

Ownership Structure, Independent Directors and Firm Performance

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Abstract. The paper examined the moderating role of independent directors in the relationship between ownership structure and firm performance. Using a sample of 37 finance companies listed on the main market of Bursa Malaysia from 2007 to 2011, the result indicates a significant positive moderating effect of independent directors in the relationship between director ownership and ROA but a negative relationship based on Tobin's Q. The result means that in a company where directors have controlling shares, having independent directors on the board will enhance performance since there will be alignment of interest of board and shareholders. On the other hand, the independent directors influence firm performance negatively in firms with majority ownership by directors since the directors who are the majority shareholders will promote their interest over the interest of the shareholders. The study has provided evidence on the moderating role of independent directors in the relationship between ownership structure and firm performance. This suggests that independent directors influence the strength and direction of the relationship between ownership structure and firm performance.

Keywords. Ownership structure, board of directors, independent directors, firm performance, moderating variable.

JEL. E62, H54, O40.

1. Introduction

The study of corporate governance and its impact on performance of companies is very important especially with the recent crisis and bankruptcies of big finance companies which has shown the impact of poor governance on firm performance (Westman, 2009). Poor governance in finance companies could indicate inability of the banking sector to manage its operations thereby making markets to lose confidence in the finance companies causing liquidity crisis (Das & Gosh, 2006). Thus, good corporate governance mechanisms in finance companies is essential to enhance the performance of such companies. Better corporate governance enhances performance of firms through enhanced confidence of the stakeholders in the finance companies (Kim & Rasiah, 2010).

Good corporate governance practice is significant due to the dominant role of the banks in management of the payment system (Kim & Rasiah, 2010). Therefore, loss of confidence in the soundness of the banking system could bring negative effect to the investment in that sector and severe problem to accomplishment of the government goals of monetary policy and the economy as a whole and a great

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impact on the vast majority of Malaysians. Good corporate governance in financial institutions will ensure that small depositors and less informed investors are protected through continuous healthy existence of the financial system (Arun & Turner, 2004). Brennan and Solomon (2008) defined corporate governance as the process of ensuring that the management is managing the affairs of a company in such a way that the interest of the stakeholders is protected and they do this by supervising and controlling actions of the management.

International waves of crisis have also affected the finance industry of different countries at different times such as Brazil, Mexico, Russia, Malaysia, Thailand, and Indonesia among others (Bazdresh & Werner, 2000). These and similar events have necessitated the need for closer monitoring of firms, review and reforms in corporate governance practices of firms especially finance firms (Leuz & Wysocki, 2008). As a result of the corporate frauds and the various crises that led to the companies' poor performance in different parts of the world, the regulatory authorities and the accounting profession responded by developing and improving corporate governance codes to strengthen corporate governance practice and put measures to ensure compliance by companies (Ghazali, 2010). Corporate governance was developed to oversee how the board is discharging its functions, the various safeguards that are adapted to protect shareholders interest and to provide guidance to the board on how to discharge those responsibilities more effectively (Brown, Beekes & Verhoeven, 2011).

The recent global financial crisis had negative impact on economies of different countries of the world and the impact came in different forms varying from decrease in external trade, foreign direct investment, collapse of capital market, fall in value of currencies, increase unemployment, large expenditure by the authorities to rescue the affected companies and ultimately decrease in economic growth (Atik, 2009). The crisis was caused among other things by the nature of ownership structure which provided little incentive for monitoring by the dispersed shareholders, weakness in corporate governance monitoring mechanism such as the board (Westman, 2009).

Poor performance of the finance companies because of poor governance could cause liquidity problem in the financial system that in turn could lead to crisis in the economy and the eventual loss of confidence in the banks (Htay, Ab. Rashid, Adnan, & Meera, 2011). Stakeholders of finance companies have different interest, equity holders are concerned about the value of their investment which could decrease if there is poor performance while the debt holders and depositors are interested in ensuring their investments and deposits are safeguarded (Turlea, Mocanu & Radu, 2010).

The intermediary role played by banks in an economy makes corporate governance in the banks very important since poor corporate governance could lead to poor management of the business of the banks thereby affecting their performance and the performance of other sectors that depend on them for financing (Htay et al., 2011). The effectiveness of corporate governance mechanisms aimed at enhancing performance in finance companies is of interest to people because of the extent of losses suffered by investors and the general public from the global financial crisis, Asian financial crisis and the various corporate failures and crisis in the banking sector which seems to be a recurring event with financial crisis occurring about eleven times in thirty years (Dermine, 2011).

Finance sector in Malaysia is important as a result of the role it plays in the implementation of government economic programmes and policies such as 'national economic programme/National economic policy, 1971(NEP) and National development policy, 1991 (NDP) (Kim & Rasiyah, 2010, p.16). In addition government has reasonable amount of investment in the sector and the sector

makes the highest contribution to GDP after manufacturing, trade and service sector (<http://www.epu.gov.my>).

Prior studies have found that the relationship between corporate governance mechanisms and performance is inconclusive and is influenced by firm characteristics and other factors beyond firms control implying that the relationship between governance mechanisms and performance is not clear and differs within industries/sectors and between companies (Brown et al., 2011). In addition, prior studies on the impact of ownership structure and independent directors on firm performance have reported inconsistent results. This contradictory evidence on the impact of ownership structure and independent directors indicates that ownership structure and independent directors may have indirect effect on firm performance suggesting that further study is needed.

It further means that the impact of independent directors and ownership has not been fully explored. If the moderating role is not examined, the influence of both ownership and independent directors on firm performance may not be fully considered. This could explain the reason why prior studies are inconsistent since the impact of ownership on firms performance may be dependent on other factors. Therefore by examining the indirect effect of independent directors on the relationship between ownership structure and firm performance, the study hopes to fill this gap. In addition, prior studies only examined direct impact of ownership and independent directors on firm performance.

The indirect impact of independent directors on the relationship between ownership and firm performance has not been given adequate attention by prior studies (Hsu, Wang & Hsu, 2012) therefore the impact of board attributes have not been examined in a comprehensive way and this could explain the inconclusive results from prior studies. The study could enable investors to evaluate the corporate governance practices of companies and determine the mechanisms that influence the performance of various finance companies when certain groups of shareholders control the firm.

This could enable them to identify companies with good corporate governance mechanisms that will ensure the protection of their interest and safeguard their investments. Secondly, the study provides directors with information on the impact of independent directors on the relationship between ownership and firm performance thereby enhancing their understanding of the impact of independent directors on firm performance and enables them to structure their boards accordingly.

Finally, the findings will enable regulators to know the appropriate mechanism to recommend for companies based on the ownership structure in a particular company. The rest of the paper is organized as follows. Section two contains review of literature while section three contains the theoretical background and hypotheses development. Section four presents the research methodology. Section five contains the result of the study. Section six presents results from additional analyses while section seven concludes the paper.

2. Literature review

Ownership structure may be determined based on the ownership of controlling shares in a firm by either management, directors, founding family, institutional shareholders or government (Ghazali, 2010; Aguilera, Desender & De Castro, 2011). Studies have shown that concentrated ownership which is a common feature of ownership structure in developing countries is associated with better accounting performance in Malaysian companies (Haniffa & Hudaib, 2006; Mokhtar et al., 2009). The legal system of a country influences the nature of ownership structure

of companies. In countries with common law, shareholdings are mostly dispersed and there are investor protection laws to protect the interest of investors whereas concentrated ownership and less investor protection laws characterized the code law countries (Brown et al., 2011).

Furthermore, ownership structure determines the extent of monitoring of the company's affairs. Where there is concentration of ownership in hands of small number of shareholders, these shareholders or their representatives on the board are likely to be actively involved in performing control and service functions thereby reducing agency problems and enhancing performance (Zahra & Pearce, 1989; Shan & McIver, 2011). On the contrary, Adnan, Htay, Ab Rashid and Meera (2011) found that the concentration of shares is negatively related with performance especially where it is in the hands of insiders or institutional shareholders. In another perspective, Zulkafli & Abdul Samad (2007) found that all the types of ownership are negatively related with firm performance.

Institutional shareholders includes mutual funds, pension funds, hedge funds, insurance companies and other non-banking organizations that invest their funds in shares and bonds of other firms (Aguilera et al., 2011). Their main concern is to maximize financial gain from their investment. According to Haat, Abdul Rahman & Mahenthiran (2008) investment by foreign institutional shareholders increases competition in the market because firms struggle to attract those investors and this therefore may force domestic firms to restructure to meet up with expectations of foreign investors.

The restructuring could take the form of technological improvement, and changes in the range and quality of goods and improvement in corporate governance (Haat et al., 2008). In addition, this pressure will make the domestic to companies improve their corporate governance practices to at least the level of the foreign companies. Praptiningsih (2009) found that foreign institutional ownership is negatively related with firm performance. The ownership structure of banks in Malaysia is characterized by concentration of ownership with foreign investors, family or government as the controlling shareholders (Thillainathan, 1999).

Institutional shareholders in Malaysia control 51.03% of shares in top ten companies based on market capitalization and are broadly classified into pension funds, mutual fund and life insurance companies and include institutional investors such as Employee provident fund (EPF), Lembaga Tabung Haji and Permodalan Nasional Berhad (Saleh, Zulkifli and Muhamad, 2010). These institutional shareholders significantly influence corporate governance in firms listed in Bursa Malaysia due to the competition to attract investment by these institutional investors.

Institutional investors participate actively in governance of companies in different countries of the world such as CALPERS in US, in Malaysia, local institutional investors such as 'Permodalan Nasional Berhad' (PNB) and Armed forces fund board (LTAT) participate actively in the governance and monitoring of performance of companies through research and client visit (Thillainathan, 1999).

3. Theoretical background and hypotheses development

3.1. Agency theory

Agency theory suggests that the agent will act in a way that will promote his interest instead of the interest of the principal unless proper corporate governance mechanisms are put in place to prevent that (Jensen & Meckling, 1976). The agency problem is expected to be minimal when the interest of the agent and the principal is aligned through ownership of stake in a company by the management and directors. Ownership structure in most developing countries is highly

concentrated in the hands of small group of shareholders this creates an agency problem between the majority and minority shareholders (Carcello, Hermanson & Ye, 2011). Thus, majority shareholders may transfer economic resources to themselves and try to promote their interest over the interest of the minority shareholders.

In order to protect the minority shareholders, independent directors are appointed to the board to serve as check on the management and executive directors (Brown et al., 2011). The extent of agency problem resulting from the ownership structure of a firm may affect the performance of a company and the performance of a firm may also affect its ownership structure when shareholders of a poorly performing firm decide to dispose their shareholdings thereby altering the ownership structure (Brown et al., 2011).

3.2. Stewardship theory

The theory focuses on how facilitative and empowering the structure in an organization are and suggests that having more executives on the board will increase effectiveness and produce superior results than having only independent directors (Donaldson & Davis, 1991). The theory is based on the assumption that ~~the~~ managers want to do good work by safeguarding the assets of the business and that there is no problem of motivation of managers. Therefore difference in performance arises from whether the structural situation in which the executive is situated enables effective action by the executive (Donaldson, 1990). The structures according to them will facilitate this goal if the role expectations are clear and consistent and if the senior management is empowered and authorized.

Stewardship theory assumes that when the interest of the steward conflict with the interest of the owner the interest of the owner will prevail because the steward gives higher value to the company and works hard to achieve greater returns for the company and owners (Al Mamun, Yasser & Rahman, 2013). In addition, the theory assumes that the actions of the steward are aligned to the interest of the principal and that motivation of the steward will be in the form of intrinsic reward which is difficult to measure and different from the agency theory where the focus of the reward to managers is extrinsic in nature. Stewardship theory contradicts agency theory which believes that people are self-centered and individualistic (Al Mamun et al., 2013). Stewardship theory suggest that due to the information and knowledge advantage of the management, better performance is likely to be associated with greater managerial trust and powers (Donaldson & Davis, 1991). Stewardship theory suggests that the presence of executive directors on the board and board subcommittees will enhance performance of companies as a result of the technical knowledge and information advantage of the inside directors (Ntim, 2009). Therefore, based on stewardship theory, where directors have majority shareholding, independent directors may not positively influence firm performance. In other words, where shareholders save as directors on companies, having independent directors on the board may not be a good monitoring mechanism.

3.3. Moderating role of independent directors

Board of directors by definition refers to the internal governing mechanism that shapes the firm's governance (Brown, et al., 2011). The Cadbury report requires all public companies to be headed by an effective board appointed by the shareholders which will lead and control the company (Cadbury Report, 1992). The board monitors and advises the management (Aguilera et al., 2011), makes strategic decisions for the business, provides leadership to the company and performs supervisory roles with respect to the activities of the management (Zahra & Pearce, 1989).

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The revised Malaysian Code on Corporate Governance (MCCG, 2007) also provided that all listed companies should have a board of directors and that the board should have a balance between executive and non-executive directors so that the decisions of the board are not dominated by a certain group or individuals. Independent directors are directors who have no affiliation with the company except in their capacity as directors (Brown, et al., 2011).

The independent directors are non-executive directors with integrity, expertise and independence to balance the interest of various stakeholders (Ponnu, 2008). Their presence is to bring objectivity to the board decisions and ensure the interest of the company and minority shareholders are protected. Although most codes on corporate governance (such as MCCG, King's report) place emphasis on having boards with a majority of outside directors, evidence from prior studies indicate that having more outside directors on the board may reduce the level of board's involvement in strategic decision making.

This could be attributed to independence problem resulting from the role that CEO plays in selecting the directors and also due to inadequacy of time devoted to the work by outside directors (Zahra & Pearce, 1990). From agency theory perspective, the presence of outside or independent directors will help to reduce the agency problem in a company by monitoring the management and ensuring that the interest of the shareholders is protected and also helps reduce the opportunistic behaviour of the management thereby enhancing firm performance (Jensen & Meckling, 1976). Prior studies on the governance practices of Malaysian companies have shown that independent directors are ineffective in monitoring the management which accounts for poor governance practices leading to poor performance of such companies (Abdul Kadir, 1999; Ghazali, 2010).

Evidence from prior studies has shown that the impact of independent directors on performance of companies is mixed or inconclusive. While theoretically independent directors are supposed to reduce agency problem and enhance performance, some empirical findings have reported contrary results on the influence of independent directors on performance of companies.

While studies such as Pfeffer & Salancik (1978), Pearce & Zahra (1991), Bozec & Dia (2005), Rebeiz & Salameh (2006) found positive relationship between independent directors and firm performance, Zulkafli & Abdul Samad (2007), Ponnu, (2008) and Adnan et al. (2011) found the opposite. Shan & McIver (2011) also found positive relationship but only in larger companies. Furthermore, several studies have examined the impact of board composition on the performance of companies (e.g. Pfeffer & Salancik, 1978; Pearce & Zahra, 1990; Abdul Kadir, 1999; Ghazali, 2010; Adnan et al., 2011; Shan & McIver, 2011) however, the specific role of independent directors in moderating the relationship between ownership structure and firm performance has not been tested (Hsu, Wang & Hsu, 2012).

In addition, the result of prior studies discussed above have also reported mixed results indicating that more research is needed to test the indirect impact of independent directors on the relationship between ownership structure and firm performance. Therefore, this study examines the moderating role of independent directors on the relationship between ownership structure and firm performance. Therefore, based on the above discussion, the following hypotheses were examined:

H1 Independent directors positively moderate the relationship between direct director ownership and firm performance.

H2 Independent directors positively moderate the relationship between indirect director ownership and firm performance.

H3 Independent directors positively moderate the relationship between institutional ownership and firm performance.

H4 Independent directors positively moderate the relationship between state ownership and firm performance.

4. Methodology

4.1. Sample, source and description of data

The study used secondary data extracted from the annual reports of companies listed on the main market of Bursa Malaysia. The annual reports were downloaded from the website of Bursa Malaysia or company websites. The data comprised corporate governance and finance data. The corporate government data was manually extracted from the annual reports of the companies while the financial information was obtained from Bloomberg data base. The unit of observation involves 37 finance companies and the observation period covered year end 2007 to 2011.

4.2. Measure of firm performance

Prior studies on performance used different measures of performance such as ROE, ROA, efficiency (Kim & Rasiah, 2010), EPS, stock price and dividend payable to measure performance of companies (Ponnu, 2008). This indicates that there is no consensus on the best method of measuring performance. This study will use both accounting (ROA) and market measures of performance (Tobin's Q) similar to prior studies such as Abdullah, (2004), Mokhtar et al., (2009), Zulkafli and Abdul Samad (2007).

Although '*Market measures of performance are more objective than accounting based measure*' (Gani & Jermias, 2006; p.303), they are also considered inappropriate because they are extracted from annual reports which are historical and subject to manipulation by management (Ntim, 2009). Accounting based measures are preferable in the context of corporate governance study because they reflect the ability of the management in adding value to the firm (Hutchinson & Gul, 2004). According to Westman (2009), the starting point for evaluating the performance of banks is the efficiency of their operations.

Market measures of performance may reflect more than the financial operating performance of organizations such as investors' sentiments and perception on future cash flow (Shane & Spice, 1983). Tobin's Q indicates the financial strength of a firm and serves as a market measure of performance. The use of the market measure of performance (Q-ratio) could enhance the reliability of the result since Tobin's Q ratio is forward looking in nature. It represents perception and the value investors attach to a company. The use of original Tobin's Q ratio is difficult due to the difficulty of obtaining data for the computation such as the replacement cost of assets; therefore a close approximation of the ratio was used (Ntim, 2009).

Although Tobin's Q has been used widely in both corporate governance and finance studies, it has been criticized due to the way it is measured, its data requirements and computational efforts required for its computation which make studies use approximation instead of the original Tobin's Q (Chung & Pruitt, 1994). In addition, it is also considered similar to the accounting based measures which are calculated using historical data due to the inclusion of figures which are from the balance sheet and based on historical cost in its calculation (Ntim, 2009). Furthermore, the use of financial data could also subject the Tobin's Q ratio to manipulation by the management.

High Tobin's Q ratio may not reflect the actual performance of a company since the market valuation of a firm could be influenced by other factors such as speculation (Henwood, 1998). Since both measures of performance have

shortcomings, combining the two in a study will ensure that one will address the weakness of the other. Following prior studies (Davies, Hillier & McColgan, 2005; Kashif, 2008; Goetz, Laeven & Levine, 2011; Al-Saidi & Al-Shammari (2013), Tobin's Q is defined as follows:

$$Tobin's\ Q = \frac{MVE + total\ debt + preference\ shares + minority\ interest}{Book\ value\ of\ total\ assets}$$

(Note: MVE= Market value of equity)

4.3. Control variables

In order to reduce the possibility of wrong conclusion that could result from omitting variables that can predict performance and also to reduce omitted variable bias and endogeneity problem, two control variables (firm size & leverage) were added to the regression model (e.g. Pathan, 2009; Praptiningsih, 2009; Tao & Hutchinson, 2013). Size of a company could influence its performance through availability of more resources at its disposal and through enhanced monitoring due to the high agency problem in such type of organizations (Haniffa & Hudaib, 2006). Multiple regression analysis was used to test the relationship. The hypotheses developed above were examined using the following model:

$$FP_{it} = \alpha_0 + \beta_1 DDO * ID_{it} + \beta_2 IDDO * ID_{it} + \beta_3 IO * ID_{it} + \beta_4 GO * ID_{it} + \beta_5 FSIZE_{it} + \beta_6 LEV_{it} + YD + \varepsilon_{it}$$

The variables in the research model will be operationalized as follows:

- FP= firm performance (ROA and Tobin's Q)
- ID= proportion of independent directors to total number of directors on the board
- DDO= percentage of direct ownership by directors
- IDDO= percentage of indirect ownership by directors
- IO= percentage of ownership by institutional shareholders
- GO= percentage of ownership by government
- FSIZE= log of total assets
- LEV= total debt over equity

5. Result and analysis

5.1. Descriptive statistics

The descriptive statistics presented in Table one indicates that the data is normally distributed since the skewness and kurtosis values are less than ±3.00 and ±10.00 (Kline, 1998). In addition to the test of normality based on skewness and kurtosis for individual variables, group normality test was performed for the model and the result indicates no normality problem. Furthermore, heteroskedasticity test was performed and the heteroskedasticity and autocorrelation problem were addressed using the heteroskedasticity-consistent standard errors and white diagonal method for heteroskedasticity and autocorrelation respectively.

Table 1. Summary of result of descriptive statistics

	ROA	DV	DDO	IDDO	IO	GO	FS	LEV	ID
Mean	0.024	0.007	0.030	0.100	0.503	0.117	0.043	0.064	0.481
Median	0.015	0.010	0.001	0.019	0.520	0.004	0.038	0.040	0.500
Maximum	0.079	0.013	0.240	0.540	0.900	0.845	0.088	0.310	0.777
Minimum	0.002	0.009	0.000	0.000	0.000	0.000	0.025	0.025	0.000
Std. Dev.	0.019	0.004	0.059	0.149	0.276	0.197	0.012	0.056	0.111
Skewness	1.253	-1.134	2.106	1.553	-0.209	1.924	0.737	1.183	-0.458
Kurtosis	3.265	2.362	6.144	4.427	1.675	5.916	2.675	4.725	4.451
Obs.	142	142	142	142	142	142	142	142	142

Note: ROA= return on assets, DV=Tobin's Q, DDO=direct director ownership, IDDO=indirect director ownership, IO=institutional ownership, GO=government ownership, FS=firm size, LEV=leverage, ID=independent directors.

The linearity assumption of the OLS regression is also fulfilled since the values based on the Q-Q plot are within ± 3.00 range. The model does not have any indication of multicollinearity problem since none of the bivariate correlation is greater than 0.7 (Pallant, 2005).

Table 2. Result of correlation analysis

	ROA	DV	DDO	IDDO	IO	GO	FS	LEV	ID
ROA	1.000	-0.048	-0.024	0.284	-0.138	-0.182	-0.003	-0.468	-0.007
DV	-0.048	1.000	0.167	-0.228	0.164	-0.142	0.064	-0.356	-0.167
DDO	-0.0240	0.167	1.000	0.070	0.042	-0.195	-0.099	-0.162	0.047
IDDO	0.284	-0.228	0.070	1.000	-0.367	-0.298	-0.208	-0.078	0.204
IO	-0.138	0.164	0.042	-0.367	1.000	-0.332	0.208	-0.138	-0.066
GO	-0.182	-0.142	-0.195	-0.298	-0.332	1.000	0.062	0.445	0.114
FS	-0.003	0.064	-0.099	-0.208	0.208	0.062	1.000	0.082	-0.148
LEV	-0.468	-0.356	-0.162	-0.078	-0.138	0.445	0.082	1.000	0.207
ID	-0.007	-0.167	0.047	0.204	-0.066	0.114	-0.148	0.207	1.000

Note: ROA= return on assets, DV=Tobin's Q, DDO=direct director ownership, IDDO=indirect director ownership, IO=institutional ownership, GO=government ownership, FS=firm size, LEV=leverage, ID=independent directors.

5.2. Multivariate regression analysis

The result of regression analysis presented below indicates that there is a significant positive relationship between the variables examined and firm performance based on both measures of performance (ROA and Tobin's Q). The adjusted R^2 0.180 (ROA) and 0.123 (Tobin's Q) indicates that the variables collectively explain approximately 18% and 12% of the variation in firm performance. The f-statistics are large 5.037 and 3.572 and the corresponding p-value is significant ($p < 0.01$) or lower than the alpha value of 0.05 in both cases.

The second hypothesis predicted that independent directors moderate the relationship between indirect ownership by directors and ROA. The result indicates that independent board significantly ($p < 0.01$) moderates the relationship between indirect ownership by directors and firm performance (ROA and Tobin's Q) meaning that the hypothesis is supported. The relationship is positive in case of ROA but negative in case of Tobin's Q. The positive sign is empirically in line with agency theory which suggests that independent directors on the board will help to ensure that the agent acts in the interest of all principals thereby protecting the other shareholders from expropriation of the company's assets by the directors for their own benefit (Al Mamun, 2013; Jesnse & Meckling, 1976).

Table 3. Summary of multivariate regression based on ROA

	OLS	REM	FEM
Constant	0.025536(4.365862)***	0.025492(4.333344)***	0.017246(1.655484)
DDO*ID	0.002482(0.062870)	0.000248(0.006115)	-0.141452(-1.317899)
IDDO*ID	0.066492(3.700802)***	0.066375(3.648191)***	0.064869(1.634374)
IO*ID	-0.010788(-1.073911)	-0.010565(-1.037961)	0.000759(0.035417)
GO*ID	0.013249(0.877184)	0.012785(0.838729)	0.028644(0.918534)
Firm size	0.190473(1.878758)*	0.187289(1.833081)*	0.203764(1.232163)
Leverage	-0.138982(-6.041342)***	-0.136992(-5.855997)***	-0.046547(-0.882595)
	-0.004137(-1.071570)	-0.004063(-1.087105)	-0.003480(-0.923745)
2008			
2009	-0.004595(-1.184393)	-0.004529(-1.205398)	-0.003659(-0.946111)
2010	-0.004572(-1.182225)	-0.004492(-1.199176)	-0.003155(-0.819976)
2011	0.001190(0.303759)	0.001348(0.355399)	0.002546(0.666578)
R ²	0.241912	0.225523	0.437712
Adjusted R ²	0.198091	0.180756	0.248915
F-statistics	5.520555***	5.037659***	2.318422***
Durbin-Watson	1.597205	1.643900	2.081159
Hausman's Test	NA	14.100688(0.1684)	NA

Note: *, **, *** Significant at 10%, 5% and 1% level. Coefficient presented first and t-statistics in parenthesis. ROA=return on asset, REM=random effect method, fixed effect method. DDO=direct director ownership, IDDO=indirect director ownership, IO=institutional ownership, GO=government ownership, ID=independent directors.

In addition, where directors have majority shareholdings, presence of independent directors will ensure that directors do not engage in non-value adding activities such as unrelated diversification that will not benefit the firm (Ntim, 2009; Vishny & Shleifer, 1987). The negative direction in case of Tobin's Q is theoretically inconsistent with agency theory and in line with stewardship theory which suggests that due to the information and knowledge of the business possessed by executive directors, better performance will be achieved if management are given more power and allowed to independently take decisions (Donaldson & Davis, 1991). The independent directors moderate the relationship between director ownership and firm performance by influencing the actions of directors who have majority shareholding. They do this by ensuring that directors who are also owners of the company take decisions that are in the best interest of the company and not just in the interest of the directors.

The result based on Tobin's Q implies that the independent directors will not ensure the interest of other shareholders is protected in the presence of high ownership by directors. In addition, the result implies that from market perspective, independent directors may not be a good monitoring mechanism in companies with high ownership by directors (Ntim, 2009) since owners usually participate actively in running the companies thereby reducing agency problem. Lastly, the result indicates that hypothesis number two based on ROA as a measure of performance is supported since the result is in line with our prediction while hypothesis one, three and four are not supported based on both measures of performance.

Table 4. Summary of multivariate regression based on Tobin's Q

	OLS	REM	FEM
Constant	0.009112(6.780494)***	0.008504(5.797919)***	0.017246(1.655484)
DDO*ID	0.017494(1.929062)*	0.004787(0.408170)	-0.141452(-1.317899)
IDDO*ID	-0.016092(-3.898037)***	-0.010102(-2.135193)**	0.064869(1.634374)
IO*ID	-0.001714(-0.742622)	0.001823(0.689703)	0.000759(0.035417)
GO*ID	-0.002711(-0.781306)	-0.002092(-0.544813)	0.028644(0.918534)
Firm size	0.025129(1.078786)	0.025827(1.042406)	0.203764(1.232163)
Leverage	-0.022445(-4.246433)***	-0.027298(-4.367513)***	-0.046547(-0.882595)
2008	0.000270(0.304764)	0.000193(0.273261)	-0.003480(-0.923745)

2009	0.001194(1.339065)	0.001042(1.456390)	-0.003659(-0.946111)
2010	-0.000133(-0.149845)	-0.000188(-0.263827)	-0.003155(-0.819976)
2011	-0.000579(-0.643389)	-0.000676(-0.939030)	0.002546(0.666578)
R ²	0.254984	0.171148	0.437712
Adjusted R ²	0.211919	0.123237	0.248915
F-statistics	5.920977***	3.572241***	2.318422***
Durbin-Watson Test	0.909785	1.274569	2.081159
Hausman's Test	NA	14.100688(0.1684)	NA

Note: *, **, *** Significant at 10%, 5% and 1% level. Coefficient presented first and t-statistics in parenthesis. REM=random effect method, fixed effect method. DDO=direct director ownership, IDDO=indirect director ownership, IO=institutional ownership, GO=government ownership, ID=independent directors.

6. Additional analysis

Evidence from prior studies indicated that there is time difference between the time a corporate governance mechanism is instituted and the time it will have impact on the performance of a company (Haniffa & Hudaib, 2006; Ntim, 2009). Therefore, following prior studies (Arellano & Bond, 1991) and in order to control for the potential problem of endogeneity, additional analysis was performed using generalized methods of moment to determine the extent to which the result presented is robust to any endogeneity problem. Estimating a model based on GMM is one of the ways in which endogeneity problem might be addressed. The result of the estimation based on GMM model is presented side by side with the result based on least squares model in order to enable comparison. The result of the estimation based on least squares for ROA and Tobin's Q is presented in column 2 and 3 while the result based on GMM model is presented in column 4 and 5 respectively.

The result obtained from the base model is similar to the result presented in Table 5 based on GMM except for small cases of sensitivities. Firstly, the coefficient of interaction between independent directors and direct director ownership has changed from positive to negative under both measures and has become significant under Tobin's Q. Secondly; coefficient of interaction between indirect director ownership and independent directors has become statistically insignificant under both measures and has changed to positive under Tobin's Q. In addition, firm size has become negative and insignificant under ROA while leverage become insignificant under Tobin's Q but remained in the same direction.

Finally, although some variables were sensitive to estimation of GMM model, overall the result has shown that majority of the variables in the model are robust to estimation based on GMM model and robust to potential endogeneity problem. The sensitivity could be explained by the time lag between the time the mechanism was instituted and the time it will have impact on relationship between board composition and firm performance. It could also be explained by the reduction in the number of period of observation and lastly, problem in the model such as omitted variable bias could account for the sensitivities.

Table 5. Summary of estimation based on generalized method of moments

	least squares models		Generalized method of moments	
	ROA(FEM)	Tobin's Q (FEM)	ROA	TOBIN'S Q
Constant	0.025492(4.333344)***	0.0143(1.659)*	-	-
DDO*ID	0.000248(0.006115)	0.0047(0.4081)	-0.0447(-0.2825)	-0.0266(-1.881)*
IDDO*ID	0.066375(3.648191)***	-0.0102(-2.1351)**	0.0651(1.097)	0.0052(0.7353)
IO*ID	-0.010565(-1.037961)	0.0018(0.6897)	-0.0008(-0.0178)	0.0034(0.5233)
GO*ID	0.012785(0.838729)	-0.0020(-0.5448)	0.0049(0.1745)	-0.0096(-1.421)
Firm size	0.187289(1.833081)*	0.0258(1.0424)	-0.0118(-0.0759)	0.0237(1.051)
Leverage	-0.1369(-5.8559)***	-0.0272(-4.3675)***	-0.0387(-1.720)*	-0.01285(-1.580)
2007	-0.004063(-1.087105)	0.0001(0.2732)	-	-

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2008	-0.004529(-1.205398)	0.0010(1.4563)	-0.0025(-0.6953)	0.000528(0.8146)
2009	-0.004492(-1.199176)	-0.0001(-0.2638)	-0.0018(-0.5266)	-0.0003(-0.4198)
2010	0.001348(0.355399)	-0.0006(-0.9390)	0.00531(1.235)	-0.0007(-1.632)
R ²	0.225523	0.171148		
Adjusted R ²	0.180756	0.123237		
F-statistics	5.037659***	3.572241***		
Durbin-Watson	1.643900	1.274569		
Hausman's Test	14.100688(0.1684)	14.100688(0.1684)		
J-statistics			2.2792(0.1311)	0.073599(0.7861)
Wald test			87.57411***	51.29472***

Note: *, **, *** Significant at 10%, 5% and 1% level. Coefficient presented first and t-statistics in parenthesis. ROA=return on asset, REM=random effect method, fixed effect method. DDO=direct director ownership, IDDO=indirect director ownership, IO=institutional ownership, GO=government ownership, ID=independent directors.

7. Conclusion

The paper examined the moderating role of independent directors in the relationship between ownership structure and firm performance. Using a sample of 37 finance companies listed on the main market of Bursa Malaysia from 2007 to 2011, we find that independent directors positively moderates the relationship between indirect ownership by directors and ROA while it negatively moderates the relations between indirect director ownership and Tobin's Q. The study has provided evidence on the interacting role of independent directors in the relationship between ownership structure and firm performance.

The finding suggests that independent directors influence the strength and direction of the relationship between ownership structure and firm performance. The findings imply that the policy of the Central Bank for companies to have a board composed of majority independent directors is appropriate for finance companies since it helps to reduce agency problem. Conversely, the presence of independent directors may not be appropriate for companies with high director ownership if the companies want to get high market valuation.

The study has highlighted the fact that although corporate governance mechanisms may enhance performance, their impact on performance depends on the context in which the mechanisms are applied. The study is robust to potential problem of endogeneity since the result obtained based on GMM estimation is similar to the estimation based on least squares model. The study is limited to only finance companies and based on data for five year period from 2007 to 2011. Future studies could increase the sample and observation period. Inclusion of unlisted companies and taking a sample from other sectors and economies could provide more evidence and enhance generalizability of these findings. Lastly, future studies could examine the mediating role of independent directors in the relationship between ownership structure and firm performance.

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