

# AN EMPIRICAL INVESTIGATION ON DETERMINANTS OF EXECUTIVE DIRECTORS' REMUNERATION IN BURSA MALAYSIA

Chye-Khoon Ooi\*, Ming-Ming Lai\*\*

## Abstract

Executive directors' remuneration may link to company performance. This paper investigates the determinants of executive directors' remuneration of all public listed companies in Bursa Malaysia from 2004 to 2006. Multiple regression results indicated that tenure of an executive director has held the director' position appeared to be the most significant determinant for executive directors' remuneration. Duality emerged as second significant determinant except for Kuala Lumpur Composite Index (KLCI) component companies. Company performance and size were found as determinants except for KLCI component companies. The results also suggest that age and qualification are the weakest determinants for human capital variables. Overall, net profit was significant positive correlated with company size and particularly is evident for KLCI companies.

Keywords: directors, executives, remuneration, Malaysia

\*Multimedia University, Jalan Multimedia

63100 Cyberjaya, Selangor Darul Ehsan, Malaysia

\*\*Corresponding Author: Ming-Ming Lai, Faculty of Management, Multimedia University, Jalan Multimedia

63100 Cyberjaya, Selangor Darul Ehsan, Malaysia, mmlai@mmu.edu.my

Tel: 603-83125722, Fax: 603-83125590

## 1. Introduction

The remuneration of the directors should reflect the responsibility and commitment of the respective directors concerned. If the directors are paid too little, they may be de-motivated to carry out their duties effectively and efficiently. Nonetheless, there is high probability that the directors may lose their independence if the remuneration is excessive. Their performance will be perceived as not in line with the quantum of pay received.

The remuneration package of executive directors is always a subject of interest when corporate governance issues were heated up again recently with the irregularities found in some of the companies listed in Bursa Malaysia. These companies, namely Transmile Group Bhd and Megan Media Holdings Bhd had reported their profits extremely high while they were actually incurring losses (CNBC, 2007). These few cases have raised the questions on the standards of corporate governance in Malaysia. The other controversial economic trend was the soaring increases in pay for executive directors. Not only executives get paid well but also they get thriving pay even when their companies lose money. The required disclosure of executive remuneration and corporate governance mechanisms information pose investors to question the link between executive compensation and company performance. Hence, this paper is motivated to examine the determinants on executive directors' remuneration of all public listed companies on main

board in Bursa Malaysia from year 2004 to 2006. The findings contribute additional empirical evidence to the current literature on corporate governance pertaining to executive directors' compensation.

## 2. Literature Review

Extensive research has been conducted on the topic of executive remuneration, particularly for the firms in UK and US since early 2000. In Malaysia, the topic of executive directors' remuneration package and corporate governance is seldom discussed until it was made mandatory by the listing requirement of Bursa Malaysia in 2001. Review of past research on determinants of executive directors' remunerations such as age, qualifications, tenure, duality, multiple directorship, company size, company performance are as below.

### 2.1 Age

Age is expected to have a positive effect on the remuneration as older executive directors gain valuable experience over time. McKnight, Tomkins, Weir and Hobson (2000) argued that the market demand for older executive director was also attributed to the organisation's size and its job complexity. As an organisation grows larger and more complex, the level of knowledge and understanding regarding the position becomes more demanding. As

such, pay should increase for any additional human capital requirement demanded by the position.

## 2.2 Qualifications

Professional qualifications such as LLB, ICAEW, MIA and ACCA and educational qualifications such as degrees and higher degrees are likely to enhance a person's general human capital in the labour market and thus lead to higher remuneration in subsequent years. However, researchers have found mixed findings on the relationship of qualifications and pay. Laing and Weir (1999a) found the relationship is very insignificant but Storey, Watson and Wyncarczyk (1995) found qualification was a significant determinant of executive's pay.

## 2.3 Tenure and Service Within A firm

A number of studies have found tenure to be positively and significantly related to pay (Hogan and McPheters, 1980; Mangel and Singh, 1993; Riachi-Belkaoui and Picur, 1993; Laing and Weir, 1999a).

Hill and Phan (1991) found that the link between pay and performance weaken as tenure increased suggesting that chief executive power increased as tenure increases. Finkelstein and Hambrick (1996) and Kostuik (1990) found that tenure and pay exhibited an inverted U-shape relationship. However, tenure was not found to be significant by Storey et al. (1995).

Executive director's tenure, which is likely to be correlated with executive's age, may also play a role in determining their remuneration. If tenure implies entrenchment, lower remuneration results from tenured executives' ability to impose their will on the firms' directors and shareholders. If performance measurement improved with executive tenure, the need for incentive remuneration was reduced. These factors suggest executive tenure would be inversely related to incentive remuneration.

In this study, tenure is defined as the number of years that the highest rank executive director has served the company in the present position. It is expected that the longer the tenure, the greater the experience and the better the executive will perform and the remuneration is of course higher.

## 2.4 Independence of Executive Directors through Duality

Research findings noticed that some board of directors may be relatively less independent than others, and that executive remuneration is linked to influence of the executive directors over the board. Sridharan (1996) argued that executive's influence over the board significantly affected his remuneration. The executive director who had higher influence over the board of directors was able to demand higher remuneration than those with less influence.

The study of Carr (1997) found that executives' influence was one of the determinants of their remuneration for large firms but not small firms. This was because the corporate cultures and environments in small firms were quite different than in large companies. In smaller companies, the members of the board and the key officers were relatives of the executives. This suggested that these firms were entrepreneurial in nature and that the separation of ownership and control was not a dominating nature.

Ueng (2000) used two variables to proxy for executive director's influence that was the presence of inside directors and whether or not the executive also serves as chairman of the board. The study included 468 of Fortune 500 Companies and 424 small companies in 1995. The result of the study was consistent with the finding of Carr (1997). The reason explained by Ueng (2000) was that executives of small firms may be the owners of the firm or part of a family operation where co-owners or family members dilute executives' influence. In this situation, executive director's influence might be unimportant in determining remuneration.

In Malaysia, at least one third of the members of the board of directors were required to be independent and non-executive. These independent non-executive directors were encouraged to be the members of the remuneration committee. The decisions on the pay of directors would be passed through this committee and submitted to board of directors for approval (Finance Committee on Corporate Governance, 2000).

In Malaysia, Vicknes (2003) found that most of the owners-managed companies tend to have hefty payout to the directors. Owners-managed companies refer to the executive director and chairmen are the major shareholders of the companies. This finding is consistent with Sridharan (1996) and Carr (1997) on the influence of the executives over the board.

## 2.5 Directors with Multiple Directorships

Executive directors and their subordinates are often directors of other boards and executives often have much discretion in choosing new board members. If two executive directors or their subordinates serve on each others' boards, they are called "reciprocally interlocked" as defined by Hallock (1995). These executives may have both the incentive and opportunity to raise each other's remuneration packages.

## 2.6 Company Size

Previous empirical studies generally found a strong relationship between firm size and executive pay. Sridharan (1996) and Ueng (2000) found a positive relationship between executive remuneration and the book value of a firm's assets. However, Gupta and

Bowers (1993) and Ricklefs (1996) suggested small companies compensated their executives relatively more than large companies compensate their executives. Higher pay in small firms, as explained by Ueng (2000) was mainly due to the highly competitive environment with growth and survival the two major objectives. The positive relationship between firm size and executive remuneration has several explications rooted mainly in the economic theory and human capital theory.

The research done by Laing and Weir (1999b) on 125 largest public listed companies in UK found that company size is a key determinant of pay. The link between top executive pay and company size was justifiable given that larger organisations carried greater responsibilities which would be translated to a higher pay.

## **2.7 Company Performance**

Gomez-Mejia and Wiseman (1997) argued that in higher uncertainty firms, remuneration based on performance may be seen as largely beyond the executive's direct control. To avoid the missing link of performance and remuneration, Gomez-Mejia and Wiseman (1997) have proposed to use size instead of performance as a pay determinant. The rationale is that greater size offers the executives more power and prestige, more control over firm size than performance, less employment risk since firm size provides a buffer against business cycle effects.

The research study of Ueng (2000) found that executive pay of large firms was mostly a function of firm performance other than executive's influence over the board and firm size as discussed above.

Back home in Malaysia, KPMG Malaysia Business Advisory Sdn Bhd, jointly with Malaysian Business and Bursa Malaysia had conducted the survey on Directors' Remuneration in 2006 for companies listed on the Bursa Main Board, Second Board and MESDAQ (KPMG 2006). Among the determinants of directors' remuneration examined by the survey were directors' age, qualification, professional qualification, directorships in other companies and components of remuneration.

The results showed that approximately 67% of the directors were in the age of 46 to 65 years old while the mean age of the executive Chairman and director was 56 and 49 years old. This result indicated that experience accumulated throughout the years was the important measurement of remuneration.

The study also showed about 89% of directors have at least degree qualifications and above. However, the directors who are Degree holders are the highest, i.e. 68.96% followed by Master & above which is only 20.05%. In terms of education qualification, the results showed 50.36% of directors have qualifications in accounting and 12.41% in technical engineering. The recruitment of these knowledgeable directors was important for listed

companies which the regulations are more stringent than private limited companies. The study also found that the chairman's average tenure length was 9 years while the executive director was 8 years. The executive directors recorded longer directorship tenure as compared to non-executive directors. These findings were expected especially for those family-owned companies in which founders of the companies who normally stay with the companies till the end. For current directorship, the results showed that a director of held a median 2 executive directorships and 5 non-executive directorships in other companies. As for past directorship, a director of public listed companies had held a median of 2 executive directorships and 2 non-executive directorships in the past.

## **3.0 Data and Method**

This study investigates the determinants of executive directors' remuneration using all public companies listed on the main board in Bursa Malaysia from 2004 to 2006. A total of 1,734 samples were selected for three years with 569 samples selected in 2004, 581 samples in 2005 and 584 samples in 2006. It covers all the main board companies listed on the Bursa Malaysia. However, real estate investment trust companies are excluded due to different regulations and disclosure requirements. The annual reports of the companies which did not have sufficient information of the variables were excluded, too. The Information on the variables was extracted from the annual reports which can be downloaded from the Bursa Malaysia website. The sections of the annual reports relevant to this research are directors' profile, corporate governance statement and financial statements.

On the other hand, companies which have been delisted or privatised in 2006 were excluded from this study. This is because the data for 2006 is unavailable despite having data for 2004 and 2005. Therefore, these companies are excluded for comparison purposes. Firms would have less than 3 years of data if they were created or went public during the period.

The data selected has two advantages. First, it includes newest firms and is not overly represented by the large firms. This should enhance the generalisability of the results reported here and validate work that has tended to re-use the same data of firms. Secondly, the data has been audited and complied with the disclosure requirements under Malaysian Code Corporate Governance.

The independent variables are company performance, company size, duality, qualification, directors with multiple directorships, age and tenure. The KLCI components samples selected for 2004, 2005 and 2006 are 89, 90 and 91. The sample was less than 100 mainly due to the exclusion of companies which did not have executive directors in the board of directors and companies with incomplete information.

### 3.1 Independent and Dependant Variables

The variables used in the study are as follows:

Variables	Acronym	Operationalisation
Dependent variable:		
Executives' Remuneration	Dir_Rem	Annual salary, bonus, allowances, fees and benefit-in-kind
Independent variables:		
Company Performance	NP	Net profit attributable to shareholders of the company
Company Size	Co_Size	Net assets attributable to shareholders of the company
Duality	Duality	This is the binary variable which has a value of 1 if the executive director has the joint-title of executive Chairman. If the posts are separate, it is 0
Qualification	Quali	Binary variable of 1 if executive director has obtained at least degree; otherwise 0
Directors with Multiple Directorships	Oth_Dir	Binary variable of 1 if executive director holds any directorship in public listed companies; otherwise 0
Age	Age	Age of the executive director
Tenure	Tenure	Number of years holding the post of executive director in the same company

The dependent variable— executive directors' remuneration is defined as the fees, salary, bonus, allowances, employee provident fund, benefit-in-kind and other benefits. However, this study did not take the value of ESOS or stock options owing to the fundamental measurement problems (Gomez-Mejia, Toshi and Hinkin, 1987). First, executive stock options are not traded and thus there is no market in which the value of these options could be observed. Secondly, other features of a substantial portion of executive stock options are such that there is little resemblance between executive stock options and options on stocks or securities in general, making it difficult to value them using the Black-Scholes option valuation model (Carr, 1997). Thirdly, the executives entitled for stock options must be in charge during the entire sample time period.

In this study, we used net assets attributable to the shareholders of the company or shareholders' equity to measure the company size. The reason is that despite market capitalisation has been widely used to gauge the market size of the companies; the market price of the company share is much depending on the market sentiment and regional stock market. In addition, not all companies' share price will go up when they report good profits.

### 3.2 Multiple Regression Model

Multiple regression produces multiple correlation which is the correlation of multiple independent variables with a single dependent variable. The regression approach has been recommended in

remuneration research and has been used frequently in previous studies (Murphy, 1997 and Hill and Phan, 1991). The regression estimated is as follows:

$$\text{Dir\_Rem} = a + b_1\text{NP} + b_2\text{Co\_Size} + b_3\text{Duality} + b_4\text{Quali} + b_5\text{Oth\_Dir} + b_6\text{Age} + b_7\text{Tenure}$$

where:

Dir\_Rem- Executive Directors' Remuneration

NP- Net Profit

Co\_Size - Company Size

Duality- Joint-title of executive Chairman and executive director

Quali- Qualification

Oth\_Dir- Directors with multiple directorships

Age- Age of the executive director

Tenure- Number of years holding the post of executive director in the same company

Since multivariate regression is used to test the hypotheses, assumptions of multicollinearity, normality, homoscedasticity and linearity are also tested. The Pearson correlation matrix is used to test the multicollinearity assumption, while an analysis of residuals, plots of the residuals against predicted values are conducted to test for homoscedasticity, linearity and normality assumptions. Multivariate regressions for each model are conducted for each year (2004 – 2006) as well as for the pooled data for all three years.

### 4. Analyses and Discussions

Table 1 presents the descriptive statistics for the dependent and independent variables. The results show approximately 43%-45% held the joint-title of

executive chairman and executive director. In terms of qualification, 84% of the executive directors were at least degree holders or professional qualifications. The average age of the executive directors was in the range of 53-54 years old. The mean tenure of executive directors was ranging from 8.47 to 9.57 years. The results of age, qualification, and tenure variables appear to be consistent with the survey results of KPMG (2006).

Table 2 presents the Pearson correlation matrix for the pooled samples 2004-2006 and individual year for 2004, 2005 and 2006. As indicated, no major multicollinearity problem was detected. Some correlations are found to be significant between variables but the size of the correlations does not cause concerns of multicollinearity except for net profit and company size which has exceeded 0.822. The correlations between company size and net profit for pooled samples, 2004, 2005 and 2006 are 0.848, 0.848, 0.776 and 0.929 respectively.

Company performance as measured by net profit appeared to be positive significantly correlated with company size, qualification, and directors with multiple directorships. On the other hand, the executive directors' remuneration indicated positive significant correlation with independent variables of net profit, company size, duality, directors with multiple directorships, age, and tenure. Consistent with the findings of prior studies, tenure and age are positive and significant correlated.

Collinearity statistics in coefficients as shown in Table 3 for independent variables are all greater than 0.1 and Variation Inflation Factors (VIF) are all lesser than 1023. Thus, the results indicate no multicollinearity problem.

#### 4.1 The Results of Regression Model for All Public Listed Companies Listed on Main Board in Bursa Malaysia

Table 4 presents the results of regression models in identifying the determinants of executive directors' remuneration of all public listed companies on main board in Bursa Malaysia from 2004 to 2006. The residuals statistics indicates no problems of homoscedasticity and linearity. The residuals can be assumed to be independent.

The overall regression results are significant. F values are in the range of between 12.112 in 2004 to 40.804 for pooled samples. As shown in Table 4, the regression equation for pooled samples is as follows:

Executive Directors' Remuneration

$$= 1,769.404 + 2.432 (\text{Net Profit}) + 0.415 (\text{Company Size}) + 974.376 (\text{Duality}) - 157.528 (\text{Qualification}) + 213.916 (\text{Directors with multiple directorships}) - 29.069 (\text{Age}) + 92.485 (\text{Tenure})$$

This means that for every unit increase in net profit, executive directors' remuneration will increase by RM2.432 provided other variables, company size, duality, qualification, directors with multiple directorships, age and tenure remain unchanged. The same effects apply for company size, duality, directors with multiple directorships and tenure which will increase the executives' remuneration while other independent variables remain constant. However, qualification and age will decrease the executive's remuneration.

Net profit, company size, duality, age, tenure were found as significant determinants for the executive directors' remuneration. Through duality by assuming both executive chairman and executive director positions he or she would maximize his or her investment interests in the company. Qualification and directors with multiple directorships are not significant determinants for executive directors' remuneration.

#### 4.2 The Results of Regression Model for Kuala Lumpur Composite Index Components Companies in Bursa Malaysia

Table 5 presents the descriptive statistics for the dependent and independent variables. The samples selected for 2004-2006, 2004, 2005 and 2006 are 270, 89, 90 and 91 respectively. On the descriptive statistics for pooled samples 2004-2006, the mean for the executive directors' remuneration is RM3,936,980. In 2004, the mean for executive directors' remuneration is RM3,469,910 but further increased to RM3,783,380 in 2005 and RM4,545,690 in 2006. The upward trend is consistent with the increase in net profit and company size. Pearson correlation matrix and Variation Inflation Factors (VIF) results for both full sample periods as well as individual year revealed no multicollinearity problem.

The regression results indicated that duality, age and tenure were significant determinants of executive directors' remuneration. However, net profit, company size, qualification and directors with multiple directorships are not determinants of executive director's remuneration for pooled samples (see Table 6).

22 Multicollinearity may be a problem when the correlation exceeded 0.80 (Gujarati, 1995).

23 No multicollinearity problem if tolerance for independent variables are greater than 0.1 and VIF are all lesser than 10 (Hair et al., 1998)

Table 1: Descriptive Statistics for Dependant and Independent Variables

	All Minimum Maximum Mean Standard Deviation N=1734	2004 Minimum Maximum Mean Standard Deviation N=569	2005 Minimum Maximum Mean Standard Deviation N=581	2006 Minimum Maximum Mean Standard Deviation N=584
<b>Dependent Variables:</b>				
Directors' Remuneration (RM'000)	0.00 101,690.00 1,852.24 4,283.34	0.00 69,496.00 1,694.82 3,603.26	0.00 78,788.00 1,819.58 4,029.77	0.00 101,690.00 2,038.10 5,066.82
<b>Independent Variables:</b>				
Net Profit (RM'000)	-1,255,202.00 4,763,546.00 61,405.09 266,985.06	-1,116,573.00 2,613,500.00 55,740.07 235,843.34	-1,255,202.00 4,763,546.00 57,589.18 285,474.62	-663,402.00 2,949,815.00 70,720.92 276,562.22
Company Size (RM'000)	-1,041,955.00 19,911,100.00 688,404.85 1,774,898.23	-740,534.00 19,453,300.00 653,667.04 1,633,337.63	-876,754.00 18,987,400.00 686,372.64 1,753,966.91	-1,041,955.00 19,911,100.00 724,272.18 1,924,095.20
Duality (%)	44.00%	45.00%	44.00%	43.00%
Qualification (%)	84.00%	84.00%	84.00%	84.00%
Directors with multiple directorships (%)	39.00%	39.00%	39.00%	39.00%
Age (years)	30.00 85.00 53.82 8.36	30.00 83.00 53.16 8.28	31.00 84.00 53.82 8.31	32.00 85.00 54.45 8.45
Tenure (years)	1.00 56.00 9.03 8.12	1.00 54.00 8.47 8.03	1.00 55.00 9.03 8.12	1.00 56.00 9.57 8.19

Table 2: Correlation Matrix between Independent Variables and Executive Directors' Remunerations of Public Listed Companies in Bursa Malaysia

	Directors' Remuneration	Net Profit	Company Size	Duality	Qualification	Directors with multiple directorships	Age	Tenure
	All	All	All	All	All	All	All	All
	2004	2004	2004	2004	2004	2004	2004	2004
	2005	2005	2005	2005	2005	2005	2005	2005
	2006	2006	2006	2006	2006	2006	2006	2006
Directors' Remuneration	All 1.000 2004 1.000 2005 1.000 2006 1.000							
Net Profit	All 0.298** 2004 0.285** 2005 0.273** 2006 0.329**	1.000						
Company Size	All 0.299** 2004 0.284** 2005 0.293** 2006 0.313**	0.848**	1.000					
Duality	All 0.123** 2004 0.123** 2005 0.128** 2006 0.123**	-0.041 -0.044 -0.036 -0.043	-0.056* -0.058 -0.060 -0.051	1.000				
Qualification	All 0.000 2004 0.003 2005 -0.003 2006 0.001	0.086** 0.093* 0.074 0.095*	0.120** 0.126** 0.122** 0.113**	-0.118** -0.129** -0.109** -0.117**	1.000			
Directors with Multiple directorships	All 0.089** 2004 0.090* 2005 0.089* 2006 0.091*	0.064** 0.094* 0.041 0.064	0.130** 0.157** 0.117** 0.119**	0.130** 0.137** 0.117** 0.135**	0.160** 0.159** 0.153** 0.168**	1.000		
Age	All 0.062** 2004 0.064 2005 0.063 2006 0.056	0.010 0.011 0.007 0.008	0.000 0.007 0.005 -0.014	0.318** 0.318** 0.318** 0.322**	-0.211** -0.214** -0.220** -0.203**	0.065** 0.074 0.057 0.064	1.000	
Tenure	All 0.188** 2004 0.190** 2005 0.195** 2006 0.182**	0.028 0.052 0.012 0.021	0.018 0.036 0.005 0.014	0.223** 0.216** 0.221** 0.235**	-0.127** -0.110** -0.131** -0.141**	0.135** 0.146** 0.135** 0.126**	0.439** 0.413** 0.431** 0.465**	1.000

Notes:

\*\* Correlation is significant at the 0.01 level (2 tailed), \* Correlation is significant at the 0.06 level (2 tailed)

Table 3: Collinearity Statistics of Independent Variables from 2004 to 2006

Independent Variables	All	2004	2005	2006
	Tolerance VIF	Tolerance VIF	Tolerance VIF	Tolerance VIF
Net Profit	0.278 3.597	0.278 3.597	0.395 2.534	0.152 6.585
Company Size	0.273 3.664	0.272 3.675	0.386 2.591	0.150 6.665
Duality	0.872 1.147	0.868 1.152	0.875 1.143	0.868 1.152
Qualification	0.908 1.101	0.906 1.104	0.907 1.102	0.909 1.101
Directors with multiple directorships	0.916 1.092	0.907 1.103	0.925 1.081	0.910 1.099
Age	0.737 1.356	0.753 1.328	0.740 1.352	0.720 1.390
Tenure	0.787 1.271	0.806 1.240	0.793 1.261	0.764 1.309

Table 4: Regression Results of Determinants of Executive Directors' Remunerations from 2004 to 2006 for All Companies in Bursa Malaysia

	R <sup>2</sup>		F value		p value	
		0.14	40.80		0.00	
	Coefficient	Standard Error	t	Sig		
<b>2004-2006</b>						
Constant	1,769.40	740.95	2.39	0.02	*	
Net Profit	2.43	0.00	3.58	0.00	**	
Company Size	0.42	0.00	4.03	0.00	**	
Duality	974.38	206.14	4.73	0.00	**	
Qualification	(157.53)	272.29	(0.58)	0.56		
Multiple directorships	213.92	204.72	1.05	0.30		
Age	(29.07)	13.30	(2.19)	0.03	*	
Tenure	92.49	13.26	6.98	0.00	**	
<b>2004</b>						
Constant	1,460.91	1,093.75	1.34	0.18		
Net Profit	2.17	0.00	1.90	0.06		
Company Size	0.36	0.00	2.17	0.03	*	
Duality	827.51	305.86	2.71	0.01	**	
Qualification	(99.16)	402.62	(0.25)	0.81		
Multiple directorships	118.05	305.01	0.39	0.70		
Age	(20.58)	19.74	(1.04)	0.30		
Tenure	75.38	19.66	3.83	0.00	**	
<b>2005</b>						
Constant	1,822.52	1,219.15	1.50	0.14		
Net Profit	1.56	0.00	1.79	0.07		
Company Size	0.49	0.00	3.42	0.00	**	
Duality	954.42	335.85	2.84	0.01	**	
Qualification	(186.32)	445.96	(0.42)	0.68		
Multiple directorships	217.48	332.70	0.65	0.51		
Age	(29.94)	21.80	(1.37)	0.17		
Tenure	93.10	21.57	4.32	0.00	**	
<b>2006</b>						
Constant	2,277.70	1,511.47	1.51	0.13		
Net Profit	4.97	0.00	2.76	0.01	**	
Company Size	0.17	0.00	0.64	0.52		
Duality	1,152.10	420.44	2.74	0.01	**	
Qualification	(194.75)	553.84	(0.35)	0.73		
Multiple directorships	366.24	417.26	0.88	0.38		
Age	(40.79)	27.10	(1.50)	0.13		
Tenure	107.81	27.14	3.97	0.00	**	

Notes: \*\* denotes p < 0.01, \* denotes p < 0.05

**Table 5: Descriptive Statistics for Dependent and Independent Variables for Companies under Kuala Lumpur Composite Index**

	<i>All</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
	<i>Minimum</i>	<i>Minimum</i>	<i>Minimum</i>	<i>Minimum</i>
	<i>Maximum</i>	<i>Maximum</i>	<i>Maximum</i>	<i>Maximum</i>
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
	<i>Standard</i>	<i>Standard</i>	<i>Standard</i>	<i>Standard</i>
	<i>Deviation</i>	<i>Deviation</i>	<i>Deviation</i>	<i>Deviation</i>
	<i>N=270</i>	<i>N=89</i>	<i>N=90</i>	<i>N=91</i>
<b>Dependent Variables:</b>				
Directors' Remuneration (RM'000)	0.00	100.00	0.00	30.00
	101,690.00	69,496.00	78,788.00	101,690.00
	3,936.98	3,469.91	3,783.38	4,545.69
	9,288.64	7,778.26	8,721.99	11,085.10
<b>Independent Variables:</b>				
Net Profit (RM'000)	-1,255,202.00	-19,644.00	-1,255,202.00	-203,981.00
	4,763,546.00	2,613,500.00	4,763,546.00	2,949,815.00
	321,925.32	292,900.19	309,070.60	363,025.99
	571,508.76	480,691.45	635,349.66	590,269.24
Company Size (RM'000)	36,470.00	114,377.00	36,470.00	192,772.00
	19,911,100.00	19,453,300.00	18,987,400.00	19,911,100.00
	2,674,800.00	2,478,703.00	2,661,761.00	2,879,482.00
	3,724,222.11	3,425,816.76	3,672,880.34	4,069,305.63
Duality (%)	40.00%	42.00%	40.00%	38.00%
Qualification (%)	98.00%	99.00%	99.00%	97.00%
Directors with multiple directorships (%)	59.00%	61.00%	58.00%	59.00%
Age (years)	30.00	30.00	31.00	32.00
	84.00	82.00	83.00	84.00
	52.87	52.35	53.08	53.19
	7.97	8.09	7.90	7.99
Tenure (years)	1.00	1.00	1.00	1.00
	43.00	41.00	42.00	43.00
	8.69	8.11	8.63	9.30
	8.01	7.96	7.98	8.14



**Table 6: Regression Results of Determinants of Executive Directors' Remunerations from 2004 to 2006 for KLCI Companies**

R <sup>2</sup>	0.21			
F value	9.86			
p value	0.00			
	Coefficient	Standard Error	t	Sig
<b>2004-2006</b>				
Constant	5,846.91	5,397.85	1.08	0.28
Net Profit	1.24	0.00	0.73	0.47
Company Size	0.35	0.00	1.32	0.19
Duality	3,294.32	1,113.29	2.96	0.00 **
Qualification	701.22	3,792.32	0.19	0.85
Multiple directorships	747.98	1,068.70	0.70	0.49
Age	(180.68)	76.64	(2.36)	0.02 *
Tenure	445.49	77.18	5.77	0.00 **
<b>2004</b>				
Constant	4,145.35	9,584.59	0.43	0.67
Net Profit	0.13	0.00	0.04	0.97
Company Size	0.38	0.00	0.74	0.46
Duality	3,064.12	1,681.25	1.82	0.07
Qualification	1,922.60	7,439.63	0.26	0.80
Multiple directorships	187.57	1,637.40	0.12	0.91
Age	(150.91)	113.10	(1.33)	0.19
Tenure	365.37	117.45	3.11	0.00 **
<b>2005</b>				
Constant	2,346.07	10,754.62	0.22	0.83
Net Profit	0.82	0.00	0.40	0.69
Company Size	0.39	0.00	1.11	0.27
Duality	2,906.17	1,844.36	1.58	0.12
Qualification	2,809.53	8,208.62	0.34	0.73
Multiple directorships	876.11	1,774.06	0.49	0.62
Age	(151.98)	125.59	(1.21)	0.23
Tenure	436.53	127.25	3.43	0.00 **
<b>2006</b>				
Constant	10,498.40	10,053.62	1.04	0.30
Net Profit	4.12	0.01	0.83	0.41
Company Size	0.05	0.00	0.07	0.94
Duality	3,939.87	2,373.94	1.66	0.10
Qualification	(883.73)	6,012.72	(0.15)	0.88
Multiple directorships	1,487.71	2,246.55	0.66	0.51
Age	(267.91)	170.24	(1.57)	0.12
Tenure	549.33	166.29	3.30	0.00 **

Notes: \*\* denotes p < 0.01, \* denotes p < 0.05

Table 7 reports the correlation coefficients between dependant and independent variables for both KLCI and non-KLCI companies from 2004 to 2006. More significant correlations were found in non-KLCI companies.

Table 7: The Correlation Coefficient of Dependand and Independent Variables from 2004 to 2006

Panel A: KLCI Companies	Directors' Remuneration	Net Profit	Company Size	Duality	Qualification	Directors with multiple directorships	Age	Tenure
Directors' Remuneration	1.000							
Net Profit	0.195**	1.000						
Company Size	0.193**	0.849**	1.000					
Duality	0.216**	-0.062	-0.103	1.000				
Qualification	-0.009	0.029	0.021	-0.056	1.000			
Directors with multiple directorships	0.122*	-0.040	0.010	0.077	-0.002	1.000		
Age	0.104	0.038	0.010	0.304**	-0.050	0.055	1.000	
Tenure	0.366**	0.049	0.021	0.276**	-0.057	0.206**	0.520**	1.000
<b>Panel B: Non-KLCI Companies</b>								
Directors' Remuneration	1.000							
Net Profit	0.434**	1.000						
Company Size	0.448**	0.557**	1.000					
Duality	0.132**	-0.023	-0.025	1.000				
Qualification	-0.072**	0.040	0.130**	-0.122**	1.000			
Directors with multiple directorships	0.023	0.008	0.150**	0.149**	0.148**	1.000		
Age	0.088**	0.059*	0.073**	0.319**	-0.222**	0.079**	1.000	
Tenure	0.161**	0.063*	0.074**	0.213**	-0.315**	0.129**	0.425**	1.000

Notes: \*\* Correlation is significant at the 0.01 level (2 tailed), \* correlation is significant at 0.05 level (2 tailed)

### 4.3 Regression Results of Determinants of Executive Directors' Remuneration for Companies not included in the Kuala Lumpur Composite Index

Table 8 presents the descriptive statistics for the dependent and independent variables. It should be pointed out that the company size and net profit of non-KLCI companies were relatively smaller than KLCI companies.

The overall regression results are shown in Table 9. F values are in the range of between 23.193 in 2004 to 86.275 for all 2004-2006. All four models are significant at the 0.05 level as the p-value is less than 0.000. This means at least one of the 7 independent variables can be used to model executive directors' remuneration. Net profit, company size, duality, qualification, age and tenure are significant determinants of executive directors' remuneration. In other words, the results indicate that an only director with multiple directorships variable is not a determinant.

### 4.4 Comparison of Determinants of Executive Directors' Remuneration among All Companies, KLCI and Non-KLCI Companies

Table 10 reports the summary of determinants of executive directors' remuneration for all public listed companies, KLCI and non-KLCI companies in Bursa

Malaysia. Tenure is the strongest determinant as the p-value is significant for all the regression models. This implies that the longer the tenure, the power for the executive directors to demand higher remuneration is higher. At the same time, it is quite usual and normal that executive directors would expect an annual increment for their remuneration in terms of salary or fees or both to compensate for their experience and services contributed in company. The results are consistent with human capital theory which states that the long service executives are entitled for higher remuneration based on their experience and skills.

The second strongest determinant is duality as evident by all companies except for KLCI companies. The possible reasons might be that the corporate governance of KLCI companies are relatively stronger and independent than the non-KLCI companies in which the executive directors' influence in determining remuneration is insignificant and sufficient check and balance even dual roles are assumed. This is in line with the Malaysian Code on Corporate Governance which had encouraged the companies to split the joint-title of chairman and executive director. KLCI companies had shown the decreased of dual roles from 40% to 38% from year 2004 to 2006. Unlike KLCI companies, non-KLCI companies particularly, the family-owned and smaller companies have significant influence over the board through the joint-title. Duality enables them to influence their own remunerations.

**Table 8. Descriptive Statistics for Dependent and Independent Variables for Non-KLCI Companies**

	<i>All</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
	<i>Minimum</i>	<i>Minimum</i>	<i>Minimum</i>	<i>Minimum</i>
	<i>Maximum</i>	<i>Maximum</i>	<i>Maximum</i>	<i>Maximum</i>
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
	<i>Standard Deviation</i>	<i>Standard Deviation</i>	<i>Standard Deviation</i>	<i>Standard Deviation</i>
	<i>N=1464</i>	<i>N=480</i>	<i>N=491</i>	<i>N=493</i>
<b>Dependent Variables:</b>				
Directors' Remuneration (RM'000)	0.00	0.00	0.00	0.00
	50,369.00	35,944.00	40,973.00	50,369.00
	1,467.76	1,365.69	1,459.62	1,575.24
	2,217.86	1,893.87	2,136.87	2,562.30
<b>Independent Variables:</b>				
Net Profit (RM'000)	-1,116,573.00	-1,116,573.00	-772,387.00	-663,402.00
	968,200.00	753,400.00	968,200.00	945,900.00
	13,358.33	11,766.63	11,492.79	16,766.03
	97,696.91	105,443.99	96,951.54	90,433.58
Company Size (RM'000)	-1,041,955.00	-740,534.00	-876,754.00	-1,041,955.00
	6,249,600.00	4,753,000.00	6,240,279.00	6,249,600.00
	322,061.53	315,275.02	324,285.13	326,454.50
	564,734.00	523,192.31	585,765.48	583,141.07
Duality (%)	44.00%	45.00%	44.00%	44.00%
Qualification (%)	81.00%	81.00%	81.00%	82.00%
Directors with multiple directorships (%)	35.00%	35.00%	35.00%	35.00%
Age (years)	31.00	31.00	32.00	33.00
	85.00	83.00	84.00	85.00
	54.00	53.31	53.96	54.70
	8.42	8.31	8.39	8.51
Tenure (years)	1.00	1.00	1.00	1.00
	56.00	54.00	55.00	56.00
	9.09	8.54	9.10	9.62
	8.14	8.05	8.15	8.20

**Table 9: Regression Results of Determinants of Executive Directors' Remunerations from 2004 to 2006 for Non-KLCC Companies**

R <sup>2</sup>	0.29			
F value	86.28			
p value	0.00			
	Coefficient	Standard Error	t	Sig
<b>2004-2006</b>				
Constant	1,807.77	374.20	4.83	0.00 **
Net Profit	5.86	0.00	9.67	0.00 **
Company Size	1.27	0.00	11.88	0.00 **
Duality	605.19	105.48	5.74	0.00 **
Qualification	(567.15)	131.90	(4.30)	0.00 **
Multiple directorships	(197.87)	107.17	(1.85)	0.07
Age	(15.46)	6.76	(2.29)	0.02 *
Tenure	29.54	6.71	4.40	0.00 **
<b>2004</b>				
Constant	1,383.90	573.64	2.41	0.02
Net Profit	3.67	0.00	4.70	0.00 **
Company Size	1.29	0.00	7.96	0.00 **
Duality	455.30	162.23	2.81	0.05 *
Qualification	(474.19)	201.53	(2.35)	0.02 *
Multiple directorships	(200.97)	165.18	(1.22)	0.22
Age	(8.57)	10.43	(0.82)	0.41
Tenure	27.84	10.31	2.70	0.01 **
<b>2005</b>				
Constant	1,887.19	633.64	2.98	0.00
Net Profit	6.43	0.00	5.90	0.00 **
Company Size	0.97	0.00	5.26	0.00 **
Duality	653.78	177.32	3.69	0.00 **
Qualification	(522.76)	222.09	(2.35)	0.02 *
Multiple directorships	(154.29)	179.32	(0.86)	0.39
Age	(16.66)	11.43	(1.46)	0.15
Tenure	30.15	11.25	2.68	0.01 **
<b>2006</b>				
Constant	2,257.55	722.21	3.13	0.00 **
Net Profit	9.31	0.00	6.67	0.00 **
Company Size	1.28	0.00	5.85	0.00 **
Duality	730.36	203.67	3.59	0.00 **
Qualification	(697.40)	255.80	(2.73)	0.01 **
Multiple directorships	(205.64)	207.09	(0.99)	0.32
Age	(22.21)	12.95	(1.71)	0.09
Tenure	28.72	12.99	2.21	0.03 *

Notes: \*\* denotes p < 0.01, \* denotes p < 0.05

**Table 10: Comparisons of Results of Determinants of Executive Directors' Remunerations Under Various Samples in Bursa Malaysia from 2004 to 2006**

Panel A: All Companies	DETERMINANTS						
	NP	CO_SIZE	DUALITY	QUALI	OTH_DIR	AGE	TENURE
All	√	√	√	X	X	√	√
p-value	0.000	0.000	0.000	0.563	0.296	0.029	0.000
2004	X	√	√	X	X	X	√
p-value	0.057	0.031	0.007	0.806	0.699	0.298	0.000
2005	X	√	√	X	X	X	√
p-value	0.074	0.001	0.005	0.676	0.514	0.170	0.000
2006	√	X	√	X	X	X	√
p-value	0.006	0.520	0.006	0.725	0.380	0.133	0.000

  

Panel B: KLCI Components	DETERMINANTS						
	NP	CO_SIZE	DUALITY	QUALI	OTH_DIR	AGE	TENURE
All	X	X	√	X	X	√	√
p-value	0.468	0.187	0.003	0.853	0.485	0.019	0.000
2004	X	X	X	X	X	X	√
p-value	0.971	0.462	0.072	0.797	0.909	0.186	0.003
2005	X	X	X	X	X	X	√
p-value	0.688	0.272	0.119	0.733	0.623	0.230	0.001
2006	X	X	X	X	X	X	√
p-value	0.408	0.943	0.101	0.884	0.510	0.119	0.001

  

Panel C: Non-KLCI Components	DETERMINANTS						
	NP	CO_SIZE	DUALITY	QUALI	OTH_DIR	AGE	TENURE
All	√	√	√	√	X	√	√
p-value	0.000	0.000	0.000	0.000	0.065	0.022	0.000
2004	√	√	√	√	X	X	√
p-value	0.000	0.000	0.050	0.019	0.224	0.412	0.007
2005	√	√	√	√	X	X	√
p-value	0.000	0.000	0.000	0.019	0.390	0.146	0.008
2006	√	√	√	√	X	X	√
p-value	0.000	0.000	0.000	0.007	0.321	0.087	0.027

Notes: NP denotes Net profits, CO\_size denotes company size, Duality denotes joint title of executive chairman and executive director, Quali denotes qualification, Oth\_dir denotes directors with multiple directorships, Age denotes age of the executive director, and tenure denotes number of years holding the post of executive director in the same company. X denotes not determinat, √ denotes significant determinant

Company size and net profit are another two significant determinants after tenure and duality. However, the significance is less apparent. The results implied that the performance-based rewards were not practiced by every public listed company. Ironically, the regression results for KLCI companies have failed to show any direct relationship between executives' remuneration with net profit and company size. In contrast, the results show the non-KLCI companies are those smaller companies which have rewarded their executive directors according to the net profit and company size achieved each year. Thus, agency and labour market theories are more applicable to smaller public listed companies.

Age is the weakest determinant in which it only appears significant for 2004-2006 samples. As for executive directors with multiple directorships, it is not a determinant at all. One explanation might be not many companies have cross directorships like Genting Berhad and Resorts Berhad, IOI Corporation Berhad and IOI Properties Berhad, to name a few.

The results of the study also imply that other than the determinants mentioned, there might be other qualitative factors to influence the executive directors' remuneration. Overall, the R square for all the models is approximately 20%. The independent variables only manage to explain 20% of the remuneration. Some qualitative factors, such as technological change, organisational strategies and streamlining of business process might be needed to be taken into consideration. These qualitative factors may bear fruits only in the long term and are not immediately reflected in the short term profits.

## Conclusion

Overall, tenure appeared to be the most significant determinant. Accumulative of skills and contributions to the company influence greatly the remuneration of executive directors. The remuneration increases when directors have been incumbent in their positions for an extended length of time. Age and qualification fail to show that knowledge and experience are the key factors to decide the pay of executives. Most probably the companies require special competence of the company or industry as evident by tenure. This is because they have adapted and understood how business model, environment, and practices of a company operates. Besides, dual roles and age also serve as important determinants. Future research would be of interest to examine the linkage of directors' remuneration with directors' liabilities and responsibilities assumed to gauge in-depth as well as different perspectives of director compensation.

## References

- Carr, L. (1997), "Strategic determinants of executive compensation in small publicly traded firms", *Journal of Small Business Management*, Vol. 35, pp. 1-12.
- CNBC (2007), "Malaysia's regulator probes Transmile, shares plunge". <http://www.cnbc.com/id/19285367/>, CNBC, Access date: 18 January 2008.
- Finance Committee on Corporate Governance, (2000), "Malaysian code on corporate governance Malaysia", Finance Committee on Corporate Governance.
- Finkelstein, S. and Hambrick, D. (1996), "Strategic leadership: Top executives and their effects on organizations", West Publishing Company, St Paul.
- Gomez-Mejia, L.R., Tosi, H. and Hinkin, T. (1987), "Managerial control, performance and executive compensation", *Academy of Management Journal*, Vol. 30, pp. 51-70.
- Gomez-Mejia, L.R. and Wiseman, R.M. (1997), "Reframing executive compensation: An assessment and outlook", *Journal of Management*, Vol. 23. No. 3, pp. 291-374.
- Gujarati, D. (1995), *Basic Econometrics* (4<sup>th</sup> ed.), McGraw-Hill, Singapore.
- Gupta, U. and Bowers, B. (1993), "Prize packages: When it comes to pay, head of little firms can outdo top CEOs", *The Wall Street Journal*, July 20, A1.
- Hair, J., Anderson, R., Tatham, R. and Black, W. (1988), *Multivariate Data Analysis* (5th ed.), Prentice Hall, New Jersey.
- Hallock, K.F. (1995), "Executive pay and reciprocally interlocking boards of directors", Working Paper #340, Industrial Relations Section.
- Hill, C.W. L. and Phan, P. (1991), "CEO tenure as a determinant of CEO pay", *Academy of Management Journal*, Vol. 34, No. 3, pp. 707-717.
- Hogan, T.D. and McPheters, L.R. (1980), "Executive compensation: Performance versus personal characteristics", *Southern Economic Journal*, Vol. 46, pp. 1060-1068.
- KPMG (2006), "KPMG directors' remuneration survey 2006", KPMG Business Advisory Sdn Bhd, pp. 1-20.
- Kostuik, P. (1990), "Firm size and executive compensation", *The Journal of Human Resources*, Vol. 25, pp. 90-105.
- Laing, D., and Weir, C. (1999a), "Corporate performance and the influence of human capital characteristics on executive compensation in the UK", *Personnel Review*, Vol. 28, No. 1/2, pp. 28-40.
- Laing, D. and Weir, C. (1999b), "Governance structures, size and corporate performance in the UK", *European Business Review*, Vol. 13, No. 2, pp. 86-94.
- Mangel, R., and Singh, H. (1993), "Ownership structure, board relationships and CEO compensation in large US corporations", *Accounting and Business Research*, Vol. 23, pp. 339-350.
- McKnight, P.J., Tomkins, C, Weir, C and Hobson, D (2000), "CEO age and top executive pay: A UK empirical study", *Journal of Management and Governance*, Vol. 4.
- Murphy, K.J. (1997), "Executive compensation and the modern industrial revolution", *International Journal of Industrial Organisation*, Vol. 15, pp. 417-425.
- Ricklefs, R. (1996), "Chiefs' pay gains in '95 at small firms topped those at huge ones, study says", *The Wall Street Journal*, October 29, B1.
- Sridharan, U.C. (1996), "CEO influence and executive compensation", *The Financial Review*, Vol.31, February.
- Storey, D., Watson, R., and Wynarczyk, P. (1995), "The remuneration of non-owner managers in UK quoted and unlisted securities market enterprises: An empirical analysis of firm specific, human capital and job history influences", *Small Business Economics*, Vol.7, pp. 1-13.
- Ueng, C.J. (2000), "CEO influence and executive compensation: Large firms vs. small firms", *Managerial Finance*, Vol.26, No. 8, pp. 3-12.
- Vicknes, S. (2003), "Top earners in Malaysia", *Accountants Today*, Vol. 16, No. 10, pp. 12-15.