Factors Influencing the Performance of Family-Controlled Publicly-Listed Firms in Malaysia

Review of Integrative Business & Economics Research

Ng, Sin Huei *
Faculty of Business, Communication and Law, INTI International University
Email: sinhuei.ng@newinti.edu.my

Yeoh, Ken
Newcastle Business School, Northumbria University
Email: ken.yeoh@northumbria.ac.uk

Lau, Chee Kwong
University of Nottingham (Malaysia Campus)
Email: Lau.CheeKwong@nottingham.edu.my

Shrives, Philip
Newcastle Business School, Northumbria University
Email: philip.shrives@northumbria.ac.uk

ABSTRACT

While highly concentrated equity ownership of publicly-listed firms is a common phenomenon in most developing capital markets worldwide, the various factors that influence the performance of firms controlled specifically by family blockholders is only partially understood at present. Therefore, we scrutinize the many channels/means by which this distinctive phenomenon manifests itself. On the basis of data covering 84 of the largest Malaysian publicly-listed, family-controlled firms in 2008, we found that the performance of family-controlled firms are significantly influenced by characteristics such as ethnicity of controlling families (context-specific), nature of family involvement in firm management and presence of other blockholders.

Keywords

Concentrated Ownership, Family-Controlled Firms, Firm Performance, Corporate Governance

1. Introduction

Highly concentrated equity ownership of publicly-listed firms is a common phenomenon in most developing capital markets (Claessens et al., 2001). Of the many types of significant shareholders, families are by far the most pervasive (Bhaumik and Gregoriou, 2010). A majority of controlling family shareholders are also managers of the firms that they partly own. Academics often argue

that the consequent lack of separation between ownership and control often results in excessive power vested in the hands these controlling families. This is known as the "principal-principal dilemma" where controlling family shareholder/managers may (i) have conflicting objectives with, and/or (ii) possess both the scope and motivation to; expropriate their firms' minority shareholders (Dharwadkar et al., 2000; Young et al., 2008).

Within the corporate governance and also ownership structure literature, family owner/managers are envisaged to expropriate by using key positions held in their firms' board and/or top management to engage in activities that unfairly benefit themselves such as siphoning out firms' assets. Moreover, some academics contend that family-controlled firms are less efficient and less profitable owing to a number of inherent weaknesses. For example, the tendency for family members to remain in firm management even though they may not be sufficiently competent (Chandler, 1990; Shleifer and Vishny, 1997; Morck & Yeung, 2003; Anderson and Reeb, 2003). Such evidence suggests that concentrated family ownership is detrimental to firm performance.

On the contrary, there is a growing body of empirical evidence indicating that concentrated family ownership is not necessarily sub-optimal. For instance, concentrated ownership is found to provide a strong incentive for controlling families to closely monitor the actions of management and thus reduce agency problems arising from misalignment of objectives (Demsetz and Lehn, 1985; Anderson and Reeb, 2003). Agency cost reduction results in more savings and surplus firm resources and, in turn, increases financial returns (Miller and Le-Breton Miller, 2006). Besides this incentive effect, researchers have also identified other benefits such as controlling families' long-term orientation and particularism that result in improved corporate performance (Miller and Le-Breton Miller, 2006; Davis et al., 1997; Anderson and Reeb, 2003; Carney, 2005).

The conflicting arguments above clearly show that a range of issues pertaining to concentrated ownership and firm performance remain unresolved empirically, especially since past studies have yielded inconclusive results (Tam and Tan, 2007; Morck et al., 1988; Demsetz and Villalonga, 2001). Of particular interest is the identification of factors that influence the concentrated ownership-firm performance relationship (Bennedsen et al., 2010). While these issues are being actively debated in the West in recent years (Andres, 2008; Jara-Bertin et al., 2008; and Miller et al., 2007), scant attention has been paid to understanding this phenomenon in developing capital markets. Past studies also tended to conceptualize family-controlled firms as a homogenous firm type (Claessens et al, 1999; Tam and Tan, 2007; Haslindar et al., 2008; Almeida et al., 2011).

In response, our study investigates (i) a distinctive form of concentrated ownership, that is, by controlling families and (ii) the various channels/means by which this phenomenon manifests itself and how these subsequently affect firm performance. Bennedsen et al. (2010) vindicated our focus by highlighting that this distinctive type of firm provides a fertile ground for corporate governance and performance research. This is because family-controlled firms are associated with significantly more dispersion in performance compared to other firm types and the mechanisms driving such discrepancies are only partially understood at present.

Specifically, our paper scrutinizes various aspects relating to concentrated family ownership and corporate performance within the developing Malaysian capital market setting. Similar to other developing capital markets, ownership of publicly-listed firms in Malaysia is mostly concentrated

in the hands of a small number of powerful families. In fact, two-thirds of publicly-listed Malaysian firms have families as controlling shareholders (Haslindar and Fazilah, 2009). More importantly, most factors typically related to the phenomenon are present in the Malaysian capital market, making it a suitable choice for an in-depth study.

Lastly, in response to calls by authors such as Aguilera and Jackson (2003), Demirguc-Kunt and Maksimovic (2002) and Gabrielsson and Huse (2004) to enhance our understanding of corporate governance in a more contextualized and socially embedded manner, we devote a part of our study to a few context-specific variables. Our intention is to illustrate how such an approach is a potentially fruitful avenue for future corporate governance research.

We make use of a widely accepted threshold in determining the existence of concentrated ownership - the 20% equity ownership cut-off - established by LaPorta et al. (1999) and Claessens et al. (2000). If the largest shareholder owns 20% or more a firm's shares, then he/she has effective control (LaPorta et al., 1999). By extension, we assume members of the same family to be persons acting in concert. We therefore define a family-controlled firm as one that is owned by one or more family members who collectively own 20 percent or more shareholdings.

2. Literature Review and Hypotheses

2.1 Controlling Shareholder Types (Family and Non-Family)

According to Peng and Yi (2006), empirical research on the influence of ownership structures on firm performance have yielded inconclusive evidence thus far. For example, Anderson and Reeb (2003) found that large US firms with concentrated family ownership actually perform better than non-family ones. This contradicts previous empirical findings that family firms in the US are inherently less efficient. Again, the question as to whether family firms have positive or negative impact on firm performance remains unresolved.

As mentioned earlier, studies beyond developed Western countries are relatively sparse. In Malaysia, Haslindar et al. (2008) find that on average, the value of family-controlled firms is lower compared to those with non-family owners. However, their study only categorises the firms broadly into family and non-family firms. They did not consider the fact that family-controlled firms are not homogenous firm type again meriting a finer-grained analysis. Hence:

H1: Family firms perform differently from other non-family firms namely the state-owned, foreign-owned, public institutional investors-controlled and widely-held firms.

2.2 Proportion of Ownership Concentration

Some academics argue that proportion of share ownership is positively related to firm performance up to a certain level (Morck et al., 1988; Chen et al., 2005). This is because, as proportion of share ownership increases, the family shareholder has got (i) increasing clout owing

to substantial and increasing voting power to influence managerial decision making and (ii) a significant vested interest as a large proportion of the family's wealth is dependent upon the firm performing well. Put simply, the controlling family would have a greater incentive to work harder. Furthermore, benefits accruing to the family are large enough to spur active monitoring since this greatly outweighs the associated costs as well as free-riding by smaller shareholders.

When the family proportion of ownership is very high, however, non-value maximizing behaviour such as expropriating firm resources to create private control benefits (to the detriment of other smaller shareholders) would be an increasingly attractive proposition (Shleifer and Vishny, 1997; Morck et al. 1988). Put simply, the concentrated ownership-performance relationship is a trade-off between the incentive/alignment effect and the entrenchment effect. Indeed, Morck et al. (1988) and McConnell and Servaes (1990) find a non-monotonic relationship where firm performance first increases, then declines, and then raises again as ownership concentration increases. Hence:

H2: Family firms' performance is non-monotonically related to the fraction of family ownership.

2.3 Nature of Family Involvement

The differences between a family firm that is managed by an individual-owner (normally as the CEO or board chairman) and one managed collectively by multiple family members are often overlooked. In this regard, Miller et al. (2007) found that the out-performance of family firms is largely driven by lone-founder firms and the effect vanishes when these firms are excluded. They reasoned that firms involving multiple family members are more likely to succumb to complicated governance situations than lone-founder ones (Bertrand and Schoar, 2006).

On the contrary, Miller and Le Breton-Miller (2006) argue that the presence of multiple family members will correlate positively with firm performance due to the positive effect of multifaceted cooperation and stewardship. Separately, professionally-managed family firms are claimed to be distinctive from controlling family-run ones. Duréndez et al. (2007) find that professional managers exhibit more innovative capacity and higher overall managerial competence. Professionally-managed family firms also have the opportunity to recruit the most talented and skillful managers without being restricted by a much smaller pool consisting of family members only. Conversely, hiring professional managers in family firms may invite rampant abuse and theft (Peng and Yi, 2006). Andres (2008) finds that performance of family firms is better only when the family is actively involved in the management. Therefore:

H3: Performance of family-controlled firms is affected by the nature of family's involvement in the management/directorship of the entities.

2.4 Ethnicity of Controlling Family

Even though many developing capital markets share a range of common major governance attributes such as concentrated ownership (albeit in varying degrees), certain characteristics are

unique to a particular country. Gedajlovic and Shapiro (1998) contend that institutional context matters and more importantly, much more research directed at identifying the micro processes of the relevant institutional influences is required. We will, therefore, consider one such context-specific variable to briefly illustrate how such an approach could potentially enrich our understanding of various aspects of the corporate governance phenomenon.

In this regard, we have chosen to focus on the ethnicity of controlling families as the spheres of politics and race are inextricably intertwined in multiracial societies like Malaysia (Gomez, 1999). Traditionally, the Chinese (who make up about 25% of Malaysia's population), being the more entrepreneurial ethnic group, controlled most of the Malaysian economy (Gomez, 1999). More importantly, their share of the economy greatly outweighed that of the Malays (who constitute more than half of the country's population). Consequently, the New Economic Policy (NEP), a system characterized by overt positive discriminatory policies favouring the Malays in seeking greater economic equality was introduced in 1970. This included arbitrary quotas in Malay corporate ownership as well as a variety of subsidies.

Over the last few decades, the NEP resulted in an intimate relationship between the state, the ruling political parties and business (Searle, 1999). Groups that consist of Malay politicians, bureaucrats and businessmen emerged, controlling capital accumulation by virtue of their access to state power. Consequently, many ethnic-Malay businessmen are now "clients" of political patrons who reward or entrust publicly-listed firms to them (mostly as proxies of their respective patrons). Firms with controlling Malay families, therefore, tend to rely on rent-seeking and other forms of unearned rewards. This is often to the detriment of the performance of firms that they own/control since there is little need to (i) develop good business acumen and (ii) compete on equal terms with other non-Malay firms. Conversely, ethnic-Chinese families owning firms had to (i) compete on unequal terms with their ethnic-Malay peers and (ii) hone as well as rely even more on their entrepreneurial abilities in order to compensate for the said imbalances. Therefore:

H4: There is a difference in the performance of family firms based on the ethnicity of family.

2.5 Family Firm Size

In their study business groups in India, Khanna and Palepu (2000) found that firm size is an important determinant of overall firm performance. Smaller family-controlled firms may have more opportunities to pursue private benefits due to their generally lower disclosure levels and relatively little external scrutiny as they are largely neglected by analysts (Chen et al., 2005). We presume that the reserve is true for families controlling larger firms. Hence:

H5: Large family firms perform differently from small family firms.

2.6 Pyramidal Ownership Structures

La Porta et al. (1999) suggested that controlling shareholder/managers of publicly-listed firms may create complicated ownership structures in order to reduce any threats to their control. Firms with more complicated structures are also reputed to be less transparent and therefore present

more opportunities for the dominant family to engage in questionable practices often at the expense of other shareholders and also firm performance. Oman et al. (2003) argue that one of the most common complicated arrangements is the use of pyramidal structures by corporate insiders in the developing world to extract corporate-control rents and also exploit other investors.

Owners of firms with pyramidal structures would have a higher incentive to expropriate minority shareholders and squander firm resources in the lower layers of the structure (Jensen and Meckling, 1976). This is because the controlling owners can extract more benefits while bearing lower expropriation costs due to lower cash flow commitment to firms in the lower layers. There are, however, certain purported benefits arising from pyramidal ownership structures. For instance, multiple firms that operate under a pyramidal business group are able to get access to and share information, technology, capital and assets with each other (Barney, 2001). In Asia, business groups controlled by powerful families gain their advantage through such relational contracting, social networking and kinship. Pyramid structure facilitates and promotes such practice (Peng and Yi, 2006; Bruton et al., 2003). We hypothesize that:

H6: Family firms with pyramidal structures perform differently from those without.

2.7 Presence of Other Significant Blockholders

Some studies show that the tendency to pursue private benefits or the degree of expropriation (which ultimately result in sub-optimal corporate performance) is less serious in family-dominated firms where other significant block-holders (i.e. all other shareholders with at least 5% shareholding each) are present (Maury and Pajuste, 2005; Jara-Bertin et al., 2008). This is because all significant decisions made by the controlling family would presumably be closely monitored by these other block-holders. Hoskisson et al. (1994) find that the existence of other blockholders reduces the likelihood of a family-controlled firm pursuing projects that are value destroying and/or enables the family owners to pursue private benefits. In effect, the scope for self-interested decision making will be reduced considerably. Overall, Jara-Bertin et al. (2008) find that this increased “contestability” of firm control increases both firm performance and value.

Furthermore, past research on the dynamics of power within firms also discovered that different types of block-holder in family-dominated firms may lead to different outcomes. In this regard, Jara-Bertin et al. (2008) scrutinized the interaction among significant block-holders and find that firm performance and value is enhanced when the second and third largest shareholders in the family firm are institutional investors. On the contrary, firm value is reduced when the second largest shareholder is another family or individual.

Since the alliance among different families to extract private benefits is subject to lower costs, it is easier for them to agree to such an arrangement as compared to the potential collusion of a controlling family with institutional investors. Moreover, institutional investors are normally subject to stricter supervision and monitoring requirements from both clients and capital market regulators implying that costs of extracting private benefits are extremely high (Maury and Pajuste, 2005; Jara-Bertin et al., 2008). Hence:

H7a: Performance is different for family firms with and without large block-holders.

H7b: The higher the contestability power of other blockholders in the family firms, the better will be the firm performance.

H7c: Performance of family firms is better when institutional investors serve as the block-holders.

H7d: Performance of family firms is worse when other non-controlling family or individuals serve as block-holders.

3. Research Methodology

Our study's main sample consists of 84 out of the 100 largest publicly-listed firms in Malaysia. Of the 84 firms, 48 (or 57%) have been identified as family-controlled firms. The criterion that we have adopted is LaPorta et al. (1999) and Claessens et al.'s (2000) 20% equity ownership proportion cut-off point. The existence and also classification of controlling shareholders for each firm are determined using relevant annual report disclosures. In this regard, the Malaysian Code on Corporate Governance requires all Malaysian publicly-listed firms to disclose (i) all significant shareholders owning more than 5% of issued shares, (ii) the 30 top shareholders and the respective sizes of their shareholdings and, (iii) all family relationships between major shareholders, directors and/or top executives. Other significant owners (i.e state-controlled, foreign-controlled, etc) are identified using the same criteria. Any firm where the largest shareholder holds less than 20% of total shares is classified as widely-held.

Subsequently, we employ the 'ultimate owner' approach in measuring the cumulative shareholdings of a particular family (Claessens et al., 2000; Zuaini and Napier, 2006). This is because direct ownership of a particular firm often does not reflect the true extent of family control - many individuals and/or family members also have indirect ownership stakes through the use of holding companies, proxies and/or other corporations owned by them. Besides controlling owners, we identify and list other non-controlling block-holders (each owning a minimum of 5% shareholding). Similar to Claessens et al.'s (2002) finding that corporate ownership structures in most countries are highly stable over time, we found no significant changes in the shareholdings of all blockholders across sampled firms between 2006 and 2008.

This study utilizes multiple regression techniques based on ordinary least square (OLS) estimation. We check for heteroscadesticity using White's heteroscadasticity-consistent standard errors. Multicollinearity is tested by observing correlations among variables using the 0.8 coefficient threshold (as per Gujarati, 2004). We contend that endogeneity (where better firm performance results in the controlling family increasing their equity holdings and *vice versa*) is not a significant concern because concentrated family ownership is a highly stable phenomenon in developing countries (LaPorta et al., 1999).

3.1 Variables

We measure firm performance using: (a) Tobin's Q (the sum of the market value of equity and the book value of liability divided by total assets), (b) Return On Assets (ROA) [based on Earnings Before Interests and Taxes (EBIT)], (c) ROA [based on Earnings Before Interests, Taxes, Depreciation and Amortization (EBITDA)], (d) Dividend Payouts.

Four control variables are considered. First, we control for firm size by market capitalisation. On the one hand, smaller firms may be more efficient because as firm size increases, overall control by top management over strategic and operating activities decreases. Conversely, larger firms are likely subject to greater scrutiny and hence, extracting private benefits would be more costly (Nenova, 2003). Larger firms are also associated with larger market power and economies of scale which results in better performance. Second, firm age controls for life-cycle and the 'learning curve' of firms. Performance of older firms may be enhanced due to sustained learning and reputation-building. Older firms, however, may be more prone to entrenchment by owner-managers and also may not be able to respond quickly to changes in competitive enviroment (Nazrul et al., 2008; Sarkar and Sarkar, 2000). Claessens et al. (2002) assert that larger and older firms have better disclosure but fewer growth opportunities.

Gearing may reduce managers' discretionary control over firm's free cash flows and thus lowering their incentive to engage in non-value maximizing activities (Jensen, 1986). Higher gearing results in creditors playing a more significant role in monitoring. However, excessive gearing may expose the firm to exorbitant interest thereby impacting firm performance. We also consider the volatility of stock prices (measured by standard deviation of monthly stock prices over 60 months) to control for the riskiness of firms. Firms that engage in higher risk activities would exhibit a more volatile earnings stream which leads to higher stock price volatility.

Lastly, sector-dummies are used to control for industry effects. This control variable is introduced as it is important to control for different growth opportunities in various business sectors (Sarkar and Sarkar, 2000). Data are collected from Thomson Datastream for five years from years 2004 to 2008. Five-year average growth figures for each industry are computed and used in our study.

4. Findings and Analysis

4.1 Univariate Analysis

Table I shows the breakdown of publicly-listed firms in Malaysia according to the different types of controlling owners. It is clear that family firm is by far the most common and this is followed by state-controlled firms whereas widely-held ones are relatively rare in Malaysia.

It is clear from Tables II and III that family firms have significant presence across all sectors of the Malaysian economy and are especially dominant in certain sectors such as Industrial, Properties, and Trading/Services. Average firm age is about 38 years, suggesting that Malaysian firms are relatively young.

Table IV shows the correlation matrix for our study's dependent and independent variables. As the respective correlations are relatively low, there is no evidence of multicollinearity.

Table I: Firm Types by Ownership Structure

Firms Controlled by:	Number of Firms	Percent
Family	48	57.14
Foreign	7	8.33
Public Institutional Investors	9	10.71
State	16	19.05
Widely Held	4	4.76
Total	84	100.00

Table II: Number and Percentage of Family and Nonfamily Firms

SECTOR	Nonfamily Firms	Family Firms	Percentage of Family Firms in Industry
Consumer	5	4	44.4
Industrial	6	9	60.0
Construction	4	3	42.9
Trading/Services	15	15	50.0
Technology	0	2	100.0
IPC	2	1	33.3
Hotels	0	1	100.0
Properties	2	10	83.3
Plantations	2	3	60.0
Total	36	48	57.1

Table III: Descriptive Statistics for the Full Sample

	FIRM AGE (years)	FIRM SIZE (RM'000)	GEARING (%)	Stock Volatility (%)	5-year ROA (EBIT) (%)	5-year ROA (EBITDA) (%)	5-year ROE (%)	5-year TOBINS Q	5-year PAYOUTS (%)
Mean	38.012	7107503	25.391	10.645	8.330	12.8	15.431	1.457	32.223
Median	34.000	3330194	25.225	10.193	6.705	10.5	12.105	1.158	30.469
Maximum	182.000	69841900	60.460	31.503	48.270	71.1	154.490	8.396	93.754
Minimum	5.000	207762	0.020	3.661	-1.670	0.08	-3.550	0.574	0.000
Std. Dev.	26.084	10598039	14.101	4.454	6.862	9.4	18.534	1.063	20.503

Notes: FIRM AGE= Age of firm since inception; FIRM SIZE= Size of firm measured by market capitalization; GEARING= Total debt/total assets; Stock volatility= standard deviation of the monthly stock price over 60 months; 5-year ROA(EBIT)= Five-year average of return on assets based on EBIT; 5-year ROA(EBITDA)= Five-year average of return on assets based on EBITDA; 5-year ROE= Five-year average of return on equity; 5-year TOBINS Q= Five-year average of Tobin's Q; 5-year PAYOUTS= Five-year average of dividend payout ratio.

Table IV: Correlation Matrix

	LNAGE	LNSIZE	GEARING	STOCK PRICE VOLATILITY
LNAGE	1.000			
LNSIZE	0.297**	1.000		
GEARING	-0.037	0.269*	1.000	
STOCK PRICE VOLATILITY	0.074	-0.207	0.162	1.000
ROA (EBIT)	-0.234*	-0.266*	-0.065	-0.252*
ROA (EBITDA)	-0.202	-0.213	-0.023	-0.401**
ROE	-0.243*	-0.191	0.116	-0.185
TOBINS Q	-0.310**	-0.253*	-0.029	-0.238*
PAYOUTS	-0.100	-0.255*	-0.151	-0.451**

Notes: Asterisks denote statistical significance at the 0.01(**) and 0.05(*)-level (2-tailed); LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; STOCK PRICE VOLATILITY = stock price volatility measured by standard deviation of the monthly stock price over 60 months; ROA (EBIT) = Earnings Before Interests and Taxes/Total Assets; ROA (EBITDA) = Earnings Before Interests, Taxes, Depreciation and Amortisation/Total Assets; ROE = Return on Equity; Tobin's Q = (Market value of equity + book value of liability}/total assets; Payouts= Dividend payout ratio.

Table V shows the differences in the mean values for key variables for both family-controlled and non-family controlled firms. On average, non-family firms are younger than family firms by about 5 years. However, family-controlled firms are relatively smaller in size compared to non-family firms. In terms of gearing, family-controlled firms in the sample do not appear to use debt significantly differently from their non-family peers. Figures for stock price volatility suggest that stocks of family-controlled firms are relatively riskier.

Table V: Mean Values of Family and Nonfamily Firms

Row	Variables	Family Firms	Nonfamily Firms
1	Age	40.062	35.278
2	Size	5694248	8991842
3	Gearing	26.241	24.256
4	Stock price volatility	11.808	9.093
5	Tobin's Q	1.353	1.592
6	Tobin's Q (excluding foreign firms)	1.353	1.237
7	ROA (EBIT)	7.942	8.847
8	ROA (EBIT)(excluding foreign firms)	7.942	6.342
9	ROA (EBITDA)	0.115	0.143
10	ROA (EBITDA) (excluding foreign firms)	0.115	0.106
11	ROE	13.829	17.567
12	ROE (excluding foreign firms)	13.829	11.721
13	Payouts	29.549	35.788
14	Payouts (excluding foreign firms)	29.549	30.574
15	Percentage of largest shareholding	43.59	42.32

Notes: Age = firm age since incorporation; Size= size of firms measured by market capitalisation; Gearing= Total debt/total assets; stock price volatility= standard deviation of the monthly stock price over 60 months; Tobin's Q = (Market value of equity + book value of liability} / total assets; ROA (EBIT) = Earnings Before Interests and Taxes/Total Assets; ROA (EBITDA) = Earnings Before Interests, Taxes, Depreciation and Amortisation/Total Assets; ROE = Return on Equity; Payouts= Dividend payout ratio.

Next, we find that the performance of family-controlled firms as measured by Tobin's Q, ROA (based on EBIT and EBITDA) and ROE is lower than non-family firms. However, when foreign-controlled firms are excluded from the non-family category, family-controlled firms actually perform comparatively better. Put simply, the apparent good performance of non-family firms is largely driven by the superior performance of foreign-controlled firms. This is a possible explanation for Haslindar et al.'s (2008) finding that family-controlled firms underperform non-family firms. Finally Table V also shows that the average percentages of shareholdings in family-controlled and non-family firms are 43.59 and 42.32 respectively, again reaffirming the pervasiveness of highly concentrated firm ownership in Malaysia.

In Table VI (row 1), family-controlled firms are divided according to the different concentrations of overall family shareholdings (proxy for the level of family control). A majority of controlling families have shareholdings within the 30%-49% range. In terms of the nature of family involvement, 65% have multiple family members involved in firm management either as managers and/or board directors. Conversely, 'lone individual' family firms makes up 21% of the sample whereas only 7% employ professionals managers. Interestingly, 34 out of 48 family firms are controlled by ethnic-Chinese families reflecting their continued dominance of the Malaysian economy. In comparison, 11 are classified as Malay family-controlled.

Table VI: Descriptive Data for Family-Controlled Firms

	Family Firm Characteristics	Categories	Number of Family Firms
1	Proportion of Family Shareholdings	20% - 29%	6
		30% - 39%	13
		40% - 49%	16
		50% - 59%	5
		60% above	8*
		Total	48
2	Nature of Management	Hired Professional	7
		Multi-family members	31
		Lone Individual	10
		Total	48
3	Family Ethnicity	Chinese	34
		Malay	11
		Indian	3
		Total	48
4	Firm Size	Below RM500m	9
		RM500m – RM1000m	14
		RM1000m – RM5000m	17
		RM5000m above	8
		Total	48
5	Pyramid structure $(\frac{cash-flow\ rights}{control\ rights}) < 1$	Yes	10
		No	38
		Total	48

* Only one firm has the family shareholdings of above 70%.

We have also classified family-controlled firms by market capitalisation (size). Only 9 family firms (or 18.75%) have market capitalizations of below RM500 million each (small-cap firms). On the other hand, the 31 firms with market capitalizations of between RM500 million and RM5 billion are regarded as medium sized. Due to the large number of mid-cap firms, they are further divided into two sub-categories: lower-medium with market capitalization of RM500 million to below RM1 billion and upper-medium between RM1 billion to below RM5 billion. The remaining 8 firms are categorized as large with market capitalizations of RM5 billion and above.

Lastly, we find that 21% of family-controlled firms exhibit pyramidal ownership structures. Being part of a group of firms connected by complex chains of ownership, owners of such firms typically have cash-flow rights are lower than the control rights.

4.2 Multivariate Analysis

In Table VII, firms are segregated according to types of controlling-owners with the use of dummy variables. Family-controlled firm is the excluded dummy. Generally, multiple regression results from Table VII supports our observations in Table V, especially the finding that family-controlled firms significantly underperform foreign-controlled firms when measured by ROA (EBIT and EBITDA) but not by Tobin's Q. This may be due to more effective monitoring by foreign institutional investors or, if the controlling blockholder is a foreign publicly-listed firm, the ability to select/appoint higher quality managers. As for other types of non family-controlled firms (excluding foreign-controlled ones), most of the corresponding coefficients are negative. These findings suggest that family firms generally perform better even though results are only statistically significant when (i) measured using Tobin's Q, (ii) compared specifically to the state-controlled firms and (iii) when compared to the widely-held firms by ROA (based on EBITDA).

Overall, the argument that family-controlled firms perform better than other firm types (excluding foreign firms) is weak. From the corporate governance perspective, a possible explanation for our observations is that improved managerial efforts and/or monitoring by the controlling families are offset by their pursuance of private benefits through tunnelling of firm's resources, expropriation and entrenchment.

In Table VIII below, firm performance is regressed against various proportions of family shareholdings. Controlling for other factors, result show that firm performance between different categories of family shareholding proportions is not significantly different except for shareholdings in 30-39% range. Family firms in the 30-39% range perform significantly worse than the rest when measured by Tobin's Q, ROA (based on EBITDA) and dividend payouts. One way to interpret this is that family firms that obtain substantial control rights above thirty percent are in the more conducive condition to expropriate minority shareholders and engage in entrenchment behaviour compared to family firms below thirty percent. Following Morck's et al. (1988) argument, the incentive effect may still be present throughout 30-39% range but is overcome by the entrenchment effect. As family shareholdings reach 40% and above, family with even higher control rights might not be significantly more entrenched than those with thirty-something percent. The significantly lower dividend payouts for family holdings in 30-39 percent range might also be an indication of greater expropriation by firms in this range.

Table VII: Regressions of Performance Measures on Family Firm Characteristics

Row		Tobin's Q	ROA (EBIT)	ROA (EBITDA)	Payouts
1	Intercept	5.531 (0.015)**	35.032 (0.014)**	0.461 (0.006)***	130.695 (0.000)***
2	LNAGE	-0.398 (0.113)	-1.208 (0.430)	-0.010 (0.584)	0.928 (0.815)
3	LNSIZE	-0.188 (0.238)	-1.422 (0.160)	-0.017 (0.135)	-5.467 (0.022)**
4	GEARING	0.007 (0.643)	0.071 (0.385)	0.001 (0.238)	0.073 (0.644)
5	SDR	-0.031 (0.525)	-0.332 (0.243)	-0.007 (0.035)**	-2.147 (0.000)***
6	OSFORG	1.498 (0.121)	8.884 (0.095)*	0.145 (0.045)**	15.827 (0.065)*
7	OSPUBII	-0.134 (0.658)	-1.166 (0.506)	0.002 (0.925)	0.717 (0.916)
8	OSSTATE	-0.522 (0.060)**	-2.739 (0.141)	-0.027 (0.161)	1.322 (0.826)
9	OSWH	-0.267 (0.258)	-2.294 (0.159)	-0.048 (0.041)**	-1.936 (0.841)
10	Sector Effect	Yes	Yes	Yes	Yes
11	Adjusted R^2	0.371	0.407	0.506	0.429
12	Observation	84	84	84	84

Notes: Family firm is the excluded dummy variable. Reported p-values in parentheses are based on White (1980) heteroskedasticity consistent standard errors & covariance. Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; OSFORG = dummy variable equals to 1 for foreign-controlled firms and 0 otherwise; OSPUBII = dummy variable equals to 1 for public institutional investors-controlled firms and 0 otherwise; OSSTATE = dummy variable equals to 1 for state-controlled firms and 0 otherwise; OSWH = dummy variable equals to 1 for widely held firms and 0 otherwise. Regression equation: Firm performance = Intercept + B_1(LNAGE) + B_2(LNSIZE) + B_3(GEARING) + B_4(SDR) + B_5(OSFORG) + B_6(OSPUBII) + B_7(OSSTATE) + B_8(widely-held)+ B_9(Sector dummy) + error term

From Table IX, contrary to Miller et al.'s study (2007), we find no significant different between the natures of family involvement and subsequent firm performance. Even so, family-controlled firms run by professional managers have significantly higher payouts compared to firms run by controlling family member(s). It is probable that professional managers are pressured by family-owners to pay higher dividends, this being a primary source of income for them. The pressure from controlling families for higher dividends can also be interpreted as not wanting to leave too much free cash flows to the discretion of the hired professional managers (Jensen, 1986). 'Lone individual' firms, on the other hand, pay significantly lower dividends compared to the other two alternative arrangements. This suggests higher likelihoods of expropriation (LaPorta et al., 2000). As for our predictions pertaining to the ethnicity of controlling families, the perception that Malay-controlled firms significantly underperform other firm types is unfounded even though ethnic-Chinese controlled firms do indeed significantly outperform the rest. Therefore, while the Malaysian government's positive discrimination policies are effective in plugging the performance gap between Malay-controlled and other firm types, they still can't fully match the entrepreneurship and managerial acumen of ethnic-Chinese families.

Table X shows the result of firm performance when family-controlled firms are segregated according to size. The benchmark category is firm size of between RM1 billion and RM5 billion.

Figures suggest that firm size significantly influence firm performance. Firms with large market capitalisation perform significantly better than the rest of the firms when measured by Tobin's Q, ROA (based on EBITDA) and payouts whereas firms with small market capitalisation significantly underperform by Tobin's Q and ROA (based on EBITDA). The finding is consistent with Chen et al. (2005) and Nenova's (2003) explanation that entrenchment by family-owners is considerably more serious in smaller family firms.

An interaction between firms with larger market capitalisation (at least RM1 billion above) and ethnicity is also carried out to find out whether there is any difference between the performances of these firms in terms of the ethnicity of the family. Row 5 shows that larger firm controlled by ethnic-Chinese families perform significantly better than the rest of the firms in terms of Tobin's Q and ROA (based on both EBIT and EBITDA). Interestingly, firms controlled and run by ethnic-Malay families do not register significant underperformance.

Table VIII: Regressions of Performance Measures on Proportion of Family Shareholdings in Family-controlled Firms

	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	Payouts
Intercept	3.299	19.826	0.345	130.698	3.917	21.251	0.345	141.882	3.966	22.449	0.361	144.127
	(0.132)	(0.198)	(0.036)**	(0.007)***	(0.056)*	(0.156)	(0.026)**	(0.002)***	(0.075)*	(0.139)	(0.024)**	(0.004)***
PTWENTY	0.474	1.582	-0.006	13.655								
	(0.215)	(0.557)	(0.820)	(0.102)*								
PTHIRTY					-0.634	-2.663	-0.039	-13.858				
					(0.017)**	(0.167)	(0.046)**	(0.019)**				
PFORTY									0.216	2.081	0.028	5.382
									(0.427)	(0.255)	(0.141)	(0.352)
LNAGE	-0.407	0.006	0.006	1.186	-0.486	-0.358	0.001	-0.717	-0.381	0.196	0.009	1.665
	(0.093)*	(0.997)	(0.721)	(0.819)	(0.037)**	(0.832)	(0.951)	(0.887)	(0.123)	(0.907)	(0.607)	(0.756)
LNSIZE	0.004	-0.454	-0.012	-5.558	-0.013	-0.428	-0.011	-5.683	-0.061	-0.794	-0.016	-6.899
	(0.977)	(0.693)	(0.291)	(0.119)	(0.931)	(0.702)	(0.334)	(0.096)*	(0.716)	(0.491)	(0.181)	(0.065)*
GEARING	-0.011	-0.069	-0.000	0.016	-0.013	-0.076	-9.19E-05	-0.036	-0.010	-0.053	0.000	0.022
	(0.328)	(0.406)	(0.895)	(0.948)	(0.223)	(0.351)	(0.9114)	(0.880)	(0.365)	(0.527)	(0.806)	(0.933)
SDR	-0.020	-0.197	-0.003	-2.189	-0.006	-0.159	-0.003	-1.870	-0.004	-0.140	-0.003	-1.823
	(0.479)	(0.332)	(0.076)*	(0.001)***	(0.807)	(0.398)	(0.043)**	(0.002)***	(0.861)	(0.464)	(0.065)*	(0.004)***

Table VIII (continued)

	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	Payouts
Intercept	3.620	20.411	0.334	138.816	3.902	23.213	0.349	144.159
	(0.086)*	(0.173)	(0.035)**	(0.005)***	(0.080)*	(0.126)	(0.034)**	(0.004)***
PFIFTY	0.791	4.052	0.047	10.81				
	(0.061)*	(0.182)	(0.130)	(0.260)				
PSIXTY					-0.219	-2.903	-0.010	-5.040
					(0.494)	(0.197)	(0.655)	(0.481)
LNAGE	-0.494	-0.455	0.001	-0.057	-0.378	0.342	0.007	1.755
	(0.041)**	(0.790)	(0.954)	(0.991)	(0.128)	(0.840)	(0.673)	(0.747)
LNSIZE	0.000	-0.391	-0.010	-5.845	-0.045	-0.770	-0.013	-6.633
	(0.997)	(0.727)	(0.352)	(0.108)	(0.786)	(0.499)	(0.273)	(0.075)*
GEARING	-0.020	-0.110	-0.000	-0.129	-0.011	-0.058	-2.51E-05	-0.005
	(0.093)*	(0.199)	(0.572)	(0.634)	(0.318)	(0.484)	(0.977)	(0.984)
SDR	0.005	-0.090	-0.003	-1.690	-0.007	-0.149	-0.003	-1.857
	(0.844)	(0.642)	(0.125)	(0.009)***	(0.791)	(0.431)	(0.056)*	(0.004)***

Notes: Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. PTWENTY= Percentage of shareholding in the range of 20 to 29 percents; PTHIRTY= Percentage of shareholding in the range of 30 to 39 percents; PFORTY= Percentage of shareholding in the range of 40 to 49 percents; PFIFTY= Percentage of shareholding in the range of 50 to 59 percents; PSIXTY= Percentage of shareholding in the range of 60 to 69 percents; LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; Regression equation: Firm performance = Intercept + B_1(Individual range of percentage of shareholding: PTWENTY, PTHIRTY,…) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term

Table IX: Regressions of Performance Measures on Family Firm Characteristics

	(1)Q	(2)EBIT	(3) Payouts	(4)Q	(5) EBIT	(6) Payouts	(7) Q	(8) EBIT	(9) Payouts	(10) Q	(11) EBIT	(12)Payouts
(1) Intercept	3.755 (0.094)*	20.105 (0.195)	151.056 (0.002)***	3.748 (0.100)*	20.103 (0.202)	153.454 (0.002)***	3.820 (0.089)*	20.734 (0.186)	156.006 (0.002)***	4.124 (0.058)*	23.155 (0.134)	144.076 (0.005)***
(2) FHIRED	0.048 (0.890)	-0.870 (0.727)	11.534 (0.137)	0.128 (0.776)	-0.877 (0.778)	19.368 (0.042)**						
(3) FMULTI				0.095 (0.771)	-0.008 (0.997)	9.677 (0.151)						
(4) FLONE							-0.100 (0.754)	0.134 (0.951)	-11.081 (0.100)*			
(5) OSMALAY										-0.450 (0.129)	-1.807 (0.382)	-3.151 (0.630)
(6) LNAGE	-0.401 (0.107)	-0.055 (0.974)	1.954 (0.710)	-0.413 (0.106)	-0.054 (0.975)	0.847 (0.871)	-0.416 (0.097)*	0.017 (0.991)	0.044 (0.993)	-0.453 (0.062)*	-0.170 (0.920)*	0.863 (0.873)
(7) LSIZE	-0.030 (0.858)	-0.446 (0.703)	-7.330 (0.046)**	-0.032 (0.851)	-0.446 (0.709)	-7.810 (0.033)**	-0.029 (0.859)	-0.521 (0.653)	-6.970 (0.053)*	-0.044 (0.782)	-0.658 (0.566)	-6.440 (0.083)*
(8) GEARING	-0.013 (0.275)	-0.079 (0.345)	0.014 (0.956)	-0.012 (0.293)	-0.079 (0.353)	0.039 (0.875)	-0.012 (0.278)	-0.076 (0.364)	0.002 (0.993)	-0.010 (0.345)	-0.066 (0.426)	-0.019 (0.940)
(9) SDR	-0.008 (0.770)	-0.167 (0.391)	-1.795 (0.004)***	-0.008 (0.764)	-0.167 (0.398)	-1.782 (0.004)***	-0.008 (0.754)	-0.161 (0.406)	-1.847 (0.003)***	-0.004 (0.870)	-0.136 (0.482)	-1.834 (0.004)***

Notes: Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. FHIRED= Family firms managed by hired professional managers; FMULTI= Family firms managed by two or more family members; FLONE= Family firms managed by single family member; OSMALAY= Dummy variable equals to 1 for Malay family firms and 0 otherwise; LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; Regression equation (a): Firm performance = Intercept + B_1(FHIRED) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term; Regression equation (b): Firm performance = Intercept + B_1(FHIRED) + B_2(FMULTI) + B_3(LNAGE) + B_4(LNSIZE) + B_5(GEARING) + B_6(SDR) + B_7(Sector dummy) + error term; Regression equation (c): Firm performance = Intercept + B_1(FLONE) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term; Regression equation (d): Firm performance = Intercept + B_1(OSMALAY) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term

Table X: Regressions of Performance Measures on Firm Size and Ethnicity in Family Firms

	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	Payouts
(1) Intercept	3.651	16.809	0.209	65.991	3.216	12.840	0.178	65.481	3.325	14.573	0.196	64.825
	(0.000)***	(0.011)**	(0.002)***	(0.004)***	(0.000)***	(0.035)**	(0.011)**	(0.004)***	(0.001)***	(0.040)**	(0.010)***	(0.006)***
(2) MC5BUP	1.036	3.404	0.046	17.902								
	(0.001)***	(0.194)	(0.089)*	(0.049)**								
(3) MC5MUP	-0.289	-2.915	-0.020	1.429								
	(0.226)	(0.150)	(0.329)	(0.834)								
(4) MC5MDOWN	-0.518	-2.961	-0.040	-0.081								
	(0.0590*	(0.195)	(0.094)*	(0.991)								
(5) (MC1BUP+MC5BUP)*OSCHINESE					0.524	4.770	0.035	3.228				
					(0.024)**	(0.003)***	(0.046)**	(0.563)				
(6) (MC1BUP+MC5BUP) *OSMALAY									-0.177	-0.162	0.009	-3.748
									(0.727)	(0.960)	(0.782)	(0.724)
(7) LNAGE	-0.602	-1.013	-0.010	-5.024	-0.479	-0.861	-0.005	-2.843	-0.406	-0.295	-0.001	-2.219
	(0.001)***	(0.497)	(0.516)	(0.325)	(0.025)**	(0.536)	(0.751)	(0.581)	(0.074)*	(0.851)	(0.926)	(0.667)
(8) GEARING	-0.015	-0.095	-0.000	-0.311	-0.010	-0.060	-0.000	-0.252	-0.014	-0.096	-0.000	-0.277
	(0.053)*	(0.150)	(0.388)	(0.167)	(0.290)	(0.334)	(0.661)	(0.282)	(0.163)	(0.173)	(0.443)	(0.230)
(9) SDR	0.035	-0.007	-0.001	-1.106	-0.001	-0.079	-0.003	-1.706	-0.005	-0.147	-0.003	-1.685
	(0.150)	(0.971)	(0.428)	(0.112)	(0.947)	(0.640)	(0.099)*	(0.009)***	(0.832)	(0.460)	(0.069)*	(0.013)**

Notes: Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. MC5BUP= Market capitalisation of RM5 billion and above; MC5MUP= Market capitalisation of RM500 million to RM1 billion; MC5MDOWN= Market capitalisation below RM500 million; MC1BUP= Market capitalisation of RM1 billion to RM5 billion; OSCHINESE= Dummy variable equals to 1 for Chinese family firms and 0 otherwise; OSMALAY= Dummy variable equals to 1 for Malay family firms and 0 otherwise; LNAGE = Natural log of firm age since inception; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; Regression equation (a): Firm performance = Intercept + B_1(MC5BUP) + B_2(MC5MUP) + B_3(MC5MDOWN) + B_4(LNAGE) + B_5(GEARING) + B_6(SDR) + B_7(Sector dummy) + error term; Regression equation (b): Firm performance = Intercept + B_1((MC1BUP+MC5BUP)*OSCHINESE) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term; Regression equation (c): Firm performance = Intercept + B_1((MC1BUP+MC5BUP)*OSMALAY) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term.

Table XI shows the regression results for family-controlled firms situated at the second and/or lower layers of pyramidal ownership structures (i.e. within business groups). Overall, these "within pyramid" firms outperform other firm types in the sample in terms of ROA (EBIT and EBITDA) but not Tobin's Q and payouts. We have determined that the better performance of these firms is not driven by the firm size variable.

When we interact the dummy of "within pyramids" firms with the ethnic-Chinese and ethnic-Malay family firm dummies respectively and we found that pyramidal, ethnic-Chinese ones perform significantly better across all performance indicators barring payouts. Conversely, there is no evidence of such a trend for comparable Malay firms (see row 4). Our findings suggest that pyramidal family-controlled firms are more efficient as an organisational structure than the non-pyramidal ones. Moreover, firms controlled by ethnic-Chinese families are more adept at both adopting and taking advantage of such a structure type. Indeed, Barney (2001) posited that resources are better shared and utilised among affiliated firms within pyramidal structures as compared to family-controlled firms without such structure.

Table XII shows that the degree of contestability between members of the controlling families and other significant blockholders has a negative influence on firm performance (when measured by ROA (EBITDA) and payouts). Contrary to Jara-Bertin et al.'s (2008) finding that increased contestability of control increases the value of family-owned firms, our findings suggest that conflicts of interests or misaligned objectives between different blockholders have a detrimental effect on performance. Alternatively, monitoring by other blockholders creates conflict with, and backlash from, the controlling families. Even so, when the second largest shareholder is a public institutional investor, the performance of family-controlled firms improves as the proportion of share-ownership of the said institutional investor increases (which is consistent with Jara-Bertin et al. (2008). This suggests that major local institutional investors in Malaysia are playing an effective governance monitoring role of late.

Table XI: Regressions of Performance Measures on Pyramidal Structure in Family Firms

	Q	EBIT	EBITDA	Payouts	Q	EBIT	EBITDA	payouts	Q	EBIT	EBITDA	Payouts
(1) Intercept	3.453	19.163	0.309	136.424	3.498	19.598	0.319	137.364	3.793	21.379	0.341	141.131
	(0.112)	(0.193)	(0.030)**	(0.006)***	(0.101)*	(0.174)	(0.022)**	(0.005)***	(0.088)*	(0.164)	(0.037)**	(0.005)***
(2) FF_PYRAMID	0.422	3.895	0.068	8.317								
	(0.190)	(0.082)*	(0.002)***	(0.244)								
(3) FF_PYRAMID *OSCHINESE					0.548	4.890	0.077	10.408				
					(0.101)*	(0.035)**	(0.000)***	(0.164)				
(4) FF_PYRAMID *OSMALAY									-0.359	-2.504	-0.005	-5.204
									(0.606)	(0.611)	(0.909)	(0.738)
(5) LNAGE	-0.463	-0.518	-0.002	0.052	-0.499	-0.815	-0.006	-0.576	-0.416	-0.079	0.006	0.994
	(0.061)*	(0.756)	(0.859)	(0.992)	(0.044)**	(0.622)	(0.677)	(0.915)	(0.094)*	(0.963)	(0.730)	(0.854)
(6) LNSIZE	0.004	-0.311	-0.008	-5.749	0.009	-0.270	-0.008	-5.664	-0.028	-0.538	-0.012	-6.233
	(0.979)	(0.778)	(0.410)	(0.114)	(0.953)	(0.802)	(0.412)	(0.116)	(0.864)	(0.638)	(0.299)	(0.091)*
(7) GEARING	-0.011	-0.060	0.000	-0.003	-0.013	-0.073	-5.27E-05	-0.031	-0.014	-0.084	-0.000	-0.054
	(0.319)	(0.453)	(0.809)	(0.990)	(0.255)	(0.349)	(0.943)	(0.902)	(0.230)	(0.321)	(0.900)	(0.838)
(8) SDR	-0.013	-0.195	-0.004	-1.950	-0.011	-0.177	-0.004	-1.913	-0.006	-0.147	-0.003	-1.849
	(0.631)	(0.297)	(0.013)**	(0.002)***	(0.673)	(0.330)	(0.017)**	(0.002)***	(0.822)	(0.450)	(0.058)*	(0.004)***

Notes: Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. FF_PYRAMID= Family firms with pyramid structure; OSCHINESE= Dummy variable equals to 1 for Chinese family firms and 0 otherwise; OSMALAY= Dummy variable equals to 1 for Malay family firms and 0 otherwise; LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; Regression equation (a): Firm performance = Intercept + B_1(FF_PYRAMID) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term; Regression equation (b): Firm performance = Intercept + B_1(FF_PYRAMID*OSCHINESE) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term; Regression equation (c): Firm performance = Intercept + B_1(FF_PYRAMID*OSMALAY) + B_2(LNAGE) + B_3(LNSIZE) + B_4(GEARING) + B_5(SDR) + B_6(Sector dummy) + error term.

Table XII: Regressions of Performance Measures on Contestability in Family Firms

		Tobins Q (1)	ROA (EBIT)(2)	ROA (EBITDA) (3)	Payouts (4)
(1)	INTERCEPT	6.008 (0.018)**	28.922 (0.097)*	0.329 (0.067)*	156.571 (0.005)***
(2)	CONTESTFAM	-2.479 (0.115)#	-13.001 (0.245)	-0.231 (0.049)**	-60.179 (0.087)*
(3)	SCDLARGESTSH	0.033 (0.374)	0.198 (0.472)	0.005 (0.073)*	1.716 (0.050)**
(4)	SCDLARGESTSH*SECONDSHPII	0.077 (0.015)**	0.411 (0.068)*	0.001 (0.404)	1.022 (0.140)
(5)	THIRDLARGESTSH	0.103 (0.144)	0.521 (0.305)	0.011 (0.030)**	2.432 (0.127)
(6)	THIRDLARGESTSH*SECONDPLUSTHIRDSHPII	-0.177 (0.167)	-1.551 (0.102)*	-0.016 (0.100)*	-3.370 (0.246)
(7)	LNAGE	-0.496 (0.065)*	-0.169 (0.929)	0.015 (0.428)	3.660 (0.537)
(8)	LNSIZE	-0.195 (0.267)	-1.200 (0.332)	-0.017 (0.171)	-8.983 (0.023)**
(9)	GEARING	-0.008 (0.461)	-0.047 (0.574)	0.000 (0.762)	0.071 (0.787)
(10)	SDR	0.017 (0.569)	-0.054 (0.799)	-0.001 (0.372)	-1.344 (0.048)**
(11)	OBSERVATIONS	48	48	48	48
(12)	SECTOR EFFECT	yes	yes	yes	Yes
(13)	ADJUSTED R^2	0.403	0.330	0.421	0.537

Notes: Asterisks denote statistical significance at the 0.01(***), 0.05(**) and 0.10(*)-level. # denotes marginally insignificant at 0.10-level. CONTESTFAM= Contestability of family firms measured as percentage of second plus third largest shareholdings divided by percentage of the largest shareholding; SCDLARGESTSH= Percentage of second largest shareholding; SECONDSHPII= Public institutional investors as the second largest shareholder, measured in percentage of shareholding; THIRDLARGESTSH= Percentage of third largest shareholdings; LNAGE = Natural log of firm age since inception; LNSIZE = Natural log of market capitalisation; GEARING = Total debt/total assets; SDR = stock price volatility measured by standard deviation of the monthly stock price over 60 months; Regression equation (a): Firm performance = Intercept + B_1(CONTESTFAM) + B_2(SCDLARGESTSH) + B_3(SCDLARGESTSH*SECONDSHPII) + B_4(THIRDLARGESTSH) + B_5(THIRDLARGESTSH*SECONDPLUSTHIRDSHPII) + B_6(LNAGE) B_7(LNAGE) + B_8(LNSIZE) + B_9(GEARING) + B_{10}(SDR) + B_{11}(Sector dummy) + error term.

5. Conclusion

Our study's main findings have yielded some insights into the nature of family-controlled, publicly-listed firms in a developing capital market setting. In particular, we have demonstrated how certain characteristics of family-controlled firms influence overall performance. These include (i) family-controlled firms perform better than state-owned firms but not foreign-controlled ones, (ii) large family-controlled firms and also those owned by ethnic-Chinese families tend to outperform (iii) when local public institutional investors are the second largest block-holder, performance improves as their shareholdings increase, (iv) the relationship between the overall proportion of equity holding by controlling families and firm performance is insignificant and (v) family-controlled firms managed by professional managers pay significantly higher dividends compared to firms run by controlling family members.

In terms of policy implications, therefore, capital market regulators in Malaysia should (i) encourage foreign institutional investors to hold significant blocks of shares in family-controlled, publicly-listed Malaysian firms as they seem to provide effective monitoring (considering the superior performance of foreign-controlled firms), (ii) further encouraging local public institutional investors to play a proactive governance monitoring role in the family-controlled firms that they are invested in, (iii) draw lessons from how ethnic-Chinese firms are managed since they perform exceptionally well despite government policies that put them at a competitive disadvantage and (iv) strengthen oversight and also regulations pertaining to prevention of expropriation and extraction of private benefits of control by controlling families. These recommendations (barring the ethnicity-related ones that are specific to the Malaysian context) are relevant considerations for governments and capital market regulators of other developing countries in designing more effective mechanisms to improve the overall standards of corporate governance within their respective jurisdictions.

Overall, we can conclude that family-controlled firms are indeed heterogeneous across a range of characteristics and therefore, should not merely be classified as a generic firm type. Moreover, we've provided a clear demonstration of how conceptualizing corporate governance in a context-specific, socially embedded manner represents a promising avenue to enhance academic understanding of the said phenomenon. The main limitation of this study is its limited sample size and thus empirical findings reported should be treated with a certain degree of caution. Future studies should expand the sample size for better generalisation of findings.

References

[1] Aguilera, R.V. and Jackson, G. (2003). The cross-national diversity of corporate governance: Dimensions and determinants, *Academy of Management Review*, 28(3): 447-465.

[2] Almeida, H., Park, S.Y., Subrahmanyam, M.G. and Wolfenzon, D. (2011). The structure and formation of business groups: Evidence from Korean chaebols, *Journal of Financial Economics*, 99: 447-475.

[3] Anderson, R.C. and Reeb, D.M. (2003). Founding family ownership and firm performance: Evidence from the S&P 500, *Journal of Finance*, 58: 1301-1328.

[4] Andres, C. (2008). Large shareholders and firm performance: An empirical examination of founding family ownership, *Journal of Corporate Finance*, 14: 431-445.

[5] Barney, J.B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view, *Journal of Management*, 27: 643-650.

[6] Bennedsen, M., Perez-Gonzalez, F., and Wolfenzon, D. (2010). The governance of family firms. In R.Anderson and K.Baker (Eds.), *Corporate Governance*, John Wiley & Sons.

[7] Bertrand, M. and Schoar A. (2006). The role of family in family firms, *Journal of Economic Perspective*, 20: 73-96.

[8] Bhaumik S.K. and Gregoriou A. (2010). Family ownership, tunneling and earnings management: A review of the literature, *Journal of Economic Surveys*, 24(4): 705-730

[9] Bruton, G., Ahlstrom, D. and Wan, J. (2003). Turnaround in East Asian firms: Evidence from ethnic overseas Chinese communities, *Strategic Management Journal*, 24: 519-540.

[10] Carney, M. (2005). Corporate governance and competitive advantage in family-controlled firms, *Entrepreneurship: Theory and Practice*, 29(3): 249-265.

[11] Chandler, A.D. (1990). Scale and Scope: The dynamics of industrial capitalism. New York: Belknap Press.

[12] Chen, Z., Cheung, Y.L., Stauraitis, A. and Wong A.W.S. (2005). Ownership concentration, firm performance, and dividend policy in Hong Kong, *Pacific-Basin Finance Journal*, 13: 431-449.

[13] Claessens, S., Djankov, S. and Lang, L.H.P. (1999). Who controls East Asian corporations? World Bank Discussion Paper No. 2054, The World Bank, Washington.

[14] Claessens, S., Djankov, S. and Lang, L.H.P. (2000). The separation of ownership and control in East Asian corporations, *Journal of Financial Economics*, 58: 81-112.

[15] Claessens, S., Djankov, S., Fan J. and Lang, L.H.P. (2001). The pattern and valuation effects of corporate diversification, Discussion Paper No. 2001/127, The United Nations University and World Institute for Development Economics Research.

[16] Claessens, S., Djankov, S., Fan, J., and Lang, L.H.P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings, *Journal of Finance*, 57: 2741–2771.

[17] Davis, J., Schoorman, R. and Donaldson, L. (1997). Towards a stewardship theory of management, *Academy of Management Review*, 22: 20-47.

[18] Demirguc-Kunt, A. and Maksimovic, V. (2002). Funding growth in bank-based and market-based financial systems: Evidence from firm-level data, *Journal of Financial Economics*, 65(3): 337-363.

[19] Demsetz, H. and Lehn, K. (1985). The structure of corporate ownership: Causes and consequences, *Journal of Political Economy*, 93: 1155-1177.

[20] Demsetz, H. and Villalonga, B. (2001). Ownership structure and corporate performance, *Journal of Corporate Finance*, 7(3): 209-233.

[21] Dharwadkar, R., George, C. and Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective, *Academy of Management Review*, 25: 650-669.

[22] Duréndez, Gómez-Guillamón, A., García Pérez de Lema, D. and Madrid Guijarro, A. (2007). Professionally managed family firms. In V.Gupta, N.Levenburg, L.Moore, J.Motwani, & T.Schwarz (Eds.), *A Compendium on the Family Business Models Around the World*. Hyderabad: ICFAI University Press.

[23] Gabrielsson, J. and Huse, M. (2004). Context, behavior and evolution, *International Studies of Management and Organisation*, 34(2): 11-36.

[24] Gedajlovic, E.R. and Shapiro, D.M. (1998). Management and ownership effects: Evidence from five countries, *Strategic Management Journal*, 19(6): 533-553.

[25] Gomez, E.T. (1999). Chinese business in Malaysia: Accumulation, accommodation and ascendance. Honolulu, Hawaii: University of Hawaii Press.

[26] Gujarati, D. (2004). Basic econometrics. 4th Ed. Singapore: McGraw-Hill Education.

[27] Haslindar, I. and Fazilah, A.S. (2009). Corporate governance and agency costs: Evidence from public listed family firms in Malaysia, SSRN Working Paper.

[28] Haslindar, I., Fazilah, A.S. and Afizar A. (2008). Board structure and corporate performance: Evidence from public-listed family-ownership in Malaysia, SSRN Working Paper.

[29] Hoskisson, R.E., Johnson, R. and Moesel, D. (1994). Corporate divestiture intensity in restructuring firms: Effects of governance, strategy and performance, *Academy of Management Journal*, 37: 1207-1251

[30] Jara-Bertin, M., Lopez-Iturriaga, F.J. and Lopez-de-Foronda, O. (2008). The contest to the control in European family firms: How other shareholders affect firm value, *Corporate Governance*, 16(3): 146-159.

[31] Jensen, M. (1986). Agency costs of free cash flow, corporate finance, and takeovers, *American Economic Review*, 76: 323-329.

[32] Jensen, M.C. and Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency Costs, and ownership structure, *Journal of Financial Economics*, 3(4): 305-360.

[33] Khanna, T. and Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups, *Journal of Finance*, 55: 867-891.

[34] LaPorta, R., Lopez-De-Silanes, F. and Shleifer, A. (1999). Corporate ownership around the world, *Journal of Finance*, 54(2): 471-517.

[35] LaPorta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2000). Agency problems and dividend policies around the world, *Journal of Finance*, 55: 1-33.

[36] Maury, B. and Pajuste, A. (2005). Multiple large shareholders and firm value, *Journal of Banking and Finance*, 29: 1813-1834.

[37] McConnell, J.J. and Servaes, H. (1990). Additional evidence on equity ownership and corporate value, *Journal of Financial Economics*, 27: 595-612.

[38] Miller, D., Le-Breton Miller, I. (2006). Family governance and family performance: Agency, stewardship, and capabilities, *Family Business Review*, 19(1): 73-87.

[39] Miller, D., Le-Breton Miller, I., Lester, R.H. and Cannella, A.A. (2007). Are family firms really superior performers? *Journal of Corporate Finance*, 13: 829-858.

[40] Morck, R., Shleifer, A. and Vishny, R. (1988). Management ownership and market valuation, *Journal of Financial Economics*, 20: 293-315.

[41] Morck, R., and Yeung, B. (2003). Agency problems in large family business groups, *Entrepreneurship Theory and Practice*, 27: 367–382.

[42] Nazrul, H.A.R., Rubi, A. and Huson J.A. (2008). Government ownership and performance: An analysis of listed companies in Malaysia, *SSRN Working Paper*.

[43] Nenova, T. (2003). The value of corporate voting rights and control: A cross-country analysis, *Journal of Financial Economics*, 68(3): 325-351.

[44] Oman, C., Fries, S. and Buiter, W. (2003). Corporate governance in developing, transition and emerging–market economies, OECD Development Centre Policy Brief No. 23.

[45] Peng, M. and Yi, J. (2006). Family ownership and control in large firms: The good, the bad, the irrelevant – and why, *William Davidson Institute Working Paper* (840), University of Michigan.

[46] Sarkar J. and Sarkar S. (2000). Large shareholder activism in corporate governance in developing countries: Evidence from India, *International Review of Finance*, 1(3): 161-194.

[47] Shleifer, A. and Vishny, R. (1997). A Survey of Corporate Governance, *Journal of Finance*, 52(2): 737- 783.

[48] Searle, P. (1999). The riddle of Malaysian capitalism: rent-seekers or real capitalists? Australia: ASAA Southeast Asia Publications Series, Allen & Unwin.

[49] Tam, O.K. and Tan, M.G.S. (2007). Ownership, governance and firm performance in Malaysia, *Corporate Governance*, 15(2): 208-222.

[50] Young, M.N., Peng, M.W., Ahlstrom, D., Bruton, G.D. and Yi, J. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective, *Journal of Management Studies*, 45(1): 196-220.

[51] Zuaini, I. and Napier, C. (2006). Expropriation of minority interests and corporate diversification in Malaysia, *Asian Academy of Management Journal of Accounting and Finance*, 2: 85-113.