# Original Article

# The effect of corporate governance and divergence between cash flow and control rights on firm performance: Evidence from Malaysia

**Masood Fooladi**
is a lecturer at Department of Accounting, Mobarakeh Branch, Islamic Azad University, Isfahan, Iran. He is also a PhD candidate in accounting at National University of Malaysia (UKM). His research area is corporate governance efficiency and now is studying on the corporate governance and related party transactions.

**Zaleha Abdul Shukor**
is an associate professor of accounting in the Faculty of Economics and Management at Universiti Kebangsaan Malaysia. She has published several papers in respected journals, is a Certified Financial Accountant (CFiA) with the Malaysian Institute of Certified Public Accountants (MICPA) and an Associate Member (AM) of the Malaysian Institute of Accountants (MIA).

**Norman Mohd Saleh**
is a professor of accounting and Deputy Dean of the Faculty of Economics and Management at Universiti Kebangsaan Malaysia. He has published many papers in respected journals, and he is a Member of the Malaysian Institute of Accountants (MIA).

**Romlah Jaffar**
is an associate professor of accounting in the Faculty of Economics and Management at Universiti Kebangsaan Malaysia. She has published many papers in respected journals especially in the area of social and environmental reporting, reporting/disclosure quality and internet reporting.

**ABSTRACT** Nowadays, separation of ownership from control in business causes the inability of shareholders to have a full control over managerial actions. In this situation, agency theory assumes an opportunistic behavior, that is, individuals want to maximize their own expected interests and are resourceful in doing so. This opportunistic behavior leads to conflict of interest between managers and shareholders on the one hand, and majority and minority shareholders on the other. From the agency theory perspective, the aim of Corporate Governance (CG) is to mitigate these agency conflicts and direct the operations to achieve an appropriate performance. Therefore, the aim of this study is to examine the relationship between CG characteristics and firm performance in Malaysian listed firms where divergence between cash flow and control rights is critical. Based on a randomly selected sample of 400 companies listed on Bursa Malaysia and applying the linear multiple regression, it is found that board independency and CEO duality have respectively positive and negative relationship with firm performance. In addition, audit quality has a significantly positive relationship with firm performance. The contribution of this study is to add a dummy interaction between audit quality and divergence between cash

**Correspondence:** Masood Fooladi, Department of Accounting, Mobarakeh Branch, Islamic Azad University, Mobarakeh, Isfahan, Iran
E-mail: foladim57@gmail.com

www.manaraa.com

flow and control rights. It is found that high-quality audit firms can mitigate the agency problems in firms with divergence between cash flow and control rights.

## INTRODUCTION

Nowadays, separation of ownership from control in business causes the inability of shareholders to have a full control over managerial actions, which imposes additional costs to the firm (Abdullah, 2004). In this situation, agency theory assumes an opportunistic behavior, that is, managers want to maximize their own expected interests and are resourceful in doing so which leads to conflict of interest between managers and shareholders (McCullers and Schroeder, 1982). Since, shareholders hire managers to apply their investment in firm's activity, an information asymmetry occurs because management have the competitive advantage of information within the company over that of the owners (Zubaidah *et al*, 2009). It can provide management with the opportunity to expropriate firm wealth in their benefit. These opportunistic behaviors of manager, known as residual loss in agency theory, lead to reduction in the shareholders' wealth (Solomon and Solomon, 2004). Macus (2008) argues that the basic issue from an agency perspective is how to avoid such opportunistic behaviors.

Hence, agency theory suggests CG as a mechanism to reduce these conflicts by monitoring managers' performance and aligning management's goals with those of the stakeholders (Brickley and James, 1987). Shleifer and Vishny (1997) define CG as a way in which suppliers of finance to corporations assure themselves of getting a return on their investment. Irrespective of the particular definition, the importance of CG arises in a firm because of the separation between those who control and those who own the residual claims (Epps and Cereola, 2008).

In addition, concentration of ownership develops a new perspective on agency problem in which the main issue is the conflict of interests between different types of shareholders in a firm (Morck *et al*, 2005). This kind of agency conflict is more critical in the case of deviation of voting rights from the size of shares in the hands of controlling shareholders (Claessens *et al*, 2000). Haniffa and Hudaib (2006) and Tam and Tan (2007) believe that while prior studies focus more on the agency relationship between managers and shareholders, the protection of minority shareholders' rights remains a key issue in Malaysian companies and need to be more considered. Therefore, the contribution of this study is to examine the relationship between CG characteristics and firm performance in Malaysian listed firms where divergence between cash flow and control rights is critical.

## CORPORATE GOVERNANCE CHARACTERISTICS

The CG model in Malaysia has closely followed the Anglo-American approach, which is generally referred to as the 'shareholder model', where the governance concept is based on the agency relationship (Abdullah, 2004). This CG model is a one-tier system where the board of directors is the highest governing body in the company because the shareholders do not have a complete control on management's decisions. In a balance sheet model of the firm, Gillan (2006) argues that the board of directors is the apex of internal governance system and is responsible to monitor and compensate management. Managers are more likely to act against shareholders' interests when they do

not earn their desirable interests (Jensen and Meckling, 1976). This opportunistic behavior of management can lead to reduction in the value of the firm. Therefore, the board's success in discharging its fiduciary duties and monitoring roles would be predicted to increase the value of the firm and enhance the shareholders' wealth (Abdullah, 2004).

Since the board of directors is the most important device to monitor the management, independency of board members becomes a significant issue (Abdullah, 2004). Board independency means the proportion of independent non-executive directors relative to the total number of directors. It is argued that boards with the more independent directors will control the opportunistic behavior of managers and protect the shareholders' interests better than boards with dependent members (Zubaidah *et al*, 2009). In addition, Dahya and McConnell (2005) and Dehaene *et al* (2001) find a significant positive relationship between the ratio of independent directors and return on equity in their study.

Another crucial monitoring mechanism based on agency perspective is the separation of the roles of chief executive officer (CEO) from the chairman (William *et al*, 2003). When there is no separation, the CEO also serves as chairman. This situation, known as 'CEO duality', is problematic from an agency perspective where the CEO chairs the group of people in charge of monitoring and evaluating the CEO's performance. In companies with CEO duality approach, the crucial question is 'who monitors management?' or 'who will watch the watchers?' (Zubaidah *et al*, 2009). This situation provides CEOs with the opportunity to have a dominant influence on the board's decisions. Therefore, CEO duality will weaken board's independency and make them unable to monitor management effectively. Furthermore, Abdul Rahman and Haniffa (2003) in their study on the effectiveness of internal governance mechanism in Malaysian listed firms document that where the CEO also serves as chairman, the performance of the firm is weaker compared with the firms with separated role of CEO and chairman.

In addition, Cheng (2008) in his article suggests that larger boards are less efficient and slower in decision-making because it is more difficult for the firm to arrange board meetings and for the board to reach a consensus. He also argues when the board size is bigger it will be easier for CEO to have a dominant control on the board and increase the CEO power in decision-making (Jensen, 1993). In addition, some studies document a negative association between board size and firm performance (Yermack, 1996; Eisenberg *et al*, 1998). Previous studies in Malaysia also consider the board size as an effective factor in the function of board of directors (Zubaidah *et al*, 2009; Effiezal *et al*, 2011). In effect, smaller boards are more effective in improving the firm performance and limiting the incentives of directors because the role function of each director is easier to control and decision-making process can be done rapidly (Haniffa and Hudaib, 2006).

Furthermore, Claessens *et al* (2000) find that corporate ownership in East Asian countries including Malaysia is complicated by pyramidal and cross-holding structures, and voting rights of controlling shareholder exceed the size of shares in their hands. This situation is known as divergence between cash flow and control rights providing controlling shareholders with an opportunity to expropriate the company's assets to their own accounts at the expense of other shareholders. Claessens *et al* (2002) document that based on the entrenchment effect, firm value decreases when the control right of the largest shareholder exceeds the cash flow ownership. Another study by Cheung *et al* (2006) documents a negative relationship between the size of shares in the hand of controlling shareholders and abnormal return. La Porta *et al* (2002) document a negative relationship between divergence of cash flow rights from control rights of controlling shareholders and firm value.

Therefore, following Claessens *et al* (2000 and 2002), Fan and Wong (2002) and Lee (2007), this study applies divergence between

cash flow rights and control rights as a measure of controlling owner entrenchment. Common approach to measure the control rights of ultimate owners is the weakest link principle (WLP) developed by La Porta *et al* (1999), Claessens *et al* (2000 and 2002), Faccio and Lang (2002). According to the WLP, a company has an ultimate owner if a controlling owner with more than 5 per cent of voting rights can be recognized in the chain of ownership (Claessens *et al*, 2000; Luo *et al*, 2012).

According to Claessens *et al* (2002), Figure 1 shows how to calculate the ultimate owner cash flow and control rights based on WLP in a firm. In this figure, the focus is on firm B (one of the listed firms) as a subject in the sample of study. The aim is to calculate the divergence between cash flow and control rights in firm B. Suppose that an ultimate owner owns 30 per cent of the share of listed firm A which in turn has 10 per cent of the share of listed firm B. The same ultimate owner owns 30 per cent of listed firm C, which in turn owns 25 per cent of firm D. Firm D also owns 40 per cent of the share of listed firm B. In addition, the same ultimate owner owns 15 per cent of listed firm B directly. Looking at control rights, the ultimate owner has 50 per cent controlling rights in firm B that is the sum of the lowest percentage in each link in the chains of voting rights. In addition, the ultimate owner owns 21 per cent of the cash flow rights of firm B. Here, the divergence between cash flow and control right is 29 which is the difference between control rights (50 per cent) and cash flow rights (21 per cent). The calculation is as follow:

- Control Rights of ultimate owner in firm B (CR): 10 per cent+15 per cent+25 per cent = 50 per cent
- Cash Flow Rights of ultimate owner in firm B (CFR): (10 per cent×30 per cent)+(40 per cent×25 per cent×30 per cent)+15 per cent = 21 per cent
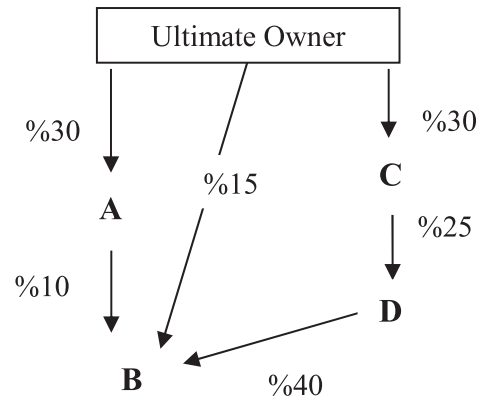- Divergence between CR and CFR = (CR − CFR): (50 per cent–21 per cent) = 29 per cent



**Figure 1:** Calculation of ultimate owner cash flow and control rights.

The required data for calculating the cash flow rights and control rights are collected from the OSIRIS database that demonstrates the ownership structure of a listed firm in a graph such as Figure 1.

Because of the ownership structure in East Asian countries such as Malaysia, it is difficult to moderate the conflict of interests between majority and minority shareholders through the conventional CG mechanisms such as boards of directors (Claessens *et al*, 2000; Fan and Wong, 2005). Therefore, Fan and Wong (2005) in their study on the role of external auditors in emerging markets support the agency theory and suggest that independent external auditors have an effective governance role to moderate agency problems in East Asian countries. In addition, Effiezal *et al* (2011) include the audit quality as measured by size of external auditors as an external governance characteristic of CG in Malaysia. The quality of audit services has an important role to mitigate the information asymmetry and agency problems resulting from the separation of ownership and control in a firm (Willenborg, 1999). Defond and Francis (2005) argue that audit quality is an important element of CG, regardless of complementary or substitution of audit quality and other components of CG. Finally, prior studies document that Big Four audit firms provide higher quality audit performance (Krishnan and Schauer, 2000; Fuerman, 2004).

Therefore, the variables of interest in this study include board independency, CEO duality, board size, divergence between cash flow and control rights and audit quality, which are expected to have a relationship with firm performance.

## FIRM PERFORMANCE

The traditional accounting performance measures such as return on equity (ROE) and earning per share (EPS) are unable to reflect a long-term value of firm and only express a short-term performance (Huang and Liu, 2010). Tobin's Q (TQ) can express the market performance rather than the accounting performance and it is a better measurement of firm performance (Mayer, 2003). In addition, prior researches have broadly used TQ as an appropriate measure of firm performance (Black *et al*, 2008; Berkman *et al*, 2009). Furthermore, recent studies on Malaysian listed firms apply TQ to measure the firm performance. TQ is the ratio of market value of assets to book value of assets, where the market value of assets is measured by the market value of equity plus the book value of total liabilities (Berkman *et al*, 2009; Sulong and Fauzias, 2010). This study also uses TQ to measure the firm performance as dependent variable.

## THEORETICAL FRAMEWORK

Based on the above literature, board independency, CEO duality, board size, divergence of cash flow rights from control rights and audit quality have been identified as possibly having effect on the firm performance. These characteristics are set as the independent variables in the framework. The dependent variable is TQ, which is used to measure the firm performance. The relationship between each of these independent variables and firm performance are hypothesized as follows:

**Hypothesis 1:** There is a positive relationship between the percentage of independent

non-executive directors and the firm performance.

**Hypothesis 2:** There is a negative relationship between CEO duality and firm performance.

**Hypothesis 3:** There is a negative relationship between board size and firm performance.

**Hypothesis 4:** There is a negative relationship between divergence of cash flow rights from control rights and firm performance.

**Hypothesis 5:** There is a positive relationship between audit quality and firm performance.

According to prior studies, four control factors including firm age (Tam and Tan, 2007; Amran and Ahmad, 2009), return on assets (ROA) (Zubaidah *et al*, 2009; Sa'adiah and Norman, 2009), firm size and leverage (Haniffa and Hudaib, 2006; Effiezal *et al*, 2011) are considered in the theoretical model of this study. These factors have been known to have an impact on TQ, and hence need to be controlled in this study.

## RESEARCH METHOD

In this study, all companies listed on Bursa Malaysia except the firms belonging to finance industry constitute the sampling frame. This is consistent with previous studies such as Chen and Chien (2007), Sa'adiah and Norman (2009), which excludes the finance firms from sampling process because of unique characteristics and different accounting procedures in reporting formats.

This study uses the online Raosoft (www.raosoft.com/samplesize.html) calculator to specify the sample size. Raosoft is a sample size calculator that determines the appropriate sample size of each population based on margin of error and confidence level, of which the common values are 5 and 99 per cent, respectively. After the exclusion of finance firms from the population of this study, total number of

listed firms on Bursa Malaysia in 2009 was 781 firms. Based on the Raosoft sample size calculator, the minimum appropriate size of sample for this population is 359 companies listed on Bursa Malaysia. Finally, using stratified random sampling, 400 companies have been randomly selected from the population of this study. Table 1 shows the distribution of firms in the sample according to the industries.

The period of this study includes the year 2009. In effect, comparison is made between firms and the average amount of variables in one year to analyze the data and examine the relationship between the dependent and independent variables. The single year for cross-sectional study is justified based on Claessens *et al* (1999) assuming that the ownership structures in a company do not change substantially over time. Since CG characteristics such as board independency, CEO duality, board size, divergence between cash flow and control rights and audit quality do not change dramatically over time, single year study with more companies in the sample will be appropriate. The data collection technique is mainly content

analysis of the annual reports. This study uses descriptive analysis to interpret the behavior of key variables of interest and applies a linear multiple regression analysis to test the hypotheses. Table 2 shows the variables and their description in this study. The regression models utilized to test the relationship between the CG characteristics and firm performance are as follows:

$$
\begin{aligned}
TQ = {} & \alpha_0 + \alpha_1 BIND + \alpha_2 CEO + \alpha_3 BSize \\
& + \alpha_4 AudQ + \alpha_5 Div + \alpha_6 Fsize + \alpha_7 Age \\
& + \alpha_8 Lev + \alpha_9 ROA + \varepsilon
\end{aligned}
$$

## FINDINGS AND DISCUSSION

Based on analysis of data in Table 3, TQ has an average value of 0.951 with the maximum and minimum value of 3.34 and 0.30, respectively. This result is consistent with the study of Ibrahim and Samad (2011) on the CG characteristics in Bursa Malaysia. In addition, we find that the average percentage of independent directors on the board is 45 per cent, which is consistent with the study conducted by Fooladi (2012) on board characteristics and firm performance in Malaysia. This level of independency is slightly higher than the level of independency found by Zubaidah *et al* (2009) and Ibrahim and Samad (2011). In addition, 92.25 per cent (369 firms) of sample firms have more than 33 per cent independent directors on their board. It means that the companies comply with the recommendations of the Malaysian Code on Corporate Governance (MCCG) (2007) that one third of the board members should be independent.

In addition, descriptive statistics show that 82 per cent of the companies comply with the recommendations of the MCCG (2007) by separating the roles of the chairman and the CEO of the company. The level of duality of 18 per cent of the sample data in this study is slightly higher than a previous finding (11.8 per cent) in the Malaysian setting over a period of 5 years from 1996 to 2000 by Rahman and Haniffa (2002). The

**Table 1:** Number of sample firms by industries

| Industry | Population size | Sample size | Proportion of each industry in the sample (%) |
|---|---|---|---|
| Construction | 43 | 22 | 5.5 |
| Consumer products | 139 | 71 | 17.8 |
| Hotels | 4 | 2 | 0.5 |
| Industrial products | 254 | 130 | 32.5 |
| Infrastructure project companies | 7 | 4 | 1.0 |
| Plantations | 42 | 21 | 5.3 |
| Properties | 89 | 46 | 11.5 |
| Technology | 29 | 15 | 3.7 |
| Trade and services | 174 | 89 | 22.2 |
| Total | 781 | 400 | 100 |

**Table 2:** Variables definition

| Variables | Description | Measurement |
|---|---|---|
| TQ | Tobin's Q | ((Number of shares outstanding×share price) +total debt)/book value of assets |
| BIND | Board independency | Number of independent non-executive directors/ total number of directors |
| CEO | CEO Duality | Nominal variable: has the value of one if duality exists; otherwise zero |
| BSize | Board size | Total number of directors on the board |
| AudQ | The audit quality | Has the value of one if the auditing firm is Big Four; otherwise zero |
| Div | Divergence between cash flow and control rights | Differences between control and cash flow rights based on Weakest Link Principle (WLP) |
| Fsize | Firm size | Natural log of total assets at the end of fiscal year |
| Age | Age | Number of the years since firm establishment |
| Lev | Leverage | Total debt/Total book value of equity |
| ROA | Return on assets | Profit before tax/Book value of assets |

**Table 3:** Descriptive statistics for the sample firms

| Variables | Minimum | Maximum | Mean |
|---|---|---|---|
| Tobin's Q (ratio) | 0.303 | 3.34 | 0.951 |
| Board independency (%) | 28.6 | 83.3 | 45 |
| CEO duality | 0 | 1 | 0.18 |
| Board size (persons) | 4 | 13 | 8 |
| Audit quality | 0 | 1 | 0.563 |
| Divergence: Control − cash flow rights (%) | 0.00 | 55.7 | 4.37 |
| Firm size (RM million) | 27 | 45,414 | 1204 |
| Age (years) | 1 | 102 | 24 |
| Leverage (ratio) | 0.01 | 11.76 | 0.97 |
| Return on assets (ratio) | −0.631 | 0.697 | 0.046 |

descriptive statistics in Table 3 indicate that the average number of directors on the board in the selected companies is about eight persons, which is desirable in the governance and transparency index published by Minority Shareholders Watchdog Group (MSWG, 2011). This finding is consistent with other studies on Malaysian listed firms by Sulong and Fauzias (2010), Fooladi (2012), Ibrahim and Samad (2011) who report that the average size of board in their study is about eight persons.

Based on Table 3, it can be seen that the Big Four audit firms audited 56.3 per cent (225 firms) of sample firms in this study. This is consistent with Effiezal *et al* (2011) in Malaysia. They find that 56 per cent of the sample firms are audited by Big Four audit firms.

Table 4 compares the findings of the current study for divergence between cash flow and control rights with Claessens *et al* (2000) and Fan and Wong (2002) in East Asian countries including Malaysia. Table 4 shows that the average value of cash flow and control rights

**Table 4:** Comparison of divergence between cash flow rights and control rights with other studies

| Mean of variables | Current study | Claessens et al (2000) for Malaysia | Fan and Wong (2002) for Malaysia |
|---|---|---|---|
| Cash flow rights (CFR) (%) | 22.15 | 23.89 | 26.03 |
| Control rights (CR) (%) | 26.52 | 28.32 | 30.73 |
| CFR/CR | 0.83 | 0.85 | 0.84 |
| Divergence (CR − CFR) (%) | 4.37 | 4.70 | 4.70 |

are 22.15 and 26.52 per cent respectively while the average ratio of cash flow rights over control rights is 0.83. In other words, cash flow rights equals to 0.83 of control rights. As divergence between cash flow and control rights is greater, the ratio is closer to zero. In other words, if there is no divergence, cash flow rights and control rights are equal and the ratio equals to 1.

In their study on the corporate ownership structure of East Asian companies, Claessens *et al* (2000) represent that the average percentage of cash flow and control rights for Malaysian firms are 23.89 and 28.32 respectively while the average ratio of cash flow rights over control rights is 0.85 (see Table 4). In a same study by Fan and Wong (2002), the mean of cash flow and control rights for Malaysian listed firms are 26.03 and 30.73 per cent respectively while the average ratio of cash flow rights over control rights is 0.84. In addition, Table 4 shows that the average difference between cash flow and control rights in the sample of this study is 4.37 per cent, which is consistent with Claessens *et al* (2000) and Fan and Wong (2002).

The average size of firms in the sample of this study is RM 1204 million, which is consistent with the findings by Sulong and Fauzias (2010) in Malaysia. The mean age in this study is nearly 24 years with 102 years being the highest. This average is between the 30 years and 16 years old reported by Ibrahim and Samad (2011) for the period 1999–2005, and Sulong and Fauzias (2010) for the period 2002–2005 on Malaysian listed firms respectively. Leverage, as another control variable, has an average value of

97 per cent. Finally, the average value of ROA for the sample of this study, 0.046, is consistent with Amran and Ahmad (2010) in Malaysia and slightly higher than the 0.032 for ROA in the sample of study conducted by Ibrahim and Samad (2011) in Malaysia on the CG and firm performance.

In order to check the degree of multicollinearity among the independent variables, this study applies the Pearson correlation analysis. Even though Table 5 shows significant correlations among some of the variables, none of the coefficients exceeds 0.8, which is used as an indicator of serious multicollinearity (Gujarati, 2003). Hence, it may be concluded that multicollinearity is not a serious problem in this case. This study also reports *t*-statistics and significance levels based on White's heteroscedasticity-consistent variances and standard errors to control the heteroscedasticity (Greene, 2002; Gujarati, 2003). In addition, this study relies on the robust regression technique, iteratively reweighted least squares (RWLS), to identify possible outliers and then remove these from our regression (Ding and Knight, 2009).

Table 6 shows the regression results. As expected, the results of this study show a significant positive relationship between board independency and TQ. This relationship is significant at 10 per cent level of significance, which is consistent with Zubaidah *et al* (2009) and Sulong and Fauzias (2010) on Malaysian listed firms. Therefore, first hypothesis is supported. This result supports the view that independent non-executive directors can improve the performance of the firm because

**Table 5:** Pearson correlation coefficients between variables

|        | BIND    | CEO    | BSize    | AudQ      | Div     | Fsize   | Age    | Lev     | ROA |
|--------|---------|--------|----------|-----------|---------|---------|--------|---------|-----|
| BIND   | 1       |        |          |           |         |         |        |         |     |
| CEO    | 0.049   | 1      |          |           |         |         |        |         |     |
| BSize  | −0.270* | −0.092 | 1        |           |         |         |        |         |     |
| AudQ   | 0.014   | 0.005  | 0.117**  | 1         |         |         |        |         |     |
| Div    | 0.021   | −0.062 | 0.031    | 0.103**   | 1       |         |        |         |     |
| Fsize  | −0.015  | −0.097 | 0.391*   | 0.307*    | 0.154*  | 1       |        |         |     |
| Age    | 0.130*  | −0.070 | 0.070    | 0.135*    | 0.173*  | 0.284*  | 1      |         |     |
| Lev    | 0.024   | −0.047 | 0.030    | −0.106**  | −0.005  | 0.104** | −0.014 | 1       |     |
| ROA    | −0.009  | 0.051  | 0.112**  | 0.186*    | 0.095   | 0.134*  | 0.065  | −0.202* | 1   |

*Correlation is significant at the 0.01 level. **Correlation is significant at the 0.05 level.

**Table 6:** Regression analysis

| Independent  | BIND  | CEO      | BSize  | Div   | AudQ     | Fsize  | Age      | Lev      | ROA      |
|--------------|-------|----------|--------|-------|----------|--------|----------|----------|----------|
| Coefficient  | 0.391 | −0.117   | −0.004 | 0.418 | 0.124    | 0.040  | −0.004   | 0.058    | 1.852    |
| *t*-statistics | 1.78* | −2.30** | −0.32  | 1.48  | 3.14***  | 1.73*  | −2.78*** | 4.59***  | 4.27***  |

*Notes*: 1. The reported results are adjusted for White's heteroscedasticity consistent covariance estimator (White, 1980) to correct for heteroscedasticity.
2. The asterisks *, **, and *** denotes significant at 10 per cent ($P<0.1$), 5 per cent ($P<0.05$), and 1 per cent ($P<0.01$) significance levels, respectively.

of their effective monitoring role (Brickley *et al*, 1994; Adams and Mehran, 2003).

In addition, this study finds a significant negative relationship between CEO duality and TQ, which supports the second hypothesis. This relationship is significant at 5 per cent level of significance. This is consistent with Haniffa and Hudaib (2006) and Abdul Rahman and Mohd Haniffa (2002) on Malaysian listed firms. It can be concluded that when there is no separation and the CEO serves as chairman, the company has a poor performance compared with companies with the separation of two positions.

The coefficient for board size is insignificant even at the 10 per cent level of significance. Hence, third hypothesis is rejected. However, the coefficient is negative which is consistent with the theoretical model that larger boards are ineffective due to their symbolic role rather than being effective in actual managing process

(Haniffa and Hudaib, 2006). The MCCG (2007) states that there is no desirable definition of board size and every board can examine its size regarding the effect of number upon its effectiveness.

In addition, this study could not find any significant relationship between divergence of cash flow rights from control rights and TQ. Therefore, fourth hypothesis is rejected. Regarding the matter of divergence, Wen (2008) finds that the discrimination effect of divergence between cash flow and control rights on stock return depends on the market status. Lins (2003) suggests that the level of investor protection has an important role to mitigate the agency problems. In addition, Berkman *et al* (2009) argue that there is a negative relationship between the level of investor protection and tunneling. Subsequently, tunneling has a negative effect on firm value. In one word, investor

protection can mitigate the opportunistic beha-vior of controlling shareholder especially in the case of divergence between cash flow and con-trol rights.

Regarding the legal protection in Malaysia, Taufik and Saad (2009) in their study on the effects of CG compliance on capital structure in Malaysia conclude that majority of the listed firms in Malaysia comply very well with MCCG. La Porta *et al* (1998) represent that the account-ing standards in Malaysia are relatively appropri-ate. In another study, Liew (2007) argues that the focus of Malaysian CG reform agenda is on two main areas including enhancement of transpar-ency and accountability of directors and imp-rovement in the protection of minority share-holders' right. In addition, regulatory and legal institution in Malaysia seems to be well defined. As the levels of investor protection increases, controlling shareholders have to be more creative to divert the firm's assets for their own benefit and they bear more punishments in the case of expropriation (La Porta *et al*, 2000). Therefore, even in the case of divergence between cash flow and control rights, controlling shareholders are less likely to expropriate the firm's wealth and diminish the firm value.

Finally, the results of regression analysis in Table 6 show a significant positive relationship between audit quality and TQ at 1 per cent level of significance. It means that there is a significant difference in the performance between firms audited by one of Big Four audit firms and other firms. It is consistent with the expectation. Therefore, fifth hypothesis is strongly supported. In addition, DeFond *et al* (2000) document that investors in Asian countries discriminate between the quality of Big Five audit firms and non-Big Five audit firms.

Regarding control variables, we find a sig-nificant positive relationship between firm size and firm performance. Chen and Chien (2007) show that firm size has a positive effect on firm performance. Larger firms have more capabilities to deal with uncertainties and obtain external and internal funding with a lower interest rate because they have more resources to settle their debts and

bear a lower credit risk. In contrast, there is a significant negative relationship between firm age and TQ. This is consistent with Amran and Ahmad (2010), who find a negative relationship between firm age and firm per-formance in their study on the CG in Malaysia. The results of regression analysis show that the relationship between leverage ratio and TQ is positively significant at 1 per cent level of significance. Accordingly, Haniffa and Hudaib (2006) in their study on the relation-ship between CG and firm performance find a significant positive relationship between leverage and market performance as measured by TQ. They imply that market considers leverage as an efficient mechanism to control managers' behavior and improve the firm performance. Another type of indicator for firm performance is accounting measure like ROA. Beiner *et al*, (2004) in their study on the relationship between board of directors and firm value find that ROA has a positive relationship with TQ. This study also finds a significant positive coefficient for ROA.

## MORE ANALYSIS ON DIVEGENCE BETWEEN CASH FLOW AND CONTROL RIGHTS

Fan and Wong (2005) investigate the role of external auditors to alleviate the agency pro-blems in East Asian countries including Malaysia. They find that firms with more agency pro-blems due to ownership structure (divergence between cash flow and control rights) are more tended to hire Big Five audit firms. They also document that Big Five audit firms have more efficient CG role in the emerging markets to mitigate agency problems and enhance the value of firms on the margin. In addition, Fan and Wong (2005) believe that market considers Big Five auditors as a mechanism to alleviate the agency problems arising from the conflict of interests between majority and minority share-holders. In other words, firms employing Big Five audit firms receive minor share price

**Table 7:** Regression analysis with interaction term

| Independent | BIND | CEO | BSize | AudQ | Div | Fsize | Age | Lev | ROA | AudQ*Div |
|---|---|---|---|---|---|---|---|---|---|---|
| Coefficient | 0.378 | −0.103 | −0.004 | 0.083 | −0.189 | 0.041 | −0.003 | 0.060 | 1.803 | 1.040 |
| *t*-statistics | 1.70* | −2.01** | −0.27 | 1.86* | −0.94 | 1.77* | −2.69*** | 4.90*** | 4.21*** | 2.13** |

*Notes*: 1. The reported results are adjusted for White's heteroscedasticity consistent covariance estimator (White, 1980) to correct for heteroscedasticity.
2. The asterisks *, **, and *** denotes significant at 10 per cent (*P*<0.1), 5 per cent (<0.05), and 1 per cent (*P*<0.01) significance levels, respectively.

discounts related to the agency conflicts between majority and minority shareholders.

Therefore, in order to analyze more, this study categorizes the sample firms into two groups based on the low and high divergence between cash flow and control rights. First group represents the firms that have a divergence higher than the average for total sample while the second group represents other firms with lower divergence. Among other characteristics of these two groups, it is interesting that firms with high level of divergence have higher average of TQ. In addition, the average number of firms audited by Big Four audit firms in the subsample with more divergence between cash flow and control rights is 67 per cent while this ratio for the subsample with less divergence is 52 per cent. This is consistent with the finding by Fan and Wong (2005).

Therefore, in order to examine the moderating effect of audit quality on the relationship between divergence and firm performance, this study adds a dummy interaction between audit quality and divergence between cash flow and control rights to the model as follow:

$$TQ = \alpha_0 + \alpha_1 BIND + \alpha_2 CEO + \alpha_3 BSize \\ + \alpha_4 AudQ + \alpha_5 Div + \alpha_6 Fsize + \alpha_7 Age \\ + \alpha_8 Lev + \alpha_9 ROA + \alpha_{10} AudQ \times Div + \varepsilon$$

Table 7 shows the results of regression model including the interaction term. These results show a significant positive coefficient for the interaction term between audit quality and divergence between cash flow and control
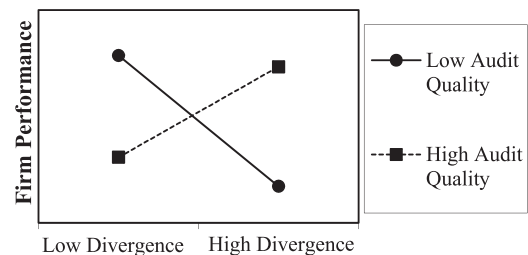


**Figure 2:** The moderating effect of audit quality on the relationship between divergence and firm performance.

rights, which is significant at 5 per cent level of significance. It means that at the presence of Big Four audit firms, there is a positive relationship between divergence and firm performance. This is consistent with the findings by Fan and Wong (2005) that high-quality audit firms can mitigate the agency problems in firms with more divergence between cash flow and control rights.

In addition, Figure 2 demonstrates the moderating effect of audit quality on the relationship between divergence and firm performance. It can be seen that there is a negative relationship between divergence and firm performance in the case of low quality of audit firms while in high-quality audit firms, the direction of relationship between divergence and firm performance changes to a positive mode. Therefore, this figure indicates the moderating effect of audit quality on the negative effect of divergence between cash flow and control rights.

This study repeats the above test to examine the moderating effect of other CG characteristics including board independency, CEO duality and board size on the relationship between divergence and firm performance. However, this study could not find any significant moderating effect of board independency, CEO duality and board size on the relationship between divergence and firm performance

## CONCLUSION

The purpose of this study is to examine the relationship between CG characteristics and firm performance in Malaysian listed firms where divergence between cash flow and control rights is critical. The results of this study show that firm performance is significantly associated with board independency and CEO duality. In other words, more independent directors and separated role of CEO from chairman provide better controlling function and improve the firm performance. In contrast, third hypothesis assuming a negative relationship between board size and firm performance is rejected because we could not find any significant relationship between board size and firm performance. In addition, the results of this study provide evidence that audit quality has a positive impact on firm performance. Market participants consider audit quality as an efficient controlling mechanism in CG, which increases the value of firm. Finally, we could not find any significant relationship between divergence of cash flow rights from control rights and TQ. However, the results of analyzing the interaction of audit quality and divergence between cash flow and control rights show that Big Four audit firms have a significant moderating effect on the relationship between divergence and firm performance. Since the ownership structure of firm can compromise the effectiveness of internal CG mechanism such as board of directors, independent auditors as an external governance system can amend the controlling system of firms. Therefore, the quality of external auditors is an important characteristic of CG to assure minority shareholders and other investors that their interests are well protected against the opportunistic behavior of controlling shareholders especially in the case of divergence between cash flow and control rights.

Although this study could not find any significant relationship between divergence and firm performance, cross holding or pyramidal ownership in East Asian countries such as Malaysia provides other opportunities for controlling shareholders to expropriate the firm wealth at the expense of other shareholders. Prior studies suggest that most expropriation of minority shareholders' wealth is conducted through the related party transactions (Johnson et al, 2000; La Porta et al, 2000). In these transactions, controlling owners can tunnel benefits from a firm to another personally related firm or directly to their own accounts through self-dealing. Therefore, more detailed studies can examine the effect of CG characteristics on firm performance in firms engaging the RPTs.

## REFERENCES

Abdul Rahman, R. and Haniffa, R.M. (2003) *Effectiveness of Internal Governance Mechanisms: An Empirical Analysis of Malaysian Listed Companies for the period 1996–2000.* Proceedings of the Conference of Australian and New Zealand Academy of Management; 2–5 December, Australia.

Abdul Rahman, R. and Mohd Haniffa, R. (2002) *CEO Duality and Corporate Performance: Evidence in Malaysia.* Proceedings of the International Conference on Corporate Governance: Trends and Challenges in the Millennium; 29–30 October, Kuala Lumpur, Malaysia.

Abdullah, S.N. (2004) Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance* 4(4): 47–61.

Adams, R. and Mehran, H. (2003) *Is Corporate Governance Different for Bank Holding Companies?* New York: Federal Reserve Bank of New York.

Amran, N.A. and Ahmad, A.C. (2009) Family business, board dynamics and firm value:

Evidence from Malaysia. *Journal of Financial Reporting & Accounting* 7(1): 53–74.

Amran, N.A. and Ahmad, A.C. (2010) Corporate governance mechanisms and performance: Analysis of Malaysian family and non-family controlled companies. *Journal of Modern Accounting and Auditing* 6(2): 1–15.

Beiner, S., Drobetz, W., Schmid, F. and Zimmermann, H. (2004) Is board size an independent corporate governance mechanism? *KYKLOS* 57(3): 327–356.

Berkman, H., Cole, R.A. and Fu, L.J. (2009) Expropriation through loan guarantees to related parties: Evidence from China. *Journal of Banking & Finance* 33(1): 141–156.

Black, B.S., Kim, W., Jang, H. and Park, K. (2008) How Corporate Governance Affects Firm Value: Evidence on Channels from Korea. ECGI – Finance Working Paper No. 103/2005; EFA 2009 Bergen Meetings Paper; U of Texas Law, Law and Econ Research Paper No. 51; McCombs Research Paper No. 01-05; KDI School of Pub Policy & Management Paper No. 08/19. Available at SSRN: http://ssrn.com/abstract=844744.

Brickley, J.A., Coles, J.L. and Terry, R.L. (1994) Outside directors and the adoption of poison pills. *Journal of Financial Economics* 35(3): 371–390.

Brickley, J.A. and James, C.M. (1987) The take-over market, corporate board composition and ownership structure: The case of banking. *Journal of Law and Economics* 30(3): 161–180.

Chen, Y.M. and Chien, C.Y. (2007) Monitoring mechanism, corporate governance and related party transactions, 4 September. http://ssrn.com/abstract=1011861, accessed 20 December 2011.

Cheng, S. (2008) Board size and the variability of corporate performance. *Journal of Financial Economics* 87(1): 157–176.

Cheung, Y.L., Rau, P.R. and Stouraitis, A. (2006) Tunneling, propping, and expropriation: Evidence from connected party transactions in Hong Kong. *Journal of Financial Economics* 82(2): 343–386.

Claessens, S., Djankov, S., Fan, J.P.H. and Lang, L.H.P. (1999) Corporate diversification in East Asia: The role of ultimate ownership and group affiliation. World Bank Policy Research Working Paper No. 2089. The University of California. http://ssrn.com/abstract=615021, accessed 20 January 2012.

Claessens, S., Djankov, S., Fan, J.P.H. and Lang, L.H.P. (2002) Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance* 57(6): 2741–2771.

Claessens, S., Djankov, S. and Lang, L.H.P. (2000) The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* 58(1&2): 81–112.

Dahya, J. and McConnell, J.J. (2005) Outside directors and corporate board decisions. *Journal of Corporate Finance* 11(1&2): 2741–2771.

Defond, M.L. and Francis, J.R. (2005) Audit quality research after Sarbanes–Oxley. *Auditing: A Journal of Practice and Theory* 24: 5–30.

DeFond, M.L., Francis, J.R. and Wong, T.J. (2000) Auditor industry specialization and market segmentation: Evidence from Hong Kong. *Auditing: A Journal of Practice and Theory* 19(1): 49–66.

Dehaene, A., De Vuyst, V. and Ooghe, H. (2001) Corporate performance and board structure in Belgian companies. *Long Range Planning* 34(3): 383–398.

Ding, S. and Knight, J. (2009) Can the augmented Solow model explain China's remarkable economic growth? A cross-country panel data analysis. *Journal of Comparative Economics* 37(3): 432–452.

Effiezal, A.A.W., Hasnah, H., Lok, C.L. and Sofri, Y. (2011) Does corporate governance matter? Evidence from related party transactions in Malaysia. *Advances in Financial Economics* 14: 131–164.

Eisenberg, T., Sundgren, S. and Wells, M. (1998) Larger board size and decreasing firm value in small firms. *Journal of Financial Economics* 48(3): 35–54.

Epps, R.W. and Cereola, S.J. (2008) Do institutional shareholder services (ISS) corporate governance ratings reflect a company's operating performance? *Critical Perspectives on Accounting* 19(8): 1135–1148.

Faccio, M. and Lang, L.H.P. (2002) The ultimate ownership of Western European corporations. *Journal of Financial Economics* 65(3): 365–395.

Fan, J.P.H. and Wong, T.J. (2002) Corporate ownership structure and the informativeness of

www.manaraa.com

accounting earnings in East Asia. *Journal of Accounting and Economics* 33(3): 401–425.

Fan, J.P.H. and Wong, T.J. (2005) Do external auditors perform a corporate governance role in emerging markets? Evidence from East Asia. *Journal of Accounting Research* 43(1): 35–72.

Fooladi, M. (2012) Board characteristics and firm performance. *Journal of Modern Accounting and Auditing* 8(5): 688–694.

Fuerman, R.D. (2004) Audit quality examined one large CPA firm at a time: Mid-1990's empirical evidence of a precursor of Arthur Andersen's collapse. *Corporate Ownership & Control* 21(1): 137–148.

Gillan, S.L. (2006) Recent developments in corporate governance: An overview. *Journal of Corporate Finance* 12(3): 381–402.

Greene, W.H. (2002) *Econometric Analysis,* 5th edn. New Jersey: Prentice-Hall.

Gujarati, D.N. (2003) *Basic Econometrics,* 4th edn. New Delhi: McGraw-Hill.

Haniffa, R.M. and Hudaib, M. (2006) Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting* 33(7&8): 1034–1062.

Huang, D.T. and Liu, Z.CH. (2010) A study of the relationship between related party transactions and firm value in high technology firms in Taiwan and China. *African Journal of Business Management* 4(9): 1924–1931.

Ibrahim, H. and Samad, F.A. (2011) Agency costs, corporate governance mechanisms and performance of public listed family firms in Malaysia. *South African Journal of Business Management* 42(3): 17–25.

Jensen, M. (1993) The modern industrial revolution, exit and the failure of internal control systems. *Journal of Finance* 48(4): 831–880.

Jensen, M.C. and Meckling, W.H. (1976) Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics* 3(2): 305–360.

Johnson, S., Boone, P., Breach, A. and Friedman, E. (2000) Corporate governance in the Asian financial crisis. *Journal of Financial Economics* 58(1&2): 141–186.

Krishnan, J. and Schauer, P.C. (2000) The differentiation of quality among auditors: Evidence from the not-for-profit sector. *Auditing: A Journal of Practice and Theory* 19(2): 9–25.

La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (1999) Corporate ownership around the world. *Journal of Finance* 54(2): 471–517.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (1998) Law and finance. *Journal of Political Economy* 106(6): 1113–1155.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (2000) Investor protection and corporate governance. *Journal of Financial Economics* 58(1&2): 3–27.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R.W. (2002) Investor protection and corporate valuation. *Journal of Finance* 57(3): 1147–1170.

Lee, K.W. (2007) Corporate voluntary disclosure and the separation of cash flow rights from control rights. *Review of Quantitative Finance and Accounting* 28(4): 3939–3416.

Liew, P.K. (2007) Corporate governance reforms in Malaysia: The key leading players' perspectives. *Corporate Governance* 15(5): 724–740.

Lins, K.V. (2003) Equity ownership and firm value in emerging markets. *Journal of Financial and Quantitative analysis* 38(1): 159–184.

Luo, J.H., Wan, D.F. and Cai, D. (2012) The private benefits of control in Chinese listed firms do cash flow rights always reduce controlling shareholders' tunneling. *Asia Pacific Journal of Management* 29(2): 499–518.

Macus, M. (2008) Board capability: An interactions perspective on boards of directors and firm performance. *International Studies of Management & Organization* 38(3): 98–116.

Malaysian Code on Corporate Governance (MCCG) (2007) *Finance Committee on Corporate Governance*. Kuala Lumpur, Malaysia: Securities Commission.

Mayer, C.J. (2003) What Can We Learn About The Sensitivity of Investment to Stock Prices With A Better Measure of Tobin's Q? School Working Paper. The Wharton School, University of Pennsylvania.

McCullers, L.D. and Schroeder, R.G. (1982) *Accounting Theory: Text and Reading,* 2th edn. United States: John Wiley.

Minority Shareholder Watchdog Group (MSWG) (2011) About us: Who we are? (online) http://www.mswg.org.my/web/page.php?pid=36&menu=sub.

Morck, R., Wolfenzon, D. and Yeung, B. (2005) Corporate governance, economic entrenchment, and growth. *Journal of Economic Literature* 63(3): 655–720.

Rahman, R. and Haniffa, R. (2002) CEO duality and corporate performance: Evidence in Malaysia. Paper presented at the International Conference on Corporate Governance; 29–30 October, Kuala Lumpur, Malaysia.

Sa'adiah, M. and Norman, M.S. (2009) Related Party Transactions, Family Ownership and Earnings Quality: A Study of Malaysian Firms. Working Paper, Universiti Malaya and Universiti Kebangsaan Malaysia.

Shleifer, A. and Vishny, R. (1997) A survey of corporate governance. *Journal of Finance* 52(2): 737–775.

Solomon, J. and Solomon, A. (2004) *Corporate Governance and Accountability*. England: John Wiley.

Sulong, Z. and Fauzias, M.N. (2010) Corporate governance mechanisms and firm valuation in Malaysian listed firms: A panel data analysis. *Journal of Modern Accounting and Auditing* 6(1): 1–18.

Tam, O.K. and Tan, M.G. (2007) Ownership, governance and firm performance in Malaysia. *Corporate Governance* 15(2): 208–222.

Taufik, M. and Saad, N.M. (2009) The effects of corporate governance compliance on market valuation in Malaysia. *Chinese Business Review* 8(3): 46–58.

Wen, Y.F (2008) The discriminative effect of ownership structure on stock returns in Taiwan during bear markets. *The Journal of International Management Studies* 3(2): 10–18.

White, H. (1980) A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48(4): 817–838.

Willenborg, M. (1999) Empirical analysis of the economic demand for auditing in the initial public offering market. *Journal of Accounting Research* 37(1): 225–238.

William, Q.J., Naoumova, I. and Koutzevol, N. (2003) Corporate governance and firm performance in Russia: An empirical study. *Journal of World Business* 38(4): 385–396.

Yermack, D. (1996) Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40(2): 185–211.

Zubaidah, Z.A., Nurmala, M.K. and Kamaruzaman, J. (2009) Board structure and corporate performance in Malaysia. *International Journal of Economic and Finance* 1(1): 150–164.

340 **International Journal of Disclosure and Governance** Vol. 11, 4, 326–340

www.manaraa.com