CHAPTER 8

RESULTS OF THE COMPARATIVE ANALYSIS BETWEEN MALAYSIAN GLCs AND SINGAPOREAN GLCs

8.0 Introduction

In the previous two chapters, the performance of government ownership compared with non-government ownership for Malaysia and Singapore was investigated. In this chapter, empirical evidence is presented concerning the relationship between government ownership and performance for Malaysian and Singaporean listed companies, specifically, the Government Linked Companies (GLCs) of both countries. The purpose of this analysis is to determine which country's GLCs perform better. The need to identify in which country the performance is better is that government ownership seems to be a more important factor in ownership structure for Malaysia and Singapore. In Malaysia, over 30% of its market capitalisation is controlled by GLCs while, in Singapore, GLCs have the biggest control with more than 50% market capitalisation as at 2005.

As of today, no study has been done to compare between the performances of GLCs in these two countries. All discussions and analysis have been based on different periods of study, namely, full period (1995-2005), pre-crisis (1995-1996), and post-crisis (1999-2005). In this chapter, this research will compare and match 25 Malaysian GLCs as sample companies with 25 Singaporean GLCs to determine which group performs better. For every analysis, the discussion begins with a focus on the econometric issues as stationary of the data, multicollinearity, heteroscedasticity,

and auto-correlation. This is then followed by a descriptive analysis and comparing statistics (using parametric t-test mean) for the matching analysis between Malaysian GLCs and Singaporean GLCs.

8.1 Results and Discussion on Malaysian GLCs and Singaporean GLCs

For this analysis, the study selected 25 GLCs from 210 Malaysian listed companies (as was done in Chapter Six), which were then matched with 25 GLCs from 177 Singaporean listed companies (listed in Chapter Seven) based on size and industry. Discussions will be based on the descriptive analysis, financial and market performance of companies from both countries, and panel regression analysis.

8.1.1 Descriptive Statistics

After an analysis and discussion on government ownership and performance in the Malaysian and Singaporean contexts to compare GLCs with non-GLCs in each country, the performance of Malaysian and Singaporean GLCs is then compared to determine in which country GLCs perform better. First, this part will compare the financial performance of Malaysian GLCs with Singaporean GLCs, and determine whether government ownership and various governance measures contribute to company performance. Table 8.1 presents the descriptive statistics and results of the test of normality assumption. The results suggest that observations are not normally distributed based on Jarque-Bera. Hence, for this reason, the generalised least squares (GLS) method is deemed appropriate and can be expected to yield a much better result (Gujarati, 2002).

Table 8.1: Normality Test Statistics of 50 Malaysian GLCs and Singaporean GLCs

	Mean	Median	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability
Mgowned	0.5000	0.5000	0.5005	0.0000	1.0000	91.6667	0.0000
Tobin's Q	1.1177	0.9566	0.7377	3.0301	17.7520	5828.8390	0.0000
ROA	0.0779	0.0239	0.1930	3.5104	20.8515	8432.6120	0.0000
Size	14.3929	14.2939	2.2921	-2.4079	18.0712	5736.8120	0.0000
Debt	-1.6010	0.4439	57.7661	-23.3117	545.6259	6797463.0000	0.0000
nDual	0.9331	1.0000	0.6390	3.7618	27.8508	15449.6800	0.0000
Agency Cost	0.5029	0.4496	0.4267	0.6503	4.2650	75.4379	0.0000
Growth	0.0865	0.0428	0.1063	2.4041	10.3925	1782.1440	0.0000

8.1.2 Correlation Matrix

Results of the correlation matrix are listed in Table 8.2; the findings suggest that there is a positively significant relationship between ROA and Tobin's Q with Malaysian GLCs at the 1% level. This implies that Malaysian GLCs perform better than Singaporean GLCs. This result is supported as growth show a positively significant relationship with Malaysian GLCs at the 1% level. The positive result on Malaysian GLCs and growth indicates that the government in Malaysia through Khazanah Holdings will always monitor and control their inflow and outflow of cash; at the same time, it handles the sales to reduce the cost of expenses effectively. Therefore, the results indicate positive results on profit margin and negative on agency cost, which are directly related to expenses, especially selling and administrative expenses.

Another corporate governance variable, that is, non-duality, shows positively significant at 1% with Malaysian GLCs, which explains that Malaysian GLCs have more duality roles in companies compared to Singaporean GLCs. Meanwhile, there is a negative

relationship between Malaysian government ownership and debt. This indicates that Singaporean GLCs have more debt than Malaysian GLCs because most of their business activities are overseas. After the crisis, Temasek, the agent for Singaporean GLCs, became an international financial centre when its became increasingly internationally, globalization, and liberalization of the product and service markets. For example, Temasek bought a stake in Mahindra & Mahindar (India's biggest maker of sport utility vehicles and tractors) of about 4.7 percent and expanded its investment to Eastern Europe by buying a2.6% stake in Russian TeleSystem for S$491 million). In mid 2005 Vietnam's Pacific airline, which had a financial problem sold a stake of 30% to Temasek Holdings (sources:www.temasek.sg). With required all these investment, Singaporean GLCs (through Temasek) is no doubt have more debt especially in long term debt and require a longer time to be reduced than Malaysian GLCs. Finally yet importantly, the result finds size is negative but not significant.

Table 8.2 also indicates that GLCs with higher debts in both countries reduce company performance when there is a negative relationship between debt and Tobin's Q and ROA at the 1% level of significance. This result is supported by the positive results between growth and profit margin with both performances. These results can be seen in those GLCs with lower debts that have better control of their cash flows and expenses.

This study also identifies that large sized GLCs seem to have large debts due to their borrowing loans or producing long-term debts. This explains the negative result on correlation between size of GLCs and debt at the 1% level of significance. This result is

followed by a negative relationship between size and growth and agency cost. Even though large GLCs have larger debts and lower cash (significant at the 1% level), they still manage to perform after gaining a profit margin and lowering expenses to reduce the agency cost problem. This can be seen from the negative relationship between size and agency cost.

Table 8.2: Correlation Matrix for 25 Malaysian GLCs vs. 25 Singaporean GLCs

	Mgowned	TobinQ	ROA	Size	Debt	nDual	Agency Cost	Growth
Mgowned	1.0000	**0.1426(***)** **0.0000**	**0.2568(***)** **0.0000**	-0.0286 0.4118	**-0.3887(***)** **0.0000**	**0.3905(***)** **0.0000**	**-0.6014(***)** **0.0000**	**0.3595(***)** **0.0000**
TobinQ		1.0000	**0.1818(***)** **0.0000**	0.0194 0.4963	**-0.1242(***)** **0.0000**	**0.4232(***)** **0.0000**	-0.0295 0.3005	**0.1387(***)** **0.0000**
ROA			1.0000	0.0031 0.9164	**-0.1280(***)** **0.0000**	0.0266 0.4044	**-0.0955(***)** **0.0012**	**0.2652(***)** **0.0000**
Size				1.0000	**0.0860** **0.0026**	**-0.1338(***)** **0.0000**	**-0.1014(***)** **0.0004**	**-0.0930(***)** **0.0011**
Debt					1.0000	**-0.3759(***)** **0.0000**	**0.4287(***)** **0.0000**	**-0.0756(***)** **0.0081**
nDual						1.0000	**-0.2019(***)** **0.0000**	**0.1644(***)** **0.0000**
Agency Cost							1.0000	**-0.0498(**)** **0.0812**
Growth								1.0000

***/**/* Correlation is a significant at 0.01/0.05/0.1 level

8.2 Financial and Market Performance of Malaysian and Singaporean GLCs

This analysis investigates the source of superior GLC performance by comparing various measures of financial and market performance of Malaysian GLCs and Singaporean GLCs. Performance analysis was further divided based on all periods, pre, and post-crisis to isolate crisis on performance. These are presented in Tables 8.3, 8.4 and 8.5 respectively. The results in Table 8.3 indicate that Singaporean GLCs outperform Malaysian GLCs in both accounting and market performance. GLCs in Singapore have better performance in accounting measurements, ROA and ROE, and Stock Return. Only Tobin's Q shows that Malaysian GLCs outperform Singaporean but unfortunately not significant. This result explains that during the 11-year period of study, Singaporean GLCs have better performance in terms of accounting measurement. This may be because the majority of Singaporean GLCs generate profit, especially from their investment outside Singapore. Consequently, investors believe in Singaporean GLCs and at the same time attract potential investors to invest in their companies. Therefore, this result shows that the stock return of Singaporean GLCs is better than Malaysian GLCs (with a positive and significant relationship).

When an in-depth look is taken into the pre-crisis period, the results show that Malaysian GLCs are better in both market and financial performance than their Singaporean counterparts are. In Table 8.4, only Stock Return indicates that Malaysian GLCs underperform, while other results show that Malaysian GLCs outperform. Unfortunately, when the crisis hit Asia in 1997 onwards, the results indicate that the financial and market performance affected both GLCs, especially the Malaysian GLCs. It can be seen that there was a dramatic fall in Malaysian GLCs' performance, especially in Tobin's Q and ROE results. This dropping continued until the Malaysian

government took action to overcome it. In 2000, the government with Khazanah and other GLICs set up a committee to take immediate action to identify and identify solutions to ensure those GLCs got back on track in the market. A committee called Putrajaya High Performance on GLCs outlined some actions to regain the confidence of stakeholders, who are the citizens. One of the actions taken by the government was the appointment of new directors from the private sector to manage and control GLCs like MAS and Proton Holdings (sources: PCG Transformation Manual, 2006- www.pcg.gov.my). For example, the Putrajaya Committee on GLC High performance decided to appoint Tan Sri Idris Jala, ex-director of Shell (M) Company, as the CEO of MAS to drive MAS in the right direction by identifying and overcoming the loss of the country's airline company. Additionally, these new directors took several major actions, one of which was to reduce the companies' unnecessary expenses and bureaucracy in decision-making. These actions seemed to have increased the value of the company even though the outcome was slow and took time.

When the economic crisis hit Asian countries in 1997, the majority of the companies suffered huge losses including Singaporean GLCs. This study identifies that most financial and market performance measurements in Singaporean GLCs experienced a drop, compared to before the crisis. Since GLCs control 50% of market capitalisation in the Singaporean Stock Exchange, the government took immediate action to make sure the country's economy was not badly affected by hiring new management teams led by foreigners and those who have great experience in multinational companies. Upon being appointed as the CEO of a GLC, the new CEO can use his or her experience and knowledge in handling large companies with different economic situations. The new management team were expected to bring the GLCs back onto the right

track to make these companies perform well not only in market performance, Tobin's Q and Stock Return but also in accounting measurements, ROA and ROE. By appointing these new managers, the companies needed to pay extra expense such as huge salaries, remuneration, and other benefits to attract them to join GLCs. As a result, this study identifies that their agency cost proxy, expenses to sales increased during crisis from the pre-crisis period, but after the crisis, slowly decreased.

Other financial performance measures are sales turnover and cash to assets, which are significant when compared between these two GLCs. For sales turnover, the findings indicate that Singaporean GLCs outperform Malaysian. The better performance by the Singaporean GLCs began during the crisis period and continued until post-crisis. Meanwhile, for growth of companies, the findings identify that Malaysian GLCs look better than Singaporean GLCs; this can be seen from the results which show that from pre-crisis until post crisis (and also for all the 11-year period), GLCs in Malaysia have better handling of cash flow compared to Singaporean GLCs. It can also be seen in the findings of the t-test mean for these two GLCs on agency cost. In the agency cost, Singaporean GLCs have higher expense costs compared to Malaysian for all the 11-year period (also for pre-crisis and post-crisis). As mentioned earlier, the higher agency cost in Singapore could probably be due to the higher salaries and remuneration of foreigners that were hired to manage most GLCs in Singapore.

Table 8.3: Market and Financial Performance throughout ALL PERIODS (1995 to 2005)

		Market Performances		Financial Performances	
Variable	**No. of Observations**	**Tobin Q**	**Stock**	**ROA**	**ROE**
MGLCs	25	1.1686	-0.0014	0.0562	0.0184
SGLCs	25	1.0667	-0.0088	0.0996	0.1259
t-test		1.6225	0.0560	**-2.6545**	**-2.0853**

Table 8.4: Market and Financial Performance throughout PRE-CRISIS (1995 to 1996)

		Market Performances		Financial Performances	
Variable	**No. of Observations**	**Tobin Q**	**Stock**	**ROA**	**ROE**
MGLCs	25	1.7480	-0.145	0.0847	0.1313
SGLCs	25	1.2965	0.0396	0.0000	0.0451
t-test		**2.1521**	**-2.3076**	**08.2019**	**7.2212**

Table 8.5: Market and Financial Performance throughout POST-CRISIS (1999 to 2005)

		Market Performances		Financial Performances	
Variable	**No. of Observations**	**Tobin Q**	**Stock**	**ROA**	**ROE**
MGLCs	25	1.0241	0.0077	0.0522	0.0049
SGLCs	25	1.0140	0.1840	0.1566	0.1761
t-test		0.1716	-5.6283	**-4.3326**	-3.8156

8.3 Panel and Pooled Regression Analysis

Tables 8.6 and 8.7 summarise the panel fixed regression for the relationship between performances and company specific characteristics for 50 GLCs (25 Malaysian GLCs and 25 Singaporean GLCs). Similar to previous research, Tobin's Q for market performance and ROA for accounting performance will be used in this analysis. This study finds that the selected model is fit and significant for both measurements. For Tobin's Q, F-statistics of 49.8678 and

adjusted R^2 of 60.21%, while for ROA, F-statistics of 21.0768 and adjusted R^2 of 38.34% indicate that there may be other factors equally important to explain values of both measurements for all the 11-year period of study. For pre-crisis and post-crisis, the analysis identifies that these models are significant and fit.

In Table 8.6, the analysis finds a different relationship between performance measurements and government ownership for all periods, pre-crisis, and post-crisis. In all periods, the results identify that Singaporean GLCs perform better on Tobin's Q (significant at 10%) compared to Malaysian, while the relationship during pre-crisis indicates Singaporean GLCs outperform the Malaysian GLCs at the 5% significance level. Size has a positive relationship with Tobin's Q at the 1% level of significance in which the t-statistic is 5.9075 for all periods and 5.8040 post-period, while not significant pre-crisis. This explains that the GLCs of both countries increased their assets after the pre-crisis period to ensure their GLCs performed better with more assets. In line with this variable, debt has a positive significant relationship with Tobin's Q for all periods including pre- and post-crisis. The t-statistics of 25.8710 for all periods, 16.1857 pre-crisis, and 16.8990 post-crisis explain that GLCs with higher debts will lead to better performance than those with lower debts.

Besides ensuring higher debts, GLCs through Khazanah and Temasek always make sure their companies grow year by year. This can be seen from the results of the relationship between growth and Tobin's Q, which is significant from pre-crisis until post-crisis at the 1% level. The agency cost is only significant (t-statistics = 2.4302) with performance at 1% post-crisis, while non-duality and profit margin are not significant at all for all and other periods of study.

In Table 8.7, the relationship between company performance, ROA and government ownership (MGowned) is different from that shown in Table 8.7. A positive correlation between ROA and government ownership explains that Malaysian GLCs perform better than Singaporean GLCs do for all periods (t-stat=3.0335) and pre-crisis (t-stat=6.1930), while post-crisis is not significant. In addition, when we look at debt and ROA, a different result was obtained, which shows a negative correlation at the 1% level of significance for all periods (t-stat=-2.5781) and 5% post-crisis (t-stat=-2.1021).

For growth, it shows a positive relationship at the1% significance level with ROA for all periods (t=4.0941) and pre-crisis (t=2.6483), while for post-crisis the t-statistic of 1.9018 is significant at the 10% level. Size and non-Duality only show significance at post-crisis with t-statistics of 1.7594 and 2.5798, respectively.

Table 8.6: Fixed Panel Regression Results for Tobin's Q as Performance Measure for 50 GLCs

	ALL PERIODS (1995-2005)		PRE-CRISIS (1995-1996)		POST-CRISIS (1999-2005)	
Variable	**Co-efficient**	**t-statistics**	**Co-efficient**	**t-statistics**	**Co-efficient**	**t-statistics**
C	-0.2759	-1.9805(**)	0.0782	0.3757	-0.5640	-3.1835(***)
MGowned	-0.1220	-1.8516(*)	0.3416	2.3483(**)	-0.0617	-1.2553
Size	0.0482	5.9075(***)	-0.0037	-0.2317	0.0599	5.8040(***)
Non-Duality	0.0002	0.5288	0.4568	3.0912(***)	0.0016	0.3033
Debt	0.7773	25.8170(***)	1.0496	16.1857(***)	0.7152	16.8990(***)
Agency Cost	-0.0374	-0.5017	-0.6666	-2.8623(***)	0.1267	2.4302(**)
Growth	0.6839	3.6797(***)	2.4835	3.0030(***)	0.5146	1.8740(***)
R-squared	0.6144		0.8073		0.5006	
Adj R-squared	0.6021		0.7903		0.4813	
F-statistics	49.8678		47.6455		25.9101	

Probability	0.0000(***)		0.0000(***)		0.0000(***)	

Notes 1: Value = $\beta_0 + \beta_1 MGowned + \beta_2 Size + \beta_3 nDual + \beta_4 Debt + \beta_5 AC + \beta_6 Growth$ ..... (Eq.1)
*Notes 2: ***/**/* Correlation is significant at 0.01/0.05/0.1*

Table 8.7: Fixed Panel Regression Results for ROA as Performance Measure for 50 GLCs

	ALL PERIODS (1995-2005)		PRE CRISIS (1997-1998)		POST CRISIS (1999-2005)	
Variable	**Co-efficient**	**t-statistics**	**Co-efficient**	**t-statistics**	**Co-efficient**	**t-statistics**
C	0.0365	1.6189	0.0022	0.1349	-0.0018	-0.0327
MGowned	0.0389	3.0335(***)	0.068	6.1930(***)	0.0102	0.612
Size	-0.0001	-0.0978	-0.0005	-0.4015	0.0058	1.7594(*)
Non-Duality	0	0.5643	-0.0117	-1.1326	0.005	2.5798(***)
Debt	-0.012	-2.5781(***)	-0.0053	-1.0992	-0.0262	-2.1021(**)
Agency Cost	0.0274	1.8788(*)	0.0265	1.6278	0.046	2.5223(**)
Growth	0.1518	4.0941(***)	0.1598	2.6483(***)	0.1183	1.9018(*)
R-squared	0.4025		0.5846		0.3152	
Adj R-squared	0.3834		0.548		0.2887	
F-statistics	21.0768		16.0057		11.8953	
Probability	0.0000(***)		0.0000(***)		0.0000(***)	

Notes 1: Value = $\beta_0 + \beta_1 MGowned + \beta_2 Size + \beta_3 nDual + \beta_4 Debt + \beta_5 AC + \beta_6 Growth$ ..... (Eq.1)
*Notes 2: ***/**/* Correlation is significant at 0.01/0.05/0.1*

8.4 Regression Analysis of Malaysian and Singaporean GLCs for Separate Analysis

In this part, this study separates data between Malaysian GLCs and non-GLCs to find the determinant factors of company performance. In Table 8.8 the results of the panel based fixed regression of Malaysian GLCs indicate that both performance measurements are fit since F-statistics of 6.7038 for Tobin's Q and 23.5205 are significant at the 1% level.[14] First, findings from both measurements show that the growth ratio has the same results that are positive with a significant correlation at the 1% level. Second, Debt is significant at all levels but with different relationships. The result of the t-statistic of 3.6637 significant at the 1% level indicates that higher debts increase the market performance of Malaysian GLCs, however, this contradicts the

[14]This analysis selects FE as regression analysis after comparing with other estimation methods such RE and GLS and identifies that FE is the best model.(Refer to Table 8.11)

ROA, which is negatively correlated at the 1% level of significance(t-stat=-3.7659). Third, there is a negative relationship between agency cost and Tobin's Q at the 1% level of significance, which indicates that with lower expenses, GLCs perform better. The relationship for ROA is also the same but it is not significant. Fourth, companies with larger assets increase market performance, Tobin's Q. This is because t-statistics of Size of Malaysian GLCs is 1.9710 significant at the 5% level. Next, the performance of GLCs, ROA increases when profit margin increases (t=13.3589). Finally yet importantly, non-Duality shows not significant at all for both measurements of performance.

Meanwhile, Table 8.9 summarises the panel based fixed regression for Singaporean GLCs in estimating the relation between performance and specific company characteristics.[15] Again, both measurements show fit since the F-statistic is 3.6626 and adjusted R-squared is 13.46% for Tobin's Q while for ROA, the F-statistic is 13.7701 and adjusted R-squared 42.72%. Results from Table 5.40 find that only non-Duality, debt and agency cost are significant with different relationships for Tobin's Q, while only one factor influences the accounting performance of Singaporean GLCs (ROA), which is debt with different correlation. First, debt shows a negative relationship for both measurements at different levels of significance. The t-statistics of -2.2976 for Tobin's Q is significant at the 5% level, while the t-stat of -3.6126 is significant at 1%. Non-Duality and Agency cost are positive and significant for Tobin's Q. Other factors are found to be not significant for each of the measurements.

[15] For Singaporean also, FE is the best estimation model after test robustness check with other methods. (Refer to Table 8.13)

Table 8.8: Fixed Panel Regression Results for Tobin's Q and ROA as Performance Measure for ALL PERIODS (1995-2005) – 25 Malaysian GLCs

	TOBIN'S Q			RETURN ON ASSETS (ROA)		
Variable	**Co-efficient**	**t-statistics**	**Probability**	**Co-efficient**	**t-statistics**	**Probability**
C	0.2712	0.3993	0.6900	0.0233	0.2739	0.7844
Size	0.0410	1.9710	0.0498(**)	-0.0030	-1.0020	0.3173
Non-Duality	0.0815	0.1334	0.8940	0.0596	0.8049	0.4216
Debt	0.3720	3.6637	0.0003(***)	-0.590	-3.7659	0.0002(***)
Agency Cost	-0.2303	-1.7174	0.0871(*)	-0.0069	-0.4348	0.6641
Growth	0.9698	4.8981	0.0000(***)	0.2148	6.9552	0.0000(***)
R-squared	0.2937			0.5933		
Adj R-squared	0.2499			0.5680		
F-statistics	6.7038			23.5205		
Probability	0.0000(***)			0.0000(***)		

Notes 1: Value = $\beta_0 + \beta_1$ Size + β_2nDual + β_3Debt + β_4 AC + β_5Growth ..... (Eq.2)
*Notes 2: ***/**/* Correlation is significant at 0.01/0.05/0.1*

Table 8.9: Fixed Panel Regression Results for Tobin's Q and ROA as Performance Measure for ALL PERIODS (1995-2005) – 25 Singaporean GLCs

	TOBIN'S Q			RETURN ON ASSETS (ROA)		
Variable	**Co-efficient**	**t-statistics**	**Probability**	**Co-efficient**	**t-statistics**	**Probability**
C	0.0996	0.3170	0.7515	0.0816	3.5614	0.0004(***)
Size	0.0162	0.8394	0.4020	0.0015	0.7524	0.4525
Non-Duality	0.2120	2.4135	0.0165(**)	-0.0117	-1.3069	0.1924
Debt	-0.5113	-2.2976	0.0224(**)	-0.0897	-3.6126	0.0004(***)
Agency Cost	0.7253	1.9578	0.0513(*)	0.0371	1.0162	0.3105
Growth	-0.0403	-0.0727	0.9421	0.0424	0.5256	0.5996
R-squared	0.1851			0.4606		
Adj R-squared	0.1346			0.4272		
F-statistics	3.6626			13.7701		
Probability	0.0000(***)			0.0000(***)		

Notes 1: Value = $\beta_0 + \beta_1$ Size + β_2nDual + β_3Debt + β_4 AC + β_5Growth ..... (Eq.2)
*Notes 2: ***/**/* Correlation is significant at 0.01/0.05/0.1*

8.5 SUMMARY

This chapter completes the empirical investigation, which focuses on producing new empirical evidence concerning corporate governance in Malaysian and Singaporean GLCs, due to the comparable government ownership in the two countries. These studies will contribute to the literature as outlined in Chapter 1, in answering the question as to the most appropriate model of corporate ownership and performance for Malaysia and Singapore.

The performances of the GLCs between the two countries, Malaysia and Singapore were elaborated on in this chapter. In the test mean of market and financial performance between these two GLCs, this study identifies that Malaysian GLCs only outperform the Singaporean before the crisis hit in Asia in 1997. However, in analysing post-crisis' and all periods' results, this study finds that Singaporean GLCs are better. Specifically, the results find differences in both measurements and analyses. Using the simple parametric test mean, that is, for financial and market performance, Malaysian GLCs are found to outperform Singaporean GLCs based on market performance. However, from the perspective of accounting performances such as ROA, ROE, and Sales to Assets as well as Stock Returns (market measurement), Singaporean GLCs are found to be better than Malaysia.

However, in analysing the performance of GLCs in Malaysia and Singapore after controlling for company specific characteristics, the findings indicate that Malaysian GLCs perform better than Singaporean GLCs in accounting measurement, ROA while in Tobin's Q, Singaporean GLCs are better than Malaysian. However, when the study is broken down into different periods, the analyses show that Singaporean GLCs underperformed before the crisis and recovered after the

period of crisis. It seems that the Singaporean government through Temasek Holdings made some immediate changes to make sure its companies under Temasek recovered from the crisis and to ensure they continued to perform well.

For Agency cost (non-duality role and total agency cost (total expenses to sales), this study finds that there is a lot of difference in the second and third analyses. In the second analysis, the results identify that the lower agency cost leads to better performance in the Malaysian situation but not Singaporean. In running the results and analysing separately, the findings indicate that in the sample of 25 Malaysian GLCs, their performance is better when the agency cost is lower, but is not significant for non-Duality. Meanwhile, the results from the Singaporean matched sample are contrary. In that analysis, results show that a higher agency cost in GLCs leads to better performance in market measurement, while the accounting measurements are not significant at all. When comparing Malaysian GLCs with Singaporean GLCs, the results show that a lower agency cost in Malaysian GLCs leads to better performance but in Singapore, this leads to a lower performance, i.e. Singaporean GLCs perform better when their agency cost is higher.

The agency cost in Singaporean GLCs is due to the appointment of outsiders from the private sector and/or foreigners as directors/CEO. This leads to higher expenses because of managerial remuneration and salaries. Outsiders and foreigners as directors of a company seem to work as independent persons with accountability and transparency; however, this situation can reduce the nation's identity within government owned companies. These findings can contribute to the literature on corporate governance theories. For Malaysia, the government can learn from the

Singaporean situation, develop further strategies, and take action to make sure that Malaysian GLCs not only perform as well as the Singaporean GLCs, but even better.