

Corporate Governance and Earnings Management: Empirical Evidence from Mauritian Listed Companies.

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1. Corporate Governance
2. Earnings Management

Abstract : The study examines the association between corporate governance and earnings management and also investigates the impact on the behavior of earnings management in the presence of corporate governance practices along with the activities of the board and the audit committee by measuring the level of discretionary accruals. The Modified Cross Sectional Jones Model is used to measure discretionary accruals whereas data about the characteristics of audit committee and board of directors have been collected from annual reports of listed companies of Mauritius. Findings reveal that firms having lowest discretionary accruals have better audit committee characteristics, moreover it is observed that where companies have more than two meetings the committee is more likely to be composed of independent directors and their members have sound financial expertise.

Introduction:

Perhaps one of the rampant themes in the accounting profession over the last two decades has been the concern over earnings management. It can be argued that the basis of earnings management can be traced back to the principal-agent problem. It has also been seen in literature that diverse instruments have been used to attempt to align the interests of the agent with those of the principle such as the implementation of legislations and standards. However, this has recurrently been subject to bureaucratic interpretations creating opportunities for the agent to deviate from the intentions of legislators. For instance, managers have greater discretion in determining actual earnings because of the nature of accruals accounting. Likewise, Jackson and Pitman (2001) argue that accounting accruals or estimates have been a frequently used technique for achieving a desired earnings figure. While it has often been averred that managers ought to add value to firms, it has been seen that they are often driven by the opportunities of earnings management (Healy, 1999). Thus, "a need has been assessed in the result of which concept of appropriate corporate governance emerged" (Shah et al, 2009, pg 624). Therefore, the adoption of governance mechanisms is seen as a sine qua non in setting up an effective management towards the maximization of firms' value.

The objective of this paper is to examine whether corporate governance practices have an impact on earnings management. It tests the relationship between corporate governance and earnings management. It lastly demonstrates how audit committee and board of directors' characteristics relate to earnings management

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and shows whether it plays a role in restraining manipulation. The remainder of the paper is organized as follows: The second part reviews prior research on corporate governance and earnings management elaborating on the main elements of corporate governance. The third section discusses the methodology used. The fourth section presents the findings. Finally, the study concludes with a discussion of the limitation of the study, and the future research in this field is presented as well.

Literature Review:

Corporate governance has contributed immensely towards establishing rules and procedures which have reduced opportunistic management behavior, thus improving the quality of financial reporting. However, academic research has found an association between weaknesses in governance and poor financial reporting quality, earnings manipulation, financial statement fraud and weaker internal controls (Dechow et al., 2002). As a result, Levitt (2000) recommended improvement of corporate governance practices as far as financial reporting process is concerned by endorsing reforms to improve the audit committee. In addition, board of directors and management should be made more accountable (Blue Ribbon Committee 1999; Sarbanes-Oxley Act 2002) to ensure integrity of financial reports (SEC 2002, The Business Roundtable 2002). It can therefore be summarised that fraudulent reporting caused by self interest motives of managers can be alleviated by implementing good systems of governance which in turn enhance the reliability and credibility of financial statements. Several investigations have found that abnormal accruals are negatively associated with both audit committee independence and board independence (Klein, 2002). Other studies have shown that earnings manipulation is less likely in firms with more outside directors (Xie et al. (2003) and Peasnell et al. (2005)). In the next two sections, we present audit committee and board of directors' features which is expected to bring about reduced earnings management.

Role, Independence, Competence and Activity of the Audit Committee:

Defond and Jiambalvo (1991) reported that the overstatement of earnings is less likely among firms with audit committees. The four main principles of good governance that supports audit committee are independence, competence, activity and open and effective relations (Cameron, 2008).

Independence is an important aspect as this allows the audit committee to fulfill their role with more flexibility. According to Myers and Ziegenfuss (2006), independence permits them to communicate more openly with internal auditors and maintain efficiency as the committee will be able to monitor the auditors better and persuade them in preventing frauds and promoting more clarity. Decisions by audit committee members are influenced by members' power to obtain information and to use it to achieve committee objectives (Pomeranz, 1997). He further explains in his paper that executive members might themselves write the objectives or order the audit committee to present a maneuvered task to stockholders. Since executive members influence decisions of the committee, it would be appropriate to have trustworthy, literate and philanthropic members who aim at avoiding earnings management and frauds. Carcello and Neal (2000) outlined that the proportion of independent directors on the audit committee is positively related with the probability the auditor will issue a going concern report for a firm facing financial difficulties. The greater the number of independent directors on the board, fewer earnings management takes place indicating a negative association between composition of board and level of earnings management. The audit committee will achieve efficiency if they are independent and non executives should be excluded from the board to ensure good governance.

Members of audit committee ought to have sound financial knowledge in order to carry out their several important roles. Dezoort and Salterio (2001) revealed that accounting experience of audit committees help them in better understanding auditors especially during auditor-corporate management dispute. Hence, financial competence of audit committee members lowers the likelihood of earnings management.

An audit committee also needs to be active. The two important mechanisms of the committee's level of activity are the various duties it needs to perform and on the number of meetings held. Verschour (1993) and Wolziner (1995) classified activities of auditors into three: oversight of financial statements, oversight of external auditors and oversight of internal audit. In addition, Kalbers & Fogarty (1993) also found a charter desirable in an audit committee and revealed that power undoubtedly leads to effectiveness as they have the right to investigate into activities, seek any information from any employee, and look for legal and professional advice and secure interest by contribution of outside members. It can thus be sum up that the three activities outlined above, means close monitoring of financial reporting. These activities will therefore lower earnings management. Abott et al. (2000) found in their study that frequency of meetings is negatively related to the level of earnings manipulation.

The Role of Board of Directors, Board Size, Independence and Competence:

The number of directors on the board is an important factor that leads to effectiveness. Instituting a team approach, a sharing of roles, competence and skills permits the clearer definition of the choices facing the business; it also allows a better presentation to external sources of finance, customers and suppliers and it should lead to stronger development of a more open and less oppressive internal human relations structure, (Schlein, 1987; Drucker, 1992; Sparrow, 1993). Beasley (1996) finds a positive relationship between board size and the likelihood of financial statement fraud whereas Abbott et al. (2000) found no relation between the two.

The characteristics of Board independence are independent directors, the separation of the roles of chair and the chief executive officer and the presence of independent commission committee.

Beasley (1996) finds that the proportion of outside directors on the board is lower for firms experiencing financial statement fraud and Dechow et al. (2002) also revealed the same while studying governance structures. They find that firms that violate GAAP and overstate earnings are more likely to have boards with more inside directors and a CEO who serves as the board chair.

Independent directors are best able to serve as active overseers of the financial accounting process, (Klein, 2002). Given that they are financially independent of management, they have the ability to resist the pressure from firms to manipulate earnings. Outside directors have incentives to develop reputations as experts in decision control and monitoring ability, (Fama and Jensen, 1983). Independent directors are not given extra compensation for the services provided and they are free from the motive to avoid fulfilling their legal obligations. The main obligation that independent directors hold towards a firm is making sure that published statements provide a true and fair view about firms' financial position. In addition, Chtourou et al. (2001) declared that independent directors are particularly concerned with their professional reputation and the latter depends upon their abilities to control top managers and consequently they have a strong incentive to restrain managers from manipulating reported earnings.

Competence and quality of earnings are considered to be correlated and this has been proved by several studies by Beasley (1996) and Gerety and Lehn (1997). They suggested that competence of non executive directors is of great importance to the effectiveness of the board. Research by Bédard and Chi (1993) reveal that besides training, experience is important to develop superior competency. Such experience allow non executive directors to monitor the firm properly as they are already familiar with the duties they ought to perform and they should only know better on executive directors and the operations of the firm. As a result they are capable of supervising the quality of financial reporting. The latter has been evidenced by Kosnik (1987) who detected that the longer the average tenure of non executive directors, the more a company will be expected to defend aggressive takeover bids. Beasley (1996) on the other hand found that the longer tenure of non executive directors decrease the likelihood of financial fraud.

Research Methodology:

For this study a sample of 18 companies listed on the Stock Exchange was used. It excludes companies from the banking sector due to their difference in capital structure and financial reporting. The sample represents 60% of listed companies for three year period averaged from 2007 to 2009. It is assumed that earnings management occur annually and thus taking data for a too old period might obscure the association between corporate governance and earnings management as companies are considered to react to most recent figures. Financial data were obtained from the annual report of the listed companies and have been used to gather information for the analysis.

Model Adopted and Interpretation:

The Modified Jones (1991) cross sectional model (Defond and Jiambalvo 1994; Francis et al,1998; Defond, et al; 1998) is used to estimate total accruals in order to obtain its discretionary component. Using the cross sectional regression approach the total accruals is computed using the ordinary least squares on the change on net sales from previous years and on total assets which results in finding out whether the 18 companies really have discretionary accruals. Afterwards, an estimate of discretionary accruals is computed for each company whereby they are ranked according to the size of their discretionary accruals and further subdivided into three groups, namely highest positive accruals (HIGH_POS), highest negative accruals (HIGH_NEG) and lastly low discretionary accruals (both positive and negative) denoted by LOW.

Discretionary Accruals Estimation:

Discretionary accruals for each firm *i* in industry *j* are defined as residual from the regression of total accruals (the difference between cash from operations and net income), which has been adapted from Chtourou et al. (2001).

$$DAC_{ijt} = TAC_{ijt} / A_{ijt} - 1 - [\alpha_j (1/A_{ijt-1}) + \beta_{1j} (\Delta RE_{ijt} / A_{ijt-1}) + \beta_{2j} (PPE_{ijt} / A_{ijt-1})]$$

DAC_{ijt} = Discretionary accruals for firm *I* in industry *j* in year *t*;

TAC_{ijt} = total assets for firm *I* in industry *j* at end of year *t-1*

A_{ijt} = Total assets for firm *i* in industry *j* at the end of year *t-1*

(ΔRE_{ijt}) = change in net sales for firm *I* in industry *j* between year *t-1* and *t* (net sales)

PPE_{ijt} = gross property, plant and equipment for firm *I* in industry *j* (property plant and equipment (gross-total))

Where α_j , β_1 and β_2 are the industry specific estimated coefficients from the following cross sectional regression. And TAC estimated using equation below:

$$TAC_{ijt} / A_{ijt-1} = \alpha_j (1/A_{ijt-1}) + \beta_{1j} (\Delta RE_{ijt} / A_{ijt-1}) + \beta_{2j} (PPE_{ijt} / A_{ijt-1}) + e_{ijt}$$

Descriptive Corporate Governance Data:

Exhibit 1 contains data about the governance variables which has been adapted from Chtourou et al. (2001). The variable ACIND is dichotomous and stands for the independence of the audit committee and given value 1 if committee is composed solely of independent non-executive directors and otherwise coded 0. ACNMAN is a continuous variable and represents the percentage

of independent non-executive directors who are not managers in other firms. ACOPTION denotes the ratio of stock options to the sum of options held and stocks held by independent non executive members. FNEXPERT is also a dichotomous variable where value 1 is coded if at least one member has financial expertise (CFA or MBAs in financial studies) or 0 otherwise. MANDATE indicates whether audit committee is both responsible for oversight of both financial statements and external audit and if the answer is true, value 1 is assigned to it otherwise 0. MEETINGS represent the number of meetings held annually and if value is 1 it means more than 2 meetings are held annually or 0 otherwise.

BOARD SIZE will represent the number of directors on the board while BOARDIND shows the percentage of independent directors on the board. The variable CEOCHAIR represents whether the roles of chair and CEO are held by one person and if true, it is given value 1 otherwise 0. NOMCOM shows whether the nominating committee is composed in majority of non executive directors in unaffiliated firms and coded value 1 if true or else 0. NXOWN represents the cumulative percentage of shares held by non executive directors. NXTENURE symbolizes the average years of board service of independent non executive directors and NXDIRSHIP shows the average number of directorships held by independent non independent directors in unaffiliated firms.

AGENCY will have value 1 if the firm has both a bonus plan based on income and is in the highest deciles of the industry for its debt ratio otherwise it will have value 0. IPO depicts whether the company has initial public offerings; it is assigned value 1 if it did so and alternately assigned 0. BIG6 will have indicator variable with a value of 1 if the auditor is a BIG6 auditor. BLOCK shows the cumulative percentage of outstanding common shares held by blockholders holding at least 5% of the firm's shares and who are not affiliated with the management. Lastly LNSIZE represents the natural log of total assets.

Empirical Test:

To examine the several observations described above it will be best to use multivariate regressions and to examine the relation between discretionary accruals and governance characteristics by estimating the coefficient in the following regression model adapted from Chtourou et al. (2001):

$$EARNMAN = \beta_0 + \beta_1 ACIND + \beta_2 ACNMAN + \beta_3 ACOPTION + \beta_4 FNEXPERT + \beta_5 MANDATE + \beta_6 MEETINGS + \beta_7 ACIND*MEETINGS + \beta_8 BOARDSIZE + \beta_9 BOARDIND + \beta_{10} CEOCHAIR + \beta_{11} NOMCOM + \beta_{12} NXOWN + \beta_{13} NXTENURE + \beta_{14} NXDIRSHIP + \beta_{15} AGENCY + \beta_{16} IPO + \beta_{17} BIG6 + \beta_{18} BLOCK + \beta_{19} LNSIZE$$

EARNMAN is defined in three categories:

EARNMANP is an indicator variable with the value of 1 if the firm is in the HIGH_POS category and 0 if it is in the LOW category;

EARNMANN is an indicator variable with the value of 1 if the firm is in the HIGH_NEG category and 0 if it is in LOW category.

EARNMANH is an indicator variable with the value of 1 if the firm is in the HIGH_POS or HIGH_NEG categories and 0 if it is in LOW category.

These three definitions of the dependent variables allow us to

examine whether income increasing and income decreasing discretionary accruals have the same relationship with corporate governance practices or whether they are affected differently, (Chtourou et al., 2001).

Hypothesis Development:

The rationale for the hypothesis development follows from both analytical and empirical work and comes from the proposal that corporate governance helps in eliminating earnings management. The relation is determined by earnings management category for financial and governance characteristics of the sample. Lastly the relation between discretionary accruals and governance characteristics will be ascertained.

This leads to hypotheses of study stated in the following form:

H_0 : there is no significant relation between Corporate governance variable and Earnings management

H_1 : there is a correlation between the two

Data Analysis:

The first part of the analysis provides the descriptive statistics by earnings management category. The three categories of accruals are tested in the last column using the Kruskal- Wallis test for continuous variables and chi-square for dichotomous variables. The subsequent part contains empirical results obtained from logistic regression to test the relation between discretionary accruals and governance characteristics.

Exhibit 1: Summary of Key Variables for analysis

Descriptive Statistics by Earnings Management Category

Variable Name	Description
Audit committee	
Independence	
ACIND	Indicator variable with the value 1 if the committee is composed solely of independent non-executive directors
ACNMAN	Percentage of independent non-executive directors who are not managers in other firms
ACOPTION	Ratio of stock options that can be exercised in the next 60 days to the sum of options held and stocks held by independent non executive members
Competence	
FNEXPERT	Indicator variable with the value 1 if at least 1 member has financial expertise
Activity	
MANDATE	Indicator variable with the value 1 if the committee is responsible for the oversight of both financial statements and external audit
MEETINGS	Indicator variable with the value 1 if the number of committee meetings is larger than 2.
Board of directors	
BOARD SIZE	Number of directors on the board
Independence	
BOARDIND	Percentage of board members who are independent non executive directors
CEOCHAIR	Indicator variable with a value of 1 if the roles of chair and CEO are held by one person
NOMCOM	Indicator Variable with a value of 1 if the nominating committee is composed in majority of non executive directors in unaffiliated firms
Directors Incentives	
NXOWN	The cumulative percentage of shares held by non executive directors
Competence	
NXTENURE	Average years of board service of independent non executive directors
NXDIRSHIP	Average number of directorships held by independent non independent directors in unaffiliated firms
Control Variables	
Incentives	
AGENCY	Indicator variable with a value of 1 if the firm has both a bonus plan based on income and is in the highest deciles of the industry for its debt ratio
IPO	Indicator variable with a value of 1 if the firm had an IPO in the years
Other monitoring mechanisms	
BIG6	Indicator variable with a value of 1 if the auditor is a BIG6 auditor
BLOCK	Cumulative percentage of outstanding common shares held by blockholders holding at least 5% of the firm's shares and who are not affiliated with the management
Other control variables	
LNSIZE	Natural log of total assets

Exhibit 2: Descriptive Statistics by Earnings Management Category

Financial Characteristics								
Variable Name	High pos b		High Neg b		Low B		Chi Square Test	P Value
	Mean	Median	Mean	Median	Mean	Median		
SIZE	1.37	1.59	1.28	8.58	7.27	7.15		
NETINC	8.76	1.59	-5.95	1.99	3.94	1.82	10.24**	0.006
OPC	-4.12	-2.54	-7.54	-6.21	5.27	2.55	10.56**	0.005
TAC	7.62	2.56	1.13	.45	.27	.227	.274**	0.003
DAC	5.13	1.93	0.75	0.841	1.341	1.03	11.23**	0.004
Governance Characteristics								
Audit Committee								
ACIND	0.65	1	.2	0	.72	1	26.65**	.001
ACNMAN	3.47	2.67	.39	.4	.43	.41	20.72**	.004
ACOPTION	7.62	7.33	2.4	2	.51	.25	6.35**	0
FNEXPERT	.9	1	.8	1	1	1	18.7***	0
MANDATE	0	0	0	0	1	1	18.00**	0
MEETINGS	1.35	1	1	1	1	1	-	-
Board of Directors								
BOARDSIZE	.36	.25	9.6	8	.76	.84	24.02**	0.003
BOARDIND	.51	.54	.25	.25	.27	.29	33.6**	.002
CEOCHAIR	.6	1	.4	0	.67	1	.68	.712
NOMCOM	.25	.27	.28	.27	.33	.41	16.84**	.033
NXTENURE	11.6	4.25	10.4	3.25	14	5.25	28.75**	0.036
NXDIRSHIP	4.8	5	4.6	5	.97	1	20.33**	0.017
Control Variable								
AGENCY	.6	1	1	1	.33	0	4.2	.122
IPO	.7	1	.4	0	.5	.001	8.96***	.035
BIG6	.8	1	.6	1	.067	.15	4.32***	0
BLOCK	.18	.065	.24	.29	.199	.26	15.43***	.001
LNSIZE	3.51	3.65	4.42	3.25	4.97	5.03	6.002**	.008

Variable name ^a - NETINC is net income before extra ordinary items and OPC is operating cash flow taken from the cash flow statement. TAC refers to total accruals and DAC is computed from the Modified Jones Model.

^b The population of the sample is 18 and they are subdivided into categories according to their levels of discretionary accruals. HIGH_POS represent the category of 10 firms having highest positive accruals and HIGH_NEG denotes a sample of 5 firms having high negative accruals. LOW is the category of discretionary accruals closest to 0 consisting of 3 firms. It is the grouping variable.

^c Test Statistic evaluating the three groups. Continuous variables are tested using Kruskal Wallis and we test Dichotomous variables using Chi-square.

Results show that financial characteristics have significant differences between the three groups. The tests reveal that firms with high discretionary accruals have positive net income and negative operating cash flows consistent with the study of Chtourou et al. (2001). Therefore, it can be deduced that most companies usually deviate accruals simply as a means to shift or adjust the recognition of cash overtime which is consistent with the study of Scholer (2005). The tests also disclose that firms with highest discretionary accruals are smaller in terms of total assets (SIZE) than firms with relatively low discretionary accruals. On the other hand, firms with highest negative accruals have negative net income and negative cash flows from operations.

The result for ACIND ($p=0.001$) is significant that rejects the null hypothesis indicating that the presence of independent directors lead to a reduction in earnings management. Firms with low discretionary figures have more independent directors. ACNMAN represents independent non executive directors who are not managers in other firms and it can be found that low accruals firms have a higher proportion of it. FNEXPERT is significantly related to earnings management and corporate governance. Low discretionary firms have directors with financial expertise, but this also holds true for companies with high discretionary accruals as they also have at least a director with financial expertise. MANDATE ($p=0.000$) is a highly significant factor leading to reduction in earnings management confirmed by the figures for LOW accrual. MEETINGS is a weak factor and shows no relationship between earnings management and corporate governance. All Mauritian listed companies should have at least four meetings yearly as per regulations.

Figures show that there is significant difference between the three groups of accruals. Higher number of directors on the board constrains earnings management. CEOCHAIR is statistically insignificant as $p=0.712$ which is greater than the significance level of 1% indicating no relationship between earnings management and corporate governance. However, BOARDIND ($P=0.002$) reveals that greater board independence leads to low discretionary accruals. Firms with highest discretionary accruals have lower NOMCOM implying that nominating committee is composed of lower number of non executive directors in unaffiliated firms as compared to low discretionary firms. These results are in conformity with the results of Chtourou et al. (2001).

Directors with higher average board service (NXTENURE) and higher average directorships in unaffiliated firms (NXDIRSHIP) lead to lower earnings management. On the other hand, NXOWN is highest for high discretionary accruals firms and it implies that higher amount of shares held by non executive directors lead to a greater tendency of earnings management.

Control variables are all significantly different and AGENCY is insignificant. However, IPO and BLOCK do not seem to be strong indicators in this analysis as their mean and median are almost same for the three categories. BIG6 is also statistically significant and proves that it averts fraudulent financial reporting.

Multivariate Analysis :

Exhibit 3 below contains results of Logistic Regression that further demonstrates the relationship between corporate governance variables and discretionary accruals. Regression analysis is used because it makes use of predictor variable that are mostly categorical.

Audit Committee Characteristics :

A Wald test is used to test simultaneously the impact of all audit committee characteristics and it illustrates overall audit committee characteristics are statistically significant ($\chi^2 =24.5$ $df =6$ and $p=0.000$) and they relate to earnings management.

Exhibit 3 contains information about the statistical results of binary logistic regression of all governance variables. It contains the Wald chi-square statistic represented by χ^2 and p-value indicating its significance and parameter signifies the likelihood effect on the factors. The variable ACIND is negatively related to earnings management. It is significant for absolute category and influences reductions in earnings manipulations which are consistent with the results of Klein (2002) and Xie et al. (2003). ACNMAN is significant for both high discretionary and absolute discretionary accruals implying that proportions of independent directors who are not managers in other firm's impact on earnings management; compliant with the findings of Dezoort and Salterio (2001). The results of ACOPTION reveal positive relationship on high discretionary and absolute discretionary accruals. Spohr (2005) found that managers having high individual ownerships have stronger incentives to manipulate figures than institutional owners because they aim to gain more. FNEXPERT is negatively related to the three ranges of earnings management supported by Bedard et al. (2004) and Xie et al. (2003) that audit committees with financial backgrounds are better monitors of earnings management. MANDATE is negatively related to earnings management and the results are significant for all categories. Further when put to interaction (ACIND*MEETINGS), the combined effect evidences that frequent meetings of independent audit committee members helps to restrict earnings management signaling a negative relationship between earnings management.

Board of Director Composition:

A simultaneous test on directors' variables using the wald test ($\chi^2 =18.7$ $df =7$ and $p=0.045$) deduced that the characteristics are statistically significant and they are associated with the earnings management behaviour. The Pseudo R-Square values are quite

close to one which shows that variables used are indeed strong predictors.

BOARDSIZE is negatively related (-0.214, -0.126, -0.145) to earnings management and the results are statistically significant

for income decreasing and absolute accruals. This implies that larger boards are effective in monitoring earnings management.

Exhibit 3: Logistic Regressions of Earnings Management on Governance Characteristics and Control Variables

		EARNMANp			EARNMANn			EARNMANh		
		HIGH_POSvsLOW			HIGH_NEG vs LOW			HIGH vs LOW		
Variable Name	exp. Sig	Parameter	χ^2	P	Parameter	χ^2	P	Parameter	χ^2	P
INTERCEPT	None	4.546	5.23***	0	2.362	13.65**	0	3.331	15.32**	.0012
ACIND	-	.051	.368	.071	-0.225	0.087	0.11	-0.041	.321***	0
ACNMAN	-	-0.125	-2.021**	0.014	-0.0913	1.02	0.6	-1.475	3.56**	0.002
ACOPTION	+	1.216	3.124***	0	-0.984	1.20**	0.001	.258	.315	.1
FNEXPERT	-	.0206	.278	.73	-2.378	1.55**	0	.333	.258**	0
MANDATE	-	-.0709	2.065**	.0001	-0.231	1.11**	.001	-0.161	.415**	.007
MEETINGS	?	.325	.569	.999	.265	.248	.88	.521	1.98	.1
ACIND*MEETINGS	-	-.311	2.31**	.004	-.0615	.412**	.001	-.215	.54***	0
BOARDSIZE	-	-.214	1.54	.999	-.126	.879***	.017	-.145	.591**	.001
BOARDIND	-	-.547	.52**	.001	-.735	.0041**	.005	-.622	.47**	0
CEOCHAIR	+	2.633	.84**	.007	1.89	.075**	.004	2.01	.54	.066
NOMCOM	-	.844	.51	.269	.762	.074	.546	.055	.72	.082
MXOWN	-	2.16	.65	.066	-1.315	.018**	0	-.365	.154	.65
NXTENURE	-	-.251	5.06***	.0001	-.201	5.15***	0	-1.254	.154***	0
NXDIRSHIP	-	-.164	2.37**	.001	-.254	3.12	.774	-1.05	.021**	.008
AGENCY		.231	.26**	.001	.189	.211	.99	.157	.321	1
IPO		.194	5.21**	.001	.284	.145**	.001	.166	.117**	.005
BIG6		.186	.002	.072	.3772	.19	.084	.297	.155	.087
BLOCK		-5.369	2.15**	.005	-3.68	2.251**	.001	-2.89	1.01**	.004
LNSIZE		-.325	2.97	.252	-.243	.19	.1	.714	1.56	.004
Pseudo R2			57%		54%			51%		
Model χ^2			78.02		63.07			75.1		

^a EARNMANP is an indicator variable with the value of 1 if the firm is in the HIGH_POS category and 0 if it is in the LOW category; EARNMANN is an indicator variable with the value of 1 if the firm is in the HIGH_NEG category and 0 if it is in LOW category and EARNMANH is an indicator variable with the value of 1 if the firm is in the HIGH_POS or HIGH_NEG categories and 0 if it is in LOW category.

^b Significance levels: ** -5% and ***- 1%

consistent with the findings of Chtourou et al. (2001) suggesting

that larger boards have more non executives to take better decisions and limit earnings management. BOARDIND is negatively related to the three categories of earnings management (-0.547, -0.735, -0.622). The results are statistically significant for the three categories implying a negative relationship on earnings manipulations. Klein (2003) favoured that more director independence will lead to more transparent and more reliable financial reports. Further the variable CEOCHAIR specifies a positive (2.633, 1.89 and 2.01 respectively)

relationship on earnings management. This refers to a situation of duality whereby same person occupies both positions of CEO and chairman of the board at the same time. Consistently the results reveal that duality of CEO roles' lead to earnings management as they are positively related. Thus, CEOs may influence high discretionary accruals and later reverse figures to show low accruals to meet a particular target.

NXOWN is statistically insignificant for income increasing accruals and absolute discretionary accruals. However a positive relationship (+2.16) exists and directors holding higher percentage of shares may maximise their own benefit to earn high dividends. Nevertheless, a negative significant relationship is found for income decreasing discretionary accruals (-1.315) which may presume that directors holding less shares in a company tend to report more realistic figures. NXTENURE demonstrates a negative significant relationship (-0.251, -0.201 and -0.154) illustrating that experienced directors are good monitors of earnings management. NXDIRSHIP is negatively related to earnings management and the results are significant for income increasing and absolute discretionary accruals. Chtourou et al. (2001) favours that directors who served other companies are in a better position to recognise competencies also provide better advice on performance.

Control Variables:

AGENCY is significant for income increasing accruals only and the result is positive (0.231); Healy (1985) declared that managers' accrual policies are connected to the income reporting incentives in their bonus contracts by pushing up accruals or debt figures. The results also portray that IPO is significantly related to earnings management. Perry and William (1994) and Woody (1997) have proved that income decreasing earnings management exists before management buyouts. "Big 6 accounting firms are widely viewed as producing higher quality audits than non-Big 6 firms", (Carcello et al., 2005) but result is insignificant. BLOCK is negatively significant for the three categories and seems to lead to reduction in earnings management especially for income increasing accruals and absolute category. The results for LNSIZE suggest no significant relationship for any of the categories of earnings management.

Conclusion:

The result from logistic regressions provides sufficient evidence that good governance practices are associated with less earnings management. It has been found that audit committee is a strong feature that leads to reduction in the level of earnings management. The greater the number of independent directors on the audit committee board has a negative relation on earnings management helps restraining earnings management. This study supports that ratio of stock options held by independent non executive directors have a positive effect on earnings management. Moreover, greater board sizes leads to a better control and take better decisions. Greater board independence help directors to manage companies better and the results are negatively significant. However, in the case of executives being a chairman and a CEO at the same time has proved that there are

manipulations and this is a main factor that leads to earnings management. One solution to companies already having corporate governance will be to adopt a rating system which serves as an investment management tool. According to Brown (2002), such a system serves in favor of the interests of financial stakeholders. This system assesses governance practices through annual reports, internal governance filings, public and regulatory filings and based on these; companies are given a rating. Investors will be able to know if corporate governance is weak or solid before investing. On the other hand, shareholders may influence directors and managers to strengthen the attributes of corporate governance.

One limitation of the study is that governing body of a company includes not only the board of directors and its appointed committees, but also relevant activities of the appointed external auditor. It is an important monitoring factor and is selected by the governing body. Very little focus has been placed on it. Control variables included in this study consist of five factors but there may be other elements that might have not been identified causing a limitation. Yet another limitation is that firms may not manage earnings only using discretions in accruals, there are other factors also illegal contracting and insider trading, whereby additional research in this area is called for.

References:

- Abbott, L.J, Park Y. and Parker S., 2000. The Effects of Audit Committee Activity and Independence on Corporate Fraud. *Managerial Finance*, Vol. 26, pp. 55-67.
- Beasley, M.S. 1996. An Empirical Analysis of the Relation between the Board of Director Composition and Financial Statement Fraud. *The Accounting Review*, pp.443-466.
- Bedard, J. and Chi, M.T.H. 1993. Expertise in Auditing. *Journal of Practice and Theory*, Vol.12, pp. 21-45.
- Bedard, J. and Johnstone, K. 2004. Earnings manipulation risk, corporate governance risk, and auditors' planning and pricing decisions. *The Accounting Review*, pp.277-304.
- Blue Ribbon Committee. 1999. Report and Recommendations of the Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees. New York: New York Stock Exchange and National Association of Securities Dealers.
- Brown, M. 2002. The ratings game: corporate governance ratings and why you should care? Available from: http://www.globalcorporategovernance.com/n_america/080_093.htm
- Cameron, D. 2008. Speech to Conference. *The Sunday Times*. London. Available from: <http://www.timesonline.co.uk/tol/news/politics/article4862103>.
- Carcello, J. and Neal, T.L. 2000. Audit Committee Composition and Auditor Reporting. *The Accounting Review*, pp.459-468.
- Carcello J., Hermanson, D., Raghunandan. 2005. Factors with U.S. Public Companies' Investment in Internal Auditing. *Accounting Horizons*, Vol.19 No.2, pp. 69-84.
- Chtourou, S., Bedard, J. and Courteau, L. (2001). Corporate Governance and Earnings Management. Working paper, available at: <http://ssrn.com/abstract=275053>
- Dechow, P. and Dichev, I., (2002). The quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review*, Vol. 77, pp.

DeFond, M.L. and J. Jiambalvo. 1991. Incidence and Circumstances of Accounting Errors. *The Accounting Review*, Vol. 17, pp.643-655.

DeFond, M. L. and Jiambalvo, J., 1994. Debt covenant violation and the manipulation of accruals. *Journal of Accounting and Economics*, Vol.17, pp.145-176.

DeFond, M.L. and Subramanyam.1998. Auditor Changes and Discretionary Accruals. *Journal of Accounting & Economics*, Vol.25, pp.35-67.

Dezoort, F.T., and Salterio, S. 2001. The Effects of Corporate Experience and Financial Reporting and Audit Knowledge of Audit Committee Members' Judgments. *Journal of Practice and Theory*, pp31-47.

Drucker, P. 1992. *The Practice of Management*. Butterworth-Heinman, London.

Fama, E.F., and Jensen, M.C. 1983. Separation of Ownership and Control. *Journal of Law and Economics*, Vol.26, pp.301-325.

Francis, J.R., Maydew, E.L. and Sparks, H.C. 1998. The Role of Big 6 Auditors in the Credible Reporting of Accruals. *Journal of Practice & Theory* Vol.18 No.2, pp.17-34.

Gerety, M. and Lehn, K. 1997. The Causes and Consequences of Accounting Fraud. *Managerial and Decision Economics*, Vol.18, pp587-589.

Healy, P.1985. The Effect of Bonus Schemes on Accounting Decisions. *Journal of Accounting and Economics*, Vol. 7 No.3, pp.85-107.

Healy, P. M. and Wahlen, J. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons*, Vol.13 No.4, pp.365-383.

Jackson, S. B. and M. K. Pitman. 2001. Auditors and Earnings Management. *The CPA Journal*, Vol. 7 No.1, pp.38-44.

Kalbers, L.P. and Fogarty, T.J. 1993. Audit Committee Effectiveness: An Empirical Investigation of the Contribution of Power. *Journal of Practice and Theory*, Vol.12, pp.24-49.

Klein, A., 2002. Audit Committee, Board of Director Characteristics and Earnings Management. *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 375-400.

Klein, A., 2003. Likely effects of the Stock Exchange Governance Proposals and Sarbanes Oxley on Corporate Boards and Financial Reporting. *Accounting Horizons*, Vol. 17 No.4, pp 343-355.

Kosnik, R. D. 1987. Greenmail: A study of Board Performance in Corporate Governance. *Administrative Science Quarterly*, Vol.32, pp. 163-185.

Levitt, A. 2000. Renewing the Covenant with Investors. Speech at New York University Center for Law and Business. Available from:

<http://www.sec.gov/news/speeches/spch370.htm>.

Myers, M.P. and Ziegenfuss, D.E., 2006. Audit Committee Pre-Enron Efforts to Increase the Effectiveness of Corporate Governance. *Corporate Governance*, Vol. 6 No.1, pp. 49-63.

Peasnell, K., Pope, P. and Young, S. 2005. Board Monitoring and Earnings Management: Do Outside Directors Influence Abnormal Accruals? *Journal of Business Finance and Accounting*, Vol. 32, pp. 1311-1346.

Perry, S. and Williams T. (1994), Earnings Management Preceding Management Buyout Offers. *Journal of Accounting and Economics*, Vol.18 No.2, pp. 157-79.

Pomeranz, F., 1997. Audit Committees: Where Do We Go From Here? *Managerial Auditing Journal*, Vol. 12 No.6, pp. 281-284.

Sarbanes, P., and M. Oxley. 2002. *Sarbanes-Oxley Act of 2002*. Washington, DC : U.S. Congress

Schein, E.H. 1987. *Process Consultation*. Addison Wesley Reading: New York, NY, Vol.2.

Scholer, F., 2005. Earnings Management to Avoid Earnings Decreases and Losses. *Financial Reporting Research Group Working Papers*. Available at <Http://www.hha.dk>.

Securities and Exchange Commission. 2002. Pitt Seeks Review of Corporate Governance, Conduct Codes. Washington: Press release.

Shah, A., S.Z., Butt, A.S., Hassan, A., 2009. Corporate Governance and Earnings Management: An Empirical Evidence from Pakistani Listed Companies. *European Journal of Scientific Research*, Vol. 26 No.4, pp. 624-638.

Sparrow, O. 1993. *Management Options: Identifying Choices for Medium-Sized Enterprises*, Shell UK Ltd, London.

Spohr, J., 2005. *Essays on earnings management*. Publication of Swedish school of Economics and Business Administration, Helsingfors.

The Business Roundtable. 2002. *Principles of Corporate Governance*. Washington, D.C. Available from: <http://www.brt.org>.

Verschoor, C.C. 1993. Benchmarking the Audit Committee. *Journal of Accountancy*, Vol.176.

Wolnizer, P.W. 1995. Are Audit Committees Red Herrings? *Abacus*, Vol.31, pp.45-66.

Woody, W.Y. 1997. Management Buyouts and Earnings Management. *Journal of Accounting, Auditing and Finance*, Vol.12 No.2, pp. 53-67.

Xie, B., Davidson, W. N., and Dadalt, P. J. (2003), Earnings management and corporate governance: The roles of the board and the audit committee. *Journal of Corporate Finance*, Vol. 9, pp. 295-316.