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Exploring the relationship between Earnings Management and Corporate Governance characteristics in the Indian context

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Working Paper

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Introduction

Earnings management in general should be undesirable as the tradeoffs are expensive for the owners in the long run. Indian companies characterized with relatively higher promoter shareholding and with dominance of family owned businesses should essentially be subscribing to the view that discretionary earnings management would be detrimental to the owners. However, depending upon market efficiency, the role of managerial discretionary accounting choices to signal better information may be argued for a certain amount of earnings management passing through the board's scanner in Indian firms as shown by the results in this study.

Corporate governance is a system of structures and processes to direct and control the functions of an organization by setting up rules, procedures and formats for managing decisions within an organization. It specifies the distribution of rights and responsibilities among company's stakeholders (including shareowners, directors, and managers) and articulates the rules and procedures for making decisions on corporate affairs. It thus provides the structure for defining, implementing and monitoring a company's goals and objectives and ensuring accountability to appropriate stakeholders. As we observe in several other facets of corporate life, corporate governance practices should not follow the one – size –fits – all principle. Practical examples in real life scenarios are signal enough to indicate the need for customizing these corporate governance norms for a country if not for an industry or a firm as a whole. The Maruti Suzuki's recent handling of the dissenting employee union members by doling out considerable severance packages to them did not go too well with its institutional investors¹ nor was it readily acceptable from good corporate governance disclosure norms point of view. Few companies if at all get the shareholders brunt for not so appropriate corporate board decisions in India, exception of course being the director's resolution against Maytas acquisition by Satyam. There the implications were severe from shareholder's wealth point of view, necessitating a near collapse of Satyam's ADRs value.

Corporate organizational form has its own complications with diverse stakeholder groups to take care of. Though its multiplicity speaks for its e

required to bring in harmony between disparate & conflicting interests groups. Relative importance attributed to the particular stakeholder group at times influences the governance systems within firms and countries, as the widely accepted definition of corporate governance refers to it as the set of control mechanisms to ensure that the investors get their required return on investment (Shleifer & Vishny 1997). We have people disagreeing with the said emphasis on 'providers of capital' & their 'interests' as despite the corporate form being organizationally efficient, their governance gained attention following the spate of corporate frauds. Corporate governance issue widely debated in the developed market economies needs to be discussed in a different vein in the Indian context. India for example did not share the set of factors responsible for the Asian crisis, which were largely macroeconomic and related to bank failure due to unprecedented and unchecked growth. Similarly structural characteristics in the Indian corporate sector are quite different from that of US and UK leading to a different set of corporate governance governance issues here.

One traditional method for classifying governance patterns has been the 'insider' vs. 'outsider' regime, with the outsider system being characterized by dispersed shareholding and high emphasis on protection of minority shareholder interests. This is similar to the 'market' based system with increasing reliance on the capital market for funds. They have greater disclosure and transparency norms for the benefit of the minority shareholders, with more pronounced and comprehensive regulatory frameworks for these 'market based' corporate systems. However the dispersed shareholding creates lesser incentives for the owners to monitor management except perhaps as an effective capital market tool for offloading these shares in case they are not satisfied and want to discipline the errant management.

The 'insider' based regime is closely related to the primarily bank financed systems, having smaller number of dominant shareholders closely monitoring the management with greater incentives to monitor and discipline. The regulatory norms are generally more tolerant towards the concerted group of owners. The principal agent problem characterizing the 'outsider' or 'market based' systems is thus not so dominant in the 'insider' or 'bank based' system. Thus while the anglo saxon countries like US and U K. have the 'outsider' or 'market based' system, Germany, Japan have the 'insider' or the 'bank based' system. India typically has a combination of the two systems with considerable concentrated stock ownership as compared to the 'market based' or 'outsider' system and dominance of family owned and managed firms. However, bank

is not the only source of finance with a significant number of them being government owned and controlled with proliferation of institutional investors gaining importance as a class. Rather than comparing the two models for superiority of one over the other, emphasis should be laid over the context specific attributes needed to be incorporated which would help them adapt to one system over the other. Moreover the classic agency problem between diversified owner and manager (referred to as Agency problem type I – Billalonga & Raphel, 2006) is kind of overshadowed by the conflict of interest between the controlling dominant shareholder and the minority shareholders (Agency problem type II), as the dominant shareholder has incentives² to monitor the manager.

With time the share of promoter shareholding has not really come down. The average promoter shareholding in most of the firms in India was as high as 48.1% in around 2002 (Topalova 2004). While in this study it average to about 50.31% in the sample Indian firms. Weak shareholder and creditor rights protection are primarily the reasons we have dominant promoter shareholding and control by a selected few. Weak property rights are primarily the reasons for concentrated shareholding and family control over businesses thereby reducing transaction costs and

planning and control of the financial reporting system to meet the management objectives of meeting analysts' expectations, maintaining the economic growth trajectory or arriving at the predetermined target income for their incentive pay (Giroux, 2004). The issue of Earnings management has been a matter of concern to academicians, regulators and practitioners alike. However, the way the issue has been dealt by them varies. Academicians look for patterns and trends among large samples using mathematical analysis whereas, managers and regulators look for the same on a case to case basis (Dechow & Skinner, 2000). Would a change in accounting policies by eliminating managerial discretion to arrest earnings management opportunities be an optimal solution from good corporate governance point of view? This would rather restrict an avenue for the managers to differentiate themselves for better incentives linked to the earnings of the firm. Earnings are one of the several signals managers liberally make use of while taking their decisions in the organization.

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Earnings management being self interested behavior ranges from manipulation to opportunism, where opportunism is 'self interest with guile' (Giroux 2004). This is perpetrated through the popular four avenues undertaken by management as laid out by Healy and Wfo,a5erlWf8.00out

standards offer. The dividing line between earnings adjustment and fraud is one of intention and is quite subjective. Among the list of incentives for managing earnings to drive management as given above, 'signaling or concealing private information' (Demski, 1998), seems a lot more convincing, so is the benefit of making the CEO look good to the stakeholders for meetings analysts expectations (Evans & Sridhar, 1996). This argument goes well with the age old agency problem of managerial compensation contracts and performance linked bonuses leading to opportunistic earnings management by the managers at the expense of owners (Jenson & Meckling, 1976).

However, as pointed out earlier, the Indian corporate sector with majority family owned and controlled firms, presents a case for type II agency problem and hence would make an interesting context to explore with relatively better matching of the cash flow rights of the dominant shareholder with the voting rights. More so as, of late corporate governance discussions have gained prominence in India again, with the confession made under the Satyam fraud necessitating review of our corporate governance standards and policies. The scandal fortunately did not have a percolating impact on the Indian corporate sector. The Maruti Suzuki episode, the Wipro employee embezzlement case^{7 confics. More istic eainitia eardevr m9(sTJ-relw-19.h)1Am}

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Minority shareholders interests could be protected with better corporate governance features – Big Four audit firms as external auditors or boards with greater percentage of independent directors, to ensure checks against expropriation of minority shareholder's interests by the dominant shareholders (Klapper & Love, 2004). The rationale for the study is provided by considerable earnings management observed across a cross-section of Indian firms across the period 2006-2011 using Benford's law (1938). The results are statistically significant suggesting a need for analyzing the association between various corporate governance characteristics and earnings management more closely. Thus we have reasons to believe that better corporate governance firms would have relatively lesser incentives for earnings management due to lower agency problems of conflict of interest between the agent and the principal, primarily the dominant and the minority shareholders in the Indian context (Agency problem type II).

Earnings Management in Indian firms

A study based on modeling manager-owner relationship over time comes up with an interesting finding. The rationale is built on relating earnings management to desire for meeting earnings expectations but failure to see the complete picture⁵. This myopic behavior termed as 'bounded rationality' is reason for several of these corporate governance scandals wherein the managers manage their earnings oblivious to the long term implications on the firm. Constant pressure to meet analyst forecasts is a definite causal factor⁶ and earnings consistently meeting analysts' benchmarks should raise eyebrows for the corporate governance committees comprising of auditors and other stakeholders. However, giving up on earnings guidances is not the solution as literature shows that firms which have done so were indeed missing the benchmarks in more quarters than one (Chen, Matsumoto & Rajgopal 2010). As a precursor to building up a rationale for a need to examine earnings management behavior of Indian firms, we have applied Benford's Law to test for unusual patterns in earnings numbers for our sample of 2315 firms taken from the CMIE Prowess database over the period 2006-2011 (Carlsaw 1988, Thomas 1989). The test basically looks for more number of zeroes and lesser number of nines⁷ than those predicted by probability for the second most digit in the repo

said managerial behaviors essentially can be mapped to the same earnings management incentives as discussed above (Healy & Wahlen 1999, McNichols 2000).

The observed frequencies of the second digit needs to be compared with the predicted frequency using Benford's law (1938) as each of the ten digits are not equally likely to occur in the second place. Most likely to occur are the zeroes and least likely are the nines, with other numbers falling in between. The variable tested for is positive profit after tax (pospat)⁸ totaling some 8026 firm observations over the sample period.

The null hypothesis for the same being:

H₀: The observed distribution of the digits occurring in the second place for the variable (pospat) under study are in sync with the predicted distribution.

The alternate (H_{A)}

Table 2

Digit distribution for pospat (2nd digit)

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.) 1	14. 14.	238 / 11.339 (-0.101 / 0.792)
	1 - 261 - 160.	1947 - 10,885 (- 6,876) - 6 1322
and Maria and an Albert and and the	$\frac{1}{1} = \frac{1}{1} $	$(P_{i}, P_{i}) = (P_{i}, P_{i}) = (P_{i}) = (P$
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$e_{1} = e_{1}^{2} e_{2} e_{2} = \left[- \left(e_{1}^{2} \left(0 + 1 \right) \right) \right]$	ie.	Construction of the second second
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	$\sqrt{\frac{1}{2}}$	

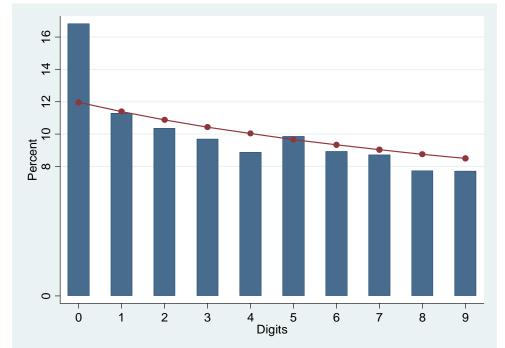


Table above shows the distribution of the digits 0 - 9 for Positive Profit after tax (pospat) for 8026 firm observations over 2006-2011 from the Prowess database of CMIE. The distribution shows that the digit '0' is over represented and the digit '9' is underrepresented and the difference between predicted (as per Benford law) and observed percentages for both are statistically significant.

To check for overall bias in the variable pospat, a chi square test was done for all the nine digits together which is significant.

Table 3

Number of obs	8026		
N of outcomes	10		
Chi2 df	9		
Goodness of fit	Coef.	P value	
Pearson's X2	192.6522	0	
Log likelihood ratio	175.9777	0	

The result in general implies some adjustment and rounding up of the earnings number by the concerned management, in general thus laying the groundwork for a more detailed study required in the wake of increasing positive sentiments for good corporate governance firms in India⁹.

Literature Review & Hypothesis development

Earnings Management

Earnings Management as a managerial incentive has been amply discussed in literature. Authors have discussed various motives ranging from '..to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend upon reported accounting income numbers' (Healy & Wahlen, 1999) managing performance bonuses (Matsunga & Park, 2001) to capital market expectations (Bartov et al., 2002). Irrespective of the motive, the issue with earnings management is that it is not directly measureable. Thus proxies used are aggregate abnormal or discretionary accruals. Though accruals primarily are supposed to overcome problems in measuring firm performance by bridging the gap between earnings and cash flows (Dechow, 1994). However the discretionary accounting choices with managers¹⁰ might be geared towards opportunistic earnings management rather than decreasing information asymmetry for better signaling about financial performance of firms. The market efficiency in general is assumed to take care of these

⁹ FIIs

¹⁰ For example Depreciation, R&D expenses, provisions & reserves.

anomalies with adequate discounting of firms indulging in the said behavior. But the fact remains that earnings manipulations do exist and in turn influence the markets. The Jones (1991) model and modified Jones model are widely used for measuring discretionary accounting accruals, despite its limitations.

Corporate Governance

The role of corporate governance in curbing earnings management, especially in the developing economy context of India has been justifiably argued for. The corporate governance norms for the various sub committees of the board, delegated with the task of monitoring the management as shareholder representatives ensures adequate compliance with the disclosure and financial reporting standards and practices (Zahra and Pearce, 1989). Apart from ensuring alignment of the interests of the agents with the principal, adequate corporate governance practices enhance the credibility of the reported financial statements in compliance to the accounting standards and the regulations (Watts & Zimmerman, 1986). Thus we have a set of corporate governance attributes related to the subcommittees of the board to explore for their association with earnings management in reducing the perennial agency problem in India through safeguarding the interests of the minority shareholders.

In general, we hypothesize that our sample firms with relatively higher levels of corporate governance structures have lower earnings management.

H₁: Lower earnings management proxies (Discretionary accruals) are associated with higher/better levels of corporate governance attributes.

Independence of the Board of Directors

The role of board of directors as effective monitoring mechanism for management is dependent upon them being non executive and independent (Beasley, 1996). Outsider dominated boards in terms of percentage of independent directors enhances the reputation of the firm as following good corporate governance improving the reliability of its financial disclosures. While there are studies arguing on the contrary with evils of excess policing (Baysinger & Butler,1985) and lack of relevant expertise (Patton and Baker, 1987). These shortcomings can be taken care of by choosing efficient board members. We have conflicting results on the association between board independence and earnings management, with studies by Beasley (1996), Klein (2002) and

monitoring. Contrary to this view Rechnar & Dalton, (1991) argue for role duality as it would provide better incentives by linking CEO pay with firm performance. Klein (2002) shows that role duality leads to unchecked powers and finds significant positive association with earnings management. A number of studies report no significant relationship (Davidson et al 2005. Cornett et al. 2006). In our sample firms while doing the factor analysis, the variable CEO chair was not loaded significantly (less of a positive coefficient) to be chosen as the significant explanatory variable. This suggests that in our sample of firms segregating the role of the Chairman from the CEO does not significantly contribute towards more effective monitoring and hence lesser earnings management.

Promoter shareholding / Block Shareholding

Average promoter shareholding in

can be hypothesized that institutional investors (domestic & foreign) effective oversight would have a negative impact on earnings management activities of the agents (Chung et al. 2002, Bhojraj & Sengupta, 2003). Probably significant institutional shareholding may create the necessary monitoring incentives to dissuade the managers from focusing on quarterly analysts' expectations rather than long term growth.

H₆: There is significant negative association between earnings management and percentage of institutional shareholding in a firm.

Big Three/Four as an auditor

Existence of an audit committee facilitates the board's job of ensuring financial reporting credibility by delegating it to a subcommittee of directors with certain minimum financial expertise. However the presence of one of the top three/four reputed audit firm as an auditor signals better monitoring mechanism as far as financial disclosures are concerned thereby curbing earnings management behavior (Xie et al. 2003, Bedard et al. 2004, Jaggi & Leung 2007). There have been studies reporting no significant to unusual positive relationship too. Thus it can be hypothesized that:

H₇: There is a significant negative association between earnings management and presence of Big Three/Four as an auditor in the firm.

Research Design

Sample & Data

Our initial sample is drawn from the population of 2697 listed firms in BSE A and B groups as given in the CMIE Prowess database. From this we deleted Banking and Financial services firms¹¹ (NIC code 64), reducing the sample to 2351 firms. It is difficult to compute discretionary accruals measures for these firms. We further removed 36 firms due to non availability of market capitalization data for the year 2011. This gave us the benefit of ensuring that the sample firms had traded in the last financial year, which increases the probability of data availability for the

¹¹ These companies in the banking and finance sector are governed by different set of regulations, with their working capital structure requirements being different (Kein 2002).

financial and the corporate governance variables. This gave us a final sample of 2315 firms, though the number of observations (firm years) used in the regressions are 9920 as firms which do not have complete information on some of the variables are also removed. Thus all inferences in the study are limited by the given time period and sample firms.

Data related to board of directors characteristics are picked up from the corporate governance report disclosed as a part of the annual report by companies. All other financial and corporate governance variables are collected from Prowess, including the earnings, working capital, cash flow data for computing the abnormal accruals. The final numbers of observations were reduced primarily because we use modified Jones model to estimate the discretionary accruals for each sample firm. The model's parameters are estimated by industry and we require each firm-year to have at least 3 observations with the same two-digit NIC code.

Earnings Management – Dependent variable measures

The use of accruals adjustment to proxy for earnings management has been widely used in literature as it is less discernible than say a change in an accounting method which needs to be adequately disclosed and justified. We start with using three variables to proxy for Earnings management based on existing literature (Dechow 1995). These are total absolute accruals (tacc_abs), total absolute accruals adjusted for size measured by average total assets (tacc_rel) and Discretionary accruals (abs_da) using the modified Jones model. Total accruals have been divided into discretionary and non discretionary. The non discretionary accruals reflect the underlying economic performance of the firm and are not influenced by managerial discretion with regard to say amount of receivables. Discretionary accruals are the abnormal part of accruals unexplained by change in revenue net of change in receivables and gross Property Plant & Equipment (PPE). These are scaled by average total assets to reduce heteroscedasticity problems.

 $TA_t - Non DAC_t = DAC_t$

 $TA_t = \hat{u}$

Variable definitions are as follows:

Results and Analyses

Descriptives statistics for the variables used in the study are given in the table below. The mean and median statistics for discretionary accruals proxy reveal both income increasing and income decreasing earnings management in the sample firms¹², which is taken care of by absolute discretionary accruals showing a median value of 0.13 and a range of 67.69. The wide variation in the variable firm size measured as average total assets (avgta) suggests that one should control for firm size and check for the said bias of large vs. small firms through interaction terms in the regression equations. On an average sample firms have 7 directors on board (size), with 50% of them being independent (ind), with a median average of 3 directors. On an average 75% of board meeting were attended by the directors (att). Promoter shareholding (pro_sh) median value of 50% shows the contextual concentrated ownership issue being a determining factor for examining the association with regard to the nature of promoters' shareholding being primarily indian or foreign and its impact on the associaton between earnings management and corporate governance attributes. Institutional shareholding –domestic and foreign in sample firms show an average 8.69%. Audit quality proxied by the presence of one of the big three auditors is measured as a (0,1) dummy variable showing that roughly 15% of the sample firms engage the services of the big three audit firms as their auditors, implying thereby that not all big firms in India engage the big three auditors. Standard deviations for most of the corporate governance attributes are low, signaling probably a kind of standardized adherence to similar norms of good corporate governance among firms in India.

Table 5

DescriptiveStatistics						
Variable	Ν	mean	Median	min	max	Sd
size	13848	7.61	7.00	1.00	27.00	2.79
ind	13848	0.45	0.50	0.00	1.00	0.23
ind_num	13848	3.46	3.00	0.00	16.00	2.10
meet_num	13848	4.65	4.25	0.00	31.00	2.82
meet_max	13848	6.35	6.00	0.00	55.00	3.82
att	12790	0.74	0.75	0.11	1.00	0.15
chp	13848	0.04	0.00	0.00	6.14	0.26
dir	13848	2.66	2.00	0.00	31.36	2.61

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ceo_chair	13848	0.01	0.00	0.00	1.00	0.08
pro_sh	13166	50.31	51.12	0.00	99.59	19.02
indpro_sh	13166	42.12	44.12	0.00	99.59	22.35
forpro_sh	13166	6.05	0.00	0.00	94.87	16.73
forpro_num	13166	0.20	0.00	0.00	1.00	0.40
inst	13166	8.69	2.02	0.00	99.97	14.08
inst_for	13166	3.45	0.00	0.00	74.18	7.24
inst_dom	13166	5.24	0.78	0.01	99.97	10.84
forinstpro_num	13166	0.47	0.00	0.00	1.00	0.50
bigthree	13800	0.15	0.00	0.00	1.00	0.36
bigfour	13800	0.17	0.00	0.00	1.00	0.37
block5_sh	13174	7.66	0.00	0.00	134.44	12.78
block5_num	13174	0.81	0.00	0.00	13.00	1.24
block10_sh	13166	3.10	0.00	0.00	123.60	8.71
block10_num	13166	0.20	0.00	0.00	5.00	0.52
avgta	12248	13319.32	1472.33	0.15	2680749.00	75417.76
tacc_abs	12349	326.58	4.25	167317.90	235640.70	5968.04
tacc_rel	12210	0.06	0.01	126.52	176.78	3.49
nondisc_acc	11719	0.01	0.00	31.62	49.19	1.22
disc_acc	11712	0.00	0.01	67.69	64.92	2.02
abs_da	11712	0.46	0.13	0.00	67.69	1.97

Quartiles Analyzed

Firm size has been an important influencing variable in literature (Becker et al., 1998); thus we use firm size measured as average total assets and segregate the sample into quartiles. We analyzed the means of all the variables within these quartiles with the smallest firm being in Quartile 1 and the biggest ones in Quartile 4. The general observation was that the bigger firms tend to manage their earnings upwards due to targets to be met in terms of market expectations (Rs 1167.53 crores), while the smaller firms manage their earnings downwards to create a buffer for the next year (Rs - 0.18 crores). Firms with higher discretionary accruals were smaller in size, while those with higher assets size had smaller discretionary accruals. Big firms would have larger analysts following and benchmarks to be achieved while smaller firms would have lower external expectations. Thus variables like board size, foreign promoter shareholding, institutional shareholding and choice of big three auditor are increasing with firm size; while absolute discretionary accruals are higher for smaller firms implying that income decreasing earnings

management is more popular among smaller firms in India. Thus there is an overbearing need to control for the impact of firm size while looking at the associations. Therefore in the regression models thus we have controlled for firm size through log of average total assets and looked at interactions of the independent variables with firm size.

<u>Table 6</u>

Correlations

It is observed that the main dependent variable absolute discretionary accruals (abs_da) is significantly negatively correlated with majority of the corporate governance attributes. The correlation matrix reveals significant negative correlations between absolute discretionary accruals (abs_da) and some corporate governance variables like board size (-ve), no. of independent directors (-ive), meetings held (-ive), no. of other directorships held (-ive), promoter shareholding (-ive), institutional shareholding (-ive) and audit quality (-ive) thereby revealing the importance of good corporate governance in controlling earnings management. There also exists

forpro_sh		.198	. <mark>893</mark>				
forpro_num		.135	.842	·	·	r	•

The Regression Model

We examine the association between corporate governance attributes and earings management proxied by discretionary accruals by estimating the following pooled OLS regession for each of the three variations of the dependent variable, being absolute discretionary accruals (abs_da), a dummy variable for absolute discretionary accruals (abs_da_dummy) and natural logarithm for the absolute discretionary accruals proxy (lnabs_da).

 $abs_da_{it} = _0 + _1lnavgta_{it} + _2size_{it} + _3ind_{it} + _4meet_max_{it} + _5att_{it} + _6pro_sh_{it} + _7forpro_sh_{it} + _8$

$$2ind_int_{it} + 3meet_max_int_{it} + 4att_int_{it} + 5pro_sh_int_{it} + 6forpro_sh_int_{it} + 7inst_int_{it} + 8forintpto_num_int_{it} + 9block10-num_int_{it} + 10bigthree_int_{it} + 0t$$
(6)

We run the pooled OLS regression with all the three dependent variable proxies (Tables below)

We have given the 'p' values based on robust standard errors to take care for autocorrelation and heteroscedasticity. The results in general lend support to most of our hypotheses. For all the three variations of the dependent variable (measure of earnings management) we find the overall F values significant. However lnabs_da gives the best results with an adjusted R^2 of 9.3%. Size of the firm measured as lnavgta has a significant negative association implying that small firms which are less under the scanner by analysts and the media, manage their earnings more thereby reporting higher levels of discretionary accruals. Thus big firms are not smoothing their earning relatively as they would not be able to hide their discretionary accruals as compared to the smaller firms.

The size of the board has a negative and significant coefficient indicating that bigger boards are able to do justice to their roles of monitoring earnings management. Smaller boards are poor at effectively monitoring and curbing earnings management behavior. Thus the results are consistent with Xie et al. (2003), Peasnall et al. (2005) that larger boards are more effective in preventing managerial discretionary decision making. Bigger size boards appoint various subcommittees for delegating thei

the expected negative sign, though not statistically significant, suggesting higher attendance of board members in the meetings lowers the management of earnings. We need to look at the

Regressions with Interactions

As laid out earlier, our sample size being considerably larger with significant dispersion in firm size, we need to include the interaction terms of the independent variable s with firm size

Bedard et al. 2004, Jaggi & Leung 2007). However this does not hold true for the bigger firms in the sample.

The significance of the constant and the low R² show that not all important variables have been 0.170** 8869 1.0778 captured. Corporate governance is only one aspect. Other firm characteristics like ownership group, debt exposure of the firm, performance etc. also play important roles in explaining earnings management behavior in firms.

Table 9 Dependent Variable is abs_da_dummy

	meet_m580o_num_int	meet_m27nt 0.170** 2304 0 I S G 1 J 1a S Q41	0.002* 1904 0 I S
att_int			
ind_int	(1 190.059ff 0.218* (2.21)	8 *94 0 0 m 4.904 0 I S Q Q BT 8.0979 0 0 7.8494 73.5 111.	.36 Tm .0124 Tc [(p
meet_max_int	0.008		
att_int	(1.28) -0.385*** (-3.95)		
pro_sh_int	(-3.95) 0.002* (2.14)		
forpro_sh_int	(2.14) -0.004* (2.47)		
inst_int	(-2.47) -0.004 (1.90)		
forinstpro_num_int	(-1.90) 0.170** (3.07)		
block10_num_int	(3.07) 0.085* (2.10)		
bigthree_int	(2.10) 0.188* (2.42)		
Constant	2.659*** 2.840*** (13.69) (9.52)		
N	9920.000 9920.000)	
r2_p II	0.054 0.057 -6498.275 -6476.888		
p	0.000 0.000)	

* p<0.05, ** p<0.01, *** p<0.001

Table 10 Dependent Variable is lnabs_da

Robustness tests

As a robustness test, we truncated the sample to BSE 500 firms and analysed it.

The results were qualitatively similar to the results of the entire sample. However there were lesser variations with egard to the variables under study due to obvis reasons. For example, all the board characteristic features were reportedly better far as the descriptive for the BSE 500 sample were concerned as compared to nitiar sample of 2315 firms. Overall promoter shareholding percentage improved to 52.9342.1(2% earlier) with foreign promoter holding increasing to 10.64% (6.05% earlier).

<u>Table 5</u>

Descriptivesta	แอแบอ						
Variable	N	mean	Median	min	max	Sd	
size	13848	7.61	7.00	1.00	27.00	2.79	
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meet_num	13848	4.65	4.25	0.00	31.00	2.82	
meet_max	13848	6.35	6.00				
att	12790	0.74	0.75	0.11	1.00	0.15	
chp	13848	0.04	0.00	0.00	6.14	0.26	
dir	13848	2.66	2.00	0.00	31.36	2.61	
ceo_chai®₀	7123881428	602350 (4030	0078026088	224033676,361+47	9 980145.6 Ft@T2	ESKÁK 0286 367.8	8 .48001 15.6 re f 307.7
pro_sh	13166	50.31	51.12	0.00	99.59	19.02	
indpro_sh	138 .48	8001 15.54 r	ef 307.74	319.68 .4800)1 15.54 re f 3	72.18 319.6	8 .48001 1xa53a346.2

DescriptiveStatistics

block10_sh	13166	3.10	0.00	0.00	123.60	8.71
block10_num	13166	0.20	0.00	0.00	5.00	0.52
avgta	12248	13319.32	1472.33	0.15	2680749.00	75417.76
tacc_abs	12349	326.58	4.25	167317.90	235640.70	5968.04
tacc_rel	12210	0.06	0.01	126.52	176.78	3.49
nondisc_acc	11719	0.01	0.00	31.62	49.19	1.22
disc_acc	11712	0.00	0.01	67.69	64.92	2.02
abs_da	11712	0.46	0.13	0.00	67.69	1.97

The Quartlies analysed were showing similar results as earlier, however for foreign promoter

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Table 11 Dependent Variable is lnabs_da

meet_max_int	-0.036***
att_int	(-4.51) 0.246
pro_sh_int	(1.49) 0.002
forpro_sh_int	(1.28) -0.000
inst_int	(-0.09) 0.001
forinstpro_num_int	(0.71) 0.015
block10_num_int	(0.13) 0.002
bigfour_int	(0.03) -0.023
Constant	(-0.38) -2.214*** -2.794*** (-6.48) (-4.91)
N r2_a F	2106.000 2106.000 0.029 0.036 6.713 4.695
р	0.000 0.000

* p<0.05, ** p<0.01, *** p<0.001

Table 12 Dependent Variable is abs_da_dummy

Summary and Conclusions

The finding of the study has significant implications for policy makers interested in reducing earnings management avenues for improving the quality of financial reporting in firms. The objective of this study was to analyse the relationship between corporate governance characteristics and earnings management in the indian context. Primarily a significant negative association exists between discretionary accruals and most of the corporate governance attributes, particularly implying that board of directors at the helm of the internal control systems in corporate form of organizations play a very significant monitoring role. Thus firms with good corporate governance manage their earnings less. There is a significant firm size effect on discretionary accruals with bigger firms ensuring lesser earnings management. Results suggest that firms with bigger boards, greater percentage of independent directors, more number of board meetings and higher attendance in these meetings resort to lesser earnings management. Thus from regulators point of view we can see that boards are effective in discharging their duties and are reasonably beyond management dominance. This is in conformity with other empirical findings.

Promoter shareholding with a significant negative association suggests montoring effect though for bigger firms the interaction term suggests that concentrated promoter shareholding leads to higher earnings management. Foreign promoter holdings in relatively large sized firms restrain earnings management. Institutional shareholders seem to have shorter horizon problem with focus on current higher returns therby provide avenues for the managers of these portfolio firms to exercise discretion and excessively manage their earnings to meet the benchmarks. Probably with their increasing stakes¹⁴ over a period of time the relationship between institutional shareholding and earnings management may become nonlinear. In other words, with higher exposure in Indian firms the inst Institutional Investors Advisory Services India Ltd. (IIAS)¹⁵ currently focussing on BSE 200 companies with considerable institutional investor exposure on providing rich information for informed decision making on corporate governance matters.

Finally, presence of the big three as auditors has significant restraining impact on managerial discretionary choices in case of smaller firms. However the effect is oposite for big firms where their presence is merely. This might imply that bigger firms are more prone to earnings management irrespective of presence of top auditors, institutional investors etc. From regulators point of view there may be opportunities for giving greater powers to the internal audit function in organizations and thereby enhancing the efficiency of audit committees for curbing earnings management, in turn reducing reliance on the external auditors to perform their whistle blower task in the organization. Another policy implic

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<u>Appendix 1</u>

Benford test results for the variable Sales



