

QUALITY OF BOARD OF DIRECTORS AND CAPITAL STRUCTURE DECISIONS IN MALAYSIAN COMPANIES

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Abstract

This study examines the relationship between board structure and board process on capital structure decisions of Malaysian public listed companies. The study combines a survey approach and secondary data from the year 2007 to 2009. Based on a sample of 175 companies, the findings reveal that directors' risk appetite is positively correlated to company leverage while directors' tenure has negative relationship with leverage. With regards to board process, four variables are identified to be negatively correlated to capital structure which is boards' risk oversight, performance of independent directors, CEO's performance evaluation and accessibility of information.

Keywords: Corporate Governance, Board Structure, Board Process, Risk Oversight, Competency of Independent Directors, Capital Structure

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1. INTRODUCTION

A solid and solvent foundation of company capital structure is essential rather than being too dependent on leverage or rookie investments. Since the decision on capital structure is influenced by the managers (Myers, 2001), the board of directors is one of the important mechanisms that could monitor the managements' decisions. The board's primary function is to protect the shareholders' interests. In order to measure the effectiveness of the board, attention is given to how directors discharge their duties and this is referred as the board process. As a structure alone it does not reflect the quality of the board, therefore a study on board process is highly demanded.

In pertaining to leverage issue and board of directors, there are few empirical researches done to identify the relationship between these two variables (Abor, 2007; Busija, 2006; Yu, Rwegasira & Bilderbeek, 2002; Berger, Ofek & Yermack, 1997; Jensen, 1986). The apparent conflicting results from these studies do not indicate a clear consensus on the relationship between corporate governance variables and leverage. Besides, these studies merely focus on board structure and up to now there is still scant study which focuses on the relationship between leverage and board process.

Apparently, there are researchers who indicate that there is a need to pay attention to board process instead of focusing mainly on board structure (see

Wan & Ong; 2005; Pye & Pettigrew, 2005; Leblanc, 2004; Finkelstein & Mooney, 2003; Dulewicz & Herbert, 1999; Pettigrew, 1992; Zahra & Pearce, 1989). Finkelstein and Mooney (2003) find that Enron, WorldComm, Global Crossing, Qwest Communications and Tyco International in the US had solid board structures a year before they collapsed. Thus, it shows that a research which solely focused on board structure could not reflect on how these companies are being governed by the board. Taking cue from Stiles and Taylor (2001)'s view, board structure is a pertinent variable to be focused on, however the real contribution is by studying the credibility of the directors and how they work.

Motivated by the urgency regarding the issue above, this study aims to seek the answer to the essential question of whether the decision on capital structure has a relationship with board effectiveness. Three variables represent board structure namely, board size, directors' risks appetite and directors' tenure. In addition, this study includes four other variables that represent board process which are board's risk oversight, performance of independent directors, CEO's performance evaluation and accessibility of information. In simple words, board process is referred to as the approaches taken by directors in decision making processes. The analysis of board process variables towards capital structure decision represents the novelty of this study especially the board responsibility on risk oversight.

The remainder of this study is organized as follows. The next section reviews the literature on board structure (board size, directors' risks appetite and directors' tenure) and board process (board's risk oversight, performance of independent directors, CEO's performance evaluation and accessibility of information) with their relationship on capital structure decisions that leads to the development of hypotheses. In the third section, the research method including sample selection, measurement of variables and findings will be presented and the final section will draw the summary of the study.

2. BOARD ATTRIBUTES AND CAPITAL STRUCTURE DECISIONS

2.1 Board Size

Board size refers to the number of directors in the company. It has been identified as an important determinant of corporate governance effectiveness in theoretical articles by Pfeffer and Slancik (1978), Lipton and Lorsch (1992) and Jensen (1993). Board size is examined by a number of researchers (Berger et al., 1997; Jensen, 1986; Abor, 2007; Yu et al., 2002). In relation to capital structure, Yu et al. (2002) find insignificant result on the relationship between board size and company leverage. The result shows that the size of board does not have any influence on company leverage. Nevertheless, Jensen (1986) and Abor (2007) find that firms with higher leverage have a larger board size. It is expected that large boards can be less effective than small boards and in turn creating agency problems. There will be more problems such as free riding directors in the board meeting, slow in decision making and ineffective discussion.

On the contrary, Berger et al. (1997) indicate that level of leverage is lower when the boards of directors are larger. It can be assumed that larger board size could exert strong pressure to managers not to take excessive leverage. It is supported by agency theory that management must be monitored in order to ensure they act for the best interest of the company as well as the shareholders. At the same time, it forces management to be more cautious on every single decision that they make. The above arguments provide more support that board size could have influence on the capital structure decisions. Even though the Best Practice AAXII of Malaysian Code of Corporate Governance does not mention the optimal number of board size, but the size should reflect the effectiveness of the board. For that reason, this study expects a negative relationship between board size and company leverage.

2.2 Directors' risks appetite

With regards to financing decision, Busija (2006, p. 27) conceptualized the "risk taking behavior as decisions concerning capital structure" and the

behavior is connected to the person's appetite on risk. Vroom and Pahl (1971) study the relationship between age and risk taking behavior. They find that managers' ages are inversely associated with risk taking appetite. Similarly, Wiersema and Bantel (1992) and Hambrick and Mason (1984) further argue that older managers are more risk adverse compared to young managers. Furthermore, older managers are more likely to have better judgment. The reason being is that old managers need more time and information before making any decisions (Daboub, Rasheed, Priem & Gray, 1995). Thus in this study, age represents the risks appetite of directors in influencing their decisions on capital structure.

It is assumed that younger directors prefer to make high risks decisions. Thus, younger directors tend to opt for excessive leverage for quick gain that could be detrimental in the long run if the economic condition is not in company favor. Besides, older directors particularly the non-executive directors have valuable experience and knowledge in various industries and it can benefit the company where they serve as the director. It is similar to resource dependency theory (see Pfeffer, 1973; Pfeffer & Slancik, 1978) where the directors are appointed as member of the board in order to bring in their reputation, networking and knowledge into the company (Johnson, Daily & Ellstrand, 1996). Therefore, with above arguments this study expects a positive relationship between directors' risks appetite and company leverage.

2.3 Director's tenure

This study also include variable measuring the employment period of directors. Berger et al. (1997), Kin and Hian (2007) and Yu et al. (2002) find negative relationship between CEO's tenure and company leverage. It shows that entrenched CEOs and directors prefer low leverage to reduce the performance pressures accompanying high debt.

It is presumed that directors with long tenure have deeper knowledge about the company business and management as a whole. As directors tenure lengthen, their loyalty, passion and self belonging towards the board that they served also increase. They opt for decisions that favor shareholders' interests and bring less harm to the company. Thus, directors influenced the management to adopt lesser leverage in mitigating the risks of incapability of paying back company debts if the investment project undertaken turned sour. Therefore, the expected relationship between directors' tenure and company leverage is negative direction.

2.4 Board's risk oversight

Board's influence on risk management is an important aspect of board process particularly in decision making activities (Bostrom, 2003). Murphy and

Brown (2009) argue that board with less responsibility on risk management could lead to company failure. Thus, the board's challenge is to manage the risk effectively (Cheah & Lee, 2009). Even though the ultimate responsibility of risk management is not on the board's shoulder, an effective board should provide "*direction, authority and oversight to management*" (Sobel & Reding, 2004, p. 31). Board who frequently ask about the risks that management perceived to strike the company and provide own views towards the risks that might be exposed to the company will inculcate the risk culture on the board. Besides, it is the board's role to endorse and communicate the risk tolerance in order to provide guidance to senior management in decision making. In supporting the above arguments, Dulewicz and Herbert (2004) discover that board who evaluates current and future internal and external risks of the company will provide positive impact on company performance.

The Best Practice of Malaysian Code of Corporate Governance has outlined six specific board's responsibilities and it includes managing company risks. The latest requirements issued by stock exchange and reporting standards bodies have also stressed on enhancing of directors' role where board members need to have continuous process in evaluating, measuring and managing company risks (Puan, 2009). It is presumed that board's ability on risk oversight will influence the management to take non-excessive leverage. This is supported by agency theory that management need to be monitored and risk oversight is one of the mechanisms in monitoring the managerial actions and decisions. Therefore, boards that monitor their company risks closely are expected to have low company leverage.

2.5 Performance of independent directors

The essential functions of independent directors are to provide unbiased judgment for the best interest of shareholders and company (Yeap, 2009; Leblanc, 2004) and monitor the decision making activities (Fama & Jensen, 1983). By having sufficient skills and experience, independent directors are able to provide thorough assessment during decision making process (Finkelstein & Mooney, 2003). Besides that, asking constructive questions frequently to CEO and senior management will cause the managers to be more prudent in their decision makings. From the agency perspective, independent directors are expected to monitor independently on management work and decisions whereby ultimately they will influence the capital structure decisions and company returns.

The Best Practice of Malaysian Code of Corporate Governance and Paragraph 1.01 of the Listing Requirements emphasize the importance of independent directors. In relation to board effectiveness, the board must consist of at least one-

third of independent non-executive directors in order to ensure that these directors can provide independent judgment. Prior to the appointment, a few characteristics need to be evaluated namely their skills, knowledge, professionalism, experience, integrity and expertise. To recap, effective and competent independent directors will dissuade management from excessive risk taking in order to protect the shareholders. Hence, this study expects a negative relationship between performance of independent directors and company leverage.

2.6 CEO's performance evaluation

CEO's performance evaluation refers to the measurement and procedures that was established by the board to evaluate a CEO. It is one of the mechanisms that could influence CEO's behavior. Therefore, by ensuring there is an effective key performance indicator to assess the CEO, it will prevent the CEO from adopting excessive short term risk takings decisions. Besides, rewards system should be tied to CEO's performance (Zahra & Pearce, 1989) and specifically it could be the function of short and long term performance. An effective evaluation system will reflect fair rewards to the CEO. From the agency view, board is one of the governance mechanisms that is able to monitor management and the evaluation process is an instrument to keep track of the CEO's performance.

The Malaysian Code of Corporate Governance has recommended that the effectiveness and contribution of every director on the board including the CEO need to be assessed. Therefore, it is expected with effective performance evaluation that act as monitoring mechanism, CEO will put extra attention on decision making process in order to bring wealth to the company. The reflection of CEO's performance can be seen from company profitability and the structure of capital. It is expected that the CEO will avoid excessive leverage that would expose the company to bankruptcy. The failure of the company will affect their reputation and job security. Hence, an effective CEO's performance evaluation by the board is expected to have a negative association with company leverage.

2.7 Accessibility of information

In this study, it is presumed that by having sufficient access to company information, directors will have a better quality of decision making. Directors "*must be able to meet freely for discussions with the company's managers and workers, have access to business records and books of account, receive detailed information about board meeting agendas and obtain necessary outside professional services at the company's expense*" (Sang-Woo & Il, 2004, p. 63). Adequate information will enhance directors' knowledge and understanding on the company

business activities, financial performance, company strategies and various parties that have interests in the company. Therefore, directors will be able to ask and challenge the ideas of CEO or senior management on any decisions (Zahra & Pearce, 1989, Finkelstein & Mooney, 2003). It is also to avoid the management or controlling owner from manipulating the other board members.

The Malaysian Code on Corporate Governance emphasizes the importance of directors to get access to company information. Besides, directors are allowed to hire any professional advice and the cost is borne by the company in order to enhance directors' knowledge on certain aspects. Thus, the effective approach in accessing company information is expected to have influence on company leverage decision making.

3. RESEARCH METHODOLOGY

This paper aims to determine the relationship between board structure and board process on capital structure decisions. Therefore, the study combines a secondary data and survey approach. Data on board structure and company leverage are extracted from the annual report of 2007 to 2009. With regards to board process, a questionnaire is developed in order to get the feedback from directors on their approaches in running the board. The questionnaire is based upon the literature and inputs from two risk specialists and an executive chairman of a committee from regulatory bodies and three public listed directors. This is very essential as people from the corporate industries understand in depth the industrial practices and the loopholes of the practices which will bring value to the study. The interviews were held at their office.

Based on the interviews and past literatures, an early draft of questionnaire was developed. Then, the draft was distributed to four directors and three senior academicians who have vast experience in survey studies. The preliminary study was conducted in order to clarify the items and ensure the relevancy of the items in the questionnaire. Based on their feedbacks, the questionnaire was corrected and amended. This was followed by a pilot study which was conducted within two months and it involved 30 boards. The duration of pilot study and number of respondents proves that dealing with company directors is a demanding task. Once the pilot study was completed, the other round of questionnaire modification was conducted. Then, a full survey was carried out. The complete questionnaire has two parts; first part consists of 31 items on board process and the second part consists of 6 demographics items.

Study by Westphal (1999) shows that studies on top executives always receive a low of response rate which is less than 25%. In Malaysia, the response rate for survey study is in the range of 10% to 20% (Hasnah & Hasnah, 2009). Hence, it is appropriate to send the questionnaires to every public listed

company. This is similar to a study by Wan and Ong (2005) that include the whole population of public listed companies in Singapore as their sample. They assess the effectiveness of directors, board structure and financial performance.

For this study, the questionnaires were sent through mail to different directors (company chairman, independent director, non independent non executive director and executive director) via company secretary. Once the response from questionnaire was obtained, it will be matched with secondary data for that particular company. From 687 companies listed on main market in Bursa Malaysia (after excluding companies which are listed under financial sector, new companies that are listed in 2007, 2008 and 2009 as well as PN17 and Amended PN17 companies) a total of 175 companies (25 per cent) participated in this study.

3.1 Measurements

There are four sets of variables which are capital structure, board structure, board process and control variables. In developing countries such as Malaysia, companies tend to utilize short term and long term debt to finance their assets. Therefore, it is appropriate to use debt ratio as a proxy for capital structure. The measurement of leverage at the end of each fiscal year is determined by dividing the total debt to total assets using the data obtained from the respective companies' financial statements from 2007 to 2009. This ratio represents the percentage of firm assets which are financed by debts, including both short term and long term debts while the remaining assets are financed by the equity. This leverage indicator has also been used in previous studies on capital structure (e.g. Suto, 2003; Pandey, 2002; Yu et al., 2002).

For board structure, there are three variables namely board size, directors' age and directors' tenure. For the purpose of analysis, board size is referred to the number of directors constituting a board. Meanwhile, age of directors represent the risks appetite of directors and it is measured by using the mean age of directors. The final variable under board structure is directors' tenure. Directors' tenure is defined as the period of time where the director holds the position as a director in a company. Information for director's tenure was not readily available. Thus the data was determined by identifying the number of years the director holds that position starting from the first date of the holding period to the financial year end of 2007, 2008 and 2009.

In relation to board process, four variables are studied namely board's risk oversight, CEO's performance evaluation undertaken by the board, performance of independent directors and accessibility of information. Board's ability on risk oversight focuses on directors' behavior and actions

in monitoring the management which associates with risks. It is predicted that board with a sound culture of managing risks is more likely to influence the decision making process. They will encourage the management to adopt less risk decisions that can ruin the company. There are eight statements in measuring this construct. The questions on board's risk oversight are constructed based on the input from industry experts, MCGG and literatures from Carey, Patsalox-Fox and Useem (2009); Wyman (2009); Murphy and Brown (2009); Ingley and Van der Walt (2005); Sobel and Reding (2004); Raber (2003); Bostrom (2003) and Finkelstein and Mooney (2003). In measuring the board's ability on risk oversight, five points Likert-scale are used. The statements employs a scale with strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = 5. Higher scores indicate higher ability of board on risk oversight.

With regards to CEO's performance evaluation, eight statements are also designed based on the input from industry experts and a review of board effectiveness literature from Wan and Ong (2005); Kula (2005); Sang-Woo and Il (2004); Sobel and Reding (2004) Finkelstein and Mooney (2003); Dulewicz and Herbert (1999; 2004); Lipton and Lorsch, (1992) and Zahra and Pearce (1989). The statements under this construct are measured by using five point Likert scale. The statements employ a scale of strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = 5. Higher scores represent high effectiveness of board in evaluating CEO's performance.

In measuring the accessibility of information, five statements and five point scale (strongly disagree = 1, disagree = 2, neutral = 3, agree = 4 and strongly agree = 5) is used. Four statements are adopted from Sang-Woo and Il (2004). Meanwhile, one statement "Directors discuss issues thoroughly" is adapted from

Ingley and Van der Walt (2005). Higher score indicates good access of information by the directors.

The scale used for board's risks oversight, CEO's performance evaluation and accessibility of information is also used by Kula and Tatoglu (2006) in measuring board process attributes among Turkish directors. Meanwhile, there are eight statements included in the questionnaire to measure the performance of independent directors. The statements have been adopted from Ingley and Van der Walt (2005). In measuring the performance aspect, a scale ranging from Very poor = 1, poor = 2, neutral = 3, good = 4, outstanding = 5. Higher scores indicate higher performance of the independent directors.

In addition, this study includes two control variables; company size and age of the company. Company size is used as control variable because company leverage may be differed from one company to another and it lead to bias in result. The log of total assets is used as proxy for company size (Noor Afza & Ayoib, 2009; Driffield, Mahambre & Pal, 2007). The other control variable is the age of company. Company age is measured by referring to the year of listed and it is subtracted with the date of financial year end in 2007, 2008 and 2009.

4. RESULTS

4.1 Descriptive statistics

Table 1 demonstrates the average of company leverage for the year 2007 to 2009 is 42%. The mean figure of company leverage for year 2007 to 2009 indicates that the leverage level has increased, from 40% in 2007 to 41% in 2008 and 44% in 2009. This could be due to the effect of global financial crisis which brought great uncertainties to the market outlook. Companies have to resort to bank borrowing during this period of uncertainties as raising capital from the capital market will be very difficult and pricey amid great risk aversion of investors.

Table 1. Descriptive statistic of company leverage

Variables	Denoted by	Mean	Std Deviation	Min	Max
Leverage (%)	LEV				
- Overall		41.61	20.63	4.63	89.64
- 2007		40.30	21.33	4.17	99.59
- 2008		41.01	21.46	3.90	98.59
- 2009		43.51	22.51	5.82	96.70

The descriptive statistics with regards to the average of board size, directors' age, directors' tenure, company size and age of company are illustrated in Table 2. From the table, it shows that the average board size is 7. The range is from 3 to 12 persons in a board. In terms of directors' risks appetite, the

variable is measured using directors' age. The average of directors' age is 54, with a range of 42 to 68. Besides, the average of directors' tenure is 7 years. The sample companies have RM1,880,000 of total assets and listed for 15 years on average.

Table 2. Descriptive statistics for board structure and company characteristics

Variable	Denoted by	Mean	SD	Min	Max
Board size	BSIZE	7	1.61	3	12
Directors' risk appetite	DRA	54.40	5.24	41.95	67.79
Directors' tenure	DTEN	6.91	3.96	0.63	17.21
Company size (Total asset; in million)	CSIZE	1.88	0.67	0.025	6.96
Age of company (years)	AGECO	15	11.64	2	48

Table 3 presents the descriptive statistics for board process variables. With regards to performance of independent directors, the result shows that the item "interactive communication of independent directors with other board members" is rated the highest with mean of 3.87. The boards perceive that their independent directors are competent to interact with other directors on the board. This is consistent with the view of Leblanc (2004) in which he strongly believes that the interaction with other board members is essential to enable them to work together. Meanwhile, Malaysian boards do agree on the approaches taken by them which related to risk management practices. The item "board gets update from senior management on risk management matters" has the highest mean with 4.08.

In relation to CEO's performance evaluation, the mean is ranging from 3.91 to 3.34 showing the level of agreement towards the statements under CEO's performance evaluation. As a whole, most of Malaysian boards have appropriate approaches in evaluating the CEO's performance. This is consistent with the result of Sang-Woo and Il (2004) where they find Malaysian boards are comparatively active compared to Thai and Korean companies in evaluating the performance of CEO. Besides, the result shows high agreement on all of the statements in relation to board's accessibility on company information with the mean value in the range between 4.05 and 3.95. This implies that most of Malaysian boards do have access to company information.

Table 3. Descriptive statistics for board process

Variables	Denoted by	Mean	SD	Range
Factor 1: Performance of independent directors				
	BCID			1-5
Independent directors ability to provide strategic vision		3.48	.829	
How effective the independent directors represent the interest of shareholders?		3.67	.826	
Independent directors' relationship with senior management		3.57	.739	
How effective the independent directors represent the interest of stakeholders?		3.66	.755	
The independent directors' understanding on company business		3.75	.723	
The quality of independent directors' contribution in board committees		3.83	.746	
Independent directors' record of constructively challenging and debating issues during board meetings		3.69	.710	
Independent directors' relationship with the CEO		3.71	.679	
Independent directors ability to apply his or her industries experience		3.75	.839	
The level of interactive communication of independent directors with other board members		3.87	.716	

Factor 2: CEO's performance evaluation	CEOPEV		
Board evaluates CEO by using key performance indicator (KPI)	3.69	.921	1-5
Board accepts feedback from CEO during the process of setting KPI	3.66	.828	
Board communicates their expectations clearly to the CEO	3.91	.883	
The board provides avenue for CEO to explain on the state of CEO's performance	3.80	.816	
Board implements a reward system which is based on long term performance	3.60	.928	
Board establishes an exit mechanism which is tied up with CEO's performance	3.34	.848	
Board communicates to the CEO on his/her success based on the evaluation result	3.59	.885	
Board communicates to the CEO on his/her failures based on the evaluation result	3.61	.889	
Factor 3: Board's risk oversight	BRISKO		1-5
Board communicate on risk tolerance to senior management	3.98	.823	
Board raise concern on risk management	3.96	.893	
Board gets update from senior management on risk management matters	4.08	.769	
Board requires senior management to deliberate on emerging risks that the management perceived the company will be facing	4.01	.858	
Members of board ask the senior management to use scenario analysis in identifying potential vulnerabilities	3.71	.857	
Board has necessary financial knowledge to analyze financial statement	3.90	.810	
Board reviews its strategy during crisis	3.89	.861	
Board attends relevant risk management training	3.85	.831	
Factor 4: Accessibility of information	ACINF		1-5
Directors have access to information via managers	4.03	.790	
At time where directors need to refer to company business records and books, their access is denied	3.95	.910	
When outside professional services is needed, the expenses will be borne by the company	4.01	.690	
Directors discuss issues thoroughly	3.96	.680	
Directors received sufficient materials/ information before board meetings	4.05	.740	

4.2 Factor analysis

From table 4, a factor analysis on 31 items that relates to board process is conducted and it produces four factors. The scale reliability for each factor under board process is calculated. Internal reliability test presents strong Cronbach Alpha values for every

factor ranging from 0.860 to 0.929. Following Nunally (1978) suggestion, the values which is above 0.7 is acceptable. Thus, the four factors under board process demonstrate a satisfactory level of reliability.

Table 4. Results of factor analysis

Factors	Factor loads	Eigen value	Percent variance explained	Cumulative per cent	Alpha
Factor 1: Performance of independent directors		12.720	19.067	19.067	0.929
Ability to provide strategic vision	0.775				
How effective the independent directors represent the interest of shareholders?	0.757				
Relationship with senior management	0.696				
How effective the independent directors represent the interest of stakeholders?	0.688				
Understanding on company business	0.677				
Contribution in board committees	0.650				
Record of constructively challenging and debating issues during board meetings	0.650				
Relationship with the CEO	0.601				
Ability to apply his or her industries experience	0.601				
Interactive communication of independent directors with other board members	0.536				
Factor 2: CEO's performance evaluation		3.09	17.318	36.385	0.923
Board communicates to the CEO on his/her success based on the evaluation result	0.835				
Board evaluates CEO by using KPI	0.786				
Board establishes an exit mechanism which is tied up with CEO's performance	0.737				
Board implements a reward system which is based on long term performance	0.724				
Board communicates to the CEO on his/her failures based on the evaluation result	0.721				
Board provides avenue for CEO to explain on the state of CEO's performance	0.712				
Board communicates their expectations clearly to the CEO	0.708				
Board accepts feedback from CEO during the process of setting KPI	0.677				
Factor 3: Board's risk oversight		1.99	15.923	52.309	0.902
Board requires senior management to deliberate on emerging risks that the management perceived the company will be facing	0.789				
Board gets update from senior management on risk management matters	0.731				
Board raise concern on risk management	0.712				
Board communicate on risk tolerance to senior management	0.699				
Board attends relevant risk management training	0.678				
Board reviews its strategy during crisis	0.648				
Members of board ask the senior management to use scenario analysis in identifying potential vulnerabilities	0.614				
Board has necessary financial knowledge to analyze the financial statement	0.584				
Factor 4: Accessibility of information		1.89	11.193	63.501	0.860
Directors discuss issues thoroughly	0.830				
Directors have access to information via managers	0.816				
At time where directors need to refer to company business records and books, their access is denied	0.726				
When outside professional services is needed, the expenses will be borne by the company	0.726				
Directors received sufficient materials/ information before board meetings	0.759				

Note: K-M-O measure of sampling = 0.911 Barlett's Test of Sphericity is significant; $p < 0.000$

4.3 Regression analysis

This study used debt ratio in representing company capital structure. Before running the regression analysis, the average leverage is transformed into logarithm due to dissuade the heteroscedasticity problem. Besides, test for multicollinearity is also

carried out. Independent variables with variance inflation factor (VIF) values more than 10 show a serious multicollinearity (Chatterjee, Hadi & Price, 2000). The test indicates that there is no evidence of multicollinearity since the VIF value is between the range of 1.034 and 1.421.

Table 5. P-values of regression model summary

Variable	Coef.	t-value
Board size	-0.001	-0.011
Directors' risk appetite	-0.197	-2.795***
Directors' tenure	-0.200	-3.120***
Board's risk oversight	-0.178	-2.516**
Performance of independent director	-0.137	-1.970**
CEO's performance evaluation	-0.173	-2.384**
Accessibility of information	-0.124	-1.824*
Company size	0.198	2.937***
Age of company	0.058	0.867
Adjusted R-squared	0.363	
F statistic	12.009***	

***, **, * indicates regression analysis is statistically significant at 1%, 5%, 10% respectively

Table 5 shows the summary of the analysis on the relationships between board structure and board process on company leverage. It shows that out of eight independent variables, six variables that are directors' risks appetite, directors' tenure, board's risk oversight, performance of independent director, CEO's performance evaluation and accessibility of information have significant relationships to company leverage (debt ratio). In relation to board structure, directors' risk appetite (DRA) is found to have significant positive relationship to leverage at 1% significant level whereas directors' tenure (DTEN) has significant negative relationship to company leverage at 1% significant level. Nevertheless, this study fails to find any association between board size (BSIZE) and company leverage as the p-value is greater than 10%.

With regards to board process, board's risk oversight (BRISKO), performance of independent directors (CID) and CEO's performance evaluation (CEOPEV) and is negatively related to leverage at 5% significant level. Meanwhile, accessibility of information (ACINFO) is found to have negative relationship to leverage at 10% significant level. In addition, the study finds that company size is positively related to company leverage. Meanwhile, age of company indicates insignificant result.

5. DISCUSSION AND CONCLUSION

This study seeks to determine the relationship between board structure (board size, directors' risks appetite and directors' tenure) and board process (boards' risk oversight, performance of independent directors, CEO's performance evaluation and accessibility of information) on company leverage. An analysis on 175 Malaysian public listed companies reveals interesting results.

The findings show that the appointment of older directors will discourage the management from adopting excessive leverage since the directors' risk appetite is lower compared to young directors. Perhaps, this is one of the reasons which explained that 80 out of 124 Malaysian directors who sit on top 30 public listed companies are in the range of age 61 and above (Yeap, 2009). In relation to directors' tenure, this study finds negative relationship between directors' tenure and company leverage. It shows that the internal monitoring mechanisms increases as the directors' tenure lengthen. Nevertheless, there is insignificant relationship between board size and leverage. This implies that large number of directors does not guarantee that the board could exert strong pressure to managers to curb excessive leverage. In terms of control variables, company asset is positively related to company leverage. This indicates that larger companies are more likely to employ more borrowings. The reason being, companies have less

risk of bankruptcy since the capability in paying back the debts is high.

The finding reveals that board's risk oversight has significant influence on the level of company leverage. A good board risk oversight involves frequent updates from the senior management on risk matters, emphasis on the senior management to conduct stress test or scenario analysis in identifying potential vulnerabilities, getting the senior management to deliberate on emerging risks that the management perceived the company will be facing and reviewing company strategy during crisis. All these will prevent management from adopting excessive leverage.

Company leverage is also negatively related to performance of independent directors. Independent directors who contribute effectively in board committees, leveraging on his or her industries experience, accountable to shareholders and stakeholders as well as able to provide strategic vision will positively influence the decision making process. This may imply that the recommendation by MCCG to have one-third of the board comprising of independent non executive directors is crucial as such directors are expected to provide unbiased judgment and independent monitoring.

In addition, the study does support the relationship between the effectiveness of CEO's performance evaluation and company leverage. One of the potential reasons behind this is that good performance evaluation of a CEO takes into account not only return but also level of risk assumed such as leverage level i.e. risk adjusted return. Effective assessment towards CEO's performance will curb the CEO from adopting risky financial structure. Besides, accessibility of information by directors influences company leverage. With better access to company information and sufficient period to digest the material, directors are able to make informed decisions on company financial structure.

The findings of this study suggest that board process is an important variable together with board structure. From theoretical perspectives, this study has extended the application of agency theory within the context of board effectiveness. In previous studies, the application of agency theory is focusing on board structures, board composition and board characteristics. However, the effectiveness of directors is very much essential nowadays (Wan & Ong, 2005; Dulewic & Herbert, 2004; Leblanc, 2004). As companies are facing greater challenges from the uncertain economic condition, how directors run the board does matters. Thus, this study can be viewed as part of board literature particularly the directors' responsibilities on risk oversights.

There are few limitations related with the methodology of the study. Directors who answered the questionnaires may not give honest responses as they may think that there is a risk that their answers could be revealed to their competitors, shareholders,

public or regulatory bodies. Nevertheless, guarantees are given in the cover letter that their answers will be kept confidential and the data will be used solely for the purpose of the study. With regards to future research, until today, study on board process is still lacking. There is a high demand in exploring the board process variables since board is seen as a prominent mechanism in protecting the company as a whole. Thus, other board process variables for example managing conflicts and communication may be included in capital structure studies for future research.

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