INTERLOCKING DIRECTORSHIP AND FIRMS PERFORMANCE: EVIDENCE FROM MALAYSIA

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ABSTRACT

This study was carried out to apply regression analysis in the prediction of corporate performance in Malaysia. Its focus is on one of the corporate governance issues which is on interlocking directorship. This study is to appraise whether the interlocking directorship and other factors like turnover, quick ratio and total debt to equity ratio can be good predictors for corporate performance. This study defines interlocking directorship as a situation where directors (executive or non-executive) sit on more than one board. There are top 100 companies listed under FTSE Bursa Malaysia Top 100 Index designated as samples in this study. Using two measures of corporate performance; earning per share (EPS) and return on equity (ROE). Two regression models have been developed in this study. Results show no significant relationship between both corporate performance measures EPS and ROE and interlocking directorship. This seems to suggest that the interlocking directorships in Malaysian firms have no implication on corporate performance. This might be due to the enforcement by Malaysia Code of Corporate Governance (MCCG) to all listed companies to form audit committee to monitor the board of directors independently. In addition, Bursa Malaysia Listing Requirement permits a director to hold up to 25 directorships at a one time, of which 10 directorships are in public listed companies and 15 directorships in unlisted companies.

Keywords: Corporate Governance, Corporate Performance and Interlocking Directorship

1. INTRODUCTION

The practice of interlocking directorates has been a subject of debate among corporate governance activists and academics for many decades. Director interlocking is a controversial and ubiquitous characteristic of global capital markets. Proponents of interlocking argue that they are beneficial because they assist companies to understand and interact with their external environment (Pfeffer and Salancik 1978; Burt, 1983); critics argue that their negatives outweigh their benefits. Some of these critics argue that interlocks reduce board independence, can be used for the private benefit of upper management, and facilitate the adoption of anticompetitive practices such as collusion and cooperation (Burt, 1983). Though the debate has continued for nearly 100 years, there is much that we are yet to learn about interlocking. The author aims to assist interlocking researchers by giving a critical overview of the extant literature and suggesting future avenues for research.

In Malaysia, there is lack of evidence of interlocking directorships, which would suggest wealth concentration and corporate performance (Haniffa, 2000). Interlocking directorships is the situation where a particular person sits on the board or is in the top management of two or more companies (Scott, 2000). The institution of the interlocking directorate has continued to exist since the early days of corporate capitalism. This study extends the literature on interrelated boards by providing a detailed examination of whether the presence of interlocked directors on a board is associated with performance.
The overall objective of this study is to present the results of a broad descriptive analysis of the data on board of director interrelationships for a group of the largest listed companies in Malaysia. The specific objectives of the present study are to explore the concept of interlocking directorate and its practice in Malaysian listed companies during the period 2003–2007 and to identify whether the existence of interlocking directorate may affect the corporate performance during the period of study.

The remainder of the paper is organized as follows. The next section surveys related literature on interlocked and connected boards and provides the motivation for this study. Section 3 provides details regarding data issues and empirical methodology. Section 4 discusses the empirical results, and the conclusion is presented in Section 5.

2. LITERATURE REVIEW

One of the issues often discussed in the corporate governance literature is cross-directorships which refers to the situation where directors (regardless of executive or non-executive) sit on more than one board. It has been suggested in the literature that this will help in making information more transparent as comparisons can be made from knowledge of other organizations (Dahya et al., 1996). However, there were also others who believe that this will put the company at a competitive disadvantage and in the case of executive directors, their existence on more than one board will make them less independent as they will be more sympathetic with others in similar positions (Davis, 1993). Arguments for and against cross-directorships are based on resource dependence theory (Pfeffer and Salancik, 1978; Turnbull, 1997; Kester, 1991; Davis, 1996), bank control theory (Kotz, 1978) and financial hegemony theory (Mintz and Schwartz, 1985).

An argument in favor of interlocking is that directors who are also members of other boards can offer insights or comparisons derived from personal knowledge of other organizations (Dahya et al., 1996). Thus, decisions at one board become part of the raw material for decisions at other boards. Lorsch and Maciver (1989) assert that interlocking of CEOs of other firms on the boards is desirable because they have hands-on experience and credibility as peers that others do not. Furthermore, serving on a board is a way to see somebody else is doing the same thing you're doing (Lorsch and Maciver, 1989, p.27). In other words, CEOs join other boards and thereby create interlocks specifically to embed what they are doing (Davis, 1996). Therefore, by monitoring each other, this practice may improve the boards' performance, which indirectly will improve firms performance.

Interlocking directorships can be seen as relationships between companies. When we combine this with what Hakansson & Waluzewski (2001) refers to as network paradoxes, we see what could be termed interlocking directorship paradoxes. What Hakanson & Waluzewski say with three paradoxes is that: One, network relationships can be both an asset and a liability; they can facilitate some actions while at the same time prevent or exclude others. Two, a company's relationships are the outcome of its strategy, but at the same time strategy is the outcome of the company's relationships. Three, the more successful the company is at controlling its network, the less innovative it will be.
Multiple directorships are not necessarily a bad thing either. Carpenter and Westphal (2001) argue that strategic similarities between companies can help directors who span these company boards to contribute to strategic decision-making. Academic studies have shown director inter-relationships to have an impact on strategic decision making of the board. Haunschild and Beckman (1998) explore the conditions under which board interrelationships have more or less impact. This is consistent with the findings by Grant and Baden-Fuller (1995), which found that interlocking directorate as one of many forms of techniques in which firms can exchange knowledge and information. Some of the widely cited studies on US director inter-relationships are Levine (1977), Koenig and Gogel (1981) and Barnes & Ritter (2001). A more recently published study by Davis, Yoo and Baker (2003) analyses changes in the patterns of relationships among 600 large US corporations and their directors at three points over a 17 year period.

A more recent stream in this line of research suggests that the presence of interlocked directors and connected boards may compromise the effectiveness of board monitoring, especially with respect to the setting of compensation of CEOs. Hallock (1997), Larcker, Richardson, Seary, and Tuna (2006), and Barnea and Guedj (2006) find that interlocked and connected boards result in higher levels of CEO compensation, after controlling for economic determinants, board structure and CEO characteristics. Other research also indicates that interlocked boards are associated with self-serving behavior by CEOs in the areas of accounting discretion and financial accounting fraud (Erickson, Hanlon, and Maydew, 2006; Bowen, Rajgopal, and Venkatachalam, 2008).

In the case of Malaysia, cross-directorships are common among listed companies. In a study on Capital Development in Malaysia, Gomez (2001) indicates that there is little evidence of interlocking directorships, which would suggest wealth concentration. On the other hand, Che Haat (2006) found significant relationship between cross-directorship (proxy for quality of directors) and firm performance (Tobin’s Q). However, evidence does not support the arguments by some researchers that cross-directorship may benefit companies via exposure of directors to different management styles and monitoring behavior as well as provide insights into new approaches adopted by other companies.

3. RESEARCH METHODOLOGY

3.1 Hypothesis

The hypothesis is developed to answer the research question of whether or not the following variables are related to corporate performance. Does the presence of interlocking directorship in Malaysian Corporations affect the performance of the corporations?

As widely discussed in the literature, several studies reveal that the difference in the control structures and interlocks have important implications on the governance function and performance of the corporations. The control and collusion perspectives suggest that using interlocks to collude with others improves profitability. This is consistent with the findings by Pennings (1980) and Burt (1983), which found positive effects of interlocking on firm profits. Meanwhile, others have found negative effects (Fligstein and Brantly, 1992). Mizruchi (1996)
suggested that these conflicting findings might be due to ambiguity in causal ordering, which means interlocking may be both a cause and a result of profitability and performance.

Therefore, these would lead to the development of the following hypothesis:

H1: There is a significant relationship between interlocking directorship and corporate performance in Malaysian listed corporations.

3.2 Research Design

The current study examines a sample of FTSE Bursa Malaysia Top 100 Index. The resulting sample has the advantage to represent the performance of companies, providing investors with a comprehensive and complementary set of indices, which measure the performance of the major capital and industry segments of the Malaysian and regional market.

Besides that, the information for analyzing the interlocking directorship are obtained from the Companies Profile from Bursa Malaysia Online, the Companies handbook and references were made from the Companies file of the respective sample and control companies obtained from Bursa Malaysia library.

As mentioned earlier, the data in study consists of 100 listed companies on the FTSE Bursa Malaysia Top 100 Index as at financial year ended 2003 and having full data covering the period 2003 – 2007. The data in this study is analyzed by using Statistical Package for Social Science (SPSS) version 17.0. The dependent variable consists of two performance measurements: Earning per share (EPS) as a proxy for market returns and return on equity (ROE) as a proxy for accounting return.

The reason for adopting both performance measurements is because there is no consensus concerning the choice of dependent variable for measuring firm performance and each measure has its own advantages and shortcomings (Cochran and Wood, 1984), Shrader et. al. (1997) and Lizal (2002) in her study in Czech Republic, had found that only two indicators are significant in measuring performance or financial health of the companies. The two indicators are return to assets and earning per share. The higher the earning per share presumes the better the companies perform. ROE is also used as a proxy for performance and this is consistent with the studies by Abdul Rahman and Haniffa (2003), Moerke (1997) and Albach (1987).

There is one main independent variable involved in this analysis which is interlocking directorship (INTERLOCK). The interlocking directorship is measured by the total number of corporations held by one director. In the analysis, this variable is split into two categories; interlocking of executive and non-executive directors. This is different from prior studies conducted by Cook (2003) and Haunschild and Beckman (1998) in the United States, where they disregard the executive and non-executive interlocks.

Since the objective of this study is to look at only certain factors that relate to corporate performance, therefore, only specific related variables are chosen. The selected variables are specifically related to size, liquidity and solvency as well as the gearing of the firms. The
inclusion of the control variables in the model was to avoid corporate performance being influenced by other factors. The ratios were selected after a review of finance and accounting literature. The variables considered are mostly derived from financial ratios found to be significant explanatory variables in past financial performance model Lizal (2002) and Abdul Rahman and Haniffa (2003).

Based on the above, the following independent variables are considered:

To follow prior research by Davis (1991), turnover (T_OVER) is used as a proxy to size of the companies and it is expected to have a positive relationship with performance of the companies because on average, larger firms are more profitable than smaller firms as they have the ability to diversify their risks (Ghosh, 1998) and Haunschild and Beckman (1998).

Since performance is closely related to the liquidity of the company, Quick Ratio (Q_RATIO) was chosen in preference to current ratio, because the inventory elements of current assets are often a cause of insolvency (Dooley, 1969). It is defined as total current assets after closing stocks and prepayments divided by total current liabilities.

The level of indebtedness is very important in this study since the high levels of debt reflect on performance of the companies. Therefore, Total Debt to Equity Ratio (TDE_RATIO) is related to the gearing of the companies and it has been used in the past studies on performance prediction Ohlson (1980), Theodossiou (1991), Theodossiou et. al. (1996) and (Khatri et. al., 2002).

4. FINDINGS AND ANALYSIS

4.1 Descriptive Statistics

Table 1: Performance Measures and Independent Variables for the Period 2003-2007

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS (%)</td>
<td>0.34518</td>
<td>0.68802</td>
<td>-1.575</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>0.12885</td>
<td>0.57686</td>
<td>-10.525</td>
</tr>
<tr>
<td>EDILOCK (No.)</td>
<td>7.666</td>
<td>3.0972</td>
<td>0.758</td>
</tr>
<tr>
<td>NEDILOC (No.)</td>
<td>12.666</td>
<td>4.1835</td>
<td>0.610</td>
</tr>
<tr>
<td>T_OVER (RM)</td>
<td>1,790,000,000</td>
<td>3,410,000,000</td>
<td>7.040</td>
</tr>
<tr>
<td>Q_RATIO (%)</td>
<td>2.01178</td>
<td>2.22756</td>
<td>2.120</td>
</tr>
<tr>
<td>TDE_RATIO (%)</td>
<td>337.39110</td>
<td>1130.0741</td>
<td>8.850</td>
</tr>
</tbody>
</table>

Table 3 presents the results of an overall descriptive statistics for the period 2003-2007. As shown in the table, the mean for EPS and ROE are 0.34518% and 0.12885% respectively with the standard deviation 0.68802% and 0.57686% respectively. However, the results of standard test on skewness indicates problem with normality assumption. Therefore the outliers that lead to the normality problem have been excluded in this study. The decision to remove outliers from the data set is made in order to avoid impact on the regression solution.
As the independent variables, it can be seen that the average number of interlocking executive directors was 7.666 with the standard deviation of 3.0972 while the average of the number of interlocking among non-executive directors was 12.666 with the standard deviation of 4.1835. The average of turnover over the period of study was RM1.79 billion with the standard deviation of RM3.41 billion. Finally, as far as the liquidity and gearing is concerned, the mean for acid-test ratio and total debt to equity ratio were 2.01178% and 337.39110% respectively at the standard deviation of 2.22756% and 1130.0741% respectively.

4.2 Correlation Matrix

Table 2: Estimated Correlation Matrix of the Variables

<table>
<thead>
<tr>
<th></th>
<th>EPS</th>
<th>ROE</th>
<th>EDILOCK</th>
<th>NEDILOC</th>
<th>T_OVER</th>
<th>Q_RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPS</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>0.651**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDILOCK</td>
<td>0.064</td>
<td>0.063</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEDILOC</td>
<td>0.154**</td>
<td>0.049</td>
<td>0.408**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T_OVER</td>
<td>0.055</td>
<td>0.027</td>
<td>0.176**</td>
<td>0.202**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q_RATIO</td>
<td>0.049</td>
<td>0.037</td>
<td>-0.047</td>
<td>-0.05</td>
<td>-0.077</td>
<td>1</td>
</tr>
<tr>
<td>TDE_RATIO</td>
<td>-0.20**</td>
<td>-0.168</td>
<td>0173**</td>
<td>-0.001</td>
<td>0.041</td>
<td>0.271**</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Table 2 indicates no multicollinearity problem as the correlations were relatively low. Multicollinearity may be a problem when the correlation exceeded 0.80 (Gujarati, 1995). It can be seen from the table that the simple correlation does not exceed 0.5. The result indicates that only NEDILOC and TDE_RATIO have significant correlation with EPS. The highest correlation is between EPS and NEDILOC with a positive correlation of 0.154, while the other negative correlation exists between TDE_RATIO and EPS. This explains that the higher the number of interlocking for non-executive directors, the higher the earning per share of the companies. On the other hand, the higher the leverage of the company will result in lower earning per share.

4.3 Regression Analysis

To test the relationship between the two independent variables and corporate performance, the following models were utilized:

**Model 1:** $\text{EPS} = B0 + B1 \text{INTERLOCK} + \text{Control variables} + Ci$

**Model 2:** $\text{ROE} = B0 + B1 \text{INTERLOCK} + \text{Control variables} + Ci$

Where,

$B0$ = intercept

$\text{EPS} =$ is a proxy for earning per share which measures performance in terms of yield and security of shareholders’ equity. It is defined as net income available to common shareholders divided by number of ordinary shares issued

$\text{ROE} =$ is a proxy for accounting measure of performance (Earning after Tax/Shareholders Equity).
INTERLOCK = total numbers of corporations hold by one Director.
Control = presents the variables included as control variables viz. size based on natural logarithm of turnover (T_over), liquidity based on quick ratio (Q-ratio) and gearing based on total debt to equity ratio.
Ci = error term

Hypotheses 1 (H1) in the study examines whether the existence of the interlocking directorship (executive and non-executive directors) are significantly related to the corporate performance. Linear regression is employed to assess whether or not they have the explanatory power on the corporate performance. The regression output is shown in Table 3 and 4.

Table 3: Linear Regression on EPS and independent variables over the period 2003 – 2007

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimates</th>
<th>t-statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERCEPT</td>
<td>0.258</td>
<td>12.264</td>
<td>0.000</td>
</tr>
<tr>
<td>EDILOCK</td>
<td>0.019</td>
<td>0.424</td>
<td>0.359</td>
</tr>
<tr>
<td>NEDILOC</td>
<td>0.154</td>
<td>3.541</td>
<td>0.220</td>
</tr>
<tr>
<td>T-OVER</td>
<td>0.064</td>
<td>1.452</td>
<td>0.108</td>
</tr>
<tr>
<td>Q_RATIO</td>
<td>0.112</td>
<td>2.461</td>
<td>0.135</td>
</tr>
<tr>
<td>TDE_RATIO</td>
<td>-0.200</td>
<td>-4.555*</td>
<td>0.000</td>
</tr>
</tbody>
</table>

* significant at the 1% level

Table 3 shows that, the R² for the above regression is 19%, and the F value is 20.749. This is significant at 1% significance level. One point that emerges from the above findings is that, there is no perceptible relationship between the number of interlocking for executive and non-executive directors with corporate performance. Hence, the hypothesis H1 is rejected. However, there is a negative relationship between companies’ indebtedness and corporate performance. It can be concluded that, the companies with higher debt face poor performance and this result is similar to the empirical findings by Doumpos and Zopounidis (1999), which indicates the TDE_Ratio is positively related to the poor performance. This result is also similar to the findings by Mohanty (2002) and Fligstein and Brantly (1992), which states that, there is no relationship between the institutional investors and corporate performance. However, it is different from the study conducted in Germany by Pfannschmidt in 1993, which found a positive association between interlocking directorates and the excellence of a firm.

Table 4: Linear Regression on ROE and independent variables over the period 2003 – 2007

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimates</th>
<th>t-statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERCEPT</td>
<td>0.105</td>
<td>5.942</td>
<td>0.000</td>
</tr>
<tr>
<td>EDILOCK</td>
<td>0.030</td>
<td>0.665</td>
<td>0.506</td>
</tr>
<tr>
<td>NEDILOC</td>
<td>0.102</td>
<td>2.319</td>
<td>0.021</td>
</tr>
<tr>
<td>T-OVER</td>
<td>0.034</td>
<td>0.766</td>
<td>0.444</td>
</tr>
<tr>
<td>Q_RATIO</td>
<td>0.090</td>
<td>1.958</td>
<td>0.051</td>
</tr>
</tbody>
</table>
It is clearly stated in the above table, the $R^2$ for the above regression is 15%, and the $F$ value is 14.549. This is significant at 5% significance level. The above results clearly demonstrate that there is no association between the existence of executive interlocking directorship and non-executive interlocking directorship with corporate performance based on return on equity measurement. Hence, the hypothesis H1 is also rejected.

5. CONCLUSION

The descriptive statistics show that the average of the number of interlocking for executive directors and non-executive directors is 8 and 13. It explains that during the period 2003 to 2007 most of the executive directors being the directors at 8 companies at one time, and most of the non-executive directors held the directorship at 13 companies at one time.

After excluding outliers to avoid normality problem, as being hypothesized in the first model, the result from linear regression shows that there is no association between corporate performance and interlocking of executive directorship. The same result is shown in the second model. The main independent variables do not seem to explain the performance of the firms. Therefore, both hypotheses have been rejected in this study and it is consistent with previous study by Hermalin and Weisbach (1997). As far as the interlocking is concerned, the enforcement of the Malaysian Code on Corporate Governance by MCCG to all companies to have an audit committee, might be the reason why the impacts of the interlocking directorships on performance is insignificant. Thus, the independence of the directors, the transparency of the information and disclosure are assumed to be maintained.

The findings of the study would guide the policy-makers and financial institutions in formulating effective measurement to evaluate corporate performance. The findings is expected to establish a starting point for exploring empirically the importance of interlocking directorship and how they have an impact on corporate performance in the future research. Hence, the result of the study might be significant if the reforms and improvement are properly implemented. Finally, this study may also help to establish a benchmark on the importance of good corporate governance, which is believed, can enhance performance of the companies.

REFERENCES


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