



## **Does the Size of Board of Directors and Executives affect Firm Performance in Malaysian Listed Firms?**

**Maziar Ghasemi<sup>1</sup>, Nazrul Hisyam Ab Razak<sup>2\*</sup>**

<sup>1</sup>Putra Business School, Universiti Putra Malaysia, Malaysia, <sup>2</sup>Faculty of Economics and Management, Universiti Putra Malaysia, Malaysia. \*Email: [nazrul@upm.edu.my](mailto:nazrul@upm.edu.my)

### **ABSTRACT**

The worldwide business practices bring more attention to corporate governance. Board of directors (BOD) is also assumed as the central mechanism of corporate governance. However, whether the board composition will influence firm profitability is still questionable. This paper investigates the effect of the size of BOD and magnitude of executive directors on the firm profitability. Based on generalized methods of moments regressions on a sample of 267 companies listed on Bursa Malaysia during 2010-2013, it is found that the board size and executive ratio have a positive impact on the firm profitability, although the coefficient value of the executive ratio considerably is greater than the coefficient of the board size. Moreover, persistent profitability is remarked by both models. The age of the firm factor has an insignificant relationship with firm profitability. However, leverage has a negative significant influence on the firm profitability, but the effect of liquidity on profitability is positive.

**Keywords:** ACE Market, Capital Structure, Board Size, Firm Profitability

**JEL Classifications:** G35, G32

### **1. INTRODUCTION**

In Malaysia, the issues on the corporate governance were considered subsequent of the 1997 financial crisis. This led to the release of the Malaysian Code on Corporate Governance in March 2000 and two other revised codes were released in 2007 (2007 Code) and 2012 (MCCG 2012). However, the Malaysian Codes were silent on the number of directors that should sit on a board, and also all versions of Malaysian Governance Codes have encouraged firms to employ more independent directors in the board of director (BOD). On the other hand, some Malaysian studies reveal that there was no relationship between BOD and performance (Dogan and Smyth, 2002), also the role of the outside directors seemed not to benefit the listed companies (Ponnu and Karthigeyan, 2010). Amazingly, the findings of a study by Shakir (2008) showed the market preference for using small boards that obtained more executives in Malaysia. In addition, as mentioned by Shukeri et al. (2012), there are some listed Malaysian firms that operate successfully; however, there are also companies that

face huge losses while other economical and political conditions remain constant. In addition, Taghizadeh and Saremi (2013) argued that the linkage between corporate governance and company performance is one of the most essential subjects in Malaysia. Thus, this research purposes to investigate the factors influencing company performance, particularly the effect of the board size and executive directors. Also this study checks persistent profitability in the Main market of Bursa Malaysia. Using sample data from 267 listed firms in the Main market from 2010 to 2013, this study applies generalized methods of moments (GMM) to examine the determinants of performance amongst the listed firms under Bursa Malaysia. The findings indicate positive significant effects of the board size, executives on the board ratio, and past performance on the firm profitability. The remainder of this article is organized as follows: Section II explains the literature of relationships between variables and firm profitability. Section III explains the sample data, research methodology, and also estimation models. Section IV provides the empirical findings. Section V concludes the outcomes of this research.

## 2. LITERATURE REVIEW

The impacts of the board size (SIZE), the ratio of executive to total directors (EXEC), lagged performance (LPERF), firm age (AGE), liquidity (LIQ), and leverage (LEV) on performance (PERF) based on theoretical and empirical studies are discussed in the following paragraphs. The size of a BOD is an important factor contributing towards BOD effectiveness (Ponnu and Karthigeyan, 2010). The larger size of BOD leads to better collective information; larger BOD makes better firm performance possible (Adams and Mehran, 2005). Moreover, larger BOD provides more chances of BOD diversity in terms of experience, skills, gender, and nationality. Some of the studies support this positive relation in the Malaysian context. For instance, Haniffa and Hudaib (2006) and Shukeri et al. (2012) confirm that the size of BOD and ethnic diversity to be significantly related to both mark and accounting profitability measures. On the other hand, when BOD consists of many individuals, agency problems may increase; hence, some of members may be marked as free-riders. In addition, a large BOD may also lead to weak communications. For instance, Jensen (1993) claims that when a BOD has more than seven or eight individuals, the probability of efficient functions of directors will decrease and also the decision-making process will be controlled easily by the CEO. In addition, when a board becomes too big, it often moves into a more symbolic role rather than fulfilling its intended functions as a part of the management (Guest, 2009; Hermalin and Weisbach, 2003). Besides, a firm with the smaller size of BOD is more informed about its earnings and subsequently can be considered as having greater monitoring abilities (Vafeas, 1999). Similarly, Mak and Kusnadi (2005) express that the listed company valuations of the Singaporean and Malaysian companies are highest when the board consists of five directors. In contrast, too small BOD suffers from not having extensive expert counsels compared to larger boards. However, Wintoki et al. (2007) finds no relations between BOD sizes and the past and present of the profitability of the firms.

The executive is expected to play a dual role in the firm; firstly between the interest of the shareholders and the firm (governance relation), and secondly between the firm and BOD (i.e., a contractual relation). Moreover, executives are expected to provide original operational information of the firm for other directors (Boumosleh and Reeb, 2005). Since executives participate in the decision making process, they have access to all relevant information compared to the outside directors who have no executive power. Additionally, they usually sit on the boards of other companies and may not be completely familiar with the details of the business of the firm. On the other hand, an executive, clearly would not be able to do his/her supervisory role accurately, since they have personal relations with other senior managers and they are also subordinates of the CEO, therefore they are not powerful enough to either discipline or monitor the CEO (Daily and Dalton, 1993). However, the outside directors have monitoring powers which puts them in the finest position to judge decisions of the managers and CEO. However, the findings of a study by Shakir (2008) indicate that Malaysian market participants seem to have a preference for small sizes of BOD, but with more executives.

Firm profitability is durable over time. It can be related to more numbers of resources in the market and expanded access to liquidity that is the traits of profitable firms. Moreover, the industries' and companies' characteristics may have an influence on persistence coefficients for the profitability. However, it can be interfered interpreted that the competition level among firms in the market is still not tight enough to decrease the additional profits in small periods (Pattitoni et al., 2014). The persistence in profitability is reported in many markets; such as Turkey by Yurtoglu (2004), 5 Latin American countries by Tarzijań and Eyleerts (2010), and the EU-15 region by Pattitoni et al. (2014).

The age of the firm is an important determinant of profitability. That is, based on experience and efficiency, an older company can be more profitable compared to younger companies (Hopenhayn, 1992). However, Loderer and Waelchli (2009) argue that older companies struggle rent-seeking behavior of the firm managers and other insiders, and also older firms have a problem of rigidity over time. This problem leads to the slow growth, and causes a decrease in R&D activities. Although the findings of the studies by Malik (2011) and Li et al. (2008) indicate that the age of the company is not a significant predictor of the firm profitability in Pakistan and China, respectively.

Higher flexibility is observed in sales and productions of the greater liquidity company which results in providing additional incomes for the business. Moreover, the liquid firm is flexible; meaning that, it can offer long term payments and meet its commitments (Bolek and Wolski, 2012). However, the findings of various studies show different relationships between firm age and profitability. For instance, the inverse relationship is reported by Raheman and Nasr (2007) in Pakistan. However, Ben Caleb et al. (2013) indicate the positive relationship in Nigeria, but Niresh (2012) reports no significant relationship in Sri Lanka.

According to the free cash flow theory, high leverage firms can enhance its performance by mitigating conflicts between shareholders and managers. A number of studies provide empirical evidence supporting this positive relationship between debt levels and firm's performance (Berger and Bonaccorsi di Patti, 2006; Hadlock and James, 2002). On the other hand, based on the pecking order theory (Myers, 1984), managers prefer financing new investments by internal sources at first. If this resource is not enough, then managers search for external debt as the second alternative. Thus, when managers expect high levels of profitability, they have fewer tendencies to use debts. Consequently, a negative relation can be expected between levels of debt and the company's performance. Some scholars also support this negative relationship in the Malaysian market (Sulong et al., 2013).

## 3. THE METHODOLOGY AND MODEL

The sample data consists of 267 firms listed on the Main market of Bursa Malaysia. The sample used in this research covers a four-year period (from 2010 to 2013). The data for the board size and the number of executive directors were extracted manually from the annual reports of the companies. The data for the other financial variables were extracted from OSIRIS and Thompson

Reuters Datastream databases. The selected companies should have used debts in their capital structure and also should have employed managers in the board of directors. Moreover, all firms that ceased to be quoted in the main market earlier than 2013 and the firms which were listed in the main market after 2010 were excluded from the sample. This study applies earning per share (EPS) as a measure of performance. This proxy is considered to be a market measure for the firm profitability, and also was used by some scholars who studied the relationships between board characteristics and firm performance (Rahman et al., 2015; Yusoff and Alhaji, 2012), and capital structures and firm profitability (Ong and Teh, 2011) in the Malaysian context. Executive ratio is included as the ratio of the executive directors to total members on the board. Moreover, the current ratio is a proxy for the firm liquidity and leverage is measured by debt/(debt+equity). Applying the dynamic panel estimators lets this research to examine whether profitability in the current period has any relationships with profitability in the prior time. This allows the research to properly investigate the persistence of profitability. The current study specifies the following two models.

$$EPS_{it} = \beta_0 + \beta_1 EPS_{it-1} + \beta_2 BOARD\ SIZE_{it} + \beta_3 FIRM\ AGE_{it} + \beta_4 LEVERAGE_{it} + \beta_6 LIQUIDITY_{it} + \eta_i + \eta_t + \mu_{it} \quad (\text{Model 1})$$

$$EPS_{it} = \beta_0 + \beta_1 EPS_{it-1} + \beta_2 EXECUTIVE\ RATIO_{it} + \beta_3 FIRM\ AGE_{it} + \beta_4 LEVERAGE_{it} + \beta_6 LIQUIDITY_{it} + \eta_i + \eta_t + \mu_{it} \quad (\text{Model 2})$$

Where subscripts *i* and *t* are indices for the firm and time, respectively,  $\eta_i$  represents the unobserved firm-specific effects,  $\eta_t$  accounts for year fixed effect,  $\beta$  is the adjustment parameter, and  $\mu_{it}$  represents the remaining disturbance term that varies according to the individual firms and time.

#### 4. THE FINDINGS

Table 1 reports the means board size, number of executives, and EPS for years of the study. As it can be seen, the board size and the number of executives experienced downward trend in their figures, although the EPS was improving during these years.

Table 2 presents the descriptive statistics of the dependent and independent variables. The mean of size board equals to 7.644 that supports the results of the studies in Malaysia. For instance, the findings of Shakir (2008)'s study showed that during 1999 to 2005, the mean has been 7.47. In addition, Noor and Fadzil (2013) found a mean equals to 7.771 in 2008, and also Shukeri et al. (2012) indicated that the mean of the board size is 7.35 in the year 2011. Table 2 also shows that the average of the number of executives is 3.672 that is close to the previous findings by Shakir (2008) (mean = 3.5).

Correlation matrix is illustrated in Table 3. Based on the low correlation among the variables, it can be concluded that there is not a multicollinearity problem among them.

Table 4 presents the summary of the findings for GMM panel estimations. The findings of both models show that lagged

**Table 1: Characteristics of corporate governance and EPS**

Variable	2010	2011	2012	2013
Size of BOD	7.68	7.65	7.60	7.65
Executives	3.73	3.69	3.67	3.61
EPS	0.14	0.19	0.21	0.20

EPS: Earning per share, BOD: Board of directors

**Table 2: Descriptive statistics**

Variable	Observation	Mean±SD	Min	Max
EPS	1068	0.1871±0.2397	0	1.92
SIZE	1066	7.644±1.7805	4	13
EXEC	1066	0.3672±0.1560	0	0.71
LIQ	1020	3.529±4.377	0.114	37
LEV	1068	0.2096±0.1814	0	0.770
AGE	1068	16.567±5.772	6	30

EPS: Earning per share, SD: Standard deviation

**Table 3: Pearson correlations matrix**

	EPS	SIZE	EXEC	LIQ	LEV
EPS	1.000				
SIZE	0.056*	1.00			
EXEC	0.20**	0.17**	1.00		
LIQ	0.045	-0.06**	-0.08**	1.00	
LEV	-0.12**	0.12**	0.045	-0.47*	1.00
AGE	0.33**	0.13**	-0.19**	0.012	0.075*

\*\*\* indicate correlation is significant at 10% and 5% respectively. EPS: Earning per share

**Table 4: Results of GMM-SYS (two-step)**

Independent variable	Model 1	Model 2
PROF <sup>i, t-1</sup>	0.251* (0.146)	0.311* (0.143)
SIZE <sup>i, t</sup>	0.025** (0.010)	-
EXEC <sup>i, t</sup>	-	0.283** (0.140)
LIQ <sup>i, t</sup>	0.008* (0.005)	9.788* (18.88)
LEV <sup>i, t</sup>	-0.298** (0.125)	-0.363** (0.122)
AGE	-0.001 (0.0062)	0.005 (0.006)
Difference Sargan test	$\chi^2=4.192$ P=0.380	$\chi^2=5.89$ P=0.38

\*\*Indicates statistical significance at 5%. \*Indicates statistical significance at 10%. All standard errors for the two step systems GMM-SYS are robust and are placed in parentheses. Over identifying the restriction is tested by difference Sargan (1958) test with H0: Instruments are valid. GMM: Generalized Methods Of Moments

profitability has a statistically significant effect at 10% on EPS. This findings support previous results by Glen et al. (2001) which indicated the Persistence of performance among 67 large listed firms under the main market of Bursa Malaysia. Based on the results of Model 1, when the number of the board members increases, the firm profitability shows a significant growth, based on the confidence level at 95%. This result is in line with Ponnu and Karthigeyan (2010) and Abidin et al. (2009), who found that the positive relationship between the board size and firm profitability in Malaysia. Moreover, the findings of model 2 reveals that the number of executives on the board is a determinant of the firm profitability in Bursa Malaysia based on 5% significant. This result is consistent with the results of earlier research by Shakir (2008) on property firms listed in Malaysia. The results of both models suggest significant positive effects of liquidity on the firm profitability. This positive effect is consistent with the findings of the research by Zainudin (2006) in the Malaysian market. Table 4 also shows the significant negative effect of leverage on the firm profitability in both models. This negative impact is in line with

the Pecking Order Theory, implying that profitable firms prefer the internal financing and if managers are not confident about the sufficient level of profitability of the projects, then they tend to use more debts. This negative relationship was previously mentioned by some scholars in the Malaysian market (Mansor Wan Mahmood and Zakaria, 2007; Sulong et al., 2013). However, the results of both models reveal that the firm Age has an insignificant impact on the firm profitability.

## 5. CONCLUDING REMARKS

This study investigates the impacts of the board size and executives directors on the firm profitability. Additionally, applying GMM methods enables this research to examine the relationship between performance and its lagged variables. Comparing the means of the board size of this study with previous studies reveals that the average of board members had not been changed significantly during the last decade. The findings provide evidence that the market seems to have a preference for large boards with more executives on the board. This positive effect can be explained by the fact that larger Malaysian boards provide greater collective information and more business connections. The spread of the experts can also improve the procedure of decision making. However, Malaysian code on corporate governance motivates firms to employ more independent directors in the board, but the findings show that the number of executives has a significant positive effect on EPS. This positive effect shows that since the executives know about the firm's operation and they also commonly have sufficient experiences about their firm's business, therefore they can provide first-hand and on-time information to other members of the board. The positive effects of the board size and executives ratio show that the advisory role of BOD is more important than monitoring roles in the Malaysian market during these years. The results also indicate the positive relation between the past performance and present performances among the listed firms in Bursa Malaysia. This research, however, has two main limitations. Firstly, the sample comprised of only listed companies under the main market and does not include the firms on ACE market. Secondly, the sample data only consists of the companies which used debts in the capital structure and also employ executives as members of the board. However, despite the mentioned limitations, this study does contribute towards the understanding relationship between performance and some traits of BOD with a particular reference to the ratio of the executives on the board and also the board size in Malaysian listed companies. Notwithstanding the findings, this paper also contributes to the limited existing studies on persistence in profitability among the listed firms in the main market of Bursa Malaysia.

## REFERENCES

- Abidin, Z.Z., Kamal, N.M., Jusoff, K. (2009), Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, 1(1), 150-164.
- Adams, R.B., Mehran, H. (2005), Corporate Performance, Board Structure and its Determinants in the Banking Industry. Paper Presented at the EFA 2005 Moscow Meetings.
- Ben Caleb, E., Olubukunola, U., Uwuigbe, U. (2013), Liquidity management and Profitability of manufacturing companies in Nigeria. *Journal of Business and Management*, 9(1), 13-21.
- Berger, A.N., Bonaccorsi di Patti, E. (2006), Capital structure and firm performance: A new approach to testing agency theory and an application to the banking industry. *Journal of Banking and Finance*, 30(4), 1065-1102.
- Bolek, M., Wolski, R. (2012), Profitability or liquidity: Influencing the market value-The case of Poland. *International Journal of Economics and Finance*, 4(9), 182-190.
- Boumosleh, A., Reeb, D. (2005), The governance role of corporate insiders. Available from: <http://www.ssrn.com/abstract=674082>.
- Daily, C.M., Dalton, D.R. (1993), Board of directors leadership and structure: Control and performance implications. *Entrepreneurship: Theory and Practice*, 17(3), 65-82.
- Dogan, E., Smyth, R. (2002), Board remuneration, company performance, and ownership concentration: Evidence from publicly listed Malaysian companies. *ASEAN Economic Bulletin*, 19(3), 319-347.
- Glen, J., Lee, K., Singh, A. (2001), Persistence of profitability and competition in emerging markets. *Economics Letters*, 72(2), 247-253.
- Guest, P.M. (2009), The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, 15(4), 385-404.
- Hadlock, C.J., James, C.M. (2002), Do banks provide financial slack? *The Journal of Finance*, 57(3), 1383-1419.
- Haniffa, R., Hudaib, M. (2006), Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance and Accounting*, 33(7), 1034-1062.
- Hermalin, B.E., Weisbach, M.S. (2003), Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review*, 9(1), 7-26.
- Hopenhayn, H.A. (1992), Entry, exit, and firm dynamics in long run equilibrium. *Econometrica: Journal of the Econometric Society*, 60(5), 1127-1150.
- Jensen, M.C. (1993), The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880.
- Li, H., Meng, L., Wang, Q., Zhou, L.A. (2008), Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of Development Economics*, 87(2), 283-299.
- Loderer, C.F., Waelchli, U. (2009), Firm age and performance. Available from: <http://www.ssrn.com/abstract=1342248>.
- Mak, Y.T., Kusnadi, Y. (2005), Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal*, 13(3), 301-318.
- Malik, H. (2011), Determinants of insurance companies profitability: An analysis of insurance sector of Pakistan. *Academic Research International*, 1(3), 315-321.
- Mansor Wan Mahmood, W., Zakaria, R. (2007), Profitability and capital structure of the property and construction sectors in Malaysia. *Pacific Rim Property Research Journal*, 13(1), 92-105.
- Myers, S.C. (1984), The capital structure puzzle. *The Journal of Finance*, 39(3), 574-592.
- Niresh, J.A. (2012), Trade-off between liquidity and profitability: A study of selected manufacturing firms in Sri Lanka. *International Refereed Research Journal*, 3(4), 34-40.
- Noor, M.A.M., Fadzil, F.H. (2013), Board characteristics and performance from perspective of governance code in Malaysia. *World Review of Business Research*, 3(3), 191-206.
- Ong, T.S., Teh, B.H. (2011), Capital structure and corporate performance of Malaysian construction sector. *International Journal of Humanities and Social Science*, 1(2), 28-36.
- Pattitoni, P., Petracci, B., Spisni, M. (2014), Determinants of profitability in the EU-15 area. *Applied Financial Economics*, 24(11), 763-775.

- Ponnu, C., Karthigeyan, R. (2010), Board independence and corporate performance: Evidence from Malaysia. *African Journal of Business Management*, 4(6), 858-868.
- Raheman, A., Nasr, M. (2007), Working capital management and profitability-case of Pakistani firms. *International review of business research papers*, 3(1), 279-300.
- Rahman, H.U., Ibrahim, M.Y., Ahmad, A.C. (2015), How MCCC 2012 Impacted board independence and firm performance In Malaysia: A proposed analysis. *Business and Management Research: An International Journal*, 7(1), 21-31.
- Sargan, J.D. (1958), The estimation of economic relationships using instrumental variables. *Econometrica: Journal of the Econometric Society*, 26(3), 393-415.
- Shakir, R. (2008), Board size, executive directors and property firm performance in Malaysia. *Pacific Rim Property Research Journal*, 14(1), 66-80.
- Shukeri, S.N., Shin, O.W., Shaari, M.S. (2012), Does board of director's characteristics affect firm performance? Evidence from Malaysian public listed companies. *International Business Research*, 5(9), 120-127.
- Sulong, Z., Gardner, J.C., Hussin, A.H., Mohd Sanusi, Z., McGowan, C.B. (2013), Managerial ownership, leverage and audit quality impact on firm performance: Evidence from the Malaysian ACE market. *Accounting and Taxation*, 5(1), 59-70.
- Taghizadeh, M., Saremi, S. (2013), Board of directors and firms performance: Evidence from Malaysian public listed firm. *International Proceedings of Economics Development and Research*, 59(37), 178-182.
- Tarzján, J., Eyleerts, I. (2010), Persistence of profitability in Latin America: Explaining the differences among countries, industries and firms. *Academia, Revista Latinoamericana de Administración*, 44(1), 99-114.
- Vafeas, N. (1999), Board meeting frequency and firm performance. *Journal of Financial Economics*, 53(1), 113-142.
- Wintoki, M.B., Linck, J.S., Netter, J.M. (2007), Endogeneity and the Dynamics of Corporate Governance. Working Paper. Available from: <http://www.ssrn.com/abstract=970986>.
- Yurtoglu, B.B. (2004), Persistence of firm-level profitability in Turkey. *Applied Economics*, 36(6), 615-625.
- Yusoff, W.F.W., Alhaji, I.A. (2012), Corporate governance and firm performance of listed companies in Malaysia. *Trends and Development in Management Studies*, 1(1), 43-65.
- Zainudin, N. (2006), Liquidity-profitability trade-off: Is it evident among Malaysian SMEs? *International Journal of Management Studies*, 13(2), 107-118.