OWNERSHIP AND CONTROL DIVERGENCE ON FIRM VALUE

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ABSTRACT

The aim of this study is to provide an empirical evidence of the implication of pyramid firm towards firm value. Previous research have documented that in many East Asian firms, the ultimate owners showed a dispersion in actual ownership and control due to ownership concentration in pyramid firm leading to expropriation of minority shareholders' interest. The study adapts the model by Attig using Malaysian pyramidal firms for the period 1990 to 2010. The results reveal that pyramid structure may have detrimental influence on firm value particularly for low cash flow right (CFR) ratio firms. Future research needs to focus on identifying the heterogeneous factors that improve the generalizability of the research.

Keywords: Pyramid structure, firm value, cash flow right, control right, Attig Model, Malaysia

Introduction:

A pyramid firm is defined as a business entity comprising of a group of firms whose ownership structure displays a top-down chain of control. According to Attig, Fischer and Gadhoum (2003), a firm is considered as affiliated to pyramidal firms if it is controlled through pyramidal structure and has at least one intermediary firm in its ownership chain. A direct result of the sructure is a separation of actual ownership (cash flow rights) from voting power (control rights) especially for firms placed in the lower level of the structure (Claessens, Djankov and Lang, 2000). Cash flow rights represent owner's actual ownership in a firm (Claessens, Djankov, Fan and Lang, 2000b). Meanwhile, control rights is defined with respect to the majority voting rule where the control ratio of a shareholder is obtained by dividing the share of control he can exercise directly or indirectly over a given firm, by the percentage of shares he actually owns in that firm (Chapele, 2005). Logically, the owner's cash flow rights that arise from his actual investment should represent his control rights in a firm. However, because of the pyramid structure effect, these two rights may not be equal.

This research is motivated by the phenomenon of highly concentrated ownership in Malaysia, as shown by (Claessens et al, 2002). Concentrated ownership can encourage controlling shareholders to expropriate minority shareholders interest. Expropriation is a process of using the control rights by controlling shareholder to maximize their own welfare by transferring corporate funds from other shareholders (Claessens et al, 1999). Furthermore, agency problem also occurs between controlling shareholder and minority shareholders due to the misconduct of the controlling shareholder and the existence of large differences between cash flow rights and control rights (Fan & Wong, 2002; 2005). The separation of these two rights exerts a negative impact on firm value. Bozec & Laurin (2008) find that large mismatch of cash flow rights and control rights encourage the controlling shareholder to have strong controls to meet his interests rather than the interests of the other shareholders.

Another study by Lemmon & Lins (2003) empirically show that the separation of cash flow rights and control rights of the ultimate owner devalue the interest of other shareholders. They conclude that the interest of other shareholders was adversely affected whenever cash flow rights and control rights divergence exists because it enables the ultimate owner to misuse his control rights over the company's resources without being penalized for misconduct. The motivation for this study comes from the findings of Attig et al (2003) which focus on the pyramid firm and dilution of minority interests issue respectively.

They analyzed a sample of Canadian listed firms and find that there is dispersion between the cash flow rights and control rights in pyramidal affiliated firms, bringing down firm value as well as causing dilution of minority interests. The current importance of pyramidal ownership structure in the East Asian region encourages this research on the implication of pyramid firm towards firm value in Malaysia.This study ascertains whether the pyramid firms in Malaysia have the same negative implication on value. Other than that, research on the structure of ultimate ownership by tracking ownership in Malaysia is still relatively limited. Until now, researchers in Malaysia are still using immediate ownership to determine firm ownership. Therefore, this study focuses on pyramid firms. Malaysian public listed firms are selected because it has the most number of pyramidal firms and tunneling is quite significant compared to other countries (Claessens et al, 2002). Pyramidal firms generally tend to face severe expropriation as well as agency problems because ultimate owners often have significant discretion and the incentives to extract private benefits of controls. This incentive arises because the ultimate owner bears only a fraction of the costs from their private benefit activities but receives the full benefits from such ill practices (Bany, Harjito & Zunaidah, 2009). The consequences of ultimate owner expropriation include high ownership concentration (Faccio & Lang, 2002) and lower firm value (La Porta, Lopez & Shleifer, 2002; Claessens et al, 2000b).

Some previous study conducted by Fauzias & Bany (2005), Fauzias & Zunaidah (2007) and Bany et al (2009) have looked at various aspects of pyramidal firm such as ownership structure, financing, investment and dividend payout. Their findings justify further investigation to be made. Thus, there is a need for further exploration of the matter to bridge the gap in exploring the implication of pyramid firm towards firm value specifically in Malaysia.

Literature Review:

Pyramidal firm has been defined as owning a majority of the stock of one corporation which hold a majority stock at another firm (Almeida & Wolfenzon, 2008), which he does not totally own (Faccio, Lang & Yeung, 2001; 2002). Claessens et al (2000) and La Porta, Lopez & Shleifer (1999) find that controlling shareholders have control rights over firms in excess of their cash flow rights through a pyramid control structure. Endowed with a motive due to non-matching significant control rights with lower cash flow rights, the controlling shareholders proceed to entrench and pursue private benefits at the expense of outside investors. Besides that, Asian firms are perceived to be highly concentrated. Previous studies document that Malaysia has the second highest ownership concentration in East Asia as well as high separation of ownership and control rights are vulnerable to controlling shareholders' expropriation (Claessens et al, 2000). Haniffa & Hudaib (2006) provide some evidence of ownership concentration in Malaysian corporate scenarios. They report that ownership concentration is undiluted overtime.

It is more apparent that Malaysian corporate scenario is faced with Type II agency problem which is between the majority shareholders and minority shareholders (Berle & Mean, 1932; Jensen & Meckling, 1976), where high ownership concentration is well documented (Claessens et al, 2000; 2000a; Haniffa & Hudaib, 2006; Khatri & Leruth, 2002; Mitton, 2002). The Type II agency problem appears when large controlling shareholders use their controlling position in the firm to extract benefits at the expense of minority shareholders. Agency problem is basically related to the issue of separation of ownership (cash flow right) and control (control right). Control rights then can far exceed cash flow rights along each chain given that the latter is the products of all of the ownership in the intermediate companies along that chain. So, it can be calculated as the sum of the streams of ownership (Yeh, 2005). Specifically, the total cash flow rights is equal to the sum of all of the cash flow rights from all of the ownership chains. The voting rights are aggregated along the chain with the weakest link of all of the holding layers (La Porta et al, 1999 & Claessens et al, 2000). This method allows the controlling shareholder to conceal the extent of his voting rights from the minority shareholders.

There are studies done to comprehend the relationship between pyramid firm and investment strategy, capital structure, dividend policy, risk taking strategy and others. Fauzias & Bany (2005), Gugler & Yurtoglu (2003) and Bunkanwanicha & Wiwattanakantang (2008) explore these topics and they find that pyramid firm has an influence on these factors and the ultimate owner may undertake policies to facilitate his private benefits. Fauzias & Bany (2005) extend Claessens's study by focusing on a small number of Malaysian distressed firms that have separation of cash flow rights and control rights. The chain of ownership allow the ultimate owner to control all the firms, even the ones in which he has no direct ownership. The voting rights of the ultimate owner far exceed his cash flow rights, so that there exists a separation between ownership and control in such a structure. Their study discover that because of the separation, there are incidences of ultimate owner misconduct through a firm's capital structure and investment policies. Lemmon & Lins (2003) acknowledge that firm's ownership structure is a main determinant of the tunneling problem between controlling shareholders and other investors. They also report that firms where cash flow rights and control rights deviation may experience 10% to 20% drop in value as compared to those withou such deviations during a financial crisis.

Meanwhile, Claessens, Fan and Lang (2006) in their study of benefits and costs of group affiliation in East Asia realize that complex ownership and control structure of group affiliated firms may lead to severe expropriation. In Malaysia alone, the percentage of firms with pyramidal structure with ultimate owner is about 39.3% (Claessens et al, 2000). This phenomenon is also observe in other East Asian countries. The current importance of pyramid firm in the East Asian region encourages examining its implication on firm value in the Malaysian perspective.

For example, high voting power combines with close relationships between the ultimate owner and top managers increases the possibility of expropriation of minority shareholders. Attig et al (2003) assume that dilution and opportunistic behaviour of the ultimate owner are more apparent within the pyramid firms than other types of firms. They analyze a sample of Canadian listed firms and find that there is divergence between the cash flow rights and control rights in pyramid firms and it has a depressive implication on the firms' value.

Hughes (2009) examines the negative implication derived from the conflict of interest between controlling shareholders and minority interest on firm value. Based on observation of 1557 companies from 12 Western European countries, they find that the presence of the ultimate owner as controller is negatively related to firm's value and this may creates opportunity for expropriation of minority interest. The other similar study is done on Chinese listed companies which reveal that firms are devalued when they participated in direct transfer of resources (tunnelling) from minority shareholders to their controlling shareholders (Cheung, Jing, Lu, Rau & Stauraitis, 2009). Attig et al (2003) findings show that the length of layers of pyramidal firms contributes to the opportunistic behaviour of ultimate owner to expropriate the minority shareholders' interest, implying that ultimate owner extract private benefits from the firms he controls at the expense of the minority shareholders. This may lead to devaluation of the firms.

The expropriation phenomenon is likely to dominate the monitoring effect at high levels of ownership concentration, explaining why a highly concentrated ownership negatively influences firm value (Miguel, Pindado & Torre, 2005). Similar finding such (Gadhoum, Noiseux & Zeghal, 2005) also report that there is a weak association between performance measures and ownership concentration levels in their studies on 600 listed Canadian firms. The issue of ownership and control is served as the basis for the framework of this study. The implication of pyramid firm towards firm value of Malaysian firms is tested. Research on pyramid firm of Malaysian listed firms within the agency theory framework is relatively limited and thus warrants this study to be undertaken.

Hypothesis:

Prior research such as Grossman & Hart (1988), Harris & Raviv (1988), La Porta et al (1999) and Shleifer & Vishny (1997) suggests that the conflicts of interest between the controlling shareholders and minority shareholders are more pronounced when control right of controlling shareholders exceed their cash flow right. It is more likely to appear when ownership is highly concentrated. High ownership concentration involves excess control rights which exacerbate the risks of minority shareholder expropriation, thus, creating larger agency problems (Bebchuk, Reiner & Triantia, 2000).

Large controlling shareholders whose control right is greater than their cash flow right may have greater incentives to extract value from minority shareholders

because this expropriation is less restrained by controlling shareholders' own cash flow stake. Claessens et al (2002) document evidence that a deviation of ownership from control rights is negatively associated with firm valuation, suggesting that the deviation leads to decreases firm value. Affiliation to pyramidal firm's is expected to either create or destroy firm value. Pyramid firm creates an internal, small, capital market that offers financing, smoothing and other benefits to affiliated firms. In diversified pyramid firm, the capital allocation in financially constrained affiliated can create value. Likewise, the ultimate owners have information advantages and authority that allow them to engage in "winner picking" behavior (Stein,1997). This practice of reallocating funds from one affiliate to another either to finance prospect opportunities or to collateral distressed firms may create value even if group-affiliated firms are financially constrained.

However, such benefits might be reaped by the ultimate owners and their connections. Ultimate controlling shareholders intend to make pervasive use of opportunistic practices aimed at stripping assets from removed subsidiaries and re-deploying cash flows from "affiliated cash cows" in favor of tightly held firms in utilizing with their personal interest. Indeed, it can be conjectured that the costs associated with the risk of expropriation within pyramid firms more than offset the attached benefits with such affiliation. Consequently, a value discount for minority shareholders may be associated with the pyramid firms. In line with these discussions, the following hypothesis is stated as follows:

H_1: Pyramidal affiliated firms have negative implication on firm value

Methodology:

Sample of Malaysian pyramidal firms of public listed companies are identified for the period 1990 to 2010. The sample consists of 136 *firms* listed from Main Market of Bursa Malaysia Berhad (BMB). Data on the number of pyramidal firms are collected based on cash flow rights, control rights, duality function and financial institution as second largest shareholders. The data are gathered from firms listed in Main Market of Bursa Malaysia Berhad (BMB) and Datastream database. While the data for ownership information was manually extracted from firms' annual reports and OSIRIS database.

The research design incorporates balanced panel approach and estimates the equation using pooled Generalised Least Square (GLS) method. There are three steps carried out in this study. First, run the model for whole sample. Second, separate sample into low and high CFR ratio pyramidal firms. Finally, run the model on the sub-samples.

The study adapts the empirical model by Attig (2003).This empirical model is developed to capture the issue of value reduction in pyramidal firms. This model is consistent with systematic and anecdotal evidence on *pyramid firm which address the incentives for expropriation*. In this model, a dummy variable for pyramidal firm (PF) is included. A number of control variables are also incorporated to

capture the potential dilution effects associated with pyramidal firms.

Equation of the Empirical Model:

$TOBQ = \alpha + \beta\,\underline{\Gamma} + \delta * PF + \varepsilon$ (1)

$(TobinQ) = f$ (Pyramid, Risk, Size, Cash, Capex, DivR, DebtR,   (1a)
Liquidity, Duality, FIH,)

$TOBQ = \beta_0 + \beta_1 PF + \beta_2 RISK + \beta_3 LSIZE + \beta_4 LCASH + \beta_5 CAPEX +$

$\beta_6 DIVR + \beta_7 DEBTR + B_8 LIQD + \beta_9 DUAL + \beta_{10} FIH + u$
     (1b)

Where:

TOBQ = market value of equity plus total debt divided by total asset, a proxy for firm value

PF = pyramid firms, dummy variable is used (PAFF = 1, NAFF = 0)

RISK = standard deviation of the variances of daily stock returns, a proxy for total risk

LSIZE = the natural log of the total asset

LCASH = the natural log of the cash

CAPEX = capital expenditure which is a proxy for firm's investment, total fixed asset divided by total asset

DIVR = ratio of cash dividends divided by pre tax income minus income tax, represent how much earnings are distributed to the shareholders

DEBTR = ratio of total debt divided by total asset, measure firm's financial leverage

LIQD = yearly average of daily bid ask spread (BASP), a proxy to compute the stock liquidity

DUAL = represent for duality (CEO / chairman), dummy variable is used (D= 1, D= 0)

FIH = financial institution holdings as the second largest owner, dummy variable is used (D= 1, D = 0)

u = disturbing terms

β_0 = constant term (intercept)

β_1 to β_{10}= regression coefficients of each explanatory variables

TOBQ is a measure for firm's value which is also known as Tobin Q. $\underline{\Gamma}$ is a set of firm specific control variables. In this model, pyramidal affiliated firm (**PAFF**) is a dummy variable for firm that has an affiliation with pyramid and is assigned a value of one (1) and zero (0) if otherwise. **α, β** and **δ** are estimated parameters and ε is an error term. **δ** measures the relation between firm's pyramidal affiliation to TOBQ. Table 2 illustrates the coefficient signs for the model the implication of pyramid firm towards firm value.

Results and Discussions:

The current section deals with the regression results for the model derived.

Overall Result Pyramid Firm towards Firm Value:

Table 1 shows the result of regression analysis for the implication of pyramid firm towards firm value. The result indicates that pyramidal firms have a negative relationship with firm value which is statistically

significant at 1% level. The negative effect means that higher pyramid ownership firm provides the controlling shareholder with more opportunity and incentive to expropriate firm's resources at the expense of minority shareholders which is in line with the expropriation hypothesis. This result is similar with the findings by (Gomez, Nunez-Nickel & Gutierrez, 2001) and (Miller, Le Breton-Miller, Lester & Cannella, 2007).

Table 1: Overall Results of Regression Analysis (Dependent Variable: TobinQ)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PF	-0.139106	0.054368	-2.558630	0.0106***
Risk	-0.348095	0.179632	-1.937822	0.0529**
Cash	0.003306	0.010064	0.328478	0.7426
Size	0.070217	0.011956	5.872990	0.0000***
CAPEX	-0.178782	0.062067	-2.880489	0.0040***
Debt Ratio	0.745349	0.027750	26.85967	0.0000***
Div Ratio	0.060664	0.022542	2.691185	0.0072***
Duality	0.097442	0.053008	1.838243	0.0663
Fin. Inst. Holding	0.020238	0.021099	0.959229	0.3376
Liquidity	-0.016179	0.005905	-2.739658	0.0062***

Weighted Statistics

R-squared	0.252771	Mean dependent var	1.052867
Adjusted R-squared	0.221421	S.D. dependent var	1.225338
S.E. of regression	0.794240	Sum squared resid	288.4862
Durbin-Watson stat	1.894872		

*significant at 10%, **significant at 5% and ***significant at 1%

Firm's size records positive relationship with firm value at 1% level, consistent with Onder (2003) and Tran (2005). A bigger firm can perhaps devise better ways and means to fight market risks and uncertainties and have better chances to offset random losses (Surajit & Saxena, 2009). For capital expenditure, it gives negative implication towards firm value. In this case, the coefficient for capital expenditure is significantly negative at 1% level. The next variable is dividend payout ratio which is significantly positive related to firm value. Higher dividend gives the impression that the ultimate owner does not retain larger amount of earnings that can be expropriated later for the benefits of ultimate owner. Besides that, the debt ratio also shows the similar thing, where it is significantly positively related to firm value at 1% level. The result signifies that those pyramidal structures which have high debt ratios indicate high tendency to borrow externally.

Pyramidal firms may destroy value since the private benefits are not equally distributed to the minority shareholders. Ultimate owners, mostly families, tend to make pervasive use of opportunistic practices which strip assets from subsidiaries and redeploy cash flows from "affiliated cash cows" to insure private benefits. Therefore, pyramidal structures tend to depress firm value. Other findings report that group pyramidal firms are associated with expropriation of minority

shareholders, tunneling of cash flows and suboptimal decision making (Bertrand, Mehta & Mullanaithan, 2000; Claessens et al, 2000; Johnson, La Porta, Lopez & Shleifer, 2000; Khanna & Palepu, 2000; Perotti & Gelfer, 2001). Hence, it can be conjectured that minority shareholders face costs linked to expropriation risk which can more than offset the benefits that come with such pyramidal firms. As a result, pyramidal firm is associated with value discount which particularly also give negative implication for the minority shareholders.

Meanwhile, in the Malaysian scenario, expropriation potential is high when the function of owner and manager is united. The regression result of this study shows that firms value are devalued when the owners are not independent (Shamsul, 2006). The other variable is stock liquidity, which might be useful for small investors as a signal providing protection against eventual expropriation. Anderson & Fraser (2000) state that trading frequency is a proxy for the speed with which information is captured in stock prices. Easley, Kiefer, O'Hara & Paperman (1996) claim that stock liquidity should be an indicator of disagreement among shareholders, as less active stocks face a greater risk of informed trading. The bid ask spread is used as a proxy in this study to measure stock liquidity.

Bid-ask spread is the spread between the dealer's ask price and the dealer's bid price. In general, the higher the spread, the lower the liquidity. In contrast, the lower the spread, the higher the liquidity. Stock liquidity is closely related to stock characteristics such as size and volatility. Smaller and more volatile stocks tend to have low liquidity. Increases in the liquidity of a company's stock can reduce its cost of capital and increase its market value and have better performance. It is because stock shares represent investors' commands for firm's cash flow and control rights, the liquidity of stock shares plays an important role in the valuation of the firms.

Stock liquidity decreases significantly with concentrated ownership such as pyramid structure (Yosra & Ben Ouda Sioud, 2011). It is because pyramid mechanism is used to gain control and hence a significant separation of ownership from control affects liquidity. Their results also indicate that concentration of voting rights allows dominant shareholder to control firms and enables them to enjoy private benefits if expropriation of minority shareholders is possible. Concentration of cash flow rights encourages them to control firms effectively. When shareholder has more voting rights than ownership rights, dominant owners do not care about firm's objectives; they pay more attention to their personal interests (Claessens et al., 2002; La Porta et al. 1999). For instance, dominant shareholders can expropriate minority shareholders. In practice, they provide funds only if they have private information about projects they would invest in which decreases stock liquidity (Attig, Fong, Lang & Gadhoum, 2006).

This indicates asymmetric information effect is important for bid-ask spread measures (Bhide, 1993; Holmstrom & Tirole, 1993). Severity of asymmetric information affects the size of the spread. The higher the ownership concentration in a pyramidal firm, the lower is the liquidity. It is because ownership concentration strengthens information asymmetry, which increases transaction costs and hence, reduce liquidity.

The finding shows negative impact of stock liquidity on firm value at 1% level. Thus, investors are alert to dilution and will avoid stocks of firms where the risk of private benefit extraction is large. As the dilution usually takes the form of inside information exploitation and firm news manipulation, investors will select more liquid stocks to lower the cost of their "exit option". This view supports the study by Anderson & Fraser (2000), that information flows in pyramidal firms are more distorted.

The implication of pyramidal firms towards value is more pronounced when they are classified into high and low CFR ratio firms as indicated in Table 2 and Table 3 respectively. For that purpose, the ratio from the cash flow rights over control rights is derived.

Result of High CFR Ratio Pyramidal Firms:

Table 2 demonstrates the result of analysis for the high CFR ratio pyramidal firms. However, only four variables are significant which are size, capital expenditure, duality and stock liquidity. For size and liquidity, these variables are significantly negative at 5% and 1% levels respectively. It means that high CFR ratio firms which are smaller and less liquid tend to have higher firm value. It can be conjectured that even though high CFR ratio firms in Malaysia can be smaller in size and less liquid, they can still perform well.

Table 2: Results of High CFR Ratio
(Dependent Variable: TobinQ)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PF	0.163089	0.127625	1.277879	0.2024
Risk	-0.311061	1.235389	-0.251792	0.8014
Cash	0.015010	0.021138	0.710079	0.4783
Size	-0.037148	0.018583	-1.998986	0.0466**
CAPEX	1.645116	0.080308	20.48498	0.0000***
Debt Ratio	0.316429	0.223774	1.414055	0.1585
Div Ratio	-0.001749	0.006183	-0.282840	0.7775
Duality	0.324107	0.132734	2.441778	0.0153***
Fin. Inst. Holding	-0.037326	0.100251	-0.372326	0.7099
Liquidity	-0.634315	0.083470	-7.599345	0.0000***

Weighted Statistics

R-squared	0.270990	Mean dependent var	0.775679
Adjusted R-squared	0.251108	S.D. dependent var	1.203877
S.E. of regression	0.981058	Sum squared resid	317.6165
Durbin-Watson stat	1.908019		

*significant at 10%,
**significant at 5% and
***significant at 1%

Meanwhile, for capital expenditure and duality, the coefficients come up with positive signs. The results suggest that higher capital expenditure and duality leads to higher firm value. For high CFR ratio firms, the result is true because the issue of separation of actual ownership and control as well as agency problems are less in these firms and they can easily invest for firms' growth without worrying about expropriation by the ultimate owners.

The other variable is duality function which is significantly positively related firm value at 1% level. The duality function of the owner actually helps the high CFR ratio firms to make proper decisions on firms' operations especially during crisis period (Shamsul, 2006).

Result of Low CFR Ratio Pyramidal Firms:

The regression analysis results of low CFR ratio firms are more conclusive to show the implication of pyramidal firms towards firm value. The low CFR ratio firms open up possibilities for the ultimate owner to conduct wealth expropriation or rent-seeking behaviour which leads to agency problems (Claessens et al, 2000). Table 3 presents the results of regression analysis which focus on low CFR ratio firms. The results reveal that seven variables are significant at 1% level and they are pyramidal firm, size, capital expenditure, debt ratio, dividend payout ratio, duality and stock liquidity.

Table 3: Results of Regression Analysis
(Model: Low CFR Ratio)
(Dependent Variable: TobinQ)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PF	0.674240	0.150079	4.492568	0.0000***
Risk	-4.762557	3.802597	-1.252448	0.2140
Cash	-0.025208	0.051088	-0.493416	0.6230
Size	0.160493	0.051544	3.113719	0.0025***
CAPEX	-0.606385	0.231441	-2.620042	0.0105***
Debt Ratio	0.966493	0.007818	123.6230	0.0000***
Div Ratio	0.114842	0.043938	2.613736	0.0107***
Duality	-0.661693	0.059274	-11.16332	0.0000***
Fin. Inst. Holding	0.133394	0.082517	1.616556	0.1098
Liquidity	0.209282	0.061831	3.384719	0.0011***

Weighted Statistics

R-squared	0.288502	Mean dependent var	1.300336
Adjusted R-squared	0.274799	S.D. dependent var	1.070549
S.E. of regression	0.924152	Sum squared resid	162.2706
Durbin-Watson stat	1.939339		

*significant at 10%,
**significant at 5% and
***significant at 1%

For the variables such as size, debt ratio, dividend payout ratio and stock liquidity are significantly positively related to firm value at 1% level whereas capital expenditure and duality variables are significantly negatively related to firm value at 1% level. Low CFR ratio firms' analysis results are more consistent and in line with prior findings of pyramidal firm implication on firm value.

Firms with more capital spending could not perform well because they probably over invest to fulfil the intention of ultimate owner's utility function such as empire building. The negative relationship of duality and firm value indicates that for low CFR ratio firms when the owner and manager functions are not separated, firm value tend to be depressed. This indicates better value for firms with separate owner-manager functions. From the findings, it can be concluded that the implication of pyramidal firm towards value is more observable for low CFR ratio pyramidal firms.

Conclusion:

The emergence of pyramid firm may have detrimental influence towards firm value. Finding from the study reveals that factors such as pyramidal firm, risk, size, capital expenditure, debt, dividend payout ratio and liquidity significantly affect firm value. The impact of pyramidal firms towards value is more pronounced when the pyramidal firms are segregated into high and low CFR ratio firms. For the high CFR ratio pyramidal firms, only four variables are significant towards firm value. Variables such as capital expenditure, duality and stock liquidity are significant at 1% level, while size variable is significant at 5% level. The rest of the variables are not significant. The final analysis is the model for low CFR ratio pyramidal firms, where the results report that seven variables are significant at 1% level and they are pyramidal firm affiliation, size, capital expenditure, debt ratio, dividend payout ratio, duality and stock liquidity. The other three variables such as risk, cash and financial institution holding are not significant. The low CFR ratio firms in this case open up possibilities for the ultimate owner to create private benefit for self-interest without regards to the minority shareholders. The implication of pyramidal firm towards value is clearly observed in the case of low CFR ratio pyramidal firms. This result is in line with the rent-extraction hypotheses where the ultimate owner of pyramidal firms creates private benefit of controls which decreases firm's value. This study can be extended to pyramid structure in other countries in the region in order to provide better generalization. For future research, it is recommended to use the other possible method such as Generalized Method of Moments (GMM) to strengthen the empirical results and that could provide a robustness check on the results.

facilitating the project.

References:

[1] Almeida, H.V. & Wolfenzon, D. (2008). A theory of pyramidal ownership and Family Business Group. The Journal of Finance, LXI (6), 2637-2680.

[2] Anderson, C., & Fraser, R.D. (2000). Corporate control, bank risk taking and the health of the banking industry. Journal of Banking and Finance, 24, 1383-1398.

[3] Attig, N., Fischer, K., & Gadhoum, Y. (2003). On the determinants of pyramidal ownership: Evidence on dilution of minority interests. Halifax, Nova Scotia: Sobey School of Business, Saint Mary's University.

[4] Attig, N., Fong, W-M., Lang, L. & Gadhoum, Y. (2006). Effects of large shareholding on information asymmetry and stock liquidity. Journal of Banking and Finance, 30 (10), 2875-2892.

[5] Bany-Ariffin, A.N., Agus-Harjito, D., & Zunaidah, S. (2009). Pyramidal firms and dividend payout announcement in Indonesia: A Note. International Applied Economics and Management Letters.

[6] Bebchuk, L.A., Reiner, K. & Triantia, G. (2000). Stock pyramids and dual class equity: Mechanism of agency cost of separating control and ownership. Working Paper, Harvard Law School, USA, 12-17.

[7] Berle, A.A. & Means, G.C. (1932). The modern corporation and private property. Commerce Clearing House, New York.

[8] Bertrand, M., Mehta, P. & Mullanaithan, S. (2000). Ferreting out tunneling: An application to Indian Business Groups. Working Paper, National Bureau of Economic Research.

[9] Bhide, A. (1993). The hidden costs of stock market liquidity. Journal of Financial Economics, 34, 31-51.

[10] Bozec, Y., & Laurin, C. (2008). Large shareholder entrenchment and performance: Empirical evidence from Canada. Journal of Business Finance and Accounting, 35, 25-49.

[11] Bunkanwanicha, P. & Wiwattanakantang, Y. (2008). Allocating risk across pyramidal tiers: Evidence from Thai Business Group. Tokyo, Japan: Institute of Economic Research, Hitotsubashi University.

[12] Chapelle, A. (2005). Separation between ownership and control: Where do we stand?. Journal of Corporate Ownership and Control, 2, 91-101.

[13] Cheung, Y.L., Jing, L., Lu, T., Rau, P.R. & Stauraitis, A. (2009). Tunnelling and propping up: An analysis of Related Party Transaction by Chinese Listed Companies. Pacific-Basin Journal, 17, 372-393.

[14] Claessens, S., Djankov, S., & Lang, L.H.P. (1999). Who control East Asian Corporations?. World Bank Working Paper No. 2054.

[15] Claessens, S., Djankov, S., & Lang, L.H.P. (2000/2000a). The separation of ownership and control in East Asian Corporations. Journal of Financial Economics, 58, 81-112.

[16] Claessens, S., Djankov, S., Fan, J.P.H., & Lang, L.H.P. (2000b). The costs of group affiliation: Evidence from East Asia. Retrieved from http://rru.worldbank.org/research/interest/prr stuff?working papers?2088.pdf.

[17] Claessens, S., Djankov, S., Fan, J.P.H., Lang, L.H.P. (2002). Disentangling the incentive and entrenchment effects of large shareholding. The Journal of Finance, 57, 2741-2771.

[18] Claessens, S., Fan, J.PH. & Lang, L.H.P. (2006). The benefits and costs of Group Affiliation: Evidence from East Asian. Emerging Markets Review, 7, 1-26.

[19] Easley, D., Kiefer, M.N., O'Hara, M. & Paperman, B.J. (1996). Liquidity, information and infrequently traded stocks. Journal of Finance, 51, 1405-1436.

[20] Faccio, M., Lang, L.H.P. & Yeung, L. (2001, 2002). Dividends and expropriation. The American Economic Review, 91 (1), 54-78.

[21] Faccio, M., & Lang, L.H.P. (2002). The ultimate ownership of Western European Corporations. Journal of Financial Economics, 65, 365-395.

[22] Fan, J.P.H., & Wong, T.J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. Journal of Accounting and Economics, 33, 401-425.

[23] Fan, J.P.H., & Wong, T.J. (2005). Do external auditors perform a corporate governance role in emerging markets?: Evidence from East Asia. CFA Digest, 35, 22–33.

[24] Fauzias, M.N., & Bany-Ariffin, A.N. (2005). Pyramiding effect on firm's investment decision among Malaysian Distress Companies. Journal of Corporate Ownership and Control, 3, 163-172.

[25] Fauzias, M.N., & Zunaidah, S. (2007). The interaction effect between ownership structure and board governance on dividends: Evidence from Malaysian Listed Firms. Proceedings of the Malaysian Finance Association 9th Annual Conference, Shah Alam, Selangor, Malaysia: UKM and UPM.

[26] Gadhoum, Y., Noiseux, M.H. & Zeghal, D. (2005). Demystifying the illusion of the positive effects of ownership concentration on corporate performance. University of Quebec, Canada.

[27] Gomez, M.L., Nunez-Nickel, M. & Gutierrez, I. (2001). The role of family ties in agency contracts. Academy of Management Journal, 44 (1), 81–95.

[28] Grossman, S.J. & Hart, O.D. (1988). One share one vote and the market for corporate control. Journal of Financial Economics, 20, 175-202.

[29] Haniffa, R. & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian Listed Companies. Journal of Business Finance and Accounting, 33 (7/8), 1034-1062.

[30] Harris, M. & Raviv, A. (1998). Capital budgeting and delegation. Journal of Financial Economics, Elsevier, 50 (3), 259-289.

[31] Holmstrom, B. & Tirole, J. (1993). Market liquidity and performance monitoring. Journal of Political Economy, 101 (4), 678-709.

[32] Hughes, J.P. (2009). Corporate value, ultimate control and law protection for investor in Western Europe. Management Accounting Research, 20, 41-52.

[33] Jensen, M.C. & Meckling, W.H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3 (4), 305–360.

[34] Johnson, S., La Porta, R., Lopez, F., & Shleifer, A. (2000). Tunneling. American Economic Review, 90, 22-27.

[35] Khanna, T., & Palepu, K. (2000). Is group affiliation profitable in emerging markets?: An analysis of diversified Indian Business Group. The Journal of Finance, LV, 867-891.

[36] Khatri, Y., Leruth, L. & Piesse, J. (2002). Corporate performance and governance in Malaysia. IMF Working Paper No. 02/152, Washington: International Monetary Fund.

[37] La Porta, R., Lopez, F. & Shleifer, A. (1999). Corporate ownership around the world. Journal of Finance, American Finance Association, 55 (1), 1-33.

[38] La Porta, R., Lopez, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. Journal of Finance, 57, 1147–1170.

[39] Lemmon, M.L., & Lins, K.V. (2003). Ownership structure, corporate governance and firm value: Evidence from East Asian financial crisis. The Journal of Finance, LVIII, 1445-1468.

[40] Miguel, A., Pindado, J. & de-la Torre, C. (2005). How do entrenchment and expropriation phenomena affect control mechanism?. Corporate Governance, 13 (4), 505-516.

[41] Miller, D., Le Breton-Miller, I., Lester, R.H. & Cannella, A.A. (2007). Are family firms really superior performers?. Journal of Corporate Finance, 13 (5), 829–858.

[42] Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. Journal of Financial Economics, 64, 215-241.

[43] Onder, Z. (2003). Ownership concentration and firm performance: Evidence from Turkish Firms. METU Studies in Development, 30 (2), 181-203.

[44] Perotti, E.C. & Gelfer, S. (2001). Red barons or robber barons?: Governance and investment in Russian Financial-Industrial Groups. European Economic Review, 45.

[45] Shamsul, N.A. (2006). Board structure and ownership in Malaysia: The case of Distressed Listed Companies. Corporate Governance, 6, 582-594.

[46] Shleifer, A. & Vishny, R.W. (1997). A survey of corporate governance. Journal of Finance, 52, 737-782.

[47] Stein, J.C. (1997). Internal capital markets and the competition for corporate resources. Journal of Finance, 52, 111-133.

[48] Surajit, B. & Saxena, A. (2009). Does the firm size matter?: An empirical enquiry into the performance of Indian Manufacturing Firms. Retrieved from http://ssrn.com/abstract=1300293.

[49] Tran, T.Q.G. (2005). Ownership structure and firm performance in transition countries: The case of European Union New Members. Dans FMA European Conference 2005.

[50] Yosra, G. & Ben Ouda Sioud, O. (2011). Ultimate ownership structure and stock liquidity: Empirical evidence from Tunisia. Studies in Economics and Finance, 28 (4), 282-300.

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