CHAPTER 6

RESULTS AND DISCUSSION

6.1. INTRODUCTION

This chapter discusses the results of the data analysis and interprets the statistical findings. The chapter is organised as follows: Section 6.2 presents the descriptive statistics of the continuous and dichotomous variables used in the regression tests. Section 6.3 reports on the Pearson product moment correlation results between the independent variable and the list of the independent and control variables. Section 6.4 discusses the results of the multiple regression analysis. Section 6.5 presents the results of several further robustness tests. Section 6.6 discusses the overall results of the study and finally Section 6.7 concludes this chapter.

6.2. DESCRIPTIVE STATISTICS

Table 6.1 presents descriptive statistics for the continuous and dichotomous variables used in the regression tests for the years 2004 to 2006. Panel A shows the descriptive statistics of continuous variables; Panel B presents the descriptive statistics of dichotomous variables and Panel C provides the descriptive statistics on skewness and kurtosis of the whole sample.

Table 6.1 (Panel A)
Descriptive Statistics of Continuous Variables

	All	2004	2005	2006
	Mean	Mean	Mean	Mean
	Median	Median	Median	Median
	Standard Deviation	Standard Deviation	Standard Deviation	Standard Deviation
	Minimum	Minimum	Minimum	Minimum
	Maximum	Maximum	Maximum	Maximum
	N	N	N	N
DPP	33.789	34.040	33.769	33.600
	31.905	34.041	31.220	31.970
	18.902	18.641	18.354	19.764
	0.000	0.670	1.530	0.000
	87.500	85.330	76.300	87.500
	592	178	197	217
MBE	13.011	13.280	14.266	11.737
	10.260	9.640	11.180	10.100
	16.418	22.977	10.553	10.802
	18,800	94.340	18.800	17.990
	135.800	135.800	56.070	39.890
	571	214	157	200
LOGMKTC	6.406	6.390	6.305	6.521
	6.270	6.250	6.110	6.380
	1.371	1.346	1.387	1.376
	2.400	2.480	2.480	2.400
	10.610	10.580	10.610	10.610
	825	275	275	275
ROA	0.062	0.038	0.062	0.080
	0.050	0.060	0.050	0.050
	0.315	0.543	0.080	0.137
	-8.170	-8.170	-0.160	-1.500
	1.260	0.630	0.610	1.260
	780	238	272	270
DTA	0.563	0.603	0.516	0.570
	0.450	0.450	0.440	0.455
	0.719	0.875	0.492	0.741
	0.000	0.000	0.000	0.000
	9.280	8.030	3.990	9.280
	832	270	276	286
BSIZE	5.384			
	5.000			
	2.161			
	2.000			
	12.000			
	843			
BCOM	0.412			
	0.400			
	0.252			
	0.000			
	1.000			
	843			

DPP = Dividend payout; MBE = [Shares outstanding multiply shares closing price] divided by total common equity; LOGMKTC = Log of market capitalisation; ROA = Return on assets; DTA = Debt to assets; BSIZE = Board size; BCOM = Board composition.

With reference to dividend payout, (refer to Table 6.1 – Panel A) the mean average *dividend payout* for the three years is at 34.04 percent, 33.77 and 33.60 percent respectively. The minimum dividend payout is nil and the maximum dividend payout is at 87.5 percent in year 2006. The high dividend payout in Malaysia could be attributed to the dividend policy of Malaysian listed companies where the managers are reluctant to cut or avoid omitting dividend even when the performance of the company is deteriorating (Ponnu, 2008). There is also an indication that the dividend payout policy is equally spread over the three years as the standard deviation for the three years ranges between 18 percent and 19 percent.

With regards to IOS, in Table 6.1 - Panel A, the minimum and maximum varies from year to year from a minimum of 18.8 to a maximum of 135.80. However the mean and median for the individual years of 13.28, 14.26 and 11.74 respectively is rather close to the overall pull data of 13.01. Further, there seemed to be drastic decline in the total value of IOS from the year 2004 onwards in which from a 135 percent of growth, the figure dropped to 56.07 to 39.89 percent respectively. According to the International Investment Position, Department of Statistics, Malaysia (2009), the drop is mainly attributed to the fall in other foreign direct investment during the period.

As reported in Table 6.1 (Panel A), the mean and median of the *market capitalisation* for the full sample are 6.406 and 6.270 and followed by means 6.390, 6.305, 6.521 and medians of 6.250, 6.110 and 6.380 respectively. The minimum value and maximum value for the full sample and the individual years are in the range of (2.400 to 2.480) and (10.580 to 10.610) respectively. The market capitalisation has been consistent due to Malaysia's

strong external position. Despite the on-going global turmoil, Malaysia remains resilient due to its sizable current economy surplus, high level of international reserves and its sustained current account surplus (Department of Statistics, Bank Negara Malaysia, 2007).

In terms of returns of assets in Table 6.1 – Panel A, there seemed to be a constant increase in the mean *return of the assets* i.e from 0.038 percent in year 2004 to 0.062 percent in year 2005 and subsequently to 0.080 percent in the year 2006. One of the indications of this momentum is that the companies in general are maximising the usage of their assets to generate revenue. Further, the maximum return from assets has almost double i.e from approximately 63 percent in year 2004 to 126 percent in year 2006. However, the returns from assets need not necessarily be always positive i.e positive returns of a minimum of 16 percent and negative returns i.e insufficient returns to cover the initial cost to a maximum of 817 percent. The build of ROA has been attributed to several factors however the major factor has been related to Malaysia's faster accumulation of external financial assets relative to the build up in the external financial liabilities (Department of Statistics, Bank Negara Malaysia, 2007).

Similarly, in Table 6.1 – Panel A, the mean of debt to assets (DTA) is 56.3 percent for the full three years sample and the mean ranges from 51.6 percent to 60.3 percent. The highest mean is recorded at 60.3 percent in the year 2004. However, with regards to the minimum debt to assets for the individual years, it ranges from 0 percent to a maximum of 9.28 percent. The overall debt to total assets is recorded lowest in the year 2005 at 4 percent, followed by 8.03 percent in the year 2004 and the highest at 9.28 percent in the year 2006. Further, to report on the standard deviation for the individual years, it is at 49.2 percent for

the year 2005 and it is the lowest as compared to previous years in which 74.1 percent is recorded in the year 2006 followed by as 87.5 percent in the year 2004. The debt to total assets for the sample of the 300 highest capitalised companies are low with the maximum of debt to total assets representing 9.28 percent of the total assets of the company. According to Department of statistics, Bank Negara Malaysia, 2007, the external debt continues to be low, at 31.8% of GDP as at the end of 2007, with the debt profile remaining skewed towards a longer maturity structure.

With regard to board size in Table 6.1 - Panel A, it needs to be taken note that the board of directors has been taken as of 2006 to represent the board as a whole as the appointment of directors is rather sticky. Further, prior study on *board size* by Haniffa & Hudaib (2006) for the period 1996 to 2000 depict that the average board size of Malaysian companies is on the range of eight directors and as such the mean size of 5 obtained in this study is within the range recommended by Jensen (1993) for board effectiveness. In support of this, Business Star publication, on the 19th Sept 2009, report that Malayan Banking Bhd (Maybank), being the largest bank in Malaysia and present in 13 countries with over 700 offices overseas worldwide, has only 8 directors (Saleh et al., 2005; Rashidah & Fairuzana, 2006).

With regards to *board composition*, as depicted in Table 6.1 (Panel A), an average 41.2 percent of the board is represented by independent directors (non-executive independent directors) and hence almost 70 percent of the companies meet the recommendation by the MCCG 2000 is to have at least one third of the board comprising independent directors. The proportion of 41.2 percent representing the independent directors for the period 2004

to 2006, indicate the domination of insiders in the board composition in Malaysia (Saleh et al., 2005; Abdullah, 2004 and 2006).

Table 6.1 (Panel B)
Descriptive Statistics of Dichotomous Variables

	All N = 900		**2004 N=300**		**2005 N=300**		**2006 N=300**	
Dichotomous Variables	1	0	1	0	1	0	1	0
GLC	96 (10.67%)	804 (89.33%)	32 (10.67%)	268 (89.33%)	32 (10.67%)	268 (89.33%)	32 (10.67%)	268 (89.33%)
Industry Type								
CONSUMER	84	816	28	272	28	272	28	272
TRADING	324	576	108	192	108	192	108	192
PROPERTIES	150	750	50	250	50	250	50	250
CONSTRUCTION	57	843	19	281	19	281	19	281
PLANTATION	96	804	32	268	32	268	32	268
INDUSTRIAL	189	711	63	237	63	237	63	237
Duality (DUAL)	120 (13.33%)	780 (86.67%)	40 (13.33%)	260 (86.67%)	40 (13.33%)	260 (86.67%)	40 (13.33%)	260 (86.67%)
Family Control (FLYC)	87 (9.67%)	813 (90.33%)	29 (9.67%)	271 (90.33%)	29 (9.67%)	271 (90.33%)	29 (9.67%)	271 (90.33%)

Further, Table 6.1 (Panel B), shows that family owned businesses represent 9.67% (equivalent to a market capitalisation of 32.291 billion, government linked companies with a 10.67% (equivalent to 96 companies) and non-government linked companies with a 89.33% (equivalent to 804 companies) of the three hundred (300) highest capitalised companies listed on Bursa for the years 2004 to 2006. Prior studies by Lim (1981), Jasani (2002), La Porta *et al.* (2000) and Alpay *et al.* (2008) report that stock ownership is highly concentrated on the hands of a few wealthy families with a system of sophisticated interlocking system. Another recent study by (Ibrahim & Abdul Samad, 2010) reveals the significance of family ownership throughout the world and in Malaysia. The study further

posits that family business in Malaysia is instrumental in shaping the corporate scene and also as a major factor in the contribution towards the Malaysian economic growth.

Table 6.1 (Panel C)
Descriptive statistics (e-views)

	Skewness	Kurtosis	Observations	Cross-sections
DPP	0.372	2.530	409	192
MBE	1.716	12.154	409	192
DUAL	3.664	14.425	409	192
LOGMKTC	0.764	3.673	409	192
ROA	3.544	19.918	409	192
DTA	6.380	56.249	409	192
FLYC	2.205	5.865	409	192
GLC	2.341	6.483	409	192
BCOM	0.195	3.069	409	192
BSIZE	0.641	3.151	409	192
IOSBIZE	2.445	14.325	409	192
IOSBCOM	2.172	8.463	409	192
IOSFLYC	5.779	47.827	409	192

Table 6.1 (Panel C) report the descriptive statistics of variables using the Pool data/Panel data model. The data provides further information on the number of observations available, statistics on the availability of cross sections, skewness and kurtosis of the data. With regard to the statistics on the type of industry representing the sample study, Table 6.2 depicts market capitalisation of the companies for the full sample and also for the corresponding individual years respectively. The report show that the highest number of companies in terms of industry type is trading (108) followed by Industrial products (63), Properties (50), Plantations (32), Consumer products (28) and Construction (19).

Further, Table 6.2 also provides the total market capitalisation for each of the industries. In terms of market capitalisation, there seemed to be a marginal decline in Consumer

products, a marginal increase in Construction and Plantations followed by marginal increase in year 2004 and 2005 and a decline in year 2006 for the Trading/Services. Further, according to the Department of statistics, foreign direct investment (FDI), 2007; the agriculture sector has surged over the period of five years from RM0.4 billion in 2004 to RM9.3 billion in 2009. The value of FDI in trade and commerce has also increased two fold for the duration of the period mainly due to the influx of hypermarkets and international procurement centres (IPC) in the country.

Table 6.2
Market Capitalisation by sector

Nature of Business	**No of Companies**	**Market Capitalisation RM '000' in Billions**					
		2004	%	2005	%	2006	%
Consumer product	28	52,482	10.49	52,435	10.41	56,001	9.29
Trading/Services	108	294,242	58.80	306,747	60.90	353,357	58.63
Properties/Hotel	50	47,218	9.44	44,774	8.89	54,878	9.10
Construction	19	13,603	2.72	10,878	2.16	21,993	3.65
Plantations	32	44,221	8.84	43,903	8.72	57,710	9.58
Industrial	63	48,677	9.73	44,942	8.92	58,736	9.75
Total	300	500,443	100	503,679	100	602,675	100

6.3. CORRELATION ANALYSIS

Table 6.3 reports on the Product moment correlation coefficient. The purpose of this section is to examine the correlation between the variables and to test the strength and the direction of the relationship between a pair of variables. These provide clear assessments of the closeness of a relationship among pairs of variables. As illustrated in Table 6.3, IOS is negatively and significantly correlated with DPP.

With regards to board size (BSIZE), there is a significant positive relationship between board size and logarithm of market capitalisation (LOGMKTC) and dividend payout (DPP). This correlation suggest that highly market capitalised companies tend to have a bigger board size and have an impact on firm performance (Zubaidah *et al*., 2009; Mak & Li, 2001; Adams & Mehran, 2003; Dalton & Dalton, 2005; Nordin *et al.,* 2005).

With regard to prior results on board composition, it is mixed and not conclusive. The issues raised are such as the availability of qualified and calibre independent directors, lack of independence, multiple appointments, inadequate time and insufficient information and the inability of independent directors to supervise management (Stiles & Taylor, 1993; Conyon & Peck, 1998; Ponnu, 2008; Jackling & Johl, 2009).

Additionally, the results provide positive correlation between logarithm of market capitalisation (LOGMKTC) and return on assets (ROA) as in Table 6.3 (Panel A) which reveal that higher market capitalised companies maintain a higher return on assets ratio ($P < 0.01$) and that high growth companies are generally associated with higher market capitalisation ($P < 0.01$).

With respect to board composition, the variable is positively and significantly correlated with logarithm of market capitalisation (LOGMKTC). The evidence shows that high market capitalised companies have higher number of independent directors in the board. Further, family controlled firm (FLYC) is found to be positively and significantly correlated with board size (BSIZE), duality (DUAL) and logarithm of market capitalisation

Table 6.3 Correlation

	DPP	MBE	DUAL	LOGMKTC	ROA	DTA	FLYC	GLC	BSIZE	BCOM
DPP	1									
N	592									
MBE	-0.147***	1								
	(0.002)									
N	434	571								
DUAL	-0.112***	0.107***	1							
	(0.007)	(0.012)								
N	579	555	843							
LOGMKTC	0.083**	-0.029	-0.056	1						
	(0.044)	(0.493)	(0.114)							
N	586	566	807	825						
ROA	-0.023	0.028	0.008	0.138***	1					
	(0.586)	(0.515)	(0.826)	(0.000)						
N	577	537	760	759	780					
DTA	0.036	-0.021	-0.045	-0.001	-0.033	1				
	(0.400)	(0.632)	(0.207)	(0.969)	(0.379)					
N	545	532	781	764	722	832				
FLYC	-0.048	-0.025	0.177***	0.164***	0.006	0.028	1			
	(0.242)	(0.545)	(0.000)	(0.000	(0.861)	(0.424)				
N	592	571	843	825	780	832	900			
GLC	0.006	-0.011	-0.014	0.344***	0.039	-0.021	-0.113***	1		
	(0.881)	(0.787)	(0.692)	(0.000)	(0.273)	(0.545)	(0.001)			
N	592	571	843	825	780	832	900	900		
BSIZE	0.090**	-0.025	0.025	-0.125***	-0.001	-0.030	0.139***	-0.026	1	
	(0.031)	(0.556)	(0.475)	(0.000)	(0.971)	(0.404)	(0.000)	(0.454)		
N	579	555	843	807	760	781	843	843	843	1
BCOM	-0.020	0.037	0.013	0.084***(0.	0.010	-0.052	-0.033	0.041	-0.285***	
	(0.637)	(0.388)	(0.706)	017)	(0.785)	(0.147)	(0.336)	(0.234)	(0.000)	843
N	579	555	843	807	760	781	843	843	843	

Note * Significance at 10 % level; ** Significance at 5 % level; *** Significance at 1 % level (two-tailed)
DPP = Dividend payout; MBE = [Shares outstanding multiply shares closing price] divided by common equity; LOGMKTC = Log of market capitalisation; ROA = Return on assets; DTA = Debt to assets; FLYC = Family controlled firms; GLC = government linked companies; BSIZE = Board size; BCOM = Board composition

(LOGMKTC). The correlation findings suggest that family controlled firms have a larger board size, maintain duality and is represented by high market capitalised companies.

Some interesting findings are also revealed with regards to government linked companies and non-government linked companies. In Table 6.3 GLCs are positively and significantly related to logarithm of market capitalisation. The findings indicate that government linked companies are on the higher end of the market capitalised companies and high growth firms are associated with government linked companies.

With regards to duality (DUAL), the variable is significantly and positively correlated with investment opportunity set (IOS). The results found that high growth firms maintain non-duality i.e a separation between the position of CEO and Chairman and that a larger board size also enhances non-duality. Likewise high growth family control firms also maintain non-duality among the CEO and Chairman. In contrast, there is a significant negative correlation between duality and logarithm to market capitalisation (LOGMKTC) and dividend payout ratio (DPP). The correlation suggests that low growth non-family controlled firms maintain duality and that lower dividend payouts are expected from companies that maintain duality.

Multicollinearity is tested based on the correlation matrix. According to Pallant (2005), multicollinearity exists when the independent variables are highly correlated (r = 0.8 and above). The results of the test indicate that all the correlation coefficients between the independent variables are less than 0.8.

6.4. MULTIVARIATE ANALYSES

Table 6.4 (Panel A) shows the summary of the results for the full sample for all the three years (2004 – 2006) by the use of the multiple regression analysis. To test the robustness of the basic model, additional control variables are progressively added to the existing model to evaluate the impact on the association between IOS and DPP. The objective of progressively adding control variables is to observe the magnitude of the coefficient on dividend policy when each variable is added on to the basic model (Mitton, 2004). The additional variables are as follow: board composition (BCOM), board size (BSIZE), government ownership (GLC), family ownership (FLYC) and interactive variables such as the interaction between investment opportunity set (IOS) and board composition (IOSBCOM), interaction between investment opportunity set (IOS) and board size (IOSBSIZE), interaction between investment opportunity set (IOS) and government linked companies (IOSGLC) and the interaction between investment opportunity set and family controlled firms (IOSFLYC).

The variables are controlled for years and for the type of industry by using dummy variables. In the case of control for years as there are two dummy variables, the number of dummies use is one less than the number of years (m - 2). The coefficients are estimated first by leaving out the dummy variable for category 1 and using dummies for categories 2. Similarly, in the case of industry type, there are 6 industries and 5 dummy variables and the dummies use are one less than the number of categories on industry type. All in there are 10 different models in which the association between the IOS and dividend payout policy are tested.

The *F*-value for each of the models from 1 to 10 (refer Table 6.4 (Panel A) and (Panel B), is statistically significant at the 1 percent level. The adjusted R^2 is the total variance of the dividend policy and control variables. The adjusted R^2 for all the models are in the range of 7.10 to 8.80 percent for the combined three year period of the panel analysis. This statistics is considered low. Although the adjusted R^2 may be considered low, it is slightly higher than the previous studies reported by Gul & Kealey (1999) who examined the relationship between investment opportunity set, corporate debt and dividend policies among Korean companies which was at 1 percent.

Another study by Gul (1999) that tested the relationship between government share ownership, investment opportunity set and dividend payout in China reported R^2 of 0.061 percent. Other studies by Smith & Watts (1992) and Gaver & Gaver (1992) document that the relationship between investment opportunity set and corporate financing and dividend is also low at an adjusted R^2 of 7 percent and 7.4 percent, respectively.

Outliers do not drive the regression results of this study. Multivariate outliers test on the residuals are carried out to check for outliers using Cook's distance. Cook's D assesses for change in regression coefficients when a case is deleted (Tabachnick, 2007, p. 75). The benchmark for Cook's D is "1", any case in the sample exceeds this value is recommended for reconsideration. None of the cases reports a value over "1" for Cook's D.

6.4.1. Basic model with control variables progressively added to the existing model

MODEL 1: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + e_{it}

The *F*-value for model 1 in Table 6.4 (Panel A) is statistically significant at the 1 percent level and the adjusted R^2 is 7.40 percent. The statistic of 7.40 percent for the total variance in dividend payout is very low. From the analyses conducted, it is found that three variables tested in the study are significantly associated with dividend payout policy. The results presented in Table 6.4 (Panel A) show significant associations between investment opportunity set (IOS), Family controlled firms (FLYC) and industry type (CONSUMER), (TRADING) and (PLANTATION). Neither CEO duality (DUAL), return on assets (ROA), logarithm of market capitalisation (LOGMKTC) is found to be significant.

6.4.1.1. Investment opportunity set

This study finds a significant negative association between investment opportunity set and dividend policy ($p < 0.01$). The negative and significant result between dividend policy and investment opportunity set supports the Free Cash Flow hypothesis which suggests that high growth firms pay lower dividends and on the contrary low growth firms pay higher dividends. These findings are consistent with recent findings by Ferris *et al.* (2009), Amidu & Abor (2006), Mitton (2004) and La Porta *et al.* (2000) in the context of developed countries. Other studies such as Smith & Watts (1992), Gaver & Gaver (1993), Gul & Kealey (1999), D'Souza & Saxena (1999) and Jensen (1986) which also report a

significant negative relationship, suggest that high growth firms due to their low cash flow declare lower dividends as compared to low growth firms that declare high dividends due to their anticipated high cash flow. In all models, the high growth firms are found to be highly significant at 1 percent level, thus *H1* is supported.

Table 6.4 (Panel A)
Multiple Regression Results

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coeff	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**
Pooled EGLS										
(Constant)	29.357	4.586***	30.568	4.621***	30.410	4.589***	26.811	3.955***	27.919	4.110***
MBE	-0.122	-2.072**	-0.121	-2.045**	-0.110	-1.756*	-0.118	-2.000**	-0.234	-2.690***
DUAL	-7.377	-1.421	-7.230	-1.388	-7.227	-1.387	-7.683	-1.477	-7.806	-1.504
LOGMKTC	0.800	0.811	0.846	0.854	0.883	0.889	0.655	0.659	0.739	0.743
ROA	-25.546	-2.499***	-25.803	-2.520***	-25.843	-2.520***	-24.556	-2.392***	-24.685	-2.407***
CONSUMER	12.575	3.038***	12.634	3.044***	12.609	3.036***	12.639	3.048***	12.551	3.036***
TRADING	6.295	1.833*	6.480	1.877*	6.551	1.895**	6.685	1.935**	7.071	2.047**
PROPERTIES	5.455	1.532	5.478	1.534	5.535	1.549	5.232	1.466	5.501	1.543
CONSTRUCTION	3.332	0.699	2.727	0.563	2.813	0.580	2.822	0.589	2.810	0.588
PLANTATION	9.533	2.436***	9.758	2.480***	9.790	2.486***	9.726	2.480***	9.789	2.503***
INDUSTRIAL										
GLC	0.010	0.003	0.268	0.064	0.129	0.031	0.358	0.085	-0.014	-0.003
FLYC	-6.533	-1.718*	-6.752	-1.765*	-6.796	-1.775*	-7.116	-1.853**	-7.447	-1.941**
BCOM			-3.748	-0.752	-3.716	-0.745				
BSIZE							0.608	1.149	0.350	0.641
IOSBCOM					-0.008	-0.528				
IOSBSIZE									0.026	1.807*
R^2		0.099		0.100		0.101		0.102		0.109
Adjusted R^2		0.074		0.073		0.071		0.075		0.080
F statistic		3.966		3.675		3.408		3.744		3.722
F-value		0.000		0.000		0.000		0.000		0.000
N		409		409		409		409		409

Notes:
The reported *t*-value and the significance opposite each variable indicates whether the variable is significantly contributing to the equation model. ***Significance at 1 %; **significance at 5 % level and *significance at 10 % level.

MBE = [Shares outstanding multiply shares closing price] divided by common equity; DUAL = Duality, LOGMKTC = Log of Market Capitalisation; ROA = Return on assets; Industry type = CONSUMER; TRADING; PROPERTIES; CONSTRUCTION; PLANTATIONS & INDUSTRIAL; GLC = Government linked companies, FLYC = Family control; BCOM = Board composition (in terms of proportion of independent directors), BSIZE = Board size; IOSBCOM = Interaction between IOS & board composition, IOSBSIZE = Interaction between IOS & board size.

6.4.1.2. Family controlled firms

The moderating effect of family ownership in Table 6.4 (Panel A) between IOS and dividend payout is negative at the 1 percent level for the full sample data. The results depicts that family controlled firms pay lesser dividends as they prefer to keep cash for expansion purposes. Further, Lai (2007) posit that in Chinese family owned companies, family members usually control the board and management and hence the business prosperity aspect of corporate governance is fulfilled as long as the company is profitable. These findings are consistent with prior studies of Lim (1981), Claessens *et al.,* (2000) and Alpay *et al.,* 2008). Hence, H5a is supported as there is likely to be a negative relationship between family controlled firm and dividend payout.

6.4.1.3. Industry type

With regards to industry dummy variables, the study finds a significant negative association between industrial product and dividend policy ($p < 0.01$). It suggests that firms associated with CONSUMER, TRADING and PLANTATIONS products declare higher dividend.

6.4.1.4. Control variables and dividend policy

With respect to control variables, not all of the variables are significantly related to dividend payout. In terms of logarithm to market capitalisation, it is expected that the higher the market capitalisation of the company, the higher will be the dividend payout. However, the variable is positive in sign but not significant. In terms of return of assets

(ROA), it is predicted that a positive return on assets show better profitability and hence better dividend payout. The results are negatively significant, and provide evidence that high growth profitable firms pay lesser dividends. On the relationship between CEO duality and dividend policy, the results show a negative sign and a non significant association. Hence, there is no significant correlation between CEO duality and dividend payout.

MODEL 2: $DPP = \beta_0 + \beta_1 MBE + \beta_2 DUAL + \beta_3 LOGMKTC + \beta_4 ROA + \beta_5 INDTYPE + \beta_6 GLC + \beta_7 FLYC + \beta_8 BCOM + e_{it}$

An additional variable on board composition (BCOM) is included in the original model. The *F*-value for model 2 in Table 6.4 (Panel A) for the sample data is statistically significant at the 1 percent level and the adjusted R^2 is 7.30 percent ($p < 0.01$). Board composition, as measured by the number of independent directors representing the board, is used to control for the influence of independent directors on dividend payout. A positive association between board composition and dividend policy is predicted as larger boards have more independent directors and hence more dividend payouts. In all models, the board composition is found to be negatively insignificant, thus $H2_b$ fail to reject H_0.

Further, there are no significant variations from the original model. The results are similar to the first model in that the same three variables tested in the study are significantly associated with dividend payout policy. In summary, the results presented in Table 6.4 (Panel A) show significant associations between investment opportunity set (IOS), family controlled firms (FLYC), return on assets (ROA) and industry type (CONSUMER), (TRADING) and (PLANTATIONS). However, the association between DPP and CEO

duality (DUAL) and logarithm of market capitalisation (LOGMKTC) is found to be not significant.

MODEL 3: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + β_8 BCOM + β_9 IOSBCOM +e_{it}

With regards to Model 3 in Table 6.4 (Panel A), an additional variable on the interaction between investment opportunity set and board composition (IOSBCOM) together with board composition as per Model 2 is included in the original model. The *F*-value for model 3 for the full sample data is statistically significant at the 1 percent level and the adjusted R^2 is 7.01 percent ($P < 0.01$). In terms of IOSBCOM, it is predicted that a positive sign would indicate that the negative relationship between IOS and dividend payout is weaker for firms with more independent directors representing the board. On the contrary, this variable is negative in sign and insignificant.

The other findings in terms of IOS and FLYC in which there is a negative significance association between IOS and dividend policy and FLYC. However, in terms type of industry, CONSUMER, TRADING, PROPERTIES and PLANTATIONS there seemed to be a positive significant association with dividend policy. It suggests that the above mentioned industries are paying higher dividends as compared to the other type of industries. In summary, the results presented in Table 6.4 (Panel A) show significant association between investment opportunity set (IOS), family controlled firms (FLYC), return on assets (ROA) and industry type (CONSUMER, TRADING, PROPERTIES and PLANTATIONS) however, CEO duality (DUAL) and logarithm of market capitalisation (LOGMKTC) is found to be insignificant.

MODEL 4: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + β_8 BSIZE + e_{it}

The addition to the original model in Table 6.4 (Panel A) is the board size (BSIZE). The *F*-value for model 4 for the full sample data is statistically significant at the 1 percent level and the adjusted R^2 is 7.50 percent ($p < 0.01$). Board size, as measured by the number of board members, is used to control for the board size effect. A positive association between board size and dividend policy is expected to be effective in performing monitoring functions of the board. However, as the coefficient is not statistically significant, hypothesis $H3_b$ is not supported.

This model has no significant variations from the original model. The results are similar to the first model in that the same three variables tested in the study are significantly associated with dividend payout policy. In summary, the results presented in Table 6.4 (Panel A) show significant associations between an investment opportunity set (IOS), family controlled firms (FLYC), return on assets (ROA) and industry type (CONSUMER), (TRADING) and (PLANTATIONS). However, CEO duality (DUAL) and logarithm of market capitalisation (LOGMKTC) is found to be insignificant.

MODEL 5: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC+ β_7 FLYC + β_8 BSIZE + β_9 IOSBSIZE + e_{it}

The addition to this original model in Table 6.4 (Panel A) is on the interaction between investment opportunity set and board size (IOSBSIZE) and board size as per Model 4. The *F*-value for model 5 for the full sample data is statistically significant at the 1 percent level and the adjusted R^2 is 8 percent ($p < 0.01$). In terms of IOSBSIZE it is predicted that a positive sign indicates that dividend payout is weaker for firms with a larger board size.

Although there is a positive association between IOSBSIZE and dividend policy but the results are insignificant.

Table 6.4 (Panel B)
Multiple Regression Results

	Model 6		Model 7		Model 8		Model 9		Model 10	
	Coeff	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**	**Coeff**	**t-stat**
Pooled EGLS										
(Constant)	32.340	4.354***	27.822	3.884***	32.488	4.371***	28.847	4.026***	31.901	4.269***
MBE	-0.487	-2.899***	-0..137	-2.188**	-0.528	-3.082***	-0.174	-2.773***	-0.465	-2.668***
DUAL	-7.814	-1.495	-7.565	-1.445	-7.836	-1.497	-7.951	-1.519	-7.636	-0.988
LOGMKTC	0.714	0.711	0.760	0.756	0.782	0.778	0.781	0.779	0.656	0.846
ROA	-25151	-2.448***	-24.642	-2.394***	-24.921	-2.429***	-25.384	-2.478***	-25.219	-2.458***
CONSUMER	12.611	3.034***	12.458	2.989***	12.360	2.967***	12.278	3.188***	12.792	3.045***
TRADING	8.230	2.080**	6.620	1.904**	7.059	2.027**	6.919	1.992**	6.985	1.995**
PROPERTIES	5.649	1.576	5.168	1.440	5.532	1.540	5.630	1.569	5.685	1.574
CONSTRUCTION	1.980	0.407	2.256	0.463	1.684	0.345	2.166	0.455	1.517	0.309
PLANTATION	9.775	2.479***	9.736	2.456***	9.621	2.436***	10.269	2.600***	9.914	2.488***
INDUSTRIAL										
GLC	0.342	0.081	-2.000	-0.404	-2.687	-0.543	0.473	0.112	-3.251	-0.653
FLYC	-7.652	-1.981*	-7.270	-1.882*	-7.751	-2.004**	-12.988	-2.932***	-12.428	-2.713***
BCOM	-2.789	-0.541	-2.518	-0.489	-2.840	-0.551	-3.190	-0.618	-3.289	-0.633
BSIZE	-0.254	-0.394	0.555	1.011	-0.277	-0.431	0.442	0.805	-0.115	-0.177
IOSBCOM	0.056	1.773*			0.060	1.881			0.043	1.304
IOBSIZE	0.067	2.454			0.070	2.555***			0.049	1.685*
IOSGLC			0.185	0.972	0.225	1.184			0.269	1.405
IOSFLYC							0.485	2.676***	0.401	1.959**
R^2		0.116		0.104		0.119		0.118		0.128
Adjusted R^2		0.083		0.073		0.083		0.086		0.088
F statistic		3.447		**3.278**		3.317		3.755		3.179
F-value		0.000		**0.000**		0.000		0.000		0.000
N		409		409		409		409		409

Notes:
The reported *t*-value and the significance opposite each variable indicates whether the variable is significantly contributing to the equation model. ***Significance at 1 %; **significance at 5 % level and *significance at 10 % level.

MBE = [Shares outstanding multiply shares closing price] divided by common equity; DUAL = Duality, LOGMKTC = Log of Market Capitalisation; ROA = Return on assets; Industry type = CONSUMER; TRADING; PROPERTIES; CONSTRUCTION; PLANTATIONS & INDUSTRIAL; GLC = Government linked companies, FLYC = Family control; BCOM = Board composition (in terms of proportion of independent directors), BSIZE = Board size; IOSBCOM = Interaction between IOS & board composition, IOSBSIZE = Interaction of IOS & board size; IOSGLC = Interaction between IOS and GLCs; IOSFLYC = Interaction between IOS and family controlled firms.

The other findings in terms of IOS and FLYC, the results show that there is a negative significance association between IOS and dividend policy and FLYC. In terms of industry

type, only the CONSUMER, TRADING and PLANTATIONS products are positively associated and significant and it suggest that firms associated with CONSUMER, TRADING and PLANTATIONS products declare more dividends as compared to all other types of industries. In summary, the results presented in Table 6.4 (Panel B) show significant associations between investment opportunity set (IOS), family controlled firms (FLYC), return on assets (ROA) and consumer, trading and plantations types of product however CEO duality (DUAL), and logarithm of market capitalisation (LOGMKTC) are found to be insignificant.

MODEL 6: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + β_8 BCOM + β_9 BSIZE + β_{10} IOSBSIZE + β_{11} IOSBCOM + e_{it}

The addition to this original model in Table 6.4 (Panel B) is on the interaction between investment opportunity set and board size (IOSBSIZE), BSIZE, the interaction between investment opportunity set and board composition (IOSBCOM) and BCOM. The *F*-value for model 6 for the sample full data is statistically significant at the 1 percent level and the adjusted R^2 is 8.30 percent ($p < 0.01$). The progressive additions of the above mentioned variables have resulted in the IOSBSIZE to have a strong positive significant association with dividend policy and indicate that dividend payout is weaker for firms with a larger board size. Hence, it supports the hypothesis $H3_a$ which proposes that the negative relationship between firm's investment opportunity set and dividend payout is weaker for firms with larger board size. Likewise, with regards to IOSBCOM, the relationship between IOS and BCOM is weaker for firms with more independent directors representing the board and the results support hypothesis $H2_a$.

The other findings in terms of IOS and FLYC show a negative significance association between IOS and dividend policy and FLYC. In terms of type of industry, CONSUMER, TRADING and PLANTATIONS maintain a positive significant association with dividend policy. In summary, the results presented in Table 6.4 (Panel B) (Models 5 – 8) show significant association between investment opportunity set (IOS), family controlled firms (FLYC), return on assets (ROA), industry type of products such as consumer, trading and plantation, IOSBCOM and IOSBSIZE. However, the association between DPP and CEO duality (DUAL) and logarithm of market capitalisation (LOGMKTC) is found to be insignificant.

MODEL 7: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + β_8 BCOM + β_9 BSIZE + β_{10} IOSGLC + e $_{it}$

The addition to this original model in Table 6.4 (Panel B) is on the interaction between investment opportunity set and government linked companies (IOSGLC) and board size and board composition. The *F*-value for model 7 for the full sample is statistically significant at the 1 percent level and the adjusted R^2 is 7.30 percent ($p < 0.01$). In terms of the relationship between the interactions of IOSGLC and dividend policy, it is predicted that a positive sign indicates that government linked companies pay higher dividends as compared to non government linked companies. However, in this model, there has been insignificant association between IOSGLC and dividend policy. The other findings in terms of IOS and FLYC show a negative significance association between IOS and dividend policy and FLYC. In terms of industry type, the consumer, trading and plantation, the results show a positive and significant association.

MODEL 8: $DPP = \beta_0 + \beta_1 MBE + \beta_2 DUAL + \beta_3 LOGMKTC + \beta_4 ROA + \beta_5 INDTYPE + \beta_6 GLC + \beta_7 FLYC + \beta_8 BCOM + \beta_9 BSIZE + \beta_{10} IOSBCOM + \beta_{11} IOSBSIZE + \beta_{12} IOSGLC + e_{it}$

The addition to this original model in Table 6.4 (Panel B) is on the interaction between investment opportunity set and board size (IOSBSIZE), BSIZE, the interaction between investment opportunity set and board composition (IOSBCOM), BCOM and the interaction between investment opportunity set and government linked company (IOSGLC). The *F*-value for model 8 for the full sample data is statistically significant at the 1 percent level and the adjusted R^2 is 8.30 percent ($p < 0.01$). The progressive additions of the above mentioned variables to the interactive variable of IOSGLC have no effect on the results of the dividend policy. The other findings in terms of IOS, FLYC and the IOSBSIZE are the same as per the previous model. In summary, the results show significant association between IOS, family controlled firms (FLYC), return on assets (ROA) CONSUMER, TRADING and PLANTATION type of product IOSBCOM and IOSBSIZE. However, the association between DPP and CEO duality (DUAL), logarithm of market capitalisation (LOGMKTC) is found to be insignificant.

MODEL 9: $DPP = \beta_0 + \beta_1 MBE + \beta_2 DUAL + \beta_3 LOGMKTC + \beta_4 ROA + \beta_5 INDTYPE + \beta_6 GLC + \beta_7 FLYC + \beta_8 BCOM + \beta_9 BSIZE + \beta_{10} IOSFLYC + e_{it}$

The addition to this original model in Table 6.4 (Panel B) is on the interaction between investment opportunity set and family controlled firms (IOSFLYC) and board size and board composition. The *F*-value for model 9 is statistically significant at the 1 percent level and the adjusted R^2 is 8.60 percent ($p < 0.01$). On the relationship between the interaction IOSFLYC and dividend policy, it is predicted that dividend payout is said to be weaker for

family controlled firms. This study found a strong positive significant association between IOSFLYC and dividend policy and hence, as the coefficient is statistically significant, hypothesis $H5_b$ is supported. In terms of industry type, CONSUMER, TRADING and PLANTATIONS the result obtained is positively associated and significant.

MODEL 10: DPP = β_0 + β_1MBE + β_2DUAL + β_3 LOGMKTC + β_4ROA + β_5 INDTYPE + β_6GLC + β_7 FLYC + β_8 BCOM + β_9 BSIZE + β_{10} IOSBCOM + β_{11} IOSBSIZE + β_{12} IOSGLC + β_{13} IOSFLYC + e_{it}

This model in Table 6.4 (Panel B) consists of a combination of the progressive variables discussed earlier. The *F*-value for model 10 for the full sample data is statistically significant at the 1 percent level and the adjusted R^2 is 8.80 percent ($p < 0.01$). The progressive additions of the above mentioned variables have resulted on the significant negative association between Investment opportunity set (IOS), family control (FLYC) and return on assets (ROA). IOSBSIZE, IOSFLYC and the results of CONSUMER, TRADING and PLANTATION as the industry product showed a positive significant relationship with dividend payout. The other variables are found to be insignificant.

6.4.2. Basic model with control variables specifically on government linked and non-government linked companies.

Table 6.4 (Panel C) report on the significance of dividend payout to government linked and non-government linked companies. The *F*-value for the full sample data is statistically significant at the (0.235) and (0.000) level respectively for the government linked and non-government linked respectively. The adjusted R^2 combined for the three year period is 10.2 and 7.50 percent respectively for the government linked and non-government linked companies. This statistic range although low is still under the acceptable limits based on

the previous study results as discussed in Section 6.4. From the analyses conducted, it is found that three variables tested in the study are significantly associated with dividend payout policy.

Table 6.4 (Panel C)
Multiple Regression Results

	GLCs		NGLCs	
	Coeff	**t-stat**	**Coeff**	**t-stat**
Pooled EGLS				
(Constant)	31.721	1.430	30.681	4.600***
MBE	-0.017	0.071	-0.231	-3.226***
DUAL	-6.600	-0.330	-4.951	-1.044
LOGMKTC	0.693	0.349	0.416	0.441
ROA	-66.404	-0.962	-13.931	-1.201
DTA	-5.824	-1.123	-1.136	-0.717
CONSUMER	-3.600	-0.244	11.062	2.985***
TRADING			9.159	2.950***
PROPERTIES			6.998	2.373***
CONSTRUCTION	-20.629	-1.664	8.072	1.889*
PLANTATION	10.573	0.148	12.084	3.682***
INDUSTRIAL	16.943	1.363		
FLYC			-7.602	-2.426**
BCOM	1.489	0.107	-1.541	-0.339
BSIZE	1.713	0.800	0.339	0.717
Year Dummy 1		0.183		0.031
Year Dummy 2		-0.293		-0.571
Adjusted R^2		0.102		0.075
F statistic		1.365		2.809
F-value		0.235		0.000
N		96		804

Notes:
The reported *t*-value and the significance opposite each variable indicates whether the variable is significantly contributing to the equation model. ***Significance at 1 %; **significance at 5 % level and *significance at 10 % level.

MBE = [Shares outstanding multiply shares closing price] divided by common equity; DUAL = Duality, LOGMKTC = Log of Market Capitalisation; ROA = Return on assets; Industry type = CONSUMER; TRADING; PROPERTIES; CONSTRUCTION; PLANTATIONS & INDUSTRIAL; FLYC = Family controlled firms; BCOM = Board composition (in terms of proportion of independent directors), BSIZE = Board size; Year Dummies = control for years.

The results presented in Table 6.4 (Panel C) show significant negative associations between investment opportunity set (IOS) and dividend policy in the context of non-government linked companies and on the contrary reports a positive and insignificant difference in the context of government linked companies. Hence, as the coefficient is not statistically significant, hypothesis H4 is not supported.

The results for the non-government linked companies are negatively significant and indicate that high growth non-government linked companies are paying lesser dividends and lower growth non-government linked companies are paying higher dividends. This result is consistent with the FCF theory that growth firms require more funds in order to finance their growth and therefore retains greater proportion of their earnings by paying lower dividends (Amidu & Abor, 2006).

Further, Gugler (2003) argue that ownership and control structure of the firm is a significant determinant of its dividend payout ratio in particular to state-controlled firms in Austria as they have large target payout ratios and are most reluctant to cut dividends despite the potential costs involved to shareholders.

6.5. ADDITIONAL ANALYSES

To ascertain the creditability of initial analysis, several additional tests are carried out. The additional tests are conducted to determine the sensitivity of the results as well to determine the robustness of the findings reported earlier in Section 6.4. In this study, the panel data methodology has been chosen for two reasons. First, this method allows the control of the so-called unobservable constant heterogeneity as each firm has its specificity and second is on the usage of the dynamic dimension where the panel data is tested for a long time adjusting processes (Arellano & Bover, 1990 and Arellano, 1993).

The panel data regression is run using fixed effect, random effect and OLS panel. The OLS regression is use to test and evaluate the contributions and significance of the hypotheses. The F-test underlines the appropriateness of the panel data approach and the Hausman test

results as per Table 6.5, shows the importance of the fixed effect component. By rejecting the null hypothesis, it is evident that fixed effect is different from the random effect and due to time effect, the fixed effect is rejected and the random effect is accepted.

Further, two diagnostic tests are used in all the regressions, which is the White (1980) specification test and a test for nonlinearities. The White test indicates whether the regression errors are heteroskedasticity and generate variance-covariance matrix of coefficient estimators that converges to the true variance-covariance matrix in large samples. The White asymptotic standard error for the estimated coefficients is typically lower than that from an ordinary-least-squares regression, so the significance of the coefficients generally increases if the White standard error is use to calculate the *t* – statistics. To test for nonlinearities, the Durban-Watson (DW) statistic is used. The Durbin-Watson test is a test for first-order serial correlation in the residuals of a time series regression. A value of 2.0 for the Durbin-Watson statistic indicates that there is no serial correlation (Asteriou, 2006).

This nonlinearities show up correlated errors for explanatory variables and it is known that except for the influence of nonlinearities, regression errors are cross-sectionally independent. In this study, the Durbin-Watson statistics is in the range of 0.823 and 1.635 which is within the permissible range. The basic model is based on the pooled OLS (Fixed) and after running the test it was evident that this test is more relevant for random effect.

6.6. DISCUSSION

6.6.1. Board of Directors' characteristics and dividend policy

6.6.1.1. Board size

Findings of this study are not consistent with prior studies for example (Adams & Mehran, 2003; Dalton & Dalton, 2005; Haniffa & Hudaib, 2006; Zubaidah *et al.* 2009) which found that a large board size, performs effectively with no communication and coordination problems. In fact, Cheng (2008) found that larger boards are associated with less variable total and abnormal accruals, less R and D spending and less frequent acquisition and restructuring activities. Further, Guest (2008) showed that larger boards in Australia, tantamount to greater advising needs and in the Indian context, Ajay (2007) and Jackling & Johl (2009) supported the view that larger boards leads to greater exposure to various resources externally (See Table 6.5 for the summary of the results).

Contrary to the support for the significance of large boards, there are also studies by (Vafeas, 2000; Mark & Yuanto, 2003; Nguyen & Faff, 2007; Chien, 2008; Cheng *et al*. 2008) that document smaller board with an average of 5 are better informed, regarded as having better monitoring capabilities and is more valuable when the market for corporate control is more active. On the other hand, although there have been support for a large board size and visa versa, there are also other studies by (Bhagat & Black, 2002; Yoksihawa & Phan, 2004) which found no significance difference on the relation between board size and performance. According to Bhagat & Black (2002) board size should be

taken to be endogenously related to other control variables and if similar control variables are used similar to Yermack (1986) the approach taken would lead to different results.

Based on the above evaluation of the impact and significance of board size as a determining factor for dividend payout, board size may not be one of the main criteria to ascertain the dividend payout but there are also other factors that need to be ascertained such as type of industry depending on a firm's organisation structure (Adam & Mehran, 2003); endogenous factors or due to small size of the pool of corporate directors (Chin *et al.,* 2004); economic considerations in particular to firms competitive environment and managerial team and differing institutional setting (Guest, 2008); concentrated ownership structure of Malaysian firms which consist generally of government control, family control or privately held firms.

Interestingly, on the interaction between board size and dividend payout, this study found a positive significance association between board size and dividend payout indicating that dividend payout is weaker for firms with a larger board size. Hence, these support the hypothesis that the negative relationship between a firm's investment opportunity set and dividend payout is weaker for firms with larger board size. Hence, this finding implicates the uniqueness of an emerging economy as there has been no similar study that has incorporated the said interaction.

6.6.1.2. Board composition

The findings from this study are inconsistent with a recent study in the Malaysian context by Sing & Ling (2008) where it was found that insiders would exert control over the firm

through the appointment of more insiders as well as combining the role of CEO and Chairman. The board will only seek to dominate its membership and decrease that of the other party and hence appointment of independent directors, are seen as just to fulfil the listing requirements rather than to improve corporate governance. But generally, the results are mixed. Independent directors on the board are seen to have diverse background, dominance, attributes, characteristics and expertise to improve board processes and decision making (Abdullah, 2004; Abdullah, 2007; Zubaidah *et al.,* 2009). Other studies outside Malaysia that show the proportion of independent directors to be positively correlated to accounting measures of performance and reduce agency cost are for example (Beasley, 1996; Dalton *et al.,* 1999; Hambrick & Jackson, 2000: Craven & Wallace, 2001; Klein, 2002, Chien, 2008).

In contrast, there are also critics that support the view that the proportion of independent directors to be adversely correlated to performance of the firm due to lack of independence, multiple appointments, time constraint and insufficient information (Patton & Baker, 1987; Klien, 1998; Gilson & Kraakman, 1991; Keasy & Wright, 1993; Coleman & Biekpe, 2007; Jackling & Johl, 2009). However, although the overall results are mixed, the choice of the board composition is rather subjective and is based on other factors such as size of the board, the extent to which the directors are independent of management, the director's shareholdings and CEO duality (Abdullah, 2004).

Further, there are also issues related to differences on the proportion of independent directors among largest firms in the UK, US and Japan in the range of approximately 30% to 49% and it varies considerably around the world. The above differences are developed over time through a wide variety of governance mechanisms, to overcome the agency

problem that arise from the separation of ownership and control (Maher & Andersonn, 2001). There are also unique situations in which even the use of ratio to compute the number of independent directors representing the board is of no use as there is evidence to show that generally outside directors do not attend board of directors meetings (Cho & Kim, 2007).

Interestingly, in the interaction between board composition and dividend payout, there exists a mixed and inconclusive result on the association between board composition and dividend payout. This study find a positive significance association between board composition and dividend payout indicating that dividend payout is weaker for firms with more non-independent directors. Hence, these support the hypothesis that the negative relationship between firms' investment opportunity set and dividend payout is weaker for firms with a larger number of independent directors representing the board. This finding implicates the uniqueness of an emerging economy as there is no similar study that has incorporated this said interaction.

Table 6.5
Summary of the Results

No	Hypothesis	t – statistics	Expected Results	Results Obtained	Comments
H1	There is a significant negative relationship between high growth firms and dividend policy *ceteris paribus.*	**Negative**	**Negative**	**Significant**	High growth firms pay lesser dividends and this supports the FCF theory.
H2a	The negative relationship between firms' investment opportunities and dividend payout is weaker for firms with more non independent directors.	**Positive**	**-**	**Significant**	Dividend payout is weaker for firms with more independent directors representing the board.
H2b	There is a positive association between dividend payout and board composition	**Negative**	**Positive**	**Not Significant**	Not supported
H3a	The negative relationship between firms' investment opportunities and dividend payout is weaker for firms with a larger board size.	**Positive**	**-**	**Significant**	Dividend payout is weaker for firms with larger board size.

No	Hypothesis	t statistics	Expected Results	Results Obtained	Comments
H3b	There is a positive association between dividend payout and board size	**Positive**	**-**	**Not Significant**	Not supported
H4	There is a positive relationship between government linked company and dividend payout.	**Positive**	**-**	**Not Significant**	Strong probability of Government linked companies paying out dividends irrespective of their performance.
H5a	There is a negative relationship between family controlled firm and dividend payout policy	**Negative**	**Negative**	**Significant**	Family controlled firms pay lesser dividends as they prefer to keep cash for expansion purposes.
H5b	The negative relationship between IOS and dividend payout is weaker for family controlled firms	**Negative**	**Negative**	**Significant**	Dividend payout is weaker for family controlled firms.

6.6.2. Ownership structure and dividend policy

6.6.2.1. Government ownership

This study found no significant association between government linked companies (GLCs) and dividend payout. Further, a study by Ling et al. (2008) for the period 2002 to 2005, argue that dividend policy of Malaysian public listed companies is rigid and sticky as managers are reluctant to cut dividend even when the overall performance of the company is deteriorating. Further, it was found that there are more dividend-paying companies than non-dividend paying companies and the dividend payer and non-payer firm's portrait different characteristics among themselves.

Gugler (2003) based on a study on Austrian firms, document that state control firms have large target payout ratios and are most reluctant to cut dividends, despite the potential costs involved for shareholders or when cuts are warranted and found that firms with low growth opportunities optimally disgorge cash. Further, Gul (1999) document that government ownership is a form of or at least similar to, institutional ownership and this is supported by (Guo & Ni, 2008) a study in US industrial firms which found that firms with higher institutional ownership are more likely to be dividend payers and hence indicate that the dividend paying decision is positively related to institutional ownership. In contrast, a study on Singapore government linked companies (Ang & Ding, 2006) document that Singaporean GLCs have higher valuations, better industry

and market averages and better corporate governance than a control group of non-GLCs.

In contrast, interestingly, this study finds a negative significant association between non-government linked companies (NGLCs) and dividend policy. Hence, the results obtain depicts that high growth non-government linked companies pay lower dividends and on the other hand, low growth firms pay higher dividends. This result is consistent with the studies of past researches such as Gul (1999) and Jensen (1986) that suggest that firms with low growth opportunities have more free cash flow and pay higher dividends to reduce the agency costs associated with the high free cash flow.

6.6.2.2. Family ownership

Importantly, this study finds a significant negative association between family ownership and dividend policy. In the East Asian context, incorporating data from Indonesia, Korea, Malaysia, the Philippines and Thailand (Hanazaki & Liu (2007) found three stylised facts. Firstly, corporate investment in five East Asian countries is determined by profitability, cash flow and credit risk. Secondly, family control firms face severe internal cash flow problems and lastly, comparison of pre and post crisis confirm that family controlled firms face severe internal funds constraints of investment than independent firms. These facts are envisaged to be the underlying factors for the existence of a significant negative association between family ownership and dividend policy.

Further, James (2003) and Fama (1983) document that families invest in an efficient manner because they are concerned with the wealth transfer to the next generation and family relationship provide improved monitoring respectively. Alpay *et al.* (2008) also found that the family controlled firms appear to maximise sales and shareholder value. The results are consistent with Ben-Amar & Andre (2006) study in Canada which indicates that higher earnings are associated with founding family ownership. Other studies by McConaughy *et al.* (1998) and Wiwwattanakantang (2001) suggest that family firms have a performance advantage over non-family firm's and family members do provide good monitoring and incentive to other stakeholders.

Therefore, it could be envisaged from the above behavioural aspects of family controlled firms that such firms pursue a significantly different dividend policy. These firms show no smoothing in dividends, have lower payout ratios and are least reluctant to cut dividends. Owner-managers of these firms are reactive to investment opportunities and financing needs and would generally adjust dividend payouts accordingly. Claessens *et al.* (1999), document that a quarter of corporate sector in Malaysia is controlled by the largest ten families. Lim (1981) document that ownership structures of the largest 100 corporations in Malaysia and the findings show that there is a high degree of concentration in Malaysia's corporate economy. The study also identified that the stock exchange is highly concentrated on the hands of a few wealthy families and the high concentration of control of wealthy families to control an amount of capital many times is due to their highly sophisticated system of interlocking of stock ownership.

6.6.3. Growth opportunities and dividend policy

Consistent with expectations, this study finds a negative significant association between investment opportunity set (IOS) and dividend policy. The negative and significant result between dividend policy and investment opportunity set supports the contracting explanation based on Jensen's FCF theory which suggests that high growth firms pay lower dividends and on the contrary low growth firms pay higher dividends. These findings are, also consistent with prior studies in developed countries and emerging markets for example (Amidu & Abor, 2006; Mitton, 2004; La Porta *et al.* 2000). Other studies that posit similar results in the developed countries are (Smith & Watts, 1992; Gaver & Gaver, 1993; Gul & Kealey, 1999; D'Souza & Saxena, 1999 and Jensen, 1986).

In summary, prior studies based mainly on developed countries have supported the view that high growth firms declare lower dividends based on the Free Cash Flow theory. However, in the Malaysian context, the FCF theory is not applicable to the state controlled public listed companies. Hence, the FCF theory in the Malaysian context is only applicable to non-state controlled companies. The implication here is that there is a likelihood that state controlled firms are paying dividends irrespective of their performance and hence are reluctant to cut dividends even when the company is not performing to expectations and this result holds for both high and low growth state owned firms. With respect to family controlled firms, the firms are paying lesser dividend payouts in line with the agency cost principle. Family controlled firms align their interest of the

owners to that of the shareholders as generally the shareholders are also the owners of the firm.

6.7. SUMMARY AND CONCLUSION

The findings of this study strongly support the existence of the negative association between ownership structure in non government linked companies and family ownership and dividend payout. Further, this study also supports the positive relationship between interaction of board size, board composition and family control and dividend payout. The analyses show the negative relationship between IOS and dividend payout is weaker for firms with larger board size, more independent directors representing the board and family controlled firms. The next and final chapter will summarise and conclude the discussion of this thesis.

CHAPTER 7

SUMMARY AND CONCLUSION

7.1. INTRODUCTION

The purpose of this chapter is to reflect on the implications of the findings and discuss the contribution and limitations of the study as well as suggestions for future research. The final chapter is organised as follows. Section 7.2 summarises the overall findings of this study. Section 7.3 addresses the potential implications and contributions of the study, followed by a discussion on the limitations of the study in Section 7.4. Section 7.5 offers several possible avenues for further research and Section 7.6 concludes the chapter.

7.2. SUMMARY OF FINDINGS

The determination of a firm's dividend payout is still a relatively unclear and complicated process. Many factors and considerations have to be taken into acccount. More importantly the governance of the firms does play a role. To add to this complexity, the political, cultural and economic environment further impacts the level of governance (McKinsey & Company, 2002). Furthermore, investors worldwide demand for well-governed companies and are willing to pay a high premium for companies (in both emerging and developed markets) with good corporate governance. Thus, several monitoring and control practices act as governance mechanisms which protect minority interest shareholders from expropriation by corporate insiders. However, their effectiveness in countries

with weak institutions and little protection of property rights is not well researched or understood. Dividend payout is of particular interest because of its unravelling effects on external and internal corporate governance. Interestingly, dividend payouts are also seen as substitutes for good governance (Sawicki, 2009).

Generally, it is also found in the context of developed countries that there is a link between growth and dividend payout. Therefore this study examined whether the relationship between growth and dividend payout still holds in the context of Malaysia, a developing country with its unique political economy and concentrated corporate ownership held by family and government-linked firms. It also provided an opportunity to examine whether internal governance mechanisms such as board size and composition as well as external mechanisms such as ownership, moderated the relationship between growth and dividend payouts.

Further, as prior studies are primarily focused on developed economies, especially the western market-based capitalist and limited prior studies related to developing economies which are more relationship-based capitalist, an understanding of the applicability of the extant theories relating to the association between IOS and dividend payout in the context of the Malaysian firms will contribute to extending the empirical evidence beyond that which is obtained almost exclusively in US, UK or EU firms.

7.2.1. Board size (BSIZE)

The study on Board size (BSIZE) is found to have insignificant association with dividend payout. This is consistent with other prior studies which show no significant difference on the relation between board size and performance (Bhagat & Black, 2002).

Hence, the results reemphasise the fact that board size may not be the criteria to ascertain the dividend payout and are more suitable for certain type of industry only and it depends more on a firm's organisation structure (Alpay et al., 2008).

7.2.1.1. Interaction between IOS and board size (IOSBSIZE) and dividend payout

With respect to the interaction between IOSBSIZE and dividend payout, the study found a positive significant association between board size and dividend payout hence indicating that the negative relationship between IOS and dividend payout is weaker for firms with a larger board size. The conclusion that can be drawn from this finding is that dividend payout is weaker for firms that maintain a larger board size as larger boards affect the value of a firm in a negative form as there is agency cost involved.

7.2.2. Board Composition (BCOM)

With regards to board composition (BCOM), this study found that there is insignificant association between board composition (BCOM) and dividend

payout. However the results obtain from prior studies are mixed. There has been numerous studies that found the proportion of independent directors to be positively correlated to accounting measures of performance and on the contrary, there has also been numerous studies that document an existence of a negative association between the representation of the of independent directors to performance.

The results are mixed mainly due to other factors such as size of the board, the extent to which the directors are independent of management, the extent of director's shareholdings, CEO duality, a firm's competitive environment, managerial team and firm characteristics.

7.2.2.1. Interaction between IOS and board composition (IOSBCOM) and dividend payout

On the interaction between IOSBCOM and dividend payout, this study found a positive significant association, between board composition and dividend payout. Hence, indicating that the negative relationship between IOS and dividend payout is weaker for firms with a larger component of independent directors representing the board. The conclusion that can be drawn from this finding is that dividend payout is weaker for firms that maintain a larger number of independent directors on the board i.e the availability of a larger number of independent directors representing the board does have an impact on the scale of dividend to be paid out.

7.2.3. Government Ownership (GLCs)

This study found insignificant association between government link companies (GLCs) and dividend payout. Prior studies that support the incidence of non association between government linked and dividend payout policy are for example Berle & Means (1932), Blair (1995) and Bushee (1998).

On the contrary, prior studies by Gul (1999) and Gugler (2003) document that state controlled firms with good investment opportunities are most reluctant to cut dividends even when cuts are warranted and on the other hand, firms with low growth opportunities optimally disgorge cash irrespective of who controls the firm. In contrast, Guo & Ni (2008) a study on institutional ownership, found that firms with higher institutional ownership are more likely to pay dividends and continue to pay dividends. Other studies that support the strong correlation between performance and GLCs are for example Feng *et al.,* (2004) and Ang & Ding (2006).

The conclusion that can be drawn from this finding is that there has been no conclusive finding with regard to the association between dividend payout and government linked companies in the Malaysian context although it can be envisaged that high growth non-government linked companies pay lower dividends and low growth non-government linked companies pay higher dividends. In other words, GLCs behave differently from NGLCs when it comes to dividend payout and this is an important evidence about the political economy

of Malaysian businesses. This also cautions one that application of FCF needs to be considered carefully in the context of the political economy of the country.

7.2.4. Family control (FLYC)

Whilst prior studies showed mixed results on the relationship between family controlled firms and dividend payout (Kang *et al.,* 2007; Chen *et al.,* 2005; and Gadhoum *et al.,* 2007), this study found a significant negative association between family ownership and dividend policy and it supports the findings of (Fama, 1983; McConaughy *et al.,* 1998; Wiwwattanakantang, 2001; James, 2003; Alpay *et al.,* 2008).

Hence, it is evidenced that in the Malaysian context family controlled firms listed in the Bursa Saham are considered large and pay lesser dividends. In particular, it highlights that Malaysian family controlled firms pay lesser dividend and appear to maximise shareholders' value. Hence, the results obtained in this study extend the literature on the contracting theory based on Jensen's Free Cash Flow Theory which suggests that high growth firms pay lower dividends due to their heavy investments and the expectation of a better return by shareholders in the near future.

7.2.4.1. Interaction between IOS and family control (IOSFLYC) and dividend payout

In the interaction between IOS and family controlled firms, this study found a significant positive significant association between the interaction (IOSFLYC)

and dividend payout which reemphasise the fact that IOS and dividend payout relationship is stronger in non family businesses and hence supports the FCF hypothesis.

7.2.5. IOS and dividend payout

Interestingly, consistent with expectations, this study finds a negative significant association between investment opportunity set (IOS) and dividend policy for non-government linked companies and family control companies. The results obtained in this study extend the literature on the contracting theory based on Jensen's Free Cash Flow theory which suggests that high growth firms pay lower dividends due to their heavy investments and the expectation of a better return by shareholders in the near future. Further, this study is also consistent with prior studies in developed countries (La Porta *et al.,* 2000; Mitton, 2004; Amidu & Abor, 2000). Other prior studies which also document similar significant negative relationship are Jensen (1986), Smith & Watts (1992), Gaver & Gaver (1993), Gul & Kealey (1999) and D'Souza & Saxena (1999).

7.3. IMPLICATIONS OF STUDY

1. Implications for Theory

This study found a strong negative and significant relationship between growth opportunities and dividend policy. It is ensuring to note that this is consistent and extends the literature on the contracting theory based on Jensen's Free Cash Flow theory. As the prior studies on the FCF theory have been generally based

on developed countries, the current findings help establish the fact that FCF theory is also applicable to East Asian countries in general and to the Malaysian context, specifically.

More precisely, the model on 'dividend as an outcome of legal protection of shareholders' is more appropriate in this context as this model views that an effective system of legal protection of shareholders and minority shareholders acts as a deterrent for the insiders from using too high a fraction of company profits to benefit themselves (Fluck, 1995; Myers, 1998; and Gomes, 2000). Hence, the greater the rights of the minority shareholders, the more cash can be disgorged to them from the company (La Porta *et al.,* 2000).

The implication of this model 'outcome models of dividends' is that shareholders who feel protected would expect lower dividend payouts and high investment rates, from a company with good opportunities because they know that as the company's investment payoff, there would be better dividends. As a result of this, a good shareholder protection means, high growth firms should have significantly lower dividend payouts than low growth firms.

Further, a firm's 'Free cash flow' (FCF) is also linked to its investment and dividend policy. The higher the investment for the period, the smaller the dividend payout or the more the equity issued for the period. Jensen (1986) document that firms with more growth opportunities have lower cash flow and thus pay lower dividend and similarly firms with less growth opportunities have

higher cash flow and thus pay higher dividends and hence there should be positive relation between the proportion of assets and dividend yield.

This study is also useful in providing empirical evidence on the dividend payout by non-state controlled companies, family controlled firms and also on the effective monitoring role of governance mechanisms such as size of the board and the number of independent directors representing the board. This in turn can be used in future studies on the applicability of the contracting explanation based on Jensen's FCF theory to ownership structure and the governance mechanism in other Asian countries.

2. Implications for Policymakers

The results document a negative significant association between growth opportunities and dividend payout. Hence, high growth firms require more funds in order to finance their growth and therefore would typically retain greater proportion of their earnings by paying lower dividends. Also firms with higher market to book value tend to have good investment opportunities and would therefore pay lower dividends. These results have implications for policy setters by suggesting that IOS is negatively associated with dividend payout and provide insight that non-GLCs in the Malaysian context are associated with the applicability of the contracting explanation based on Jensen's FCF theory on dividend. Hence, the results demonstrate the importance of an effective legal system and minority shareholder protection consistent with substantial improvements in governance empowering shareholders.

Further, dividends policies are guided by Malaysian Companies Act, 1965 and established case law. The Companies Act 1965 (section 365) only stipulates that dividend should be distributed from profits but does not indicate whether it should be current profits or accumulated profits. In Malaysia, there have been no standard rules governing the distributability of dividend (Chan & Susela, 2009). By examining the association between growth opportunities and dividend policy, this study provides a basis to determine the behaviour of high growth and low growth firms on their distribution of dividends. The findings of this study is useful to the regulators in deliberating policies on issues related to dividend policy and corporate governance, thus determining the direction of future dividend rules for Malaysian companies.

With regard to board size and board composition, this study found no significant relationship with dividend payout. Hence the implication to policy setters is that, in Malaysia, the size of the board and the proportion of independent directors representing the board have no any effect on dividend policy. However, the policy setters may want to consider the following two issues either separately or jointly. Firstly, in terms of board size, what determines an ideal board size for an organisation to perform efficiently and effectively? Secondly, with regards to board composition, there remain some questions with regard to aspects of outside directors and their link to higher performance of the board. For instance, the expertise brought in by outside directors to enhance company performance, they are not mutually exclusive and the observed effects may be of some function that is already expected from the board.

With regard to the implication of the CEO duality on board size and board composition, this study shows that there is an insignificant effect on CEO duality on company performance. The reason could be because in Malaysia, the CEO and directors are less constrained by organisational system and structures as compared to developed countries for example US and UK. Further, although there is an assumption that founders of companies becoming a chairman and CEO of the firm but the CEO would have only operational authority and has not much influence on firm's performance (Nordin *et al.,* 2005).

With respect to the interaction between IOS and board size and board composition, this contributes to extant literature, as this study found a positive significant association between the interactions and dividend payout. Hence the implication on the interaction between board size and IOS is that, high growth companies seem to maintain a larger number of boards of director and also represented by a proportionate number of independent directors.

On the subject of ownership and family controlled firms, the results show a negative significant association between family control firms and dividend payout. The implication of this finding to the policy setters is that family controlled firms are paying lesser dividends as compared to non-family control firms. This contribute to extant literature as the study offers insights to policy makers interested in enhancing the extent to which minority shareholders are protected. In particular, it highlights that improvements in corporate governance will be most beneficial in larger firms (as the sample taken was based on 300

highest capitalised public listed companies), where potential expropriation is greatest.

Policy setters may want to review the requirement for Malaysian firms to have a dispersed ownership structure as well as a board dominated by outside directors. This is because family firms' financial policies are insufficiently studied in finance and have interesting features which deserve the attention of financial academics and professionals. Further, as family controlled firms are dominant and not fully researched in East Asian countries, the findings of this study support the call to address the implementation of corporate governance mechanisms that are most appropriate for the institutional context of a particular country.

3. Implication to Management and Shareholders

The result presented in this study is certainly useful to management and shareholders who are concerned with dividend payout and corporate governance practices in their firms. This is because the concentration of ownership structure (Government ownership and non-government ownership; family ownership) and to a certain extent, the interaction of IOS and size of the board and the number of independent directors representing the board, have a strong influence on the dividend payout of the companies.

7.4. LIMITATIONS OF THE STUDY

The above results are however subject to a few limitations. The main limitations of the study are listed below:

1 This study is based on the top 300 highest capitalised Malaysian public listed companies meaning that the validation of the conclusion might be applicable to large companies only. Furthermore, this study only use corporate governance data for 3 years and hence may not be generalised for other periods such as prior to governance reforms or during the crisis.

2 There may be an element of bias as only firms reporting details on all the corporate variables of interest are included in the analysis (Gul & Kealey, 1999; Che Haat et al., 2008).

7.5. SUGGESTIONS FOR FUTURE RESEARCH

Extension to the current study is possible in the following areas:

1. Other important monitoring mechanism variables that could be added on to the model to provide greater support on the association between corporate governance and dividend policy are such as the interaction between politically linked government companies and IOS, non-politically linked government companies and IOS, ethnicity and IOS. Hence, future studies may consider the effect of these additional variables on the whole model of this study.

2. A longer longitudinal study with more recent data is proposed to investigate the relevant corporate governance issues using time series data.

3. Future studies may want to consider other aspects of corporate governance such as ethnicity, differentiating ownership held by institutional, individual investors and block holders. Ethnicity can be further subdivided into Bumiputera and non-Bumiputera ownership. For instance, features such as concentrated ownership structure as well as ethnic Chinese domination in businesses also exist in other East Asian countries such as Singapore, Indonesia, Thailand and Hong Kong. Managerial ownership may be differentiated into direct and indirect interests and by using different cut off points.

4. This research is situated in the positivist paradigm, which relies mainly on the quantitative based research approach and perhaps future research might follow up this study using interpretive or critical perspective to delve into issues such as on concrete measurement of the IOS and dividend payout.

5. A comparative analysis could be performed between Malaysia and other developing countries to gauge and scrutinise the similarities and the main differences on the determination of dividend payout.

6. By studying the continuing controversy over the merits of board size, board composition and CEO duality and its effects on organisational

performance, the significant composition of a proper board size or board composition on the dividends can be gauged. Following from these findings, it would be useful to also consider the following directions for future research:

i) What determines the decision to pay or not to pay dividends in listed firms?

ii) What determines the dividend policy decisions of unquoted firms in Malaysia?

7. It would be useful for future studies to examine politically connected firms in order to understand how businesses operate in Malaysia. Johnson & Mitton (2003) report that firms with political connections has worse stock returns in the early phase of the Asian financial crisis compared to the non-political linked firms in Malaysia. It is possible that politically and non-politically connected firms in Malaysia have a different impact on the dividend payout.

8. Finally, future studies could test the relationship examined in this study using different proxies of investment opportunity set such as price earnings ratio and capital expenditure ratio (R & D expenditures divided by total assets or sales) as suggested by Adam & Goyal (2008) as well as the growth in working capital ratio and growth return on capital employed by Burton (2003). As researchers do not identity a uniform method to measure growth opportunities, testing the relationship using different proxies of growth opportunities could validate the existing

findings of this study. It is also recommended that a combination of both market based and non-market growth proxies are used to enhance the robustness of the test.

9 Agrawal & Knoeber (1996) suggest that corporate governance variables are used as substitutes for each other and that firms use these variables optimally. In this study, four variables are used as a monitoring mechanism and that no consideration is provided on the substitution issue as there are many incentives and monitoring mechanisms available to a firm.

10 Although this study period was expected to have most of the corporate governance reforms, an extension of this study to subsequent years to 2007 onwards would certainly help determine whether more reforms are on the pipeline.

7.6. CONCLUSION

The present study is pursued as an attempt to investigate the effect of corporate governance mechanism such as ownership structure, board of directors' characteristics and IOS interaction on dividend payouts in Malaysia. More importantly this study in contrary to other developed countries, focus on ownership structure and document the consistent support on the negative significant association between growth opportunities and dividend payout of non

GLCs only. It is assuring to note that this is consistent with the contracting explanation based on Jensen's FCF theory.

With regard to board composition and board size, this study in contrary to other recent studies in Malaysia (Zubaidah *et al.* 2009), India (Jackling & Johl, 2009), US (Cheng *et al.* 2008) and UK (Guest, 2008) found that the corporate governance mechanism in board size and board composition have no influence or impact on the dividend policy in Malaysia. This continuing controversy over the appropriate number of independent directors that should represent the board and the ideal size of a board to be considered effective has been attributed to the unique ownership structure, organisational culture, legal system and the business environment uphold by any one country.

With respect to interactions between variables, this study is the first to report on the positive significant interactions between IOS and moderating variables in board size, board composition and family owned companies. Further, although Malaysia comes under the common law regime, the dividend policy behaviour of GLCs and family controlled firms, differ immeasurably from the behaviour of other common law countries. This study found that the family controlled firms are paying lesser dividends however the results obtained was inconclusive with regards to GLCs, in which there was no evidence on the application of the contracting explanation based on Jensen's FCF theory applied to GLCs.