Do The Gender Diversity in The Board Structures have Impact on Managerial Firm Performance?

Wisnu Panggah Setiyono[1], Bayu Hari Prasojo[2]
Department of Management, **Universitas Muhammadiyah Sidoarjo**

Abstract. Corporate governance has been perceived to be the driver of corporate performance especially if we associated the issue with gender diversity. However, literature has rare acknowledged that gender diversity issues on corporate governance have impact on the managerial performance. The purpose of this study is to investigate the impact of gender diversity in the structure and ownership of the boards in relation with the companie's performance in Indonesian firms. The study employed data sample of companies which the stocks are actively traded on the Indonesia Stock Exchange. By using panel data regression model, we determined the data of cross section and time series on 2013, 2014 and 2015. The sampling was simple random sampling, and the analytical techniques were panel data regression analysis. We also employed several hypothesis testing including Correlation analysis, Normality Test, multicolinearity, heteroscedastisity, and model estimation test. The results of this study, we found that the gender diversity in the boards have not significantly effect. However, the gender diversity in the board structures has negative effect and significant on the company's performance. Furthermore, this study also found that institutional ownership has negative effect on the company's performance. Finally, the managerial ownership showed similar results, namely a significant negative effect on the company's performance.

Key words: corporate governance, gender diversity, board structure, ownership structure, Return on Equity (ROE).

1. Introduction

Corporate governance is the concept submitted for improving the performance of the company through the role and behavior of the board of commissioners, the board of directors, managers, and the shareholders (Florackis, 2008)(Denis & McConnell, 2003). The achievement of corporate governance also can make management of company more transparent for all company's stakeholders and can create value added for all interested parties (Dong & Gou, 2010)(Setia-Atmaja, 2009). Furthermore, many scholar explained that the one of corporate governance isues is gender diversity in management positions (Pletzer, Nikolova, Kedzior, & Voelpel, 2015)(Francoeur, Labelle, & Sinclair-Desgagne, 2008)(Bremer, S, Milington, A, 2007). In addition, the effectiveness of corporate governance, especially the association between corporate governance and organizational performance has been a focus of many studies (Yermack, 1996)(Qian, 2015)(Gani & Jermias, 2006). However, to understand the corporate governance and its link to performance, most of research in corporate governance has explored the agency theory, that may influence the corporate governance and its effectiveness in improving performance (Aguilera, Filatotchev, Gospel, & Jackson, 2008). Agency theory asserts that the separation of owners and agents raises agency problems, since both parties tend to maximize their own interests (Fama, Jensen, Law, & Conference, 1983). Good corporate governance is perceived as reducing the agency problems and hence, increases the firm's value (Singh, A 2003).

The discussion regarding corporate governance in Indonesia is relatively new (Patrick, 2001), especially, it corporate governance is corellated by the gender diversity issues. According to Suad Husnan in 1999, the intense discussion about gender issues in the corporate governance has taken place since the Indonesian financial crisis began in the late of 1997. Therefore, the Indonesian government took an initiative to improve regulations of the corporate governance (Indonesia, 2006). The initiative was presented in the form of "*Codes for Good Corporate Governance*", which was established by the National Committee on Corporate Governance. This initiative was also followed by recommendations for law reform and legislation to support the implementation of this code (FCGI, 2006). The Committee believed that the importance of an institutional framework and further development of policies for the code at the institutional level should be applied in the context of Indonesia. Corporate governance reforms in Indonesia are also aimed at strengthening the current institutional structure .

2. Research Method

2.1. Data Setting: Indonesia Case

This study employs Indonesian data as samples. Some justifications regarding the use of Indonesian data have been provided such as: a) Indonesia revised its corporate governance code of conduct in 2006 by adopting the OECD principles. b) as developing countries Indonesia still has weak corporate governance regulations especially in the gender diversity issues. c) Indonesian firms structure their governance not only consider the regulations but also other factors such as culture. Therefore, it is interesting to observe the corporate governance variables correlated by the gender issues whether they contribute also in influencing the practises of corporate governance in Indonesia.

2.2. Data and Sampling

This study uses secondary data extracted from companies listed in Indonesia Capital Market (IDX). The population of the study is all companies listed in Indonesian Capital Market for the period of 2013 to 2015. Twenty seven companies listed on the IDX will be selected based on a random sampling. This study also assumes pooled panel data model, as the samples of each years to do such analysis (Gravetter, F & Wallnau, 2007). Furthermore, we also employed panel data regression analysis. Several statistical and econometric tests are used to test the models (Damodaran Gujarati, 2014). The data used for these tests are a combination of cross-sectional and time series observations and are termed "panel data" (Hair, JF, Anderson, RE, Tatahm, RL & Black, 2010).

3. Results

3.1. Descriptive Statistics

Descriptive analysis from the data taken to this research is from 2013 to 2015 with 81 data observations. A statistical distribution descriptive for each variable can be seen in the following table:

Table 1: Descriptive Statistics					
Variable	Obs	Mean	Std. Dev.	Min	Max
Companies	0				
IDCODE	81	14	7.83741	1	27
YEAR	81	2014	0.8215839	2013	2015
ROE	81	9.649877	8.642961	-10.78	26.37
GCOM	81	30.74383	13.27948	10	66.67
GDIR	81	31.52716	11.94375	14.29	66.67

|					
KEPINS	81	66.16988	19.42225	19.18	97.3
KEPMAN	81	9.23294	13.26254	0.01	50.36
e	81	2.01e-08	7.476965	-17.92687	16.98981
_est_fixed	81	1	0	1	1
_est_random	81	1	0	1	1

Source: Output Stata 2015

3.2. Correlation Analysis

Correlation analysis aims to measure the magnitude of a linear relationship between variables (Gujarati, 2014). As a result of correlation analysis for each variable, there is no correlation between each variables.

3.3. Normality Test

To apply the pooled model analysis, the population from which the samples or observations are derived should be normally distributed (Gujarati, 2014). Several tools used to test the normal distribution are presented, such as kernel density plot (kdensity), normal probability plots (pnorm) and a quartile of a normal distribution (qnorm).

Figure1: kdensity, pnorm and qnorm
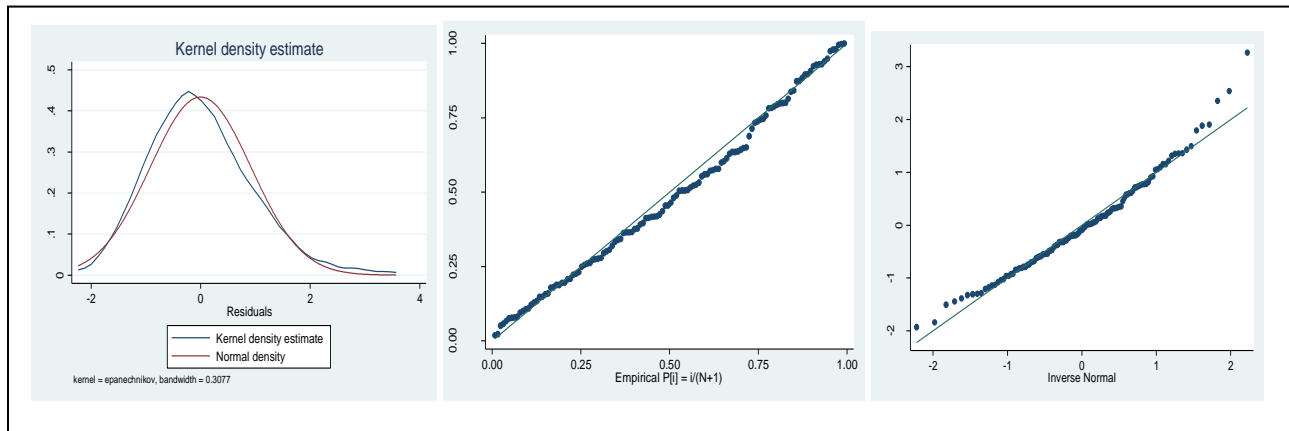
The Figures above denote the quartiles of a normal distribution (qnorm). This study also presents the standardized normal probability (pnorm) and quartile of a normal distribution (qnorm) in Figures 2 and 3, which are used to check whether the data have non-normality in the middle range of residuals. The Figures show that the distribution of residuals does not deviate from the diagonal line (normal distribution), which means that the normal distribution assumption is not violated, i.e. the residuals are distributed normally (Gujarati, 2014). Therefore, the examination of the normality plot of the models employed in this paper suggested a minor deviation from normality.

3.4. Independent Observation

Independent observation can only be claimed when every observation or measurement is notaffected by other observations or measurements (multicolinearity). The tolerance factor and variance inflation factor (VIF), furthermore, can be used to identify multicollinearity (Gujarati, 2014). In this research, the VIF and the 1/VIF were calculated to identify the multicollinearity and the results of this research, there are no mulyikolinearity problems.

3.5. Model Estimation Test

Regression panel data can be done with three models namely the common effect, fixed effect, and random effect, there are several model tests on panel data regression models including; *Pagan Lagrangian Multiplier* (LM-Test), or Hausman Test to tests whether the model is fixed effect, random effect, or pooled OLS.

3.6. Random Effect Regression Model

Based on the results of the estimation model, the random effect is the most effective model to analyse regression data panel.

ROE_{it} = 29,51295– 0,0160594 $GKOM_{it}$ – 0,2008724 $GDIR_{it}$ – 0,1723542 $KEPINS_{it}$ – 0,1955877 $KEPMAN_{it} + \varepsilon_{it}$

From the results of the regression equation above, can be seen that variable gender of board of commissioners, gender of the board of directors, institutional ownership, and ownership of managerial have negative effect on company's performance.

Conclussion

This research test influence review board structure in perspective gender and ownership stucture on performance companies listed on the Indonesian stock exchange (IDX). The company's performance in this study is measured using return on equity (ROE) for sample companies with a period of years 2013-2015. Conclusion that can be obtained from the research is as follows:
1. Research results obtained that gender the board of commissioners will not affect the company because the existence of women in the top management was in question are incapable in leading company.
2. Research results obtained that gender board of directors have negative effects significantly to the company.
3. Research results obtained that institutional stake in have negative effects significantly to the company.

Limitation of the study

As show with other empirical studies, this study also has several limitations. The limitations associated with this study are presented below.

3.7. Data

There are several limitations related to the data. This study observes only 27companies, which is less than 10 percent of the population of companies listed in the IDX for the three years period of 2013-2015. Difficulties arose from the data collection processes due to the limitation of company's information, since Indonesia does not yet has a strong culture of compliance with disclosure requirements. The Indonesian Stock Exchange website does not provide sufficient information, as it provides only limited information on certain accounting and corporate governance indicators. Furthermore, this study excludes all financial and property related issues (?) to firms, hence, the results of this study cannot be generalized for these two industries. Moreover, the use of annual data derived from companies' annual reports may cause problems, particularly regarding companies' ownership structure. There might have been changes in ownership during the period of this study. However, this problem may not be significant since the ownership structure is proxied by ownership concentration, and this pattern of the ownership structure is quite stable over the study period.

3.8. Methodology

The study uses the panel data, with small panels for three consecutive periods. Consequently, each company will be treated as the same for each fiscal year during the study period. It is still possible to create bias in the results. If the period of observation is likely to be able to alter the characteristics of the internal corporate governance mechanisms during the study period, the results would be different.

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