BOARD COMMITTEES AND EARNINGS MANAGEMENT

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Abstract

Following the international effort of strengthening corporate governance, this study investigates the impact of Corporate Governance Principles and Recommendation (GCPR 2009) on the credibility of accounting information. By investigating 138 companies listed on the Australian Stock Exchange (ASX), this study demonstrates that the independence and activities of the board and sub-committees are negatively associated with earnings management represented by the discretionary accruals. The results of this study provide useful guidelines to policy makers, practitioners and academics.

Keywords: Earnings Management; Discretionary Accruals; Corporate Governance

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1. Introduction

Previous studies have observed that earnings management is pervasive across sectors and institutions (Sun & Rath, 2009) because the choices of accounting policies are related to CEO compensation (Clinch. & Margliolo, J., (1993) and bonus plan (Gaver, Gaver & Austin, 1995). According to information asymmetry, by manipulating information disclosure (Belkaoui & Picur, 1984) and withholding types of information reported, companies can demonstrate desired performance or meet benchmark (Holland & Ramsay, 2003). Earnings management also occurs when there is Initial Public Offerings (Teoh, Wong & Rao, 1998b); CEO changes (Well, 2002); debt covenant violation (DeFond & Jiambalvo, 1994); the provision for bad debts (McNichols & Wilson, 1988); management buyouts of public stockholders (DeAngelo, 1986); and the introduction of the Australian Gold Tax (Monem, 2003).

The issues of earnings management has attracted attention of policy makers and academics following series of accounting scandals worldwide, such as Enron and WorldCom in US and HIH Insurance in Australia. Excessive earnings manipulation distorts the quality of information underlying the business performance and financial position, which may lead to financial fraud (Vineeta, 2004). To strengthen the transparency of information disclosure, to improve the credibility of financial reporting and to regain investors' confidence to the quality of business reports, regulators, policy makers and accounting standard setters have made effort to promote better corporate governance principles and practices.

Corporate governance is an internal mechanism that is intended to ensure that the interests of shareholders and managers are closely aligned, and to manage issues related to companies' operations and decision makings. Those significant governance issues currently faced by the corporations are those related to the composition and activities of the board and sub-committees. It has been widely discussed in previous studies (Chen, Kilgore et al. 2009; Akhtaruddin and Haron 2010) that the independence of the board and sub-committees contributes to the effectiveness of governance. However, as an important part to ensure the effectiveness of governance, the activities of the board and subcommittees in relation to the monitoring role are less addressed.

The objective of this study is to investigate the influence of the board and sub-committees on constraining earnings management. With effective governance in place, the managers will be more accountable by making decisions regarding the information disclosures to reflect the underlying performance of the company and by properly utilization of resources that are entrusted by shareholders. This study, therefore, examines the impact of independence of the board and sub-committees and their activities on earnings management in Australian listed companies.

By using a sample of 138 companies from the top 300 of the ASX listed companies from 2004 to 2007, this study review the corporate governance practices in Australia. The results indicate that the characteristics of corporate governance are associated with earnings management. By using the absolute level of discretionary accrual as a proxy for earnings management, this study observes that the independence and the existence of committees are significantly associated with the reduction of earnings management. The independence and the activities of audit committee, the existence of a nomination committee and corporate governance committee are negatively associated with earnings management.

The contribution of this study is three folds. First, previous research on the relationship between earnings management and corporate governance was predominantly conducted in the US and the UK (Klein, 2002; Peasnell, Pope & Yong, 2005). These findings may not be generalizable in an Australian context because of different regulatory and economic environment and development of capital market. This study provide some evidence that corporate governance characteristics, as recommended by the CGPR (2003, 2007 & 2009), are effective restricting earnings management in Australian listed companies. Second, during observation period, as ASX CGPR is not compulsory to be adopted by the Australian listed companies, there are diverse corporate governance practices among listed companies. Therefore, this study provides important findings to regulators and policy makers regarding the implementation of CGPR in practices, especially the role and activities of sub-committees on earnings management. Third, previous studies have examined the role of the board of directors and audit committee on financial reporting. However, as remuneration committee, nomination committee and corporate governance committee have impact on financial reporting indirectly by the appointment of CEO and management, decisions on CEO and senior officials' remuneration and other corporate issues, an examination of the association between corporate governance characteristics, using ASX CGPR (2003, 2007 & 2009) as benchmark, and earnings management are necessary.

This study is organized as follows. Section two provides incentives of earnings management and corporate governance practices in Australia. Section three details the hypothesis development for this study. Section four sets out the methods used to measure earnings management, the corporate governance variables and the methods for testing the hypothesis. Section five presents the analysis of the data and discussions of the results from the hypothesis testing. Section six provides the conclusions and limitations.

2. Corporate Governance and Earnings Management

The incentive of earnings management derives from principle-agent relationship, information asymmetry, managerial contracting and political costs. First, principal-agent relationship or manager-shareholder relationship occurs when agents and managers delegate to manage the resources on behalf of shareholders (Jensen & Meckling, 1976). Agency costs arise if the agent does not act in the best interest of the principal. However, opportunistic managers may transfer wealth from the shareholders to themselves in a variety of ways through earnings management without observation by shareholders. The problem of opportunistic behaviors by management raises the need to oversee day-to-day decision-making by management of the firm by the appointment of the board of directors.

Second, earnings reporting are managed by management because they can access and manage inside information. By withhold and manage inside information, managers can benefit from extracting rent from shareholders (Schipper, 1989), increasing management compensation (Holthausen, Larcker & Sloan, 1995), gaining personal benefit (Healy & Palepu, 1995), and reducing political costs (Watts & Zimmerman, 1986). More disclosure requirements increase the opportunities for shareholders and stakeholders to detect earnings management and to reduce the level of information asymmetry.

Third, contracting motivation for earnings management can exist when there are some forms of contract between the managers and other parties interested in the firm. It is suggested that the company rewards

managers according their contribution to the company and the company's economic performance and in turn managerial contracting have an impact on earnings management. According to contracting perspective, Healy & Wahlen (1999) argue that earnings management is of concern to regulators because earnings management may affect the accounting numbers by using income increasing accruals when the businesses are close to debt covenant in US.

Fourth, political costs are the costs of transferring wealth from the business to others outside of the business's normal operations. These costs can include higher taxes (Guenther, 1994), higher reporting costs or higher tariffs. Large firms are argued to be more politically visible so that this motivates the managers to engage in earnings management in order to avoid these costs according to Watts & Zimmerman (1986).

Corporate governance is significant to provide effective monitoring in order to align managers' interest with those of shareholders and to ensure the integrity of financial information. The focus of corporate governance regulatory regime is to enhance the credibility of financial information, to increase the director's ability to discharge their duties and to ensure the trustworthiness of financial information produced. Consistent with prior studies, Irene & Nikos (2005) identify that effective corporate governance is associated with higher financial disclosure quality. Crutchley, Jensen & Marshall (2007) find that firms with fewer outside directors on the audit committee are more likely to be involved in fraud. The results of the study suggest that the requirement for a majority of independent directors on the board and other committees can reduce financial fraud. Other studies also suggest that certain governance characteristics reduce the likelihood of a firm being involved in accounting scandals (Faber, 2005). Good corporate governance depends on how efficiently the board of directors fulfills their responsibilities. The board of directors is responsible to give direction for the company, to express their opinion in setting the company's objectives and to monitor the implementations of the objectives.

The ASX Corporate Governance Council develops CGPR (2003, 2007 & 2009) regarding some recommendations of corporate governance practices for Australian listed companies. CGPR aims at improving corporate performance and credibility of financial information. ASX CGPR provided guideline for the existence of sub-committees, independence of board and sub-committees, as well as committee activities which are related to financial reporting prepared by management. In particular, this study investigates the role of CEO duality, the independence of the board of directors, the existence and independence of nomination committee, the independence and activities of audit committee, and the independence of remuneration committee and corporate governance committee on earnings management.

3. Hypotheses Developments

Based on the discussions of earnings management and corporate governance, this section builds up the hypothesis to test the impact of corporate governance characteristics on earnings management. As the role of corporate governance is to monitor managers' behavior so that they act in the best interests of shareholders, it is expected that opportunistic behavior conducted by managers is constraint by good corporate governance. Thus, this study expects a negative association between earnings management and the quality of corporate governance in Australian context.

CEO duality

It is argued that the separation of roles between the CEO and the chairman of the board of directors can give the board more independence, thus reducing the influence of the CEO on the board (Jensen, 1993; Klein, 2002). Consistent with this view, ASX CGPR (2009) recommends that the roles of chairperson and CEO should not be exercised by the same individual. The chairman should be responsible to lead the board efficiently and to ensure sufficient time is committed to resolve any issues that arise during the board meetings. However, prior research has found inconsistent results. Previous studies (Wells 2002) find that by using abnormal and extraordinary items, new CEO undertakes earnings management to reduce income in the year of CEO change. Klein (2002) also suggests that the more independent the board of directors is from the influence of the CEO, the more effective is the monitoring role of corporate governance. However, the study did not provided evidence on earnings management. Allegrini and Greco (2011) find an independent chairman is negatively associated with the level of disclosure. This may due to limited supervision by the non-executive chairperson as the board itself is predominantly independent

from management. Based on the arguments, it is suggested that reduced influence by the CEO should lead to reduced earnings management because of more effective monitoring. The first hypothesis is:

H1: The separation of the roles of CEO and chairman is associated with a lower level of the earnings management.

Independence of the board of directors

It is argued that an independent board can provide a better monitoring role because they can make independent judgments aside from management influences and better monitoring should limit earnings management (Peasnell et al, 2005; Kang, Cheng & Gray, 2007). As the board of directors will response to the needs of shareholders better with higher level of independence, therefore, it is likely earnings management will be reduced (Khan, Muttakin et al. 2012). Prior research finds inconsistent results between earnings management and the independence of the board (Allegrini and Greco 2011). This could have been due to limited information available to ascertain the independence of the directors (Park & Shin, 2004). The second hypothesis is therefore.

H2: The higher the proportions of independent directors on the board of directors the lower is the level of earnings management.

Existence of the nomination committee

The ASX CGPR (2009) recommends that firms establish a nomination committee. The role of a nomination committee is to ensure that the board of directors is comprised of individuals who have the necessary skills and competencies required to sufficiently discharge their responsibilities as directors in the company. A nomination committee is an efficient mechanism for the detailed examination of the selection, appointment, and removal of directors on the board. The study (Ruigrok, Peck et al. 2006) finds that the existence and independence of the nomination committee impact on board independence. It is expected that the existence of a nomination committee can influence earnings management because a nomination committee is expected to mitigate earnings management practice by ensuring that each appointed director selected has appropriate skills, experience and expertise in order to enhance quality of financial information. The third hypothesis is thus:

H3: The existence of a nomination committee is negatively related to the level of earnings management

Independence and activities of the audit committee

ASX CGPR (2009) recommends that an audit committee consists of a majority of independent directors. Xie, Davidson & DaDalt (2003) finds no relationships between levels of audit committee independence (as measured by the percentage of independent outside directors on the audit committee) with current discretionary accruals. However, others show a negative relationship between the independence of the audit committee and earnings management (Klein, 2002; Bedard, Chtourou & Courteau, 2004; Ebrahim, 2007). The findings of study conducted by (Allegrini and Greco 2011) demonstrate that the more independent and more active of the audit committee, more responsible it is to shareholders in terms of reducing the incentives for the controlling shareholders to limit the other. In addition, the audit committee is expected to be active and to discharge their duties efficiently of verifying the conformity of financial information with the relevant accounting standard and reflecting the true performance of the company. The activity of the audit committee has been measured by the frequency of meetings of the audit committee. Thus, the fourth hypothesis is:

H4.1: the higher proportion of independent directors on the audit committee, the lower the level of earnings management

H4.2: the more frequent the meetings of the audit committee, the lower the level of earnings management

Existence and independence of the corporate governance committee

The role of a corporate governance committee is to review all matters relating to corporate governance such as the composition of the directors on the board and each subcommittee, the criteria for each

member on the committee such as the financial expertise required and the independence of the directors. The role of the corporate governance committee is similar to that of the nomination committee. However, the corporate governance committee responsibilities are specifically to monitor the company's compliance with relevant Corporate Governance principles such as the ASX CGPR (2009) Recommendations. Therefore, it is expected that the existence of a corporate governance committee could ensure that the company has a sound corporate governance structure which can improve its monitoring role and thus reduce the incidence of earnings management. It is therefore appealing to test the effectiveness of the establishment of this committee to constrain earnings management. The fifth hypothesis is:

H5.1: the existence of a corporate governance committee is associated with a lower level of earnings management.

H5.2: the higher the proportion of independent directors on the corporate governance committee, the lower the level of earnings management

Independence of the remuneration committee

ASX CGPR (2009) recommends that the remuneration committee consists of a majority of independent directors. This is expected to reduce the conflict of interest between those that set the remuneration policies and those that benefit from them. Prior evidence (Meek, Rao & Skousen, 2007) result that earning management is identified prior to options awarded to the managers in order to reduce the exercise prices of stocks. Other studies (Li and Qian 2011) investigate that outside CEO directors on the compensation committee influence the level and pay-for-performance sensitivity of CEO compensation. Therefore, it is expected that the remuneration committee can effectively constrain earnings management provided that the remuneration committee is independent from management. The sixth hypothesis is:

H6: the higher the proportion of independent directors on the remuneration committee, the lower the level of earnings management.

Some control factors have been identified as influencing the accuracy of the association between earnings management and corporate governance. Therefore, these factors are added to the earnings management model to reduce the measurement errors and thus increase the validity of inferences from the hypotheses testing. They are the size of the board and the size of the company.

Many companies report that the size of their board limits their tendency to comply with all ASX CGPR (2009) recommendations, such as having a majority of independent directors, separating the role of the chairman and that of the CEO, and establishing a nomination or a remuneration committee. Previous literature (Jensen, 1993; Allegrini & Greco, 2011; Vafeas, 2000) provides no consensus about the relationship between board size and the effective monitoring role of corporate governance. Jensen (1993) finds that with a larger board the CEO role is more important than a better control mechanism. However, a smaller board is viewed as functioning more efficiently than a larger board. Allegrini & Greco (2011) find a positive relationship between board size and the possibility of financial statement fraud. The results of Vafeas (2000) outline that market participants consider that the earnings of firms with a smaller board (minimum of five directors) are more informative. This indicates that *the larger the size of the board, the higher the level of earnings management and thus a high probability of fraudulent reporting*.

Prior research suggests that the bigger the firm, the more likely it is to use income decreasing accruals for tax purpose and to avoid political visibility (Watts & Zimmerman, 1986). Firm size also affects the structure of the board (Kent, 2002), the size of board and equity offering (Ching, Firth & Rui, 2002). *It is predicted that the larger the firm size, the higher is the level of earnings management.*

4. Research Method

4.1 Data collection

As the ASX CGPR was introduced in March 2003 and revised in 2007 and 2009, this study selects companies for the period from 2004 to 2007 financial years. It is expected that companies are increasingly adopting the ASX CGPR guidelines. It is expected to show a significant improvement in corporate

governance practice. The selection procedure follows two stages. The first stage involves the selection of the top 300 Australian firms by total market capitalization as 30th June of each financial year. In the second stage the firms in regulated industries and financial industries are excluded because regulated industries have a set of fixed accounting rates of return on their revenue and financial industries have special accounting practices that make the detection of earnings management through discretionary accruals more difficult (Bughsan, 2005). Other companies are also excluded because of the multi layered structure of corporate governance, presentation of financial statement in foreign currency and insufficient years. The final sample includes 138 firms.

This study adopts Eviews OLS regression to analysis the relationship between earnings management and corporate governance characteristics. Accounting data is manually collected for consecutive four financial years from the annual reports of the sample companies. These annual reports are available from Connect4 database and the company's website. The corporate governance characteristics are identified in the corporate governance section in the annual reports.

4.2 Measurement of earnings management and corporate governance characteristics

To determine the level of earnings management in a firm, a measure of the proportion of earnings that are not managed is needed. The use of accrual accounting provides management the opportunity to alter earnings, which makes the accrual measurement as a favored empirical indicator of earnings management (Teoh et al, 1998b, Jones, 1991). The Modified Jones Model developed by Dechow et al (1995) is used in this study to measure earnings management as shown in equation 2.

$$TACC_{it} / TA_{it-1} = \beta_{0j} (1/ TA_{it-1}) + \beta_{1j} (\Delta REV_{it} - \Delta REC_{it}) / TA_{it-1} + \beta_{2j} (PPE_{it}) / TA_{it-1} + e_{it} \quad (1)$$

Where:
$TACC_{it}$ =the total accruals (net income before extraordinary items minus cash flow from operations) in year t for the i'th firm
ΔREV= changes in net revenue from ordinary activities
ΔREC= changes in account receivables
PPE_{it} = Property, plant and equipment (PPE)
TA_{it}= Beginning of the year total assets (BEG_TA)
j = denote firm from each industry group
e_{it} = error term

$$DAC_{it} = TACC_{it}/ TA_{it-1} – [\beta_{0j} (1/ TA_{it-1}) + \beta_{1j} (\Delta REV_{it} - \Delta REC_{it}) / TA_{it-1} + \beta_{2j} (PPE_{it}) / TA_{it-1}] \quad (2)$$

DAC_{it}= discretionary accruals

The indicators that are used to measure corporate governance variables in this study are based on the ASX CGPR (2009). The disclosure rules require companies to regularly assess the independence of their directors. Thus, the measurement for independence is based on the proportion of independent directors on the board, the nomination committee, the audit committee, the corporate governance committee and the remuneration committee. The indication for CEO duality uses a dummy variable, which is given a value of one if the CEO is not also the chairman of the board of director and zero otherwise. The existence of a corporate governance committee and a nomination committee is indicated by a value of one if they exist and zero otherwise. Finally, the measurement for the activity of the audit committee is the number of meetings held during the year.

This study uses regression to examine the effect of each independent variable on earnings management. The magnitude of earnings management is represented by the discretionary accrual in an absolute term because this study does not predict the direction of earnings management (income increasing or income decreasing accruals). The hypotheses testing are described in equation 3.

$$DCA = \alpha + \beta_1 CEOD + \beta_2 INDPT_BDR + \beta_3 ENC + \beta_4 INDPT_AC + \beta_5 MTGAC + \beta_6 ECGC + \beta 7 INDPT_CGC + \beta_8 INDPT_RC + \beta_9 BSIZE + \beta_{10} LN_TA \quad (3)$$

5. Results of Analysis

This section firstly outlines the descriptive statistics for the discretionary accrual variables and corporate governance variables. Then, the section follows a description of the trend of improvement in corporate governance structure and the changes in the level of earnings management. Interpretation of the results of hypotheses testing based on the univariate and multivariate analysis are provided.

5.1 Descriptive Statistics of the dependent variable and the independent variables

Table 1 shows the descriptive statistics for the discretionary accrual variables of the sample over four years of data. It shows the total accrual, property, plant and equipment and adjusted revenue (changes in revenue from ordinary activities minus changes in account receivables) all scaled by beginning total assets. ROA is equivalent to operating revenue over beginning total asset. The descriptive statistics for ROA are given because it is included in an alternative measure of discretionary accruals.

Table 1. the descriptive statistics for the discretionary accrual variables

Variables	TACC_BEGTA	PPE_BEGTA	ADJ_REVOR_BEGTA	ROA
Mean	-0.039179	0.496857	0.142247	0.052411
Median	-0.037097	0.300177	0.072920	0.060777
Maximum	2.574519	14.74816	17.04448	302.4835
Minimum	-2.535537	2.44E-05	-12.87116	-176.0213
Std. Dev.	0.263491	1.018544	1.145596	17.15425
Skewness	2.737743	10.13741	3.853453	6.500225
Kurtosis	57.28939	126.6742	125.6692	209.8143
Jarque Bera test	67361.84	357320.3	342428.4	987646.9
Probability	0.000000	0.000000	0.000000	0.000000

PPE =gross property, plant and equipment
ADJ_REVOR =adjusted revenue from ordinary activities (changes in revenue from ordinary activities (DREVOR) minus changes in total receivables (DREC))
ROA =operating income over beginning total asset
BEGTA =beginning total asset

Table 2 and 3 show the descriptive statistics for the independent and control variables used in hypothesis testing. Table 2 shows the continuous variables (measured in ratio or interval data) and Table 3 shows the categorical variables (measured by dummy variables, value of one or zero) for different years. The results of table 2 indicate that the average proportion of independent directors on the board of directors (INDP_BDR) is close to 60% across years. The proportion of independent directors on the audit committee (INDP_AC) also changes little and is around 80%. The average frequency of audit committee meetings (MTGAC) is approximately four times in all years but shows an increase from 2004 to 2007. The proportion of independent directors on the corporate governance committee (INDP_CG) increases from 8% to 10%. The proportion of independent directors on the remuneration committee (INDP_RC) is close to 70% in all years with the lowest proportion in 2006 at 62%. The independence of the board of directors (INDP__BDR) and the independence of the remuneration committee (INDP_RC) does not show any significant improvement.

Table 2. Descriptive Statistics for continuous variables

2004						
	INDP_BDR	INDP_AC	MTGAC	INDP_CG	INDP_RC	LN_TA
Mean	0.59	0.80	3.66	0.08	0.70	19.91
Maximum	0.92	1	11	1	1	23.55
Minimum	0	0	0	0	0	15.02
Skewness	-0.4693	-1.3047	0.7015	3.1811	-0.8685	-0.5156
Kurtosis	2.4743	4.3335	4.5075	11.3963	2.5941	3.0167
2005						
Mean	0.57	0.79	3.88	0.08	0.68	20.08
Maximum	0.9	1	12	1	1	23.59
Minimum	0	0	0	0	0	15.68
Skewness	-0.3359	-1.1757	0.6001	2.9669	-0.7956	-0.4463
Kurtosis	2.2731	4.1765	5.3861	10.1128	2.4619	2.7739
2006						
Mean	0.59	0.82	3.88	0.10	0.62	20.35
Maximum	0.916667	1	9	1	1	23.64
Minimum	0	0	0	0	0	15.68
Skewness	-0.5978	-1.5812	0.1479	2.5935	-0.6180	-0.3526
Kurtosis	2.6956	5.3396	3.3379	7.9277	1.9741	2.7897
2007						
Mean	0.60	0.83	4.06	0.10	0.71	20.61
Maximum	0.9	1	12	1	1	23.68
Minimum	0	0	0	0	0	16.634
Skewness	-0.6583	-1.6481	0.8789	2.5509	-0.9721	-0.0781
Kurtosis	2.8099	5.6789	5.2591	7.7454	2.7816	2.6171
ALL						
Mean	0.59	0.81	3.87	0.09	0.68	20.23
Maximum	0.92	1	12	1	1	23.68
Minimum	0	0	0	0	0	15.02
Skewness	-0.5177	-1.4231	0.6119	2.7783	-0.8120	-0.4683
Kurtosis	2.5482	4.8249	4.7988	8.9704	2.4140	3.0900

The dummy variables used in this study are summarized in table 3. The table shows that approximately 93% of the sample companies do separate the role of CEO and the chairman (CEOD). Consistent with ASCX CGPR (2009) requirement to establish a nomination committee, the percentage of companies having a nomination committee has increased from 61% to 71%. There are an increasing number of companies who establish a corporate governance committee (ECGC) with overall mean of 9%. The companies which use big four accounting firms as their external auditor and have a bonus plan for their directors is around 88% and 89% respectively. The results of table 3 show that CEOD, ENC and ECGC have shown some improvement.

Table 3. Descriptive Statistics for dummy variables

	Year	2004	2005	2006	2007	All years
CEOD	Sum	92.70%	93.43%	92.70%	94.20%	93.26%
	N	137	137	137	138	549
ENC	Sum	60.87%	68.84%	71.01%	71.01%	67.93%
	N	138	138	138	138	552
ECGC	Sum	7.25%	7.97%	9.42%	11.59%	9.06%
	N	138	138	138	138	552

Table 4 shows the level of earnings management across four years based on all models. Overall, the mean of all models is approximately zero in all years. Table 4 indicates that the level of earnings management has fallen since 2004. Thus, the descriptive statistics provide some support for the proposition that improved corporate governance should result in a decrease in the level of earnings management.

Table 4. Descriptive Statistics of the Dependent Variable (discretionary accrual)

	Mean	Max	Min.	Std. Dev.	Obs.
2004	-0.000714	0.330959	-1.401651	0.167981	130
2005	-0.000227	1.609434	-0.332649	0.184823	127
2006	0.0000583	1.091485	-0.673634	0.152515	126
2007	-0.0000498	0.703773	-0.645582	0.1 55975	128
All	-0.000236	1.609434	-1.401651	0.165337	511

5.2 Regression results

The hypothesis testing estimates the relationship between the residual (the proxy for earnings management) in equation 3 (which is regarded as the magnitude of discretionary accruals) and the corporate governance variables and control variables. Based on results of table 5, the separation of duties between the CEO and chairman (CEOD) and independence of board of directors (INDP_BDR) is found to be significant with a positive association. This finding and its implications should be further investigated and tested. The descriptive statistics suggests that almost 93% of the companies separate the duties of CEO and chairperson. Since such a high proportion of companies separate the duties of CEO and chairman in sample companies, CEOD may not be necessarily associated with a lower level of earnings management. Moreover, it is common that companies with small board in size do not separate the duties of CEO and chairman. Thus larger firms are more likely to have larger boards and hence to have the capability to separate the roles of CEO and chairman. As firm size is normally associated with a greater earnings management, then this result may be more related to firm size than CEOD. The board should comprise independent directors with appropriate skills and expertise and who have knowledge of the business in order to effectively run the company. Thus, it is possible to argue that if the proportion of independent directors on the board is high, there could be an imbalanced structure on the board regarding skills, expertise and knowledge of business management. The positive association between the INDP_BDR and earnings management may be caused by conservative accounting practice adopted (Pope and Walker, 2005). The use of conservative accounting may understate earnings because it is not being recognized in a timely manner (Basu, 1997). The existence of a nomination committee (ENC) is found to be statistically significant negative association with earnings management. The independence of the audit committee (INDPT_AC) and activities of audit committee (MTGAC) is found to be negatively associated with the discretionary accrual. This suggests that it is important for the audit committee to be separated from management's influence in order to reduce earnings management and to verify the integrity of financial information. The independence of the remuneration committee (INDPT_RC) shows an opposite direction to the expected relationship with discretionary accrual. It may be because that the business adopts conservative accounting practices so earnings information is understated.

Table 5. Summary of result to test the hypothesis (with matching with industry)

Dependent variable	Absolute discretionary accrual (without industry)				Absolute discretionary accrual (with industry)			
Independent Variables	Coefficient	Std. Error	t-Statistic	Prob.	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.601782***	0.308875	-5.18586	0.0000	-1.049008***	0.321023	-3.267707	0.0013
CEOD	0.112012**	0.041316	2.711115	0.0074	0.085915**	0.026638	3.22532	0.0015
INDPT_BDR	0.058681**	0.027929	2.101085	0.0371	0.058392	0.083818	0.69665	0.4870
ENC	-0.080443***	0.022245	-3.61626	0.0004	-0.053196**	0.019033	-2.79487	0.0058
INDPT_AC	-0.109167***	0.017906	-6.09671	0.0000	-0.02334	0.05778	-0.403947	0.6868
MTGAC	0.001719	0.001829	0.939891	0.3486	-0.006636**	0.003213	-2.065218	0.0405

ECGC	0.102923	0.090587	1.136169	0.2575	0.102691	0.09263	1.108611	0.2692
INDPT_CG	-0.035541	0.071722	-0.49553	0.6209	-0.056016	0.063146	-0.887089	0.3763
INDPT_RC	0.061384***	0.014956	4.104361	0.0001	0.07382***	0.019604	3.765536	0.0002
BSIZE	-0.003237	0.003255	-0.99448	0.3214	-0.010333	0.007242	-1.426849	0.1555
LN_TA	0.076851***	0.012547	6.125222	0.0000	0.049107***	0.014585	3.366924	0.0009

*Significant at 10% level, **Significant at 5% level, ***Significant at 1% level

Model	A	B
R-squared	0.819649	0.834913
Adjusted R-squared	0.714357	0.735659
S.E. of regression	0.079414	0.065913
Durbin-Watson stat	2.325093	2.527034
Mean dependent var	0.085272	0.07659
S.D. dependent var	0.148588	0.1282
F-statistic	7.784545	8.411845
Prob(F-statistic)	0.0000	0.0000

6. Conclusions

This study uses discretionary accrual measures derived from the Modified Jones model as a proxy for earnings management. Using the OLS regression, it is found that certain characteristics of corporate governance can have an impact on the level of earnings management in a firm. Consistent with the ASX CGPR (2009) objective to increase the integrity of financial information and to enhance investors' confidence, it is found that the independence of audit committee, the frequency of meetings and the existence of a nomination committee are also negatively associated with earnings management in terms of the ways to measure discretionary accruals. This indicates that sub-committees and their activities play a role to ensure the quality of earnings reporting and the compliances with relevant corporate governance principles can ensure a sound system of corporate governance to oversee the financial reporting of the company.

However, in contradiction to the respective hypotheses, the independence of the board and the existence of a remuneration committee are positively associated with higher levels of earnings management. In addition, the separation of the roles of the CEO and chairman is not found to be able to constrain earnings management. This indicate that the board of directors and remuneration of CEO and senior officials have an impact on the effectiveness of corporate governance practice and business decision regarding earnings reporting may due to the adoption of conservative accounting policies (Pope and Walker, 2005). Because conservative accounting practices prefer to understate earnings, the board is related to earnings management which can reduce the likelihood of damaging the reputation of directors as compared to overstatement of earnings. In addition, another reason may be explained by the effect of firm size and political costs. Earnings management may occur provided there is an incentive to avoid political costs (Watts & Zimmerman, 1986). It is observed that the larger the firm, often the larger the board, and the higher the number of independent directors. Larger firms are associated with higher earnings management because they are more sensitive by the political influence and public media. Furthermore, it is suggested that independence of directors is not sufficient to serve the role of directors, but also the appropriate level of skills and knowledge of the business operations is critical (Bedard, et al, 2004). By having a higher number of independent directors on the board may not represent an appropriate board composition for effectively monitoring if directors don't have the required skills of business management. This finding suggests that the board of directors should comprise skillful and knowledgeable directors in order to efficiently oversee the management of the company.

There are some limitations of this study. First, earnings management is measured by discretionary accrual estimates. The difficulty to accurately separate total accruals into their discretionary and non-discretionary component in the total accrual of the Modified Jones model can lead to improper estimates

of discretionary accruals. Second, because this study only tested a few recommendations of ASX CGPR (2009), the results can be biased if other variables are omitted that can have an influence on earnings management. Third, the sample companies used in this study are selected from the top 300 ASX companies because of the availability of information. Thus, it should be acknowledged that the results may not be generalized to all Australian companies, especially smaller and private (unlisted) companies. The findings are limited to large publicly listed companies which generally depend on the market to access a large amount of capital and are mainly concerned to maintain shareholders' confidence. Fourth, it has been argued that earnings management can also be beneficial to shareholders, if it is used for signaling "good news" (Subramayam, 1996) and since good corporate governance is expected to align the interest of shareholders and managers. This effect has not been identified in this study.

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