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## Corporate Governance and Earnings Management: A Study on the Malaysian Family and Non-Family Owned PLCs

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### Abstract

This study supported the claim that corporate governance (CG) mechanisms are able to overcome earnings management (EM) activities specifically from the perspective of family owned companies (FOC) and the non-family owned companies (NFOC). A total sample of 264 public listed companies (PLCs), selected based on stratified samplings, were tested. The results showed that for FOC, only number of board meetings held; while for NFOC, independence of directors, audit committee, non-duality, audit committee size, in-house internal audit function and quality differentiated auditors are the CG mechanisms that are found to be able to assist in minimizing the EM activities.

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### 1. Introduction

Corporate governance (CG) mechanisms guarantee investors that they will receive adequate return on their investment (Shleifer and Vishny, 1986). Thus, it justifies the necessity for this study to prod into the ability of the CG mechanisms in overcoming earnings management (EM) so that reliable financial statements could be produced. EM happens when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholder about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers (Healy and Wahlen, 1999). This study is done on the distinction of family owned companies (FOC) and non-family owned companies (NFOC) so as to provide evidence to the knowledge gap on the types of CG mechanisms that could assist in overcoming EM during the recent financial crisis between these two groups, specifically

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from the perspective of a developing country, Malaysia. The findings supported the claim that CG mechanisms are able to overcome EM activities in the FOC and NFOC.

## 2. Literature Review

Finance Committee on CG in Malaysia in the Report on GC (2002) defines CG as: ‘*The process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realizing long term shareholders value, whilst taking into account the interests of other stakeholders*’ (HLFC, 2000).

Under CG mechanisms, board of directors (BOD) is considered as the central point in providing effective oversight over a company’s financial reporting system to the stakeholders. These includes presence of an independent non-executive director (NED) (Jaggi *et al.*, 2009; non-duality (Gulzar and Wang, 2011); and non-multiple directorship (Dhaliwal *et al.* 2010). The presence of an independent NED could provide effective monitoring mechanism for EM (Jaggi *et al.*, 2009, while Gulzar and Wang, 2011, find that the existence of chief executive officer (CEO) duality is positively related to discretionary accruals as duality enhances further the CEO's position and power, providing ample opportunities for management discretion. Further, Dhaliwal *et al.*, 2010, state that accrual quality is positively related to accounting experts who has fewer multiple directorships.

Besides BOD, the audit committee (AC) (Ahmad-Zaluki and Wan-Hussin, 2010; Abed *et al.*, 2012 ), internal audit function (Prawitt *et al.*, 2009), and quality differentiated auditor (the Big Eight/Big Six/Big Five/Big Four) also play CG role for a company (Fan and Wong, 2005). Ahmad-Zaluki and Wan-Hussin, 2010, provide evidence that for those companies with a higher percentage of NED in the AC would indeed exhibit greater forecast accuracy. Abed *et al.*, 2012, provide evidence that having large board would assist in hindering the incidence of EM as in a large board size there is varied expertise among its members that could assist in identifying any misconduct arisen. Further, the overall internal audit function has a significant relation with absolute abnormal accruals (Prawitt *et al.*, 2009); and quality differentiated auditor (the Big Eight/Big Six/Big Five/Big Four) also plays CG role for a company (Fan and Wong, 2005). The latter is supported by Che-Ahmad and Mansor, 2009, who state that the presence of such auditor would hinder the auditee from involving in income smoothing activities.

In addition to CG mechanisms, corporate ownership structures of a FOC and NFOC are also incorporated into the study’s model equation. This is because Fama and Jensen, 1983, have stated that the presence of the founding family with strong equity position and their ability to have control over the management, present an advantage for the family to monitor the business. Additionally, founding FOC have less incentive to manage the companies’ earnings as they face lesser pressure to meet or beat earnings expectation (Jiraporn and DaDalt, 2009).

In addition, control variables that have significant influence on a company’s ability and propensity to engage in EM are also included. These include; firstly profitability. Saleh *et al.*, 2005, state that company which is making losses would have higher tendency to be involved in EM activities. Secondly is the company size. Che-Ahmad and Mansor, 2009, discover that smaller size companies have the tendency to be involved in income smoothing activities as their actions would not be scrutinized. Thirdly is the debt. Companies that use high levels of debt are exposed to increase levels of institutional monitoring, which would decrease the company’s ability to manage its earnings (Becker *et al.*, 1998).

### 3. Methods

#### 3.1. Data Selection

This study employs secondary data approach. The target population for this study is defined as all the companies listed in Bursa Malaysia Berhad as of 31<sup>st</sup> December 2008, excluding finance companies. Information was gathered from the respective companies’ annual reports retrieved from the Bursa Malaysia Berhad website and also from Datastream. Stratified random sampling technique was employed in order to obtain the required sample of 264 public listed companies (PLCs).

#### 3.2. Methodology

##### 3.2.1. Theoretical Framework

All the testable variables, both dependent and independent, are being summarized in Figure 1.

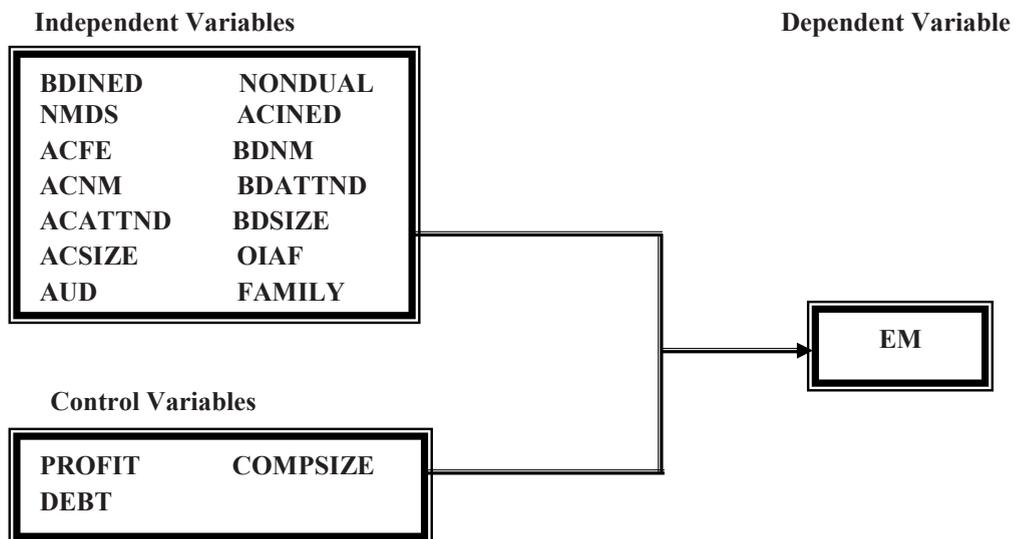


Fig. 1: Theoretical Framework

### 3.2.2. Equation Model

This study employs multiple regression analyses, and the research model for the study is as follows:

$$EM = \alpha_0 + \alpha_1BDINED_i + \alpha_2NONDUAL_i + \alpha_3NMDS_i + \alpha_4ACINED_i + \alpha_5ACFE_i + \alpha_6BDNM_i + \alpha_7ACNM_i + \alpha_8BDATTND_i + \alpha_9ACATTND_i + \alpha_{10}BDSIZE_i + \alpha_{11}ACSIZE_i + \alpha_{12}OIAF_i + \alpha_{13}AUD_i + \alpha_{14}FAMILY_i + \alpha_{15}PROFIT_i + \alpha_{16}COMPSIZE_i + \alpha_{17}DEBT_i + \varepsilon_i \tag{1}$$

Variables	Operationalization	Presentation	Expected Sign
Independent non-executive director (INED) in the board of directors	'1' for companies that have one third or more of the board members being INED and '0' for otherwise	BDINED	-
None existence of Duality role of chairman and chief executive officer	1 for companies that have non-duality, and 0 for otherwise	NONDUAL	+/-
Non-multiple directorships	1 for companies that do not have multiple directorships, and 0 for otherwise	NMDS	+/-
INED in the Audit Committee (AC)	'1' for companies that have all of the members in the audit committee being INED, and '0' for otherwise	ACINED	-
AC financial expertise	1 for companies that have a person being a member of an accounting associates or body, and 0 for otherwise	ACFE	-
Numbers of BOD meetings	Number of Board meetings per annum	BDNM	+/-
Numbers of AC meetings	Number of AC meetings per annum	ACNM	-
Members' Attendance during BOD meetings	Percentage of members' attendance during Board meetings	BDATTND	-
Members' Attendance during AC meetings	Percentage of members' attendance during AC meetings	ACATTND	-
Size of the board	Number of members on the board	BDSIZE	+/-
Size of the AC	Number of members in the audit committee	ACSIZE	-
Outsource Internal audit function	1 for companies that have outsource internal audit function, and 0 for otherwise	OIAF	+/-
Quality differentiated auditor	1 for companies that have quality differentiated auditor, and 0 for otherwise	AUD	-
Family controlled companies	1 for companies that are family owned, and 0 for otherwise	FAMILY	+/-
Profitability	The ratio of income before extraordinary items to equity	PROFIT	-
Size of the company	Natural logarithm of total assets	COMPSIZE	-
Debt	The ratio of total debt to total assets	DEBT	+/-

### 3.2.3. Measuring Earnings Management

In this study, the cross-sectional version of the Modified-Jones model is being employed to measure EM (Becker *et al.*, 1998; Davidson *et al.*, 2005). Under this Discretionary Total Accruals method, all variables are scaled by the beginning of the period total assets as follows:

$$ACCR_{i,t}/TA_{i,t-1} = \alpha_0(1/TA_{i,t-1}) + \alpha_1(\Delta REV_{i,t} - \Delta REC_{i,t}/TA_{i,t-1}) + \alpha_2(PPE_{i,t}/TA_{i,t-1}) + \varepsilon_{i,t} \tag{2}$$

where  $ACCR_{i,t}$  = Total Accruals for company *i* in year *t* (measured as the difference between earnings before extraordinary items and cash flows from operations)

- TA<sub>*i,t-1*</sub> = Total assets for company *i* in year *t*
- Δ REV<sub>*i,t*</sub> = Change in net sales for company *i* in year *t*
- Δ REC<sub>*i,t*</sub> = Change in receivables for company *i* in year *t*
- PPE<sub>*i,t*</sub> = Gross property, plant and equipment for company *i* in year *t*
- ε<sub>*i,t*</sub> = The regression error terms, assumed cross-sectionally uncorrelated and normally distributed with mean zero.

Discretionary or managed accruals for each company *i* is:

$$DAC_{i,t} = ACCR_{i,t} / TA_{i,t-1} - (\alpha_0 (1/TA_{(i,t-1)}) + \alpha_1 ((\Delta REV_{i,t} - \Delta REC_{i,t}) / TA_{i,t-1}) + \alpha_2 (PPE_{i,t} / TA_{i,t-1})) \tag{3}$$

where α<sub>0</sub>, α<sub>1</sub> and α<sub>2</sub> = the fitted coefficients from equation (2)

DAC<sub>*i,t*</sub> = the managed component of total accruals for sample company *i* in year *t*, which is equal to discretionary accruals, and all other variables are as previously determined.

#### 4. Findings and Discussion

Table 1 summarizes the pertinent results of the main model for the study. The BDINED, ACINED, NMDS, ACSIZE and COMPSIZE were found to be significant negatively related to EM. It proves that firstly, by having INED on the BOD and AC was able to assist in hindering EM from taking place. This is because these directors, who have no direct interest in the companies, would act on behalf of the shareholders in mitigating the agency problems, such as EM (Jaggi *et al.*, 2009) and they would be able to offer professional advice to the management (Fama and Jensen, 1983).

Table 1: Multiple Regression Results of the Main Model

DV = EM	Coefficients	t-stat	Sig.	VIF	Tolerance	
(Constant)	0.16	1.45	0.15			
BDINED	-0.03	-1.65	0.10	*** <sup>a</sup>	0.89	1.12
NMDS	-0.02	-1.83	0.07	** <sup>b</sup>	0.84	1.20
ACINED	-0.02	-2.09	0.04	*** <sup>a</sup>	0.72	1.39
BDNM	0.00	-1.28	0.20	* <sup>b</sup>	0.74	1.35
ACSIZE	-0.01	-1.50	0.14	* <sup>a</sup>	0.74	1.35
OIAF	0.01	1.57	0.12	* <sup>a</sup>	0.80	1.25
PROFIT	0.26	14.75	0.00	*** <sup>a</sup>	0.86	1.17
COMPSIZE	-0.02	-2.44	0.02	*** <sup>a</sup>	0.48	2.08
Adjusted R <sup>2</sup>					48.2%	
F-Value					15.42***	
Durbin-Watson					1.89	
Standard residual - Maximum / Minimum					2.79 / -2.59	
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity					26%	

Notes: \*\*\* Significant at 0.001 level; \*\* Significant at 0.05 level; \* Significant at 0.1 level; a = one-tail-test; b = two-tail-test. EM = Earnings Management measured via Discretionary Accruals based on Modified Jones; BDINED = Board Independent non-executive director; NMDS = No Multiple Directorship; ACINED = INED in the Audit committee; BDNM = Number of board meetings; ACSIZE =

Size of the audit committee; OIAF = Outsource internal audit function; PROFIT = Profitability; COMPSIZE = Company size.

Secondly, by not holding too many directorships would enable a director to be more effective monitor as he has more time to spend on each company (Morck *et al.*, 1988) relative to if he was to hold too many directorships in various companies at any point of time. Thirdly, a small size audit committee is more effective in overcoming the problem of EM as larger size of audit committee would only make available ample rooms for courtesy among the members (Yermack, 1996). Such a situation would cause the members to overlook the EM activities done by the management. Fourthly, bigger company size is less involved in EM as it is better governed, capable to maintain effective internal control systems and able to appoint quality differentiated auditors (Black *et al.*, 2006). In fact the finding is in line with the result by Che-Ahmad and Mansor, 2009, that discovered the fact that the smaller the size of the companies, the higher is their inclination to smoothen their income.

The BDNM, OIAF and PROFIT were found to be significant positively related to EM. The results show that firstly, when the BDNM held is frequent, the level of the EM activity is also high (Gulzar and Wang, 2011). This could be due to the presence of courtesy and diplomacy among the members (Yermack, 1996) during the board meetings. Such situation would enable the management to take opportunity of the situation to manage the company's earnings as they believe that their unhealthy activity would go unnoticed. Secondly, the PLCs prefer to adopt the in-house internal audit function in order to minimize the probability of leakage of their companies' vital information (Klosek, 2005) when an outsourced internal audit function is employed.

Thirdly, since the expected coefficient estimate for profitability is negative; that is the larger the companies' profitability, the lower is their participation in EM, then the findings from this study is peculiar. A good reason could be due to the financial crisis that had cropped up in the year 2007. Since the sample companies were selected from among the companies with financial reports during the financial year ending 2008, then the 2007 financial crisis would have a certain degree of impact on these companies' business operations during the year 2008. This is supported by Saleh *et al.*, 2005, who highlighted the fact that when companies were making losses during that particular financial year, then their managers would have the inclination to manage the companies' earnings. It is done with the intention either to send positive signals to the market or to reduce the impact of negative signals originated from financial distress.

Further, additional tests were carried out on the 264 sample companies where they were split into FOC and NFOC. It is done in order to ascertain whether different CG mechanisms are needed to overcome the EM problem when these PLCs were compared on this basis. The pertinent results for FOC are recorded in the Table 2. From the analyses conducted, it can be seen that BDNM is significant ( $p < 0.01$ ) negatively related to EM for the FOC. This proves that the number of meetings held by the BOD is found to be of importance in overcoming EM as during those frequent meetings, the directors could improve their interaction among themselves as well as with the company's managers (Eisenhardt, 1989). However, the reverse holds true for BDATTDN during those meetings which is found to be significant ( $p < 0.05$ ) positively related to EM. Possible reason could be that the family members themselves would normally be appointed to hold posts in the BOD. Then it came as no surprise when these family members who attended those meetings would tolerate certain matters as it may involve either their own parents and siblings, or even their relatives. In such situations, the management could have the opportunity to manage the company's earnings without being detected or observed.

Table 2: Multiple Regression Results for the Family Owned Companies

DV = EM	Coefficients	t-stat	Sig.	VIF	Tolerance	
BDNM	-0.02	-3.33	0.00	*** <sup>a</sup>	0.86	1.17
BDATTND	0.27	2.38	0.02	** <sup>a</sup>	0.76	1.32
BDSIZE	0.01	1.36	0.18	* <sup>b</sup>	0.72	1.40
PROFIT	0.19	4.21	0.00	*** <sup>a</sup>	0.73	1.37
n=124 companies						
Adjusted R <sup>2</sup>						22.3%
F-Value						3.21
Durbin-Watson						1.81
Standard residual - Maximum / Minimum						2.66 / -2.28
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity						10%

Notes: \*\*\* Significant at 0.001 level; \*\* Significant at 0.05 level; \* Significant at 0.1 level; a = one-tail-test; b = two-tail-test. EM = Earnings Management measured via Discretionary Accruals based on Modified Jones; BDNM = Number of board meetings; BATTND = Directors' attendance during board meetings; BDSIZE = Size of the board of directors PROFIT = Profitability.

Next, BDSZ was found to be significant positively related to EM. This implies that the larger the board size, the higher is the chances of EM to occur. Since the family members would be appointed to hold the important roles in the organization, then again the level of diplomacy among them would ease the practice of EM by the management. Further, PROFIT was found to be significant ( $p < 0.01$ ) positively related to earnings management. Reason to this peculiar result is as per mentioned earlier.

As for the NFOC, the results are as tabulated in Table 3. From Table 3, the CG mechanisms that have significant negative relation to EM are BDINED, ACINED, ACSIZE, NONDUAL and AUD. The first three results are as per discussed earlier. As for the presence of non-duality, it could allow transparent business dealings to take place and this would definitely assist in safe-guarding the interest of the shareholders. This finding is supported by Saleh, *et al.*, 2005, who state that the presence of duality is positively related to discretionary accruals as duality enhances further the CEO's position and power. In other words, the presence of non-duality is an aid to the ailment of EM problem. This is because when there is separation of duties, then all decision made for the company's business transactions could be done in a more transparent manner.

Table 3: Multiple Regression Results for the Non-Family Owned Companies

DV = EM	Coefficients	t-stat	Sig.	VIF	Tolerance	
BDINED	-0.08	-2.79	0.01	** <sup>a</sup>	0.85	1.18
NONDUAL	-0.03	-1.48	0.14	* <sup>b</sup>	0.91	1.10
ACINED	-0.03	-1.79	0.08	*** <sup>a</sup>	0.75	1.33
BDNM	0.01	1.71	0.09	* <sup>b</sup>	0.58	1.74
ACSIZE	-0.02	-1.49	0.14	* <sup>a</sup>	0.72	1.39
OIAF	0.03	2.37	0.02	** <sup>b</sup>	0.65	1.53
AUD	-0.03	-2.34	0.02	*** <sup>a</sup>	0.72	1.38
PROFIT	0.27	14.86	0.00	*** <sup>a</sup>	0.84	1.19
n=140 companies						
Adjusted R <sup>2</sup>						65.7%
F-Value						17.67
Durbin-Watson						2.04
Standard residual - Maximum / Minimum						2.48 / -2.83
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity						78%

Notes: \*\*\* Significant at 0.001 level; \*\* Significant at 0.05 level; \* Significant at 0.1 level. EM = Earnings Management measured via Discretionary Accruals based on Modified Jones; BDINED = Board Independent non-executive director; NONDUAL = No Duality; ACINED = INED in the Audit committee; BDNM = Number of board meetings; ACSIZE = Size of the audit committee; OIAF = Outsource internal audit function; AUD = Qualified differentiated auditors; PROFIT = Profitability.

Next is concerning to the quality differentiated auditor. Since this type of auditor is able to provide a significant constraint on EM (Becker *et al.*, 1998) and income smoothing (Che-Ahmad and Mansor, 2009) for the PLCs; then it is of no surprise when the clients of non-quality differentiated auditor report relatively more discretionary accruals. As for the outsourced internal audit function (OIAF), it is found to be significant ( $p < 0.05$ ) but positively related to EM. This indicates that NFOCs prefer to appoint an in-house internal audit function so as not to lose any of their intellectual property (Glass, 2004) or to put their data privacy at stake (Klosek, 2005).

## 5. Conclusions, Limitations and Future Research

This study shows that when regression is done on the total sample companies as a whole, the board independence, AC independence, AC size, non-multiple directorship, in-house internal audit function and the company size are among the CG mechanisms that could assist in overcoming the problem of EM. However, when regression is done on the distinction of corporate ownership structures of FOC and NFOC, different CG mechanisms were found to be effective to control for the EM activities in those respective corporate ownership structures.

While, only the number of board meetings is found to be significant negatively related to EM for the FOC; more CG mechanisms seem to be effective in the NFOC. These include the board independence, AC independence, AC size, non-duality and the quality differentiated auditor. From here it can be seen that CG mechanisms seem to have more impact among the NFOC in overcoming EM. The interference by the family members in FOC could have caused the CG mechanisms to lose its impact in overcoming the EM problem.

In gist, the findings provide further evidence to the existing literature pertaining to the CG mechanisms that could assist in controlling EM, specifically from the perspective of FOC and NFOC. As for the limitations, the result obtain could not be generalized to finance based companies and other non-PLCs. Thus, for future research, study on EM and CG from the perspective of the FOC and NFOC could be carried out from the angle of the non-PLCs.

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