefficients	T	Sig.
	B	Error Std.	Beta		
I(Constant)	18.337	9.807	2.425		.016
KIN_PER	.227	.099	.587	6.323	.000
KOM_PER	.454	1.279	.151	.120	.905
UK_PER	.365	1.169	.487	.483	.430
KEP_MAN	.127	.523	1.761	3.063	.000
KIN_PER*KEP_MAN	.754	1.279	.451	.120	.003
KOM_PER*KEP_MAN	.465	1.169	.487	.483	.421
UK_PER*KEP_MAN	1.040	.050	1.397	.801	.425

b. Dependent Variable: DEW_KOM

Source: Data processed by Researchers (2023)

Based on the results of the study, it shows that company performance has a significant effect on the Board of Commissioners Structure, then Company Complexity and Company Size do not have a significant effect on the Board of Commissioners structure. Managerial Ownership strengthens the influence of Company Performance on the Board of Commissioners Structure. Managerial Ownership does not strengthen the influence of Company Complexity and Company Size on the Board of Commissioners Structure

F Test

The purpose of the F statistical test of model feasibility is to determine all independent variables in the study simultaneously have an impact on the dependent variable. The results of this test are shown in the following table:

Table 8. F Test

Model	F	Sig
1	9,926	0,000

This research obtained the result of F 9.926 and the level of significance of 0.000. With this result, it indicates that Independent Variable simultaneously have a significant impact on financial statement fraud which means further testing of this regression model can be done.

CONCLUSION

Based on the results of this study, it shows that Carbon Management Accounting and Carbon Emission Disclosure have an effect on Firm Performance, but Carbon Emission

Disclosure has no effect on Firm Performance. Green Intellectual Capital strengthens the influence of Carbon Management Accounting on Firm Performance and Green Intellectual Capital does not strengthen the influence of Competitive Business Strategy and Carbon Emission Disclosure Strategy on Firm Performance.

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