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Relationship between Board Gender Diversity and Firm Performance: Evidence from Malaysian Firms

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Abstract The purpose of this study is to investigate the association between board diversity and firm performance of 26 government-linked companies (GLCs) and 26 non-government-linked companies (non-GLCs) in Malaysia. The study focuses on gender variable to explain the board diversity and tests its relationship towards firm performance as measured by return on equity (ROE) and return on asset (ROA). A final sample of 196 GLCs and non-GLCs listed on the Bursa Malaysia are used across four years from 2007 to 2010. The results fail to satisfy the expectation made for this study, thus rejecting the hypothesis that gender board diversity is positively related to firm performance. In conclusion, this study could not establish that gender diversity on boards would enhance firm performance due to the small average samples of women directors on the board of Malaysian companies.

Keywords Board diversity; firm performance; gender.

1 Introduction

Growing businesses faces a range of challenges. As a business grows, different problems and opportunities demand different solutions. Frequent business challenges require a team namely the board of directors (BOD) who can act as a top level advisor and monitor the firm. They are responsible for protecting shareholders' assets and ensuring that they receive decent returns on their investment (Kennon,

2011). A well-functioning BOD is also expected to maximize shareholders' wealth through an effective monitoring and controlling over the management as well as that ensuring good corporate governance practices are well- performed in the firm.

Board characteristics affect the effectiveness of monitoring the management and the quality of corporate governance (Chien, 2008). It should be noted that demographic is one of the characteristics of the boards. Demographic characteristics (e.g. age, tenure, gender, specialization) are related to many cognitive bases, values and perceptions that influence the decision making of BODs (Marimuthu & Kolandaisamy, 2009b). Therefore, the more complex the decision is (e.g. decision in strategic measure of the company), the more important an individual's characteristics of the decision maker are required (Zee & Swagerman, 2009). Demographic characteristics such as tenure, age, experience, and board size are only some parts of the characteristics that contribute to the diversity of the board (McIntyre, Murphy & Mitchell, 2007). Additionally, diversity can be viewed in two perspectives; demographic and cognitive (Marimuthu & Kolandaisamy, 2009a). However, this study only focuses on one demographic characteristic of board diversity, i.e. gender, to investigate its effect on firm performance.

Prior research by Marimuthu and Kolandaisamy (2009b) has looked at 100 public listed companies in Malaysia to investigate the influence of gender diversity on firm performance over the period of 2000 to 2006. In order to make a comparison between government-linked companies (GLCs) and non-government-linked companies (non-GLCs), this study creates a gap by selecting a final sample of 196 listed GLCs and non-GLCs for a period of four years starting from 2007 until 2010. A four-year window period from the year 2007 to 2010 is chosen as to reflect the effects of the revised corporate governance in Malaysia in year 2007 (The Malaysian Code on Corporate Governance, 2007) as well as to enable a better analysis with current issues and environment. It should be noted that the Malaysian government has performed the "GLC Transformation Programme" and one of the key principles is to create economic and shareholders' value through enhanced or improved performance of GLCs (http://www.khazanah.com.my/faq.htm). Therefore, by examining the impact of board diversity on GLCs' performance, the results of this study may be used to assist in realizing the key principle of GLCs' transformation as well as to contribute to the development of GLCs in Malaysia. The main objective of this study

is to investigate the gender diversity on the board of directors by focusing on its impact on the firm performance and comparing between GLCs and non-GLCs. The statistical results of this study reveal a significant finding but it contradicts with what is hypothesized.

2 Literature Review

2.1 Board diversity

Coffey and Wang (1998) define board diversity as the variation among its members and it is probably derived from multiple sources of board characteristics such as expertise and managerial background, personalities, learning styles, education, age and values. The more diverse the board, the more it can contribute to improve organizational performance by providing new idea, insight and perspective to the boards (Siciliano, 1996).

However, several studies show that the effect of board diversity on team performance is not uniform (Dahlin et al., 2005). For instance, Carter et al. (2007) examine the relationship of ethnic and gender diversity in the three functions of the board committees namely, audit, executive compensation, and director nomination to firm performance and find that gender diversity has a positive impact on firm performance through audit committees of the board but not in executive compensation and director nomination committee, while ethnic diversity turn outs to have a positive impact on firm performance through all functions of the board committees. Dahlin et al. (2005) suggest that working in a diversified team can be challenging because the nature of the team diversity with various perspectives could result in difficulty for the team members to perform, communicate and coordinate their work.

2.2 Gender diversity

Prior literature documents that the positive impact created after the corporate scandals and collapse of high-profile companies such as Enron and WorldCom has enhanced the importance of monitoring role and corporate governance (Campbell & Vera, 2008). The existence of a new legislative after the crisis such as Sarbanes Oxley Act (SOX) 2002 has provided guidelines on board composition, board audit committees, board independence and other corporate

governance practices but neither one of that mentions the gender composition or diversity of BODs. However, although none of SOX guidelines specifically addresses any aspect of gender diversity, it is believed that the provisions of SOX and the listing exchanges have indirectly a major impact on the needs of roles and responsibilities of women on the board as a part of contributor to the firm performances (Dalton & Dalton, 2010).

Previous studies have identified a negative result of gender diversity on the board. Adams and Ferreira (2009) argue that the average effect of gender diversity on firm performance is negative. At first impression, the correlation between gender diversity and firm value seems to be positive. However, it changes once they apply reasonable procedures to tackle omitted variables and reverse causality problems. Their finding suggests that gender diversity positively affects performance in firms that have weak governance. However, in firms with strong and good governance practices, they assert that determining gender quotas in BODs can reduce the firm's value due to excessive monitoring. Wang and Clift (2009) examine the relationship between gender diversity and firm performance on top 500 Australian companies and indicate that there is no statistically significant association between ROA, ROE and shareholder return with the percentage of women members on the board. They conclude that there is no strong relationship between gender diversity on the board and firm performance based on two reasons; firstly, there are very few women on the boards and this is insufficient to give the benefit of woman's talents on the board. Secondly, women representation is probably assumed to be only a process of socialization and consequently, the contribution of women directors on firm performance has never been realized on the boards (Rose, 2007). This argument is supported by Marimuthu and Kolandaisamy (2009b) who argue that the effect of gender diversity is only temporary and women do not play a main role in contributing to the firm. Their study on Top 100 Public Listed Companies in Malaysia on gender effect among the board members does not turn out to be significant with regard to ROA and ROE.

Even though the results are contradicting and the positive or negative impact of women directors is still undetermined, most of the studies on relationship between gender diversity and performance suggest that women directors have a positive impact on board performance (Radlach et al., 2008). For example, Carter et al. (2007) use all firms listed on the U.S Fortune 500 over the period of 1998-

2002 to investigate the effects of gender diversity on firm performance. The findings of this study supports the opinion that gender diversity on board committees appears to influence positively on firm performance by increasing the value for shareholders particularly through the audit function. This corresponds with Bathula (2008) who conducts a study based on data of firms listed on New Zealand Stock Exchange for a period of four years from 2004 to 2007 and finds that gender diversity leads to enhanced firm performance. The findings of these two studies provide evidence to stakeholder perspective and resource dependency perspective that diversity is beneficial to firms and suggest that women directors have the ability to bring their point of views more effectively in a smaller board rather than in a larger board. In addition, previous studies suggest that the presence of gender diversity on the board contributes to enhanced firm performance.

2.3 GLCs and non-GLCs

As reported by Feng, Sun and Tong (2004), past studies provide argument by economists on the performance between private firms or non-government-linked companies (non-GLCs) and firms with government ownership or government-linked companies (GLCs). Focusing on performance of 30 GLCs in Singapore, they conclude that firms with government intervention could also bring good performance as efficient as the privately-held firms; mainly on their stock return. In addition, Ang and Ding (2006) have also investigated the GLCs in Singapore. The results of their study seem to agree with the previous study done by Feng, Sun and Tong (2004) where Singaporean GLCs provide better valuations and corporate governance than the non-GLCs. Furthermore, Esa and Mohd Ghazali (2010) report significant increase in the extent of corporate social responsibility (CSR) disclosure in the annual reports of 27 GLCs in Malaysia for two years; 2005 and 2007. However, there are also contrasting findings where non-GLCs or privately-held firms outperform the GLCs as proved by Ab Razak, Ahmad and Joher (2011) in their research, where they find that non-GLCs perform better than GLCs in terms of corporate governance and other firms' specific characteristics.

2.4 Hypothesis development

Previous studies on board diversity show mixed results of the relationship between gender diversity on the board of directors and

firm performance. Based on several studies conducted in prior years, Marimuthu and Kolandaisamy (2009b) come up with a similar hypothesis that gender diversity on boards is positively correlated with a firm's financial performance. However, their research on top 100 public listed companies in Malaysia has brought a non-significant result towards the hypothesis developed. They conclude that women's role is not felt in the board composition. In fact, the effect is only temporary; which is in year 2005, only one-year of the seven-year period of investigation. Similarly, Wang and Clift (2009) indicate that there is no statistically significant relationship between firm performance - measured in terms of ROA, ROE and shareholders' return - and gender diversity on the board. The reason is that the very small number of women on the board is insufficient to deliver a critical impact and the advantages of their talents to the board.

However, most studies find positive results on the association between gender diversity on boards and firm performance. Campbell and Vera (2008) argue that gender diversity on BODs has a positive impact on the firm's value. They suggest that the most important focus for Spanish companies is the balance between women and men on the board rather than simply having the presence of women. They find that investors in Spain do not penalize firms which increase their woman board membership; in fact, investors expect that greater gender diversity on boards may generate economic benefits.

Furthermore, Vera and Martinez (2010) who study gender diversity in SME's board of directors find that gender diversity on BODs has a positive effect on firm performance. They indicate that woman's representation on boards creates an advantage for the firms and contributes to the benefits of work groups such as variety of alternatives, opinions and strategies that are able to overcome the problems of integration as well as slowness and difficulties in the decision making process. On the other hand, Carter et al. (2007) find that gender diversity on BODs has a positive effect on firm performance particularly in audit committees. The results show that gender diversity among board members appears to create value for shareholders. Finally, boards with diverse gender have more alternatives to employ in the decision making process (Vera & Martinez, 2010) and this variation may improve the appearance of the firm which positively affects the customers' view and perception of the firm and contribute to a better performance (Pohjanen et al.,

2010). Hence, as the current study is looking at Malaysian companies, a similar hypothesis with research done by Marimuthu and Kolandaisamy (2009b) as well as other prior studies has been developed taking into account the different sample size and years, which focused on GLCs and non-GLCs in similar years and industry as well as their market capitalization. The hypothesis developed for both GLCs and non-GLCs is as follows:

H1: Gender diversity among board members is positively related to firm performance.

3 Research Methodology

3.1 Sample selection

The sample consists of government-linked companies (GLCs) and non-government-linked companies (non-GLCs) listed on Bursa Malaysia for a period of four years from 2007 until 2010. The list of GLCs is obtained from the Ministry of Finance (MOF) website; (http://www.malaysiaco.com/government-linked-company). For the purpose of the study, only listed companies and non- financial companies on Bursa Malaysia are selected. The selection of non-financial companies is important to control the heterogeneous characteristics of the companies selected (Marimuthu & Kolandaisamy, 2009b).

The list of listed GLCs in Bursa Malaysia is obtained from the website of Putrajaya Committee on GLCs High Performance (PCG); (http://www.pcg.gov.my/trans_manual.asp). It states that the total number of listed GLCs in Malaysia is 33 companies as of 13 March 2009. The exclusion of seven listed financial companies leaves a balance of 26 listed non-financial companies used for this study. Since the purpose of the study is to make a comparison between GLCs and non-GLCs, another 26 non-GLCs are selected from companies listed on Bursa Malaysia in order to match them with the GLCs.

The complete number of samples for this study should be 208 samples (104 samples of GLCs and 104 samples of non-GLCs). However, due to the unavailability of important data from several firms' annual reports and some outliers in the data collected, the number is reduced to a final sample of 196 firms consisting of 99

samples of GLCs and 97 non-GLCs as shown in Table 1.

Table 1: Firms by Industry

		GLCs	Non-GLCs
Valid	Trading/services	55	51
	Plantation	8	8
	Consumer products	11	11
	Industrial Products	12	11
	Technology	3	4
	Construction	4	4
	IPC	3	4
	Properties	3	4
	Total	99	97

3.2 Data collection

The data for this study came from multiple sources of secondary data. The primary sources of this study were extracted from companies' annual reports downloaded from Bursa Malaysia website. The information regarding gender diversity on boards was collected from the company's annual reports. In addition, financial databases, namely DataStream and OSIRIS, were used in order to retrieve information regarding the size, performances and the financial ratios of the firms.

Data on the independent variables represented by the board characteristics were obtained from the annual report of each company through content analysis. For control variables, the firm's size was collected from OSIRIS which explains the total assets of the firm while types of firm's industries were classified in reference to Bursa Malaysia.

3.3 Variable measurement

In this study, the general multivariate model is used as the basis of empirical analysis for testing the hypothesis. The hypothesized relationships are modelled as follows**:**

Model 1: GLCs

$ROA_t = \beta_0 + \beta 1 gender_t + \beta 2 CFirmSize_t + \beta 3 Industryt + \varepsilon_t$

$ROE_t = \beta_0 + \beta 1 gender_t + \beta 2 CFirmSize_t + \beta 3 Industry_t + \varepsilon_t$

Model 2: Non-GLCs

$ROA_t = \beta_0 + \beta 1 gender_t + \beta 2 CFirmSize_t + \beta 3 Industry_t + \varepsilon_t$

$ROE_t = \beta_0 + \beta 1 gender_t + \beta 2 CFirmSize_t + \beta 3 Industry_t + \varepsilon_t$

All variables included in this study are measured as shown in Table 2.

Table 2: Measurement of Variables

Variables	Measurements	Literature
Dependent variables Firm Performance : 1) Return on asset (ROA)	Net Income divided by total asset	Marimuthu and Kolandaisamy (2009b)
2) Return on equity (ROE)	Net Income divided by total equity.	Marimuthu and Kolandaisamy (2009b) Pohjanen et al. (2010)
Independent Variables 1) Gender diversity	Ratio scale: Woman directors divided by total board directors.	Marimuthu and Kolandaisamy (2009b) Pohjanen et al. (2010)

Table 2 (continued): Measurement of Variables

Variables	Measurements	Literature
Control Variables 1) Firm size :	Approximated by the natural logarithm of total assets.	Ees, Postma and Sterken (2003) Campbell and Vera (2008)
2) Firm Industry :	Control for industry with a dummy variable. Industry dummy for property, construction, trading and services, consumer product, infrastructure, plantations, industrial product and technology. Measured as dummy variable taking the value of 1 if the firm belongs to a particular industry, otherwise 0.	Carter et al. (2007) Post et al. (2011) Ehikioya (2007)

3.4 Data analysis

The multiple regressions are used to test the hypothesis. By using Statistical Package for Social Science (SPSS), this study examines whether or not there is a significant relationship between gender diversity on boards and both ROA and ROE.

4 Findings and Discussions

To analyze the results, statistical tools employed for this study are descriptive statistics, Independent sample t-test, Kolmogorov-Smirnov test, Pearson correlation and multiple regressions.

Firstly, all the variables are explained by descriptive statistical tests which involve a descriptive statistic test for the numerical variables (gender diversity, total assets, return on assets

and return on equity); and a frequency statistic test for the categorical variable (firm industry). The results are shown in Table 3 for GLCs and Table 4 for non-GLCs.

Table 3: Descriptive Statistic test for GLCs

	N	Min	Max	Mean	Std Dev.
Gender Diversity	99	.00	.38	.10	.11
Total Assets (Firms' size)	99	59,226	74,081,100	11,734,111	16,689,111
Return on Assets	99	-14.67	25.20	7.37	5.79
Return on Equity	99	-27.24	39.50	11.20	9.61
Industry	99	1	8	2.38	1.95

Table 4: Descriptive Statistic test for non-GLCs

	N	Min	Max	Mean	Std Dev.
Gender Diversity	97	.00	.33	.06	.09
Total Assets (Firms' size)	97	190,870	262,000,000	8,665,713	32,811,258
Return on Assets	97	-9.13	20.47	5.13	5.45
Return on Equity	97	-28.66	33.90	8.06	10.41
Industry	97	1	8	2.49	2.11

From Tables 3 and 4, first of all, with regard to gender diversity, the statistics show the mean is 0.10 for GLCs ranging from a minimum of 0 to a maximum of 0.38 which explains that the average percentage of women on boards is just near 10 percent. The average for gender diversity in non-GLCs is 0.06 at a minimum of 0 to a maximum of 0.33 which is lower than GLCs. Next, for total assets, looking at the maximum and minimum amount in both GLCs and non-GLCs, the results generally show a huge difference in firms' size. On the other hand, the results for the dependent variables show the average ROA and ROE for GLCs are 7.37 and 11.20 respectively.

This indicates that the mean for ROA is lower than the mean for ROE. The average ROE for non-GLCs is 8.06 and 5.13 for ROA. Similar results are shown in GLCs where the mean for ROA is also lower than the mean of ROE. Meanwhile, for the firm industry variable, we can see that there is not much difference between the mean for GLCs (2.38) and non-GLCs (2.49).

Next, Table 5 reports the significant difference of mean variance for ROA and ROE between GLCs and non-GLCs, as performed by the independent-sample t-test. The t-test results show that there are no significant differences in the mean value of ROA and ROE in both GLCs and non-GLCs.

Table 5: T-test for mean comparison of ROA and ROE between GLCs and non-GLCs

Variable	Mean difference	t-stat	P-value
ROA	-.295	-.196	.845
ROE	-3.46	-.928	.355

Note:
Grouping variable:
(GLC assigned value of 1, non-GLC, assigned value of 2)
***Significance at 0.01 level; **Significance at 0.05 level; *Significance at 0.10 level

Table 6: Pearson Correlation Test for GLCs

	Gender Diversity	Total Assets	Firm Industry	ROA	ROE
Gender Diversity	1				
Total Assets	.26**	1			
Firm Industry	-.23**	-.35**	1		
ROA	-.19	-.07	-.30**	1	
ROE	-.14	.01	-.36**	.80**	1

Further, correlation analysis test is used to determine linearity of relationship (Magpayo, 2007) and describe the strength as well as the direction of the linear relationship. Tables 6 and 7 report the correlations between the variables used in the regressions for GLCs and non-GLCs. The results show that for GLCs, there is no significant relationship between the independent variable, i.e. gender diversity and the dependent variables, i.e. ROA and ROE. Yet, the results show a significant negative correlation at 5% level between the two variables (-.33 and -.39 respectively) in non-GLCs. Nonetheless, there are highly significant positive correlations at 1% level between ROA and ROE as a measure for firm performance in both GLCs (.80) and non-GLCs (.71).

Table 7: Pearson Correlation Test for non-GLCs

	Gender Diversity	Total Assets	Firm Industry	ROA	ROE
Gender Diversity	1				
Total Assets	.04	1			
Firm Industry	.21*	-.06	1		
ROA	-.33**	.089	-.17	1	
ROE	-.39**	.09	-.184	.71**	1

Finally, multiple regression analysis is conducted to test the hypothesis developed in this study. To ensure a valid model being performed in this study, the ROA and ROE variables are regressed separately on the independent and control variables. Tables 8 and 9 report the statistical results for Model 1 and Model 2.

Table 8: Regression Results for Model 1: GLCs (N=99)

Variables	Unstandardized Coefficient Beta	ROA (t-stat)	Unstandardized Coefficient Beta	ROE (t-stat)
(Constant)	13.72	2.17	12.76	1.15
Gender Diversity	-8.12	-1.32	-11.73	-1.08
Total Assets	-1.52	-1.79*	-.75	-.50
Firm Industry (Dummy)	Included		Included	
Adjusted R^2	19.8%		10.0%	
F-Statistic (P-value)	3.685 (0.001)		2.210 (0.028)	

Notes: *** Significant at the 0.01 level; ** Significant at the 0.05 level; and * Significant at the 0.10 level

Based on Table 8, the adjusted R^2 values indicate that independent and control variables in GLCs contribute about 19.8% to changes in ROA and 10.0% to ROE. Then, in order to observe the overall significance of the model, F-test is conducted using Analysis of Variance (ANOVA). From the results in Table 8, the F-ratio value of 3.685 and 2.210 are significant at 1% and 5% level respectively, indicating that at least one of the explanatory variables in Model 1 has an effect on the dependent variables, i.e. ROA and ROE. Furthermore, the results show non-significant negative results between gender diversity and firm performance, i.e. ROA (-1.32) and ROE (-1.08).

Next, based on Table 9, the adjusted R^2 values show that independent and control variables in non-GLCs contribute about 31.7% to changes in ROA and 11.4% to ROE. The F-ratio value of 5.945 and 2.366 are both significant at 1% level % indicating that at least one of the explanatory variables in Model 2 has an effect on the dependent variables, i.e. ROA and ROE. In addition, again, the results appear to have the same significant negative results in non-GLCs, but at 5% level between gender diversity and firm performance, i.e. ROA (-2.02) and ROE (-1.99). Hence, despite its significance on both models, it shows the opposite sign than what has been expected from this study. Thus, the regression results for both

Model 1 and 2 reject the hypothesis, **H1**, i.e. Gender diversity among board members is positively related to firm performance.

Table 9: Regression Results for Model 2: non-GLCs (N=97)

Variables	Unstandardized Coefficient Beta	ROA (t-stat)	Unstandardized Coefficient Beta	ROE (t-stat)
(Constant)	-4.67	-.878	-13.37	-1.16
Gender Diversity	-12.23	-2.02**	-26.23	-1.99**
Total Assets	1.16	1.60	3.07	1.95**
Firm Industry (dummy)	Included		Included	
Adjusted R^2	31.7%		11.4%	
F-Statistic (P-value)	5.945 (0.000)		2.366 (0.019)	

Notes: *** Significant at the 0.01 level; ** Significant at the 0.05 level; and * Significant at the 0.10 level

Overall, the statistical results for both GLCs and non-GLCs are surprising since previous studies show the opposite results. These may be due to different sample size, observation years and classification of the listed companies into GLCs and Non-GLCs, as compared to the study done by Marimuthu and Kolandaisamy (2009b) which focuses on top 100 listed companies in Malaysia. The results also indicate that neither GLCs nor non-GLCs have a large number of women directors on the board to sufficiently generalize the board gender diversity.

5 Conclusion

This study attempts to examine the relationship between gender diversity and firm performance. A research was performed to give a thorough explanation on how gender diversity on boarda affects firm performance measured as return on equity (ROE) and return on assets (ROA). The study was conducted in Malaysia using 26 GLCS and 26 non-GLCs listed on Bursa Malaysia over the years of 2007 until 2010.

The results show that non-GLCs exhibit a more negative impact with regard to the relationship between gender diversity on boards and firm performance, even after controlling the firm's specific factors such as firms' size and industry. The results indicate that significant relationships are found between gender diversity and

firm performance, i.e. ROA and ROE only at the non-GLCs (at 5 percent level). Surprisingly, these significant results show a negative relationship on firm performance. The finding is totally against the hypothesis developed in this study which suggests that gender diversity on boards has a positive impact on firm performance. It is believed that the reason for this is related to the small number of women directors on boards. Similar to other countries such as Sweden (Pohjanen et al., 2010) and Spain (Campbell & Vera, 2008), Malaysian large-cap firms have a minimal woman's participation in the boardroom which is not enough to give the Malaysian firms a critical impact or the advantages of women's involvement (Wang & Clift, 2009). At the same time, it somehow denies the expectation that GLCs should follow the government's recommendation on the woman's participation in the decision making process.

In conclusion, the findings suggest that homogeneity in gender has a more competitive advantage rather than heterogeneity among board members. It could be that men and women may have varied opinions to manage a firm which can lead to conflicts and lower the firm performance. However, the results may be affected by the small average samples of gender diversity which indicate that the composition of gender on the board is unbalanced and dominated by men directors. If Malaysian firms have higher level of gender diversity on the board to be used as samples in this research, it may result in different findings such as increased performance as shown by previous studies (Carter et al., 2007; Campbell & Vera, 2008). In addition, the announcement made by the Prime Minister that the Cabinet has now approved a policy that women must comprise at least 30% of those in decision-making positions in the corporate sector by 2016 (Nik Anis, 2011) can be seen as the first step to develop and encourage more diversity in the corporate board. The new policy is seen as a wise action and it should be supported and assisted by regulatory bodies to ensure consistent implementation by the firms in Malaysia.

5.1 Recommendations for future research

There are a lot of other areas and extensions that could be possible for future research. This study could be replicated by considering other board characteristic variables such as ethnicity, education, tenure, age and religion of the directors on the board. It would be interesting to know the impact of those diverse variables on the firm performance. In addition, future research may consider employing

different formulas to measure the firm performance other than ROE and ROA. As Bursa Malaysia views corporate social responsibility (CSR) as an integral part towards being an internationally competitive marketplace, it would be very useful to find whether the CSR of the firms is influenced by the diversity of the board. Furthermore, future research should be extended by taking newly updated list of GLCs. Lastly, future research may also focus on all GLCs regardless of listed or non-listed in Bursa Malaysia. Due to their unique features and policies, there is a probability that the results will contribute to better governance practices in GLCs and provide a value- added feature to regulators as well as the Malaysian government as a major institutional ownership.

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