

Malaysian Corporate Finance and Governance Behavior

(Gelagat Kewangan dan Tadbir Urus Syarikat Malaysia)

Fauzias Mat Nor
(UKM-Graduate School of Business, Universiti Kebangsaan Malaysia)
Ruzita Abdul Rahim
Norazlan Alias
Mohd. Hasimi Yaacob
(Faculty of Economics and Management, Universiti Kebangsaan Malaysia)

ABSTRACT

This study analyzes the performance of 361 non-financial public firms that are listed on Bursa Malaysia during a relatively tranquil period from 2002 until 2007. The objective is to identify the corporate finance and governance practices that contribute to firm performance. In this study, performance is measured using Tobin's Q. The results from a fixed-effect panel data regression on 2,166 yearly-firm observations show four significant explanatory factors; leverage, dividend per share, CEO duality and Board size. The results imply that firms are more likely to perform if they employ more debt, pay higher dividend per share, hire different individuals to assume the two most important roles in the company and maintain a smaller number of directors. The four factors are then used to construct a model in which viability is proven if it can effectively differentiate the financial and governance characteristics of the high performers from the poor performers. The model seems more effective in predicting high performance, rather than low performance. High performance companies are therefore those that pay a much higher dividend per share and separate the roles of CEO and Board's Chair. Debt ratio and Board size are less definitive in segregating the two groups of companies.

ABSTRAK

Kajian ini menganalisis prestasi 361 syarikat awam bukan kewangan yang tersenarai di Bursa Malaysia dalam satu tempoh ekonomi stabil dari tahun 2002 hingga 2007. Objektifnya adalah untuk mengenal pasti amalan kewangan dan tadbir urus korporat yang menyumbang kepada prestasi. Dalam kajian ini, prestasi syarikat diukur menggunakan nisbah Tobin Q. Hasil regresi data panel kesan tetap ke atas 2,166 cerapan tahunan-syarikat menunjukkan empat faktor penjelas adalah signifikan yakni leveraj, dividen se saham, dwi peranan CEO dan saiz Lembaga Pengarah. Hasil kajian menyarankan syarikat lebih berpeluang untuk meningkatkan prestasinya jika ia menggunakan lebih banyak hutang, membayar dividen se saham yang lebih tinggi, memastikan dua jawatan terpenting dalam syarikat dijawab oleh dua individu yang berbeza dan mengurangkan bilangan pengarah. Keempat-empat faktor yang signifikan tersebut seterusnya digunakan untuk membentuk satu model yang kemampuannya dibuktikan jika secara efektif ia mampu membezakan ciri-ciri kewangan dan tadbir urus syarikat berprestasi tinggi daripada yang berprestasi lemah. Model tersebut nyata lebih efektif untuk meramalkan prestasi tinggi berbanding rendah. Syarikat berprestasi tinggi jelas membayar dividen se saham yang jauh lebih tinggi dan mengasingkan jawatan CEO daripada Pengerusi Lembaga Pengarah. Nisbah hutang dan saiz Lembaga Pengarah kurang meyakinkan dalam membezakan antara dua kumpulan syarikat tersebut.

Keywords : Corporate Finance ; Governance Behavior

INTRODUCTION

The primary responsibility of the management of corporations is to achieve the optimal level of financial performance and to update the stakeholders periodically about the status. To that extent, corporate performance largely depends on management behavior, which is multi-dimensional. Shaping the right managerial behavior that lead towards performance is, however, an impossible task because both humans and firms possess dynamic elements. Immense technological progress during the modern industrial era has inevitably brought

about the leading changes in corporate culture, strategies and operations (Jensen 1993). Increasing competition among borderless corporations has raised standards of quality, growth and profitability. As a result, corporations are clouted from multidimensional forces, which include their own feeble internal control systems (Jensen 1986: 2001). Violations, on theoretical grounds, of agency relationships, free cash flow, over-and-underinvestment, capital structure, and dividend policy have reshaped corporate behavior over the last few decades (Harris & Raviv 1991; Jensen 1986; Jensen & Meckling 1976; Morgado & Pindado 2003; Naranjo, Nimalendran &

Ryngaert 1998). New measures need to be taken in order to identify what features are important in achieving the desired performance.

Firm performance is the result of an effective and efficient use of all components of a firm's capital. External forces, such as changing regulations, advancing technologies, and state of competition, have influenced the growth and performance of firms. However, these factors are normally beyond the control of the firms themselves. Firms, however, maintain the authority, expertise and resources to make decisions on how to shape their internal forces. Of particular interest in this study are the major financial decisions and those who are responsible for the decisions. To a certain extent, the latter involves corporate governance, as it reflects the structure of the board of directors. Specifically, in regards to the CEO/chairperson role duality, board independence and board size are important in firm performance because they have a significant bearing on major decisions, particularly those involving the financing sources, cash disbursements and investments of the firms.

In short, this study analyses the performance of Malaysian publicly listed firms with an objective to identify the combination of corporate financial and governance practices that impact corporate performance. To test the importance of these practices, they are composed into a model which, if proven viable, can be promoted as a future forecasting model. To form the model, the study focuses on important financial areas, including investment, dividend policy, capital structure and free cash flows. These financial areas are considered simultaneously with the three board governance variables, namely: CEO duality, board independence and board size. The viability of the index is verified by testing its ability to differentiate high performance companies from poor performance counterparts.

The remaining discussion of the paper is organized as follows. The next section reviews past studies on major financial decisions and corporate governance. This is followed by a section that explains the data and methodology employed in the present study. The results and discussions are presented next, while the last section concludes the study and suggests the implications of the results.

CORPORATE FINANCIAL AND GOVERNANCE PRACTICES

The performance of financial managers, more often than not, is associated with their ability to efficiently raise the needed capital and invest the capital in projects that produce optimal returns for the firms. While those two decisions seem straight forward, the value creation effects could differ by the way the financing sources are mixed. That is the gist of the tax-correction paper by Modigliani-Miller (MM) in 1963, which is an advanced format of MM's seminal contribution in capital structure

theory (Modigliani & Miller 1958). While equity-based capital provides management with flexibility of not being pressured with periodical debt obligations and scrutiny by debt-holders, a new equity issuance has been perceived as sending bad signals to investors. Debt-based capital offers interest tax-shields and additional monitoring, but too much debt can prove risky for the company's long run survival.

Normally, the motive behind debt issuance is to finance added-value activities. In the U.S., Fama and French (1999) find that firms principally rely on long-term debt for financing growth and seasonal variations; and on equity for mergers and acquisition activities. Regardless of the motives, the finding by Myers (1977) shows that the relationship between debt financing and corporate performance is negative, if applied under an underinvestment scenario. Similar to Myers, Lang et al. (1996) also discover that firms with a higher debt to asset ratio also experience negative corporate performance. However, such a relationship occurs when the investment decisions are of low quality. The significant negative relationship between debt ratio and performance (ROA and Tobin's Q) is also documented in Abor (2007). Other studies that examine the valuation effect of capital structure through the firm performance in product market (Campello 2006; Harris & Raviv 1991) also find that valuation effect of debt is subject to the investment quality. These studies find that issuance of debt is positively associated with quality and reputation of firms.

In their classic paper on capital structure, MM (1958) emphasize the importance of investment instead of capital structure to create firm's value. However, past studies have also been mixed in documenting the impacts of investment increases on corporate performance. For instance, Myers (1977) put forwards a theory of underinvestment which posits that due to investor related policies, such as maintaining a high dividend payout ratios, managers do not invest enough because they are left with less funds to invest in good projects (Bebchuk & Stole 1993). On the contrary, possessing too much funds opens up opportunities for managers to overinvest, including in lower net present value (NPV) projects, which negatively influences corporate performance. Similarly, Chung et al. (1998) argue that corporate performance is positively influenced by the quality, rather than the quantity, of investment. Meanwhile, Baker et al. (2003) reveal that the impact of investment on firm performance depends on the method of financing (i.e. debt or equity) the investment.

While the impacts of fund raising and investment activities on firms' performance clearly indicates their importance, so do other financial policies that ensure the sustainability of those firms' activities. For instance, firms' dividend policies must be tailored toward pleasing their investors, whose reactions determine the firms' value in the market and whose wealth is crucial for meeting firms' future capital needs. The agency costs

argument; information asymmetry between managers and shareholders; and the separation of ownership and control constitute the basic explanations as to why dividend policies matter. Lang and Litzenberger (1989) explain that abnormal returns following firms' dividend announcement indicate that these firms are considering investing in quality projects. From another angle, a high dividend payout positively influences corporate performance because it reduces agency cost.

As much as major financial decisions are important in creating value, equally important are the components of firms that ensure those decisions are efficiently materialized. The relevant component is corporate governance, which constitutes the combination of all corporate guidelines and responsibility frameworks (Gillan & Starks 1998). In Jensen's (2001:9) words, corporate governance is critical because "without the clarity of mission provided by a single-value objective function, companies embracing stakeholder theory will experience managerial confusion, conflict, inefficiency and perhaps even competitive failure". Corporate governance works as an internal control system whose failure results in negative effects upon a firm's performance, both in the product market as well as the capital market. Corporate governance mechanisms are relatively more important for firms in emerging markets to achieve comparative economic benefits. This is because the capital markets are still immature, since some are still undergoing massive corporatization, and the corporate reporting system is still lacking in regards to effectiveness (Chua, Eun & Lai 2007; Cremers & Ferrell 2009). When incorporated in a study that recognizes the importance of financial decisions, attention should be paid to the governance of the board. As argued by John and Senbet's (1998), the board is effectively at the center of corporate performance monitoring.

The role of board governance has been studied in terms of its multiple dimensions, particularly the size of the board; the role of the duality of the CEO; and the level of independence of the Board. Hermalin and Weisbach (2001) find that a small board is more effective, while large boards are more symbolic. Still, a larger board has its own advantages in overcoming environmental uncertainties (Pearce & Zahra 1992). Empirically, the evidence is more in favor of the effectiveness of smaller board size. Yermack (1996) and Eisenberg et al. (1998) report a significant negative relationship between corporate performance (Tobin's Q) and board size. The same significant negative relationship is also documented in Haniffa and Hudaib (2006) for the Malaysian market, although the relationship is occasionally insignificant (Holthausen & Larcker 1993).

With respect to role of the duality of the CEO, Boyd (1995) reports it is significantly and positively related

to corporate performance. On the contrary, Rhoades et al. (2000) find a deterioration in corporate value due to CEO duality. In other studies (c.f., Brickley et al. 1997; Baliga et al. 1996) the relationships between CEO duality and corporate performance are insignificant. The insignificant relationship is also documented by Haniffa and Hudaib (2006) among Malaysian corporations.

Another important aspect of board structure is board composition, which focuses on the level of independence in the directors' decision making processes. Gompers et al. (2003) find a positive relationship between Tobin's Q and democratic boards (presence of independent directors). Similarly, Millstein and MacAvoy (1998) find that corporations with more independent board members outperform their counterparts. On the contrary, Agrawal and Knoeber (1996) find a negative relationship between Tobin's Q and board independence. In the Malaysian context, Haniffa and Hudaib (2006) find the impact of board composition on performance is also negative, but insignificant.

DATA AND METHODOLOGY

The sample firms of this study are selected from those listed on the Main Board of Bursa Malaysia. After August 2009, the Main Board was merged with the Second Board and renamed as the Main Market. The other market is Ace Market, which replaced the former MESDAQ market. The time range of the data, from 2002 to 2007, is purposely chosen to ensure data availability on different indicators, especially regarding corporate governance variables such as board independence, CEO duality and board size. The financial data is mainly collected from DataStream database provided by Thomson Reuters, while data on the governance variables are manually collected from the annual reports of the companies. During our first screening test, based on data availability, 367 companies were selected. The number includes companies with missing data, which are then treated by obtaining the data from the annual reports. After a critical check on the data, another six companies were dropped due to extreme outliers in certain years. Finally, a balanced panel data of 361 companies, possessing six years of data from 2002 to 2007 was finalized. The results from the initial use of 367 companies, compared with later use of 361 companies, did not reveal a significant difference, therefore, left no issue regarding survivorship bias. Table 1 presents the distribution of the final sample firms by sector. The sample firms are representative of all main sectors in Malaysia except for the Bank and Financial Institutions sector, which is purposely excluded due to structural, listing and other regulatory differences.

TABLE 1. Industry concentration of the selected companies

Sector	Sample Firms	
	Number	Percentage
Construction	26	7.20
Consumer Products	50	13.85
Hotels	6	1.66
Industrial Products	96	26.59
Infrastructure Project Companies	5	1.39
Plantation	31	8.59
Property	60	16.62
Technology	12	3.32
Trading/Services	75	20.78
TOTAL	361	100%

With panel data, this study enjoys the benefits of examining the listed companies in terms of both cross section and time series components. In panel data, researcher can control for individual fixed effects, which is common to any cross section across time, but may vary across a cross section during certain time periods. Panel data is popular in developing countries, where cross section data is often more available than data with long history (Gujarati 2003). Fixed-effect panel data models have constant slopes, but different intercepts for cross sectional units. The viability of using a fixed effect model or a random effect model can be decided using the Hausman test. The null hypothesis of the Hausman

test is H_0 : Random effects are consistent and efficient. The Hausman statistics may be viewed as a measure of distance between random and fixed effects. Hausman test follows a Chi Square distribution with ' k ' degrees of freedom, where ' k ' is the number of independent regressors (Ahn & Moon 2001). If the analysis rejects the null hypothesis, it is therefore more appropriate to run the fixed effect model for this data set. Fixed effect models are also appropriate when considering a specific set of ' N ' firms and the inference is restricted to the behavior of these firms (Baltagi 2005). Random effects are chosen when some firms are randomly selected from a large pool of companies.

TABLE 2. Variables and the operational definitions

Variables	Acronym	Operational Definition
Tobin's Q	TOBINQ	Ratio of the market value of common shares plus book value of total debt divided by the book value of total assets.
Investment Growth	INV	Growth in investment calculated by deducting the natural log of total assets at year $t = 1$ from year $t = 0$.
Free Cash Flow	FCF	The ratio of the free cash flow to book value of total asset. Free cash flow is calculated by adding EBIT and Depreciation and by subtracting interest, tax and dividend payments.
Capital Structure	TDTA	The ratio of book value of total debt to book value of total asset.
Dividend Policy	DPS	The ratio of total dividend payment to total number of shares outstanding.
CEO Duality	BDUAL	A dichotomous variable which takes a value of '1' if the CEO also serves as the Chairperson of the Board of Directors, and '0' otherwise.
Board Independence	BIND	The ratio of the number of independent directors to total number of directors.
Board Size	BSIZE	Natural log of the total number of board members.

Based on the literature regarding performance indicators, this study uses Tobin's Q as the proxy for corporate performance. Both measures, Tobin's Q and Shareholder's Return, are commonly used simultaneously or separately in extant literatures on corporate performance. Tobin's Q was introduced by Brainard and Tobin (1968) and later refined by Tobin (1969). According to Tobin (1969), the Q statistic is the ratio of the market value of outstanding financial claims on the firm to the current replacement cost of the firm's asset. Firms displaying Q greater than unity are judged

as using scarce resources effectively, while those with Q less than unity are judged otherwise (Lewellen & Badrinath 1997). The advantage of the Tobin's Q is it captures both market and accounting performance of the firm.

Recognizing the equivocal importance of both the decision making process and the decision made, this study incorporates both the major corporate financial decisions and corporate governance aspects that comprise the decision making element. The major corporate financial decisions concern the capital structure, investment,

free cash flows, and dividend policy. The decision making process is captured in board governance, which is examined on the basis of board size, CEO duality and board independence perspectives. Table 2 lists the variables and their operational definitions.

The impact of these corporate financial and governance factors is tested on corporate performance in the following regression equation;

$$\begin{aligned} TOBINQ_{i,t} = & \alpha_{i,t} + \beta_1(INV)_{i,t} + \beta_2(TDTA)_{i,t} \\ & + \beta_3(FCF)_{i,t} + \beta_4(DPS)_{i,t} + \beta_5(BIND)_{i,t} + \beta_6(BDUAL)_{i,t} \\ & + \beta_6(BDUAL)_{i,t} \\ & + \beta_7(BSIZE)_{i,t} + \varepsilon_{i,t} \end{aligned}$$

The model is used to identify the corporate financial and governance characteristics of the companies. Thus, if the model is reliable, it should be able to differentiate the characteristics of good performance from the poor performance companies. This is accomplished by taking the estimated coefficients of the significant regressors to create a forecasting model. The coefficients of the forecasting model are then used to predict the performance of the companies. If the model satisfies the reliability criterion, it is assumed that it is an effective tool to predict the corporate performance of the companies based upon their corporate financial and governance behavior.

FINDINGS AND DISCUSSIONS

Tables 3 and 4 highlight the descriptive statistics and correlation matrix of the variables. Table 3 shows that the average Tobin's Q for the total dataset is 0.97. This is lower than the international average of 1.30 (Chua et al. 2007). It is also lower than the Q of Malaysian firms, which for the period of 1996-2000 is 1.13 (Haniffa & Hudaib 2006) and for the period of 1999-2004 is 1.12 (Chua et al. 2007). In a broader scope, Chua et al. (2007) reveal that Tobin's Q range from the highest value of 2.11 in Finland to the lowest value of 0.77 in Venezuela. The average 0.97 value of Q in this study indicates a slightly unfavorable valuation of the Malaysian companies by the market compared to their replacement value.

The analysis reveals that the average growth of investment is around 5 percent. A low investment growth ratio can be explained by the unfavorable Tobin's Q. An average Q of below 1 indicates a situation where the firms are lacking in good investment opportunities (Morgado & Pindado 2003). The low investment is not likely to be caused by difficulties related to raising debt because the average debt ratio is still relatively low at 23% and rather constant at that level throughout the 6-year period. This debt level is similar to findings of Krishnan and Moyer (1997) and Deesomsak et al. (2004).

It is worth mentioning here that more than 80% of the listed companies in Malaysia are *shariah* compliant. By the international standard of *shariah* compliance criteria, these companies are obliged to keep the leverage level below one third of their asset value (Securities Commission Malaysia 2007).

The average free cash flows to total asset ratio of 3.07% is another potential reason behind the low investment growth and below standard Q. When insufficient capital is available for financing investment, the costs of capital will become higher as companies need to resort to external investors. Consequently, less investment opportunities are viable (with positive NPV or IRR greater than the high cost of capital). Despite the low free cash flows and low investment growth rate, companies pay out an average of MYR0.06 (Malaysian Ringgit) of dividend per share (DPS). DPS increases slightly over the period, having the lowest DPS of MYR0.48 in 2002 and the highest DPS of MYR0.075 in 2007.

In regards to board characteristics, on average, there are three independent directors in the board. The natural log of the board size is around 2, which is equivalent to 8 directors. That makes the independent directors around one third of the board members composition. These findings are similar to earlier results by Lipton and Lorsch (1992) and guidelines in the Malaysian Code of Corporate Governance (2001). In term of duality, around 27% of the companies have their CEOs serve as chairpersons of the board of directors. The findings relating to CEO duality and board size are similar to those of Haniffa and Hudaib (2006). In their study on Malaysian firms, Haniffa and Hudaib report an average board size of 7.94 and a presence of role duality in around 25% of the companies.

Table 4 reports the correlations among the dependent and independent variables. The first important finding is that Tobin's Q is significantly related to most of the independent variables except for capital structure and independent directors. All of the correlations with Tobin's Q are negative except for dividend per share. Investors in developing stock markets are more prone to appreciating real benefits rather than growth propensity. This conjecture is supported by the negative relationships between Tobin's Q and investment and free cash flow and the significantly positive relationship between Tobin's Q and dividend per share. With respect to the relationship between Tobin's Q and free cash flows, Jensen (1986) argues that managers are more likely to misuse the free cash flows if the amount is ample by investing them in negative NPV projects. As expected, board independence, duality and size are negatively related to Tobin's Q. However, the relationship is insignificant in the case of independent directors. Another important finding from Table 4 is that none of the correlation coefficients violate the assumption for multi-collinearity (correlation greater than 0.80), as suggested Gujarati (1995).

Table 5 reports the results of the Hausman test,

TABLE 3. Descriptive statistics

Variables	<i>Whole</i>	2002	2003	2004	2005	2006	2007
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
	St. Dev	St. Dev	St. Dev	St. Dev	St. Dev	St. Dev	St. Dev
	Skew	Skew	Skew	Skew	Skew	Skew	Skew
Kurtosis	Kurtosis	Kurtosis	Kurtosis	Kurtosis	Kurtosis	Kurtosis	
	n = 2166	n = 361	n = 361				
TOBINQ	0.9753	1.0096	1.0077	1.0657	0.8765	0.8917	1.0006
	1.1187	1.3433	1.1188	1.1654	0.9213	0.9849	1.1249
	6.7078	6.6734	6.7014	5.3272	5.0859	7.9764	7.5012
	63.9153	57.7063	61.7954	38.6261	36.1907	91.6740	82.1223
INV	0.04994	0.0310	0.0644	0.0601	0.0487	0.0351	0.0604
	0.3127	0.3601	0.3839	0.3235	0.3414	0.2026	0.2180
	-0.6100	1.7528	-1.5945	-2.7600	0.0261	1.5476	-2.4951
TDTA	43.5121	39.2069	43.9189	33.3287	33.2367	24.8127	22.6377
	0.2302	0.2207	0.2262	0.2288	0.2369	0.2408	0.2278
	0.2096	0.1966	0.1957	0.1879	0.2235	0.2499	0.1981
	2.3792	0.8608	0.9378	0.6773	3.1288	4.2838	1.4207
FCF	22.7956	3.4266	4.1927	2.8046	29.3439	41.4086	8.0126
	0.0308	0.0379	0.0433	0.0312	0.0238	0.0157	0.0327
	0.1346	0.1152	0.1271	0.1428	0.1799	0.1089	0.1201
DPS	-4.2300	1.2319	0.4363	-1.3925	-7.9201	-4.7759	-4.7786
	100.524	35.585	43.7043	41.3964	136.879	52.9177	55.3236
	0.0604	0.0483	0.0507	0.0606	0.0587	0.0690	0.0752
	0.1673	0.1452	0.1435	0.1763	0.1591	0.1783	0.1949
BIND	10.1051	10.5497	12.6908	9.8622	11.6072	8.5805	8.7530
	131.607	139.2304	201.472	120.728	175.768	103.247	96.1273
	3.1163	2.9640	3.1191	3.1191	3.0582	3.1994	3.2382
	0.9939	0.9783	1.0218	1.0774	0.9857	0.9123	0.9625
DUAL	0.9120	0.9990	0.9336	1.2835	0.5109	0.8713	0.8384
	5.0632	5.9327	4.9629	6.3847	3.7974	4.3591	4.1126
	0.2770	0.3324	0.2825	0.2909	0.3158	0.2355	0.2050
	0.4476	0.4717	0.4509	0.4548	0.4655	0.4249	0.4043
BSIZE	0.9966	0.7115	0.9659	0.9210	0.7926	1.2470	1.4616
	1.9931	1.5063	1.9330	1.8482	1.6282	2.5550	3.1362
	2.0101	2.0526	2.0371	2.0416	2.0395	1.9601	1.9298
	0.3079	0.2804	0.2874	0.2732	0.2670	0.3377	0.3683
	-0.8600	-0.2261	-0.1770	-0.1608	-0.1369	-1.3374	-1.3043
	5.1474	3.5391	3.4850	3.5739	2.8522	5.4234	4.8931

Notes: BSIZE is reported in natural log of total number of Board members. Skew refers to skewness.

TABLE 4. Correlation matrix

Variables	1	2	3	4	5	6	7
1=TOBINQ	1						
2=INV	-0.04*	1					
3=TDTA	-0.01	-0.05**	1				
4=FCF	-0.08***	0.25***	-0.20***	1			
5=DPS	0.38***	-0.03	-0.08***	0.05**	1		
6=BIND	-0.01	0.03	0.03	0.07***	0.06***	1	
7=BDUAL	-0.08***	0.02	0.07***	-0.03	-0.07***	-0.10***	1
8=BSIZE	-0.05**	0.04**	-0.02	0.11***	0.06***	-0.15***	0.48***

Notes: * = Significant at 10%, ** = Significant at 5%, *** = Significant at 1%. Column headings in number correspond to row headings.

whose null hypothesis indicate that the random effect panel model is the efficient choice for this dataset. However, the result for the TOBINQ model rejects the null

hypotheses. Hence, the study utilizes a fixed effect panel model for estimation.

TABLE 5. Hausman test for fixed or random effect

Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	37.9070	9	0.0000

Next, the results of running the fixed effect panel regression model on 2166 yearly-firm observations are depicted in Panel A of Table 6. Collectively, the seven corporate financial and governance variables explain nearly 88 percent of the variations in corporate performance as measured by Tobin’s Q. The results show that all selected corporate financial variables influence corporate performance positively. However, only debt ratio and dividend per share are significant. The sign of capital structure (debt ratio) suggests that firms can create value through a capital mix which allows more component of debt. This positive impact could be due to the low debt ratio currently used by the sample firms

(23%). The positive DPS coefficient indicates that more disbursement to investors in the form of dividend per share would increase corporate performance. Meanwhile, in contrast to theoretical prediction, a growth in investment does not necessarily lead to value creation. The fact that free cash flows are also not a significant predictor of performance suggests that investors do not appreciate having excess cash in the companies either. Overall, the investors’ preference for receiving dividend payment to spending the capital on investment is consistent with “bird-in-the-hand” theory, which posits that investors favor certain cash at present time, rather than uncertain gain from growth potential in the future.

TABLE 6. Regression results for general models

	Panel A. General Model		Panel B. Parsimonious Model	
R ²	0.898		0.898	
Adj R ²	0.877		0.877	
Std. Error	0.687		0.641	
F Value	43.012		43.476	
P-Value	0.000		0.000	
Variables	Coefficients	t-statistics	Coefficients	t-statistics
Intercept	0.8640	(40.7460)***	0.8100	(58.7012)***
INV	0.0028	(0.2297)		
TDTA	0.4451	(15.0185)***	0.0948	(18.9714)***
FCF	0.0215	(0.4569)		
DPS	1.1934	(12.7100)***	0.1803	(13.042)***
BIND	0.0018	(0.5036)		
BDUAL	-0.0311	(-4.4944)***	-0.0140	(-4.9778)***
BSIZE	-0.0304	(-3.5377)***	-0.0081	(-3.7523)***

Notes: * = Significant at 10%, ** = Significant at 5%, *** = Significant at 1%.

On the three dimensions of board governance, only board independence has a positive influence on corporate performance as predicted, but the impact is insignificant. The impacts of CEO duality and board size are negative and highly significant, consistent with prediction. With regard to the negative influence of CEO duality, Jensen (1986) argues that duality role of the CEO creates problem for organizational management. Therefore, a negative sign suggests a role separation is expected to uplift corporate performance. Board size (BSIZE) is another negative determinant of corporate performance, most probably because a greater number of directors

tend to create more conflicts in decision making process. The rule is probably more about the quality, rather than quantity, of the directors.

By dropping all insignificant variables in Panel A, we constructed and ran a parsimonious model on the 2,166 yearly-firm observations. The results, which are reported in Panel B of Table 6, demonstrate that, overall, this simplified model yields a goodness-of-fit level which is completely compatible with the general model. The model generates a corporate performance forecasting model as follows;

$$E(TOBIQ)_{i,t} = \alpha_{i,t} + 0.8100 + 0.095(TDTA)_{i,t} + 0.183(DPS)_{i,t} - 0.014(BDUA)_{i,t} - 0.008(BSIZE)_{i,t}$$

The equation is then used to estimate the expected Tobin's Q and rank the performance of the 361 sample firms on a yearly basis. Note that the equation has a unique intercept for each of the individual firm following the convention of the fixed effect regression model. A firm is categorized as in the top 10 percent performers if it ranks in the list (of 36 highest E(TOBIQ)) for at least 3 of the six years. Similarly, a firm is categorized as in the top 10 percent losers if it remains in the list (of lowest 36 E(TOBIQ)) for at least 3 of the six years. Once the

top and worst performance companies are identified, the corporate financial performance, including the Tobin's Q and governance characteristics of the firms, are determined. As a result, 36 companies have been identified as the high performance companies, while only 29 companies fit in the category of low performance companies. In a sense, the model works more effectively in predicting good (100%) performance, rather than poor performance (81%).

TABLE 7. Profile of top versus worst performing companies

	TOBIQ	TDTA	DPS	BDUAL	lnBSIZE	BSIZE
Panel A. Top 10% performing companies						
Average	2.694	0.184	0.211	0.185	2.001	7.820
Maximum	15.306	2.916	2.72	1.000	2.639	14.000
Minimum	0.514	0.00	0.00	0.000	0.700	2.012
Panel B. Bottom 10% non-performing companies						
Average	0.407	0.146	0.038	0.305	1.995	7.702
Maximum	3.493	1.007	1.256	1.000	2.996	20.000
Minimum	0.058	0.000	0.000	0.000	0.954	2.597

Note: Only major factors found significant are compared.

Next, a comparison is made to determine if the high performance companies have characteristics that are different from those of the low performance companies. The resulting financial and governance characteristics are shown in Table 7. To begin with, the high performance companies report an average actual Tobin's Q of 2.694, which is much higher than that of low performance companies ($Q = 0.407$). Other than performance, this result could also be interpreted as indicating that the high performance firms are generally those with high quality investment opportunities, while the low performance companies generally have low quality investment opportunities. Dividend per share (DPS) appears to be the most prevalent characteristics of the high performance companies. This group pays a handsome income of 21 cent per share to its shareholders, whereas the low performance companies pay only 4 cent per share. A closer look at the companies reveals that only 11.1 percent of the 36 high performance companies have not been paying dividends throughout the 2002-2007 period. Meanwhile, 27.6 percent of the 29 low performance companies adopt the zero dividend payments. This clear distinction could immediately translate into an investing strategy that requires investors to focus on high paying dividend stocks for a greater chance of future price appreciation.

Capital structure or debt ratio is only slightly higher for the high performance companies (18.4%) compared to the low performance (14.6%) companies. While the difference is not as clear as in the case of dividends, the percentages are also lower than the overall average debt ratio (23%). The lower than average debt ratio for the high performance companies might suggest that these companies can rely on internally generated capital (FCF =

5.34%) for investment, whose growth is at 2 percent (not reported). On the other hand, the much lower debt ratio among low performance companies could be attributed to the difficulties in securing debt when the firms are in poor condition, despite the greater needs for financing higher (4.57%) investment growth. The free cash flows of the low performance companies are only 0.22 percent.

In the meantime, the fact that the maximum debt ratio for the high performance companies is 292 percent suggests two disturbing interpretations. First, it suggests that even high performance companies can slip into financial distress some times. In this instance, it occurred in the case of a large industrial product company, recording a debt ratio of more than 200 percent in 2005 and 2006. In other years, the company's debt ratio is as high as 53 percent and as low as 0.1 percent (obviously after the company undergoes a restructuring plan). For investors, this implies that temporary down turns in good companies should be expected and, therefore, not to be taken as a permanent treat to their wealth. Second, the extremely high debt ratio also seems to have some weight on the average value that, if taken out, leaves an average which is very close to that of the low performance companies. For example, if the extremely high ratios are replaced with the firm's normal debt ratio (44.4%), the average debt ratio for the general performance of companies goes down to 16.35 percent. Consequently, it would become harder to distinguish the good performance of companies from the bad performance of companies based on their capital mix.

With regard to the board governance characteristics of the firms, it is helpful to first recall that both CEO duality and board size negatively influence performance. Accordingly, high performance companies are expected

to have a lower average than low performance companies. The result shows that other than dividends, CEO duality also differentiates high performance companies from low performance companies. Specifically, high performance companies are less likely to hire and rely on the same person to hold the two most important roles in the company. Only 19 percent of the top firms allow role duality, while nearly one third of the poor firms adopt such practices. Board size, however, is less definitive than role duality in differentiating high performance companies from low performance companies. One possible reason could be that Malaysian firms are generally adopting the right size of board, i.e. 8 persons which is the median number of directors for both groups.

CONCLUSIONS AND IMPLICATIONS

Malaysia is an emerging economy that has witnessed new companies being listed on Bursa Malaysia at an increasing rate each year. The performance of these companies is consistently under scrutiny from investors, policy makers, and other stakeholders. From the researchers' perspective, corporate performance presents a challenging quest for the identification of the key determinant factors. This study is particularly interested in the influence of financial and governance variables, reflecting the importance of the major decisions and decision making processes in influencing the performance of a firm. Specifically, this study investigates the relationship between corporate financial and governance decisions on the performance of 361 listed companies in Malaysia. This study covers a 6-year period that spans from 2002 to 2007, which represents an economy that is relatively free from major financial or economic shocks.

The fixed effect panel regressions, which are conducted on 2,166 yearly-firm balance panel data, reveal that dividend per share, CEO duality, debt ratio and board size significantly influence corporate performance. The impact of financial variables (dividend per share and debt ratio) on corporate performance is positive, whereas that of board governance (CEO duality and Board size) is negative. Of the two financial variables, dividend per share appears to contribute more positively to firm performance. Since this condition occurs during a period when investment is low, it may be surmised that investors appreciate sure cash rather than expected future price appreciation. The slow investment growth (5%) is not likely due to financing constraint because debt ratio is still low and remains relatively constant at 23% throughout the study period. This suggests that companies do not attempt to increase debt to finance their investment. Rather, with the low Q values, the slow investment growth is more likely to reflect a safe strategy, whereby firms become very selective in choosing projects that are vital to the performance of the company. This evidence is

also consistent with the "bird-in-the-hand" theory.

The results from the parsimonious model, which incorporates only the four significant determinants, indicate that the model is more effective in predicting good performance, rather than poor performance. Comparisons between the two groups yield results, demonstrating that high performance companies pay a much higher dividend per share and are less likely to allow their CEOs to also serve as the chairpersons of the board of directors. It is, however, more difficult to differentiate the two groups based on the level of debt ratio and board size. The low indifferent debt ratio (without the extreme values) is lower than the average debt ratio for the overall companies. For the high performance companies, it may suggest that these companies can rely on their internally generated capital (FCF = 5.34%) for financing investment, whose growth is 2 percent. For the low performance companies, it could be interpreted as their failure to secure debt due to the poor financial condition (FCF = 0.22%), despite their greater needs for financing higher (4.57%) investment growth. Board size also plays a less definitive role in differentiating the good performance companies from the poor performance companies. One possible reason could be that Malaysian firms are generally adopting the right size of board, i.e. 8 persons, which is the median number of directors for both groups. In a nutshell the results imply that Malaysian firms behave in such a way that pleases investors, who place certainty of return at the top of their priority list. While future growth propensity is uncertain, limiting tied-up capital on investment is more likely to also receive positive market reaction unless if investment can be funded by internally generated funds without having to rely on more costly borrowings.

Future studies should re-examine this issue in periods that include uncertainty. Extending the study period backward and forward will incorporate the turbulent periods of the 1997/98 Asian financial crisis and the 2008 global sub-prime crisis. However, these periods will pose a challenge for a study that employs panel data because more companies are likely to fail or delist during difficult economic conditions. It is also important to note that the intercept of the general and parsimonious models consistently show highly significant values. This indicates that other factors need to be taken into consideration when predicting the financial performance of firms.

ACKNOWLEDGEMENT

The authors are grateful for the support of the Ministry of Science, Technology and Innovation (MOSTI) in providing the funding for the research project (UKM06-01-02-SF0373). They also thank the participants of the 12th Malaysian Finance Association Conference for their insightful comments.

REFERENCES

- Abor, J. 2007. Debt policy and performance of SMEs: evidence from Ghanaian and South African Firms. *The Journal of Risk Finance* 8 (4): 364-379.
- Agrawal, A. & Knoeber, C. R. 1996. Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis* 31(3): 377-397.
- Ahn, S. C. & Moon, H. R. 2001. Large-N and large-T properties of panel data estimators and the Hausman test. In 10th International Conference on Panel Data. Berlin.
- Baker, M., Stein, J. C. & Wurgler, J. 2003. When does the market matter? Stock Prices and the investment of equity-dependent firms. *Quarterly Journal of Economics* 118(3): 969-1005.
- Baliga, B., Moyer, R. C., & Rao, R. S. 1996. CEO duality and firm performance: what's the fuss? *Strategic Management Journal* 17(1): 41-53.
- Baltagi, B. H. 2005. *Econometric Analysis of Panel Data*. United Kingdom: John Wiley and Sons Ltd.
- Bebchuk, L. A. & Stole, L. A. 1993. Do short-term objectives lead to under-or overinvestment in long-term projects? *Journal of Finance* 48(2): 719-729.
- Boyd, B. K. 1995. CEO duality and firm performance: a contingency model. *Strategic Management Journal* 16(4): 301-312.
- Brainard, W. C. & Tobin, J. 1968. Pitfalls in financial model building. *The American Economic Review* 58(2): 99-122.
- Brickley, J. A., Coles, J. L., & Jarrell, G. 1997. Leadership structure: separating the CEO and Chairman of the Board. *Journal of Corporate Finance* 3(3): 189-220.
- Campello, M. 2006. Debt financing: does it boost or hurt firm performance in product markets? *Journal of Financial Economics* 82(1): 135-172.
- Chua, C. T., Eun, C. S. & Lai, S. 2007. Corporate valuation around the world: the effects of governance, growth, and openness. *Journal of Banking & Finance* 31(1): 35-56.
- Cremers, M. & Ferrell, A. 2009. Thirty years of corporate governance: determinants and equity prices. Yale ICF Working Paper
- Deesomsak, R., Paudyal, K. & Pescetto, G. 2004. The determinants of capital structure: evidence from the Asia Pacific region. *Journal of Multinational Financial Management* 14(4&5): 387-405.
- Eisenberg, T., Sundgren, S. & Wells, M. T. 1998. Larger board size and decreasing firm value in small firms. *Journal of Financial Economics* 48(1): 35-54.
- Fama, E. F. & French, K. R. 1999. The corporate cost of capital and the return on corporate investment. *The Journal of Finance* 54(6): 1939-1967.
- Gillan, S. & Starks, L. T. 1998. A survey of shareholder activism: motivation and empirical evidence. *Contemporary Finance Digest* 2(3): 10-34.
- Gompers, P., Ishii, J. & Metrick, A. 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118(1): 107-155.
- Gujarati, D. N. 1995. *Basic Econometrics*. Singapore: McGraw-Hill Inc.
- Gujarati, D. N. 2003. *Basic Econometrics*. 4th edition. New York: McGraw-Hill Inc.
- Haniffa, R. & Hudaib, M. 2006. Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting* 33(7&8): 1034-1062.
- Harris, M. & Raviv, A. 1991. The theory of capital structure. *Journal of Finance* 46(1): 297-355.
- Hermalin, B. E. & Weisbach, M. S. 2001. Boards of Directors as an endogenously determined institution: a survey of the economic literature. Working Paper: National Bureau of Economic Research
- Holthausen, R. W. & Larcker, D. F. 1993. *Boards of Directors, ownership structure and CEO compensation*. Unpublished Manuscript: Wharton School, University of Pennsylvania, Philadelphia.
- Jensen, H. 1993. International monetary policy cooperation in economies with centralised wage setting. *Open Economies Review* 4(3): 269-285.
- Jensen, M. 2001. Value Maximisation, stakeholder theory, and the corporate objective function. *European Financial Management* 7(3): 297-317.
- Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 76(2): 323-329.
- Jensen, M. C. & Meckling, W.H. 1976. Theory of the firm: managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 3(4): 305-360.
- John, K. & Senbet, L. W. 1998. Corporate governance and board effectiveness. *Journal of Banking and Finance* 22(4): 371-403.
- Krishnan, V. S. & Moyer, R. C. 1997. Performance, capital structure and home country: an analysis of asian corporations. *Global Finance Journal* 8(1): 129-144.
- Lang, L. H. P. & Litzenger, R. 1989. Dividend announcements. cash flow signalling vs. free cash flow hypothesis? . *Journal of Financial Economics* 24(1): 181-191.
- Lang, L. H. P., Ofek, E. & Stulz, R. È. M. 1996. Leverage, investment, and firm growth. *Journal of Financial Economics* 40(1): 3-29.
- Lewellen, W. G. & Badrinath, S. G. 1997. On the Measurement of Tobin's q. *Journal of Financial Economics* 44(1): 77-122.
- Lipton, M. & Lorsch, J.W. 1992. A modest proposal for improved corporate governance. *Business Lawyer* 48: 59-59.
- MICCG. 2001. *Malaysian Code of Corporate Governance: 2001*. Malaysia: Ministry of Finance
- Millstein, I. M. & MacAvoy, P. W. 1998. The active Board of Directors and performance of the large publicly traded corporation. *Columbia Law Review*

- 98(5): 1283-1322.
- Modigliani, F. & Miller, M. H. 1958. The cost of capital, corporation finance and the theory of investment. *The American Economic Review* 48(3): 261-297.
- Morgado, A. & Pindado, J. 2003. The underinvestment and overinvestment hypotheses: an analysis using panel data. *European Financial Management* 9 (2):163-177.
- Myers, S. C. 1977. Determinants of corporate borrowing. *Journal of Financial Economics* 5(2): 147-175.
- Naranjo, A., Nimalendran, M. & Ryngaert, M. 1998. Stock returns, dividend yields, and taxes. *The Journal of Finance* 53(6): 2029-2057.
- Pearce, J. A. & Zahra, S. A. 1992. Board composition from a strategic contingency perspective. *Journal of Management Studies* 29(4): 411-438.
- Rhoades, D. L., Rechner, P. L. & Sundaramurthy, C. 2000. Board composition and financial performance: a meta-analysis of the influence of outside directors. *Journal of Managerial Issues* 12(1): 76-91.
- Securities Commission Malaysia. 2007. List of Shariah compliant companies in Bursa Malaysia.
- Tobin, J. 1969. A general equilibrium approach to monetary theory. *Journal of Money, Credit and Banking* 1(1): 15-29.
- Yermack, D. 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40(2) : 185-211.
- Fauzias Mat Nor (corresponding author)
UKM-Graduate School of Business
Universiti Kebangsaan Malaysia, 43600 UKM Bangi,
Selangor
E-mail: fauzias@ukm.my
- Ruzita Abdul Rahim
Faculty of Economics and Management
Universiti Kebangsaan Malaysia, 43600 UKM Bangi,
Selangor
E-mail: ruzitaar@ukm.my
- Norazlan Alias
Faculty of Economics and Management
Universiti Kebangsaan Malaysia, 43600 UKM Bangi,
Selangor
E-mail: norazlan@ukm.my
- Mohd. Hasimi Yaacob
Faculty of Economics and Management
Universiti Kebangsaan Malaysia, 4360 UKM Bangi,
Selangor
E-mail: ruzitaar@ukm.my

