

Board Governance and Firm Performance: A Panel Data Analysis

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Abstract

This study presents the relationship between board governance and firm performance of the Malaysian listed Trading and Services sector by using panel random effects model. The study examines 73 firms for the period of six years from 2005 to 2010. This study also examines the effect of board governance during subprime crisis which occurred in 2007 and 2008. On average, eight directors sat on the board with three independent nonexecutive directors. After controlling the effect of investment opportunities, firm age, leverage and firm size, the result revealed that board size positively influences firm performance. Board independent and foreign board members are insignificant effect on the Trading and Services firms performance. The firm performance also negatively influence by investment opportunity, leverage and firm size. During the crisis period (2007-2008), firm performance negatively affected by board independent. The greater the firm investment opportunity, leverage and firm size, the lower it will be the performance of the firm.

Keywords: Board size, board independent, foreign board member, firm performance

1.0 Introduction

Corporate governance can be defined as a system to stabilize internal and external of companies with accountability and transparency to all stakeholders in overall business activities (Solomon, 2007).

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According to Gregory and Simms (2006), there are four principles of corporate governance, namely fairness, transparency, accountability, and responsibility. The ineffectiveness of corporate governance continues to surface around the world with scandals such as Enron in 2001 and Worldcom in 2002. As a result, many believe that existing corporate governance devices are unable to fully control the behaviour of managers.

The Deputy Chief Executive of Securities Commission, Datin Zarinah Anwar, at the corporate governance conference in 2003 said, "Misgovernances have shown that weak or ineffective governance procedures do not just create huge potential liabilities for the individual firm but also the market in general and society collectively." Hence, to improve monitoring, the Malaysia Code of Corporate Governance (MCCG) was implemented in March 2000 and revised in 2007. The MCCG outlined certain conditions on the structures and functions of boards of directors, audit committee, and external auditors to safeguard the shareholders' interest. However, Mohamed Yunus et al. (2011) stated that the MCCG is effective only in appearance; in terms of enforcement it is still weak.

A board's structure would encourage entrenchment. A large number of members sitting on the board would provide more voice regarding the intuitive decisions on firm performance. However, it is not easy to persuade all the members to make counterintuitive decisions. The culture of the board of director is an important component of a company's board failure (Jensen, 1993). The author suggested that small number of board members can help companies to improve on their performance. A company will be less effective, while the CEO gains easier control on the board if the board of directors consists of more than seven or eight people. According to Yermack (1996), the boardrooms are dysfunction when there is an increase in the number of executives on the board. They rarely criticize the policies used by top managers. They are reluctant to hold up discussion about corporate performance and leave entrenched managers to control it.

Corporate ownership in Malaysia is typically characterized as concentrated shareholding compared with the ownership structure in Western countries (Claessens et al., 2002). The concentrated shareholders will control the board and the other executive officers (Fan & Wong, 2002) and could influence the appointment of independent directors (Jo and Pan, 2009; Sulong and Mat Nor, 2010).

In Malaysia Trading and Services sector, there are numbers of companies have more than eight members on the board including Sime Darby Berhad, Ajinomoto (Malaysia) Berhad, Berjaya Corporation Berhad, and Hiap Teck Venture Berhad. Therefore, this study is interested to identify the effectiveness of board governance to firm performance in Malaysia Trading and Services sector.

2.0 Literature Review

2.1 Board Size

There is an inverse effect of board size on corporate performance (Conyon & Peck, 1998). They use two different measurements for corporate performance, namely return on equity and market-based Tobin's Q. The result obtained was a negative relationship. They found that companies that tried to increase their monitoring function, even with their enlarged board size will eventually be outweighed by problems. The problems that generally occurred are information asymmetries between the CEO and the board, communication issues and decision making.

Supported by Yermack (1996), Eisenberg et al. (1998) and Ees et al. (2003), suggested that smaller boards may be related to better company performance and would be less exposed to their CEOs' influence. Yermack (1996) reported that with smaller boards, major American companies are more likely to dismiss their CEOs who exhibited poor performance. In addition, in companies with small boards, compensation is highly sensitive to performance. Thus, a CEO does not have enough power to influence this decision. Too many directors serving on the board may increase the agency problems since the directors are becoming less effective in monitoring the managers (Bozec & Dia, 2007).

This result contradicts the previous findings from Pearce and Zahra (1991), Dallas (2001), and Zainal Abidin et al. (2009), who held that more board members will give more ideas, and skills; and experiences are shared among them to develop strategies to enhance firms' performance.

H₁ There is a positive relationship between board size and firm performance.

2.2 Board Independent

The higher the number of outside directors sitting on the board, the stronger would be the corporate governance of the firm (Weisbach, 1988). By using large British companies' data between 1986 and 1994, Conyon (1998) indicated that a CEO's threat to be dismissed will be higher in companies with higher proportion of nonexecutives on the board especially during poor performance. The ability to control top management would be stronger if Malaysian companies had moved towards board independence (Muniandy, 2007).

According to Allen et al. (2000), the effectiveness of independent directors as board governance mechanism is still unclear especially in a country where the firm controlling shareholders will use their power to select members of the entire board of directors. The political reason such as politician, environment activists and consumer representative could limit the independent director power and negatively impact the firm performance (Agrawal and Knoeber, 1996). Firms with higher independent directors would experience declining in stock return during financial crisis. Independent directors would influence firms to increase in equity financing which lead transfer of wealth from shareholders to debt holders (Erkens et al., 2012). Consistently, Black et al. (2012) also find inverse relationship between board independent and firm performance.

H₂ There is a negative relationship between board independent and firm performance.

2.3 Foreign Board Member

Foreign board membership is an essential part of a corporate governance structure (Oxelheim & Randoy, 2003). A company with foreign board ownership is able to enhance the firm's reputation and value in the financial market. By having at least one foreign member on the board, it is a signal of greater company's commitment to corporate monitoring and transparency. The evidence is supported by Choi and Hasan (2005) in their study on the effect of ownership and governance on firm performance based on the data from Korean commercial banks, from 1998 until 2002.

Companies with foreign board members, regardless of their number, showed better results in terms of handling risk, and in terms of reducing risk.

This is because conflict of interest is lesser with the foreign board members who are more independent than the local board members. In addition, their experience and knowledge about competition in the local and global market provided an extra advantage to the commercial banks in Korea. In the study of Gulamhussen and Guerreiro (2009) on Portuguese banks, the result was consistent with that of a previous research made by Choi and Hasan (2005). Foreign board membership was able to help banks improve their revenue by reducing traditional business and increasing nontraditional ones.

H₃ There is a positive relationship between foreign board member and firm performance.

3.0 Methodology

This study used the annual report of Bursa Malaysia Public Listed firms for the period of 2005 to 2010 to obtained data for ownership. This period of study was chosen to see the effect of board governance during subprime crisis which occurred in 2007 and 2008. Therefore, this study will be more significant since it would capture three stages of economic condition: before crisis (2005-2006), during crisis (2007-2008), and after crisis (2009-2010).

Other than that, data for return on assets and control variables collected from Datastream. This study mainly focuses on listed Trading and Services Firms. Firm which do not have complete data during the period of study will be excluded from the sample. Hence, a balance panel data of 73 firms examined from the total of 177 firms. The empirical model used in this study can be described as follows:

$$ROA_i = \beta_0 + \beta_1 BI + \beta_2 BZ + \beta_3 FBM + \beta_4 MTBV + \beta_4 AGE + \beta_5 LEV + \beta_6 FZ + \varepsilon_{it}$$

Where; β_0 = constant term; *ROA* = Return on Assets for firm *I*; *BI* = Board Independent; *BZ* = Board Size; *FBM* = Foreign Board Member; *MTBV* = Market-to-Book Equity Ratio; *AGE* = Firm Age; *LEV* = Leverage; and *FZ* = Firm Size.

Return on Assets (ROA) is used as a proxy for firm performance. It regresses against the ownership structure (concentrated, managerial, government and foreign) and other control variables (investment opportunities, leverage and firm size).

ROA has been used by many studies to measure for firm performance including Demsetz and Villalonga (2001), Douma et al. (2006) and Phung and Hoang (2013).

Board size is measured as the total number of directors on the board as shown in the annual report as suggested by Pathan (2009) and He et al. (2012). This study conforms to Sulong and Mat Nor, (2010) in measuring board independence. It is measured by the percentage of independent directors in the firm. In tandem with the study conducted by Oxelheim and Randoy (2003), this study measured board member's nationality by using nationality dummy 1 if board members are foreigners, otherwise 0.

As for control variables, market-to-book value of equity ratio is a measure of investment opportunities (Adjaoud and Ben-Amar, 2010). Firm age measure using log (listing age) of firms based Wei and Xiao, (2009). Leverage is measured based on debt to equity ratio as suggested by previous researches such as Lev and Kunitzky (1974) and Gaver, and Gaver, (1993). Firm size is one of the control variables measured by using log of total assets (Chae et al., 2009

4.0 Findings

4.1 Descriptive Statistics

Table 4.1: Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Standard Deviation
ROA (%)	5.00	4.51	37.38	-14.13	6.49
BI (No)	3.33	3.00	7.00	1.00	1.10
BZ (No)	8.21	8.00	15.00	4.00	1.95
FBM (No)	0.48	0.00	6.00	0.00	1.02
MTBV	1.08	0.95	13.36	-49.09	4.14
AGE	15.06	13.63	39.01	0.04	8.63
LEV (%)	57.14	40.39	336.11	0.00	62.49
FZ (%)	8.97	8.81	12.46	6.18	0.75

Table 4.1 presents the descriptive statistics for variables used in the study for the period 2005 to 2010.

The average (median) of ROA (proxy for firm performance) in Malaysia listed Trading and Services firms was 5.00% (4.51%) and the maximum was 37.38%. On average, three independent nonexecutive directors, *BI* seat on the board with a maximum of 7 members. This is consistent with the Bursa Malaysia Listing Requirement (2001) and MCCG (revised 2007) which requires at least two directors or one-third of the board of directors to be represented by independent directors. In terms of average board size, *BZ*, eight directors sat on the board of Malaysian listed firms with the maximum was 15 members. The size of board in Malaysia Trading and Services Sector is inconsistent with the size suggested by Lipton and Lorsch (1992). From the perspective of ideal monitoring, they suggested that a company should consist of eight or nine members up to a limit of 10 members. Malaysia Airline System Bhd, Edaran Otomobil Nasional Bhd and Telekom Malaysia Bhd are among the Trading and Services firms consist of more than 10 members on the board. The maximum number of foreign directors sitting on Malaysian board is 6 members. For firm age, based on years of being listed on the main board, the average was 15.06 years, with the maximum value of 39.01 years. The mean (median) percentage of leverage was 57.14% (40.30%).

4.2 Empirical Results

Table 4.2 reports the results of firm performance based on random effect model. The regression result showed that board size is positive and significantly related to firm performance at 5% level. The finding on this study showed that the larger the board size of the firms, the higher the firm performance. Therefore, hypothesis (H_1) was accepted, implying that there is positive relationship between board size and firm performance. This result is consistent with earlier study of Pearce and Zahra (1991), Dallas (2001), and Zainal Abidin et al. (2009). Firm with more board members will give more ideas, and skills; and experiences are shared among them enhance firms' performance.

Table 4.2: The Relationship between Board Governance and Firm Performance (ROA)

Variables	Coeff	S.E
Constant	23.81***	7.49
BI	0.01	0.05
BZ	0.57**	0.29
FBM	1.40	1.36
MTBV	-0.38***	0.12
AGE	-2.94	0.11
LEV	-0.02**	0.01
SZ	-2.19***	0.82
R-squared	0.05	
Adjusted R-squared	0.04	
F-statistic	3.49***	
Durbin-Watson	2.11	

***, **, * indicate significance at the 1%, 5 % and 10% levels

Board independent and foreign board members are positive and insignificant to influence performance of Trading and Services firms, hence hypothesis H₂ and H₃ are rejected. Since Malaysia is characterized as concentrated ownership (Claessens et al., 2002), the result revealed by Allen et al. (2000) could explain the insignificant of board independent. The effectiveness and power of independent directors as monitoring device is still unclear especially in a country where the firm have controlling shareholders. Independent directors are not related to firm performance (Abdullah, 2004), and earning management (Rahman & Ali, 2006). On the other hand, contradicted with previous finding of Oxelheim & Randoy (2003) Choi and Hasan (2005) and Gulamhussen and Guerreiro (2009), this study showed foreign board members not influence the performance of Malaysia Trading and Services firms.

The control variables investment opportunity, leverage and firm size were negatively related with firm performance at 1% and 5% significant level. This indicated that the companies firm performance increase once there are low investment opportunities, small size of firm with low level of debt. Other variable firm age is insignificant to influence firm performance.

Table 4.3 reports the regression result of firm performance for pre crisis, during crisis and post crisis periods. The result suggested that the random effect was more preferable since chi-square was insignificant at least at 1% level. The result showed that board independent negative and significant relationship with firm performance during the crisis periods at 10% level. The result consistent with Erkens et al., (2012) who reported that during crisis with influence of independent directors the wealth of shareholders transfer to debt holders since reduce in stock return. The size of the board positively affects firm performance only for the post crisis period. Apparently, firms with large boards are effective in monitoring the manager, sharing thought and strategies to improve the firm performance. Foreign board members showed insignificant result throughout the three crisis periods. The result suggested that foreign directors have no power to influence firm strategies to increase firm performance regardless of whether the company is facing a crisis or not.

Table 4.3: The Affect of Board Governance and Firm Performance (ROA) Under Three Stage Crisis Periods

Variables	Pre crisis	During Crisis	Post Crisis
Constant	6.31 (8.27)	15.57** (7.31)	34.39** (14.33)
BI	0.10 (0.06)	-0.09* (0.05)	0.04 (0.10)
BZ	-0.31 (0.31)	0.08 (0.28)	2.07*** (0.64)
FBM	-0.45 (1.41)	-0.33 (1.29)	4.04 (2.72)
MTBV	1.18*** (0.34)	-0.42*** (0.13)	-0.70*** (0.23)
AGE	-1.08 (1.58)	-3.78* (1.24)	-8.04 (5.43)
LEV	-0.02** (0.01)	-0.03*** (0.01)	-0.01 (0.02)
SZ	-0.28 (0.95)	-0.02 (0.78)	-4.34*** (1.56)
R-squared	0.16	0.19	0.15
Adjusted R-squared	0.11	0.15	0.11
F-statistic	3.64***	4.68***	3.49***
Durbin-Watson	2.03	2.13	2.15

***, **, * indicate significance at the 1%, 5 % and 10% levels

As for control variable, firm performance positively affected by their investment opportunities in the pre crisis period. However, it turns negative relationship during the crisis and post crisis period. It is a tendency of investment in – NPV or high agency problem that leads to poor firm performance due to the investment. Firm age only significantly related to firm performance during the subprime crisis period 2007 to 2008 at 10% level. During the crisis, most of the mature firm were still in the stage of facing the financial problem, hence reduce in firm performance. There was negative relationship between leverage and dividend yield during the three periods. The higher the company is leveraged for the pre crisis and during crisis period, it significantly influences lower firm performance. Small size firms will perform better after the crisis period.

5.0 Conclusion

This study found that the size of firm board of directors certainly affect on the firm performance in cases of Malaysian Trading and Services sector. The larger the size of the board, the higher will be the performance of the firm especially for the post crisis period. During the period of study 2005 to 2010, board independent and foreign board members not effectively play their role to influence the firm performance. Firm should not fully depend on independent directors to reduce the agency problem. This is because the independent directors may not have the skills to do so, or they may be inefficient and thus they are not effective in performing their duties.

Reference

- Abdullah, S. N. (2004). Board composition, CEO duality and performance Malaysia listed companies. *Corporate Governance*, 4, 47-61.
- Allen, F., Bernardo, A., & Welch, I. (2000). A theory of dividends based on tax clienteles. *Journal of Finance*, 55, 2499–2536.
- 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.
- Adjaoud, F., & Ben-Amar, W. (2010). Corporate governance and dividend policy: Shareholders' protection or expropriation? *Journal of Business Finance & Accounting*, 35(5), 648-667.
- Black, B. S., Carvalho, A. G., & Gorga, E. (2012). What matters and for which firms for corporate governance in emerging markets? Evidence from Brazil (and other BRIC countries). *Journal of Corporate Finance*, 18, 934-952.
- Bozec, R., & Dia, M (2007). Board structure and firm technical efficiency: Evidence from Canadian state-owned enterprises. *European Journal of Operational Research*, 177, 1734–1750

- Chae, J., Kim, S., & Lee, E. J. (2009). How corporate governance affects payout policy under agency problems and external financing constraints. *Journal of Banking & Finance*, 33, 2093–2101.
- Choi, S., & Hasan, I. (2005). Ownership, governance, and bank performance: Korean experience. *Financial Markets, Institutions & Instruments*, 14(4), 215-242.
- Claessens, S., Djankov, S., Fan, J.P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57(6), 2741-2772.
- Canyon, M. (1998). CEO director's pay and turnover: An application to a Sample of large UK firms. *Oxford Bulletin of Economics and Statistics*, 60, 485-507.
- Canyon, M. J., & Peck, S. I. (1998). Board size and corporate performance: evidence from European countries. *The European Journal of Finance*, 4(3), 291-304.
- Dallas, L. L. (2001). Development in U.S. boards of directors and the multiple roles of corporate boards. Research paper California: University of San Diego School of Law.
- Demsetz, H. & Villalonga, B. (2001). Ownership Structure and Corporate Performance. *Journal of Corporate Finance*, 7, 209–233
- Douma, S, George, R & Kabir, R (2006). Foreign and Domestic Ownership, Business Groups, and Firm Performance: Evidence from a Large Emerging Market. *Strategic Management Journal*, 27(7), 637-57.
- Ees H. V., Postma, T. J. B. M., & Sterken, E. (2003). Board characteristics and corporate performance in the Netherlands. *Eastern Economic Journal*, 29 (1), 41-58.
- Eisenberg, T., Sundgren, S., & Wells, T. W. (1998). Larger board size and decreasing firm value in small firms'. *Journal of Financial Economic*, 48, 35-54.
- Erkens, D. H., Hung, M., & Matos, P. (2012). Corporate governance in the 2007-2008 financial crisis: Evidence from financial institutions worldwide. SSRN working paper.
- Fan, J. P. H., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting & Economics*, 33(3), 401-425.
- Gaver, J. J., & Gaver, K. M. (1993). Additional evidence on the association between the investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Accounting and Economics*, 16(1-3), 125-160.
- Gulamhussen, M. A., & Guerreiro, L. (2009). The influence of foreign equity and board membership on corporate strategy and internal cost management in Portuguese banks. *Management Accounting Research*, 20(1), 6-17.
- He, E., Miller, S., & Yang, T. (2012). Determinants of board structure: A comparison of publicly-traded and privately-owned insurance companies. SSRN Working Paper Series. Rochester.
- Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831-880.
- Jo, H., & Pan, C. (2009). Why are firms with entrenched managers more likely to pay dividends? *Review of Accounting & Finance*, 8(1), 87-116.
- Lev, B., & Kunitzky, S. (1974). On the association between smoothing measures and the risk of common. *The Accounting Review*, 49(2), 259-270.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *Business Lawyer*, 48(1), 59-77.

- Mohamed Yunus, R., Smith, M., Ismail, Z., & Ahmad, S. A. (2011). Inside concentrated owners, board of directors and accounting conservatism. Annual Summit on Business and Entrepreneurial Studies (ASBES 2011) Proceeding.
- Muniandy, B. (2007). CEO duality, audit committee effectiveness and audit risks: A study of the Malaysian market. *Managerial Auditing Journal*, 22(7), 716-728.
- Pathan, S. (2009). Strong boards, CEO power and bank risk-taking. *Journal of Banking & Finance*, 33, 1340-1350.
- Pearce, J. A., & Zahra, S. A. (1991). The relative power of CEOs and board of directors: associations with corporate performance. *Strategic Management Journal*, 12, 135-53.
- Phung, D. N & Le, T. P. V (2013). Foreign Ownership, Capital Structure and Firm Performance: Empirical Evidence from Vietnamese Listed Firms. *The IUP Journal of Corporate Governance*, 12(2), 40.
- Oxelheim, L., & Randoy, T. (2003). The impact of foreign board membership on firm value. *Journal of Banking & Finance*, 27, 2369–2392.
- Rahman, A. R., & Ali, M. H. F. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783-804.
- Solomon, J. F. (2007), *Corporate governance and accountability* (2nd ed.), New York, NY: Wiley.
- Sulong, Z., & Mat Nor, F. (2010). Corporate governance mechanisms and firm valuation in Malaysian listed firms: A panel data analysis. *Journal of Modern Accounting and Auditing*, 6(1).
- Wei, G., & Xiao, J. Z. (2009). Equity ownership segregation, shareholder preferences, and dividend policy in China. *The British Accounting Review*, 41, 169–183.
- Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431-460.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40, 185-212.
- Zainal Abidin, Z., Mustaffa Kamal, N. & Jusoff, K. (2009). Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, 1(1), 150-164