Corporate Governance as a Moderating Variable for Identifying the Relationship Between CSR and Earnings Management : A Study of Listed Indian Mining Firms

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Abstract

The purpose of this paper was to investigate the connection between earnings management and corporate social responsibility (CSR) for all the listed mining firms in India. This paper is an empirical work that used a sample of 40 listed mining firms in NSE/ BSE India for the period from 2007-2015. We found a positive impact of CSR disclosure on earnings management (EM) practices. We explained this result empirically by incorporating corporate governance and financial performance indicators for our proposed hypotheses. Investors and policy makers might be interested in the evidence on the not so good impact of governance on the relationship between CSR and EM. Tax authorities and audit committees might scrutinize whether there is implementation of Companies Act, 2013 by the mining companies. The companies which are not adopting the Act should be penalized accordingly. This paper is the first study of Indian mining firms that explored the relationship existing between CSR and earnings management by depicting the influences of Indian corporate laws in such a capital intensive industry.

Keywords : corporate social responsibility, corporate governance, earnings management, financial performance, mining firms

JEL Classification : G3, K4, L70, M48

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In today's era where the concept of accountability is so deeply rooted and more specifically, when it comes to funds, the issue becomes more sensitive, it is expected that any corporation is discharging its duties with fair spirit and is maintaining a high standard of transparency in all of its functionaries. Again, in today's competitive market, where a corporation has to make its efforts at the global level to attract best of human capital, and a large pool of global investors, it has become indispensable for any corporation to maintain honesty and high standards of integrity. It must be understood that if any corporation wants to succeed globally, it must demonstrate to its stakeholders that they are following good ethical practices. But unfortunately, Indian corporates have been suffering due to high profile financial scams since the last two decades. Recent financial reporting scandals have been attributed to poor corporate governance oversight of the financial reporting process (Agrawal & Chadha, 2005). The 2007-2008 global economic meltdown explains how earnings management and corporate governance failures adversely affect firms and entire economies (Cho & Chun, 2015). In the aftermath of these events, we

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witnessed the compilation of new legislations, new regulatory organizations, such as Companies Act, 2013. Recently, the Ministry of Corporate Affairs (MCA) announced the newly amended Ind AS, an Indian Accounting Standards framed in convergence with IFRS standards known to be applicable for companies having net worth more than 500 crores from April 1, 2016. The above few instances demand a rigorous study on the importance of corporate governance and its functioning in the capital market.

Contemporary literature viewed corporate governance (CG) to have an effect on firms' performance and earnings quality (Berthelot, Morris, & Morrill, 2010 ; Kang & Kim, 2012). Firms' financial performance is considered an important variable that affects various stakeholders including managers and employees whose dividends are based on it. Managers' and employees' bonus also depends on firm performance. Creditors and lenders also make decisions based on firm performance. Thus, earnings figure of a firm is an important issue in a firm's financial reports as it reflects the firm's profitability. CG is viewed as an important mechanism to improve earnings quality by reducing earnings management (Abed, Al - Attar, & Suwaidan, 2012). Thus, earnings quality is an important factor for financial reporting.

Earnings management (EM) is generally considered as a technique to smooth out fluctuations in earnings and/or to meet stock analysts' earnings projections. Managers have got the discretion of either showing higher earnings or lower earnings without violating GAAP (Generally Accepted Accounting Principles) (Kumari & Pattanayak, 2014), but it is believed to be an unethical practice (Kaplan, 2001) when managers exercise discretional behaviour in relation to accounting numbers (Fields, Lys, & Vincent, 2001). Manipulation of earnings tends to lose the support of stakeholders, which may lead to increased activism and vigilance from shareholders and other stakeholder groups (Zahra, Priem, & Rasheed, 2005). As a result, a manager is under threat of getting fired from the company, misunderstanding from customers, pressure from investors, and/ or legal actions from regulators. Consequently, these threats may destroy a firm's reputation capital (Fombrun, Gardberg, & Barnett, 2000).

In order to shelter against stakeholder activism and vigilance, a manager starts disclosing social information called as corporate social responsibility (CSR) which then forges them as ethically responsible and demonstrates their ethical behaviour through philanthropic contributions to society in general (Hoffman, 1986). In essence, CSR can be viewed as an extension of firms' efforts to foster effective CG, ensuring firms' sustainability via sound business practices that promote accountability and transparency to all groups of stakeholders.

This forms a complete cycle of business norms and functions which are indispensable to each other to reckon quality reporting. Hence, for a successful business, proper governance and its obligations, when percolated with earnest attempts, emanate to a sustained business which exigently results in better financial performance. This paper introspects the relationship existing between corporate social responsibility and EM through CG with the help of available items and analyses how effective it is in producing a good quality financial report. This paper is an attempt to prove that businesses seek certain strategic opportunities like EM in disguise of CSR and governance to sustain themselves in the capital markets. Previous studies suggested that empirical relations between CSR and EM are largely inconclusive.

Distinctly, accounting for mining activities is what we intend to perform in our research study. Although corporate governance in the mining sector is not, on the face of it, significantly distinct from other industry sectors, it poses some unique challenges. One of these is the preparation and disclosure of financial reports. Various policies such as National Mineral Policy (2008) explicitly underlined the need for mining within a sustainable development framework (SDF). MMDR (Mines and Minerals Development and Regulation) Act, 2015 specified that the Mine Closure Plans will be prepared within the SDF and these were attached to a CSR document, giving the proposed annual expenditure on socioeconomic activities. CSR, being considered as an innovative responsible strategy, considering multiple stakeholders that sometimes exceeds government requirements, is a long-term objective for any firm. An increasing number of studies regarding CSR among the practitioners and academicians showed that firms are becoming more conscientious of the effects of their socially responsible behaviour (Brew, Junwu, & Addae - Boateng, 2015). Mining companies have an obligation to fulfil towards the communities they operate within as part of their CSR (Owusu - Ansah, Brenya, & Damtar, 2015).

Mineral and metal mining is truly global with operations spread amongst a wide range of global locations. Shares of mining companies dominate in many stock exchanges and as such are an integral part of the financial system. In turn, mining companies have an urge for funds: exploration activities for finding economically viable and technically feasible mineral resources take years, require substantial capital, and must bear economic downturns. Significant upfront investments, uncertainty over prospects or mineral resources, and long project lives create difficulties and require discretion and judgement by the companies' management. The most significant source of value for mining entities is mineral reserves and resources - together with the mining companies' ability to transform mineral resources into cash flows. Regardless of the fact that mining companies compile financial statements according to Companies Act, 2013, they possess various positions for management to pursue discretion in preparing financial statements. Hence, our main motivation for this research is to check management of earnings in the mining industry which is a highly capital intensive industry affecting capital market of the Indian economy and its connection with CSR activity.

Literature Review and Hypotheses Development

(1) Corporate Social Responsibility and Earnings Management in Mining Firms - Corporate Governance as a Mediating Factor : At the first glance, mining companies may be seen to only produce negative impacts that contribute to the destruction of nature and environment, but they also produce positive impacts for the economy. The positive impacts of mining companies to the economy were presented by Kwesi and Kwasi (2006) who said that mining companies make a positive contribution to the economy. When mining activities are implanted through distinctive regulations of its organization, then its reporting is believed to be credible in nature. However, integrity of financial reporting is being questioned due to the failure of the boards to prevent high profile corporate collapses in recent times. The broad question that has motivated prior research is whether regulating corporate governance enhances economic efficiency ? Governance provides opportunities for efficiently complying with the standards prescribed by related authorities and successful fulfilment of long term requirements of the people and the planet (Szekely & Knirsch, 2005). The Indian government and judiciary have enacted several laws and regulations like SEBI (Securities and Exchange Board of India) ; cyber laws and competition laws have brought several amendments and the laws have also been repealed in order that they don't act as barrier for these corporate bodies and the economic development of India.

The first reason for implementing Companies Act, 2013 is to make financial reporting of the mining industry useful for management, stockholders, creditors, and other users. In a way, a good governed firm calls for the accountant to present all kinds of scenarios, be it good or worst in the financial statements. In most cases, shareholders depend on the ability of a board and its committee to monitor the independence of the management (Alzoubi & Selamat, 2012). Therefore, the responsibility of financial reporting quality lies on the effectiveness of a board and its committee. Investors seek for investment in firms that appear profitable or perform financially well. Regulatory bodies demand for the timely and complied accounted numbers to get published in annual reports. This certainly stimulates pressure amongst the managers to get aggressive and one of the most far reaching consequences is that they indulge in manipulation of earnings.

In summary, regulatory considerations, capital markets, and investors induce managers to manipulate earnings reports. Earnings management practice is an intervention in the external financial reporting process that may be intended to either mislead some stakeholders about the underlying economic performance of the company or the contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Earnings of any firm decide the firm's financial and social performance. Misalignment of managers' and shareholders' incentives could induce managers to use the flexibility provided by Generally Accepted Accounting Principles (GAAP) to manage income opportunistically, thereby creating distortions in the reported earnings (Jiraporn, Miller, Yoon, & Kim, 2008). This opportunistic action of earnings management give rise to parting of ownership separation, one the agent (the manager), and other the principal (owner) who may have different objectives with the existence of information asymmetries. In this background, earnings management is considered an agency cost because managers look after their own interests by releasing financial reports that do not represent an accurate economic picture of the firm.

However, manipulation of earnings tends to affect a firm's owners and stakeholders too. These stakeholders are those that bear some form of risk as a result of having invested in some form of capital, human or financial, in a firm (Clarkson, 1994). This means that a managerial action like EM is misleading all groups of stakeholders (Zahra et al., 2005). When this illegal activity extends for a longer period aggressively, suspicion and misunderstanding from customers, pressure from investors, and/ or legal actions from regulators arise. These threats hamper a firm's integrity and brand image.

So, managers start engaging in a broad array of activities that are aimed at developing relationships with corporate stakeholders and environmental activities, called as corporate social responsibility (CSR), so as to gain support from these groups. CSR activities include protecting environment while adopting eco-friendly technologies, health and sanitation, education, and so on. CSR initiatives are believed to be helpful to businesses in becoming economically viable and equitable, socially responsible, and environmentally sustainable (Singh, 2013).

Also, the Indian government has recently claimed that environmental reporting is deemed to be crucial in corporate reporting and companies must report essential environmental issues in their annual reports of accounts under the amendment of the Companies Act, 2013. Essentially, a manager believes that by satisfying stakeholders' interests and projecting an image of social and environmental concern and awareness, he/she can reduce the likelihood of being scrutinized by satisfied stakeholders for his/her management of earnings.

Such misuse of CSR in mining firms brings into doubt the efficiency of implementation of corporate governance mechanisms. A false image of the firm delineates in our mind as to why such filthy activities are been undertaken even after so much of rigorous regulations and enactments. What factors are nudging managers to behave as such? These research questions motivated us to fill the research gap of studying the whole process starting from governance to earnings management practices and their significance in the implementation of CSR in Indian mining companies, which has hitherto been a neglected area of study.

Based on the above arguments, we have developed the hypotheses as below :

- **H01:** For mining firms, CSR as an outcome of earnings management directly influences good governance practices.

- **Ha1:** For mining firms, CSR as an outcome of earnings management does not directly influence good governance practices.

(2) Corporate Social Responsibility and Financial Performance in Mining Firms - Earnings Management as a Mediating Factor : Another aspect in our research study is the impact of CSR on financial performance set off by earnings management for Indian mining firms. Engaging in socially responsible activities not only improves stakeholder satisfaction, but also increases the positive effects on the company's reputation and brand name among stakeholders. Mining companies are mostly recognized by their disclosure of social and environmental information that help themselves build a positive image among stakeholders (Orlitzky, Schmidt, & Rynes, 2003), which, in turn, assists firms to establish community ties and build reputation capital. This improves the relationship among stakeholders by which a company acquires competitiveness, enjoys economic benefits through increased revenues and reduced costs, and eventually achieves a positive relationship between CSR and financial performance (Callan & Thomas, 2009 ; Waddock & Graves, 1997). Companies paying much attention to CSR activities are predominantly concerned with proving the quality of earnings (Gray, 2005). CSR restrains the harm of excessive earnings manipulation, and then the positive effects of CSR on financial performance can be performed as long as CSR has enough power to control the deliberate behaviour of managers. An investigation on a sample of 139 Asian countries firms' revealed that Asian firms with relatively good CSR were engaged significantly less with earnings management, which resulted in increased firm performance (Scholtens & Kang, 2013).

Various other literatures also exist which do not illustrate the positive impact of CSR on corporate financial performance. For instance, a newly appointed manager seeking higher position may pursue short-term policies that focus exclusively on financial results at the expense of long-term social issues (Preston & O'Bannon, 1997). Managing a wide set of stakeholders with conflicting objectives may result in an excessively rigid and resource-consuming organization that may damage a firm's financial performance (Aupperle, Carroll, & Hatfield, 1985). In order to fulfil stakeholders' interests, managers may behave opportunistically to the detriment of financial results by following the entrenchment mechanism (Prior, Surroca, & Tribo, 2008).

Along this line, we argue that when firms improve CSR to cover earnings management, the relationship between CSR and financial performance should diminish or there should be a negative impact of CSR on financial performance.

The above discussion leads to the development of the second set of hypotheses, which are as follows :

↳ **H02 :** For mining firms, greater the level of earnings management, the greater is the positive impact of CSR on financial performance.

↳ **Ha2:** For mining firms, greater the level of earnings management, the greater is the negative impact of CSR on financial performance.

Methodology

(1) Data Collection : Our sample is composed of all the mining firms listed on BSE (Bombay Stock Exchange) and NSE (National Stock Exchange) of India for the period from 2007 - 2015.An unprecedented large number of companies collapsed or were bailed out by governments during the global financial crisis of 2007-08 (Erkens, Hung, & Matos, 2012). The Companies Act was amended in the year 2013 in India, and so, it is important for us to study its influences on mining firms. So, our sample period is from 2007- 2015. Financial data were collected from Prowess database which is compiled by Centre for Monitoring Indian Economy- the largest database of financial performance of Indian companies. The companies were analyzed according to their reporting procedures, policies, guidelines, and management systems. This information was extracted from financial accounts, company documentation like annual reports, and corporate governance reports. The list of all the listed mining firms that were considered for the study is mentioned in the Appendix 1.

There is no such index developed for measuring CSR performance in India. First, we identified CSR indicators such as donation expenses, social and community expenses, and environmental & pollution control related expenses from annual reports and then analyzed these disclosures using a score from 0 to 100 scoring methodology. After individual issues were quantified, we determined the aggregate score for each firm. The same measuring technique was also used by Al - Tuwaijri, Christensen, and Hughes II (2004).

(2) Measures of Earnings Management : In this study, Extended Modified Jones model is used to find accrual based earnings management. A brief description of both the models is given below :

The Extended Modified Jones Model is expressed as follows :

$$TA_t = \beta_0 + \beta_1 \frac{(REV_i - REC_i)}{REV_i} + \beta_2 \frac{(\Delta EXP_i - \Delta PAY_i)}{REV_i} + \beta_3 \frac{(DEP_i + RET_i)}{REV_i} + \varepsilon_i \quad \text{........(1)}$$

where,

TA_t is the total accruals in the year t ; REV_i is net sales revenue of the firm 'i' ; REC_i is receivables of the firm 'i' ; EXP is the sum of cost of goods sold and selling and general administrative expenses excluding non - cash expenses ; PAY is payables; DEP is depreciation expenses; RET is retirement benefit expenses; DA_i is discretionary accruals for the firm 'i' ; PPE_i is plant, property, and equipment for the firm 'i' ; $A_{i,t-1}$ is the total assets of the firm 'i' in the previous year 't - 1'; Δ the change operator ; and €$_i$ the residual, which represents firm- specific discretionary portion of total accruals.

(3) Measures of CSR : Parameters considered for measuring CSR performance are :

(I) Donation Expenses : Donation expenditure could be the most direct measure of managers' willingness to conduct CSR activities (Pyo & Lee, 2013). Donation is significantly related to firm size and return on assets (ROA) (Amato & Amato, 2007). Hence, we have considered donation as an important indicator to measure CSR performance. We include donation as because firms with increased donation and voluntary CSR filings are expected to choose more/less conservative accounting methods and lower/ higher earnings management.

(ii) Social and Community Expenses : In the corporate world, social accounting has been one of the major stepping stones in improvement in CSR (Gull, Hanchinal, & Salma, 2013). Disclosure of social costs and benefits in the corporate world has been one of the first major stepping stones in improvements in CSR.

(iii) Environmental and Pollution Control Related Expenses : As concern about environmental protection has become a global issue, managers have to focus their attention on creating biodegradable products that can be recycled. Also, they need to have more control over air pollution, need to reduce the energy consumption as much as possible, and exploit natural resources in a wise way (Baba, 2012). Managers have to take into consideration costs and damage for not respecting the law concerning the environment. Therefore, they ask for information from finance and accounting department, information about revenues and expenses, etc.

We have calculated the scores of 40 firms from 0 (zero) to 100 (best) based on the percentage of investments done on the above three items to the net profit or total net worth or turnover of the respective firm.

(4) Measures of Corporate Governance

(i) Board Size : Lipton and Lorsch (1992) and Jensen (1993) opined that limiting board size improves firm performance because the benefits by larger boards of increased monitoring are outweighed by the poor communication and decision making of larger groups.

(ii) Representation of Women : Section 149 (1) of Companies Act, 2013 has mandated all listed firms to appoint at least one woman director within one year from the commencement of the act. This has been implemented to bring radical changes in the corporate sector, especially for empowerment of women and transparency in corporate compliance mechanisms (Kumar & Sudesh, 2016).Women on board are found to have a positive significant relationship with discretionary accruals, which indicate higher number of women on board may increase the discretionary accruals activity (Buniamin, Johari, Rahman, & Rauf, 2012). Bear, Rahman, and Post (2010) demonstrated a positive association between the number of women directors and the intensity of social responsibility indexes.

(iii) Audit : We have considered frequency of audit committees held in a financial year. The major function of an audit committee is to monitor financial performance and ensure integrity of financial reporting (Yatim, 2009). A Malaysian based study with a sample of 25 listed companies on Bursa Malaysia for a period of 2008-2010 found that independent audit committee had a positive effect on firm performance (Al-Mamun, Yasser, Rehman, Wickramasinghe, & Nathan, 2014).

(5) Measures of Corporate Financial Performance

(i) Firm Size : Company size is measured by the logarithm of the total assets. It is common practice to use firm size as a determinant variable of information disclosure (Patten, 1991). Larger firms are subject to stronger pressure from stakeholders and, therefore, are expected to report more social, economic, and environmental information and thus satisfy users' needs (Archel & Lizarraga, 2001; da Silva Monteiro & Aibar - Guzmán, 2010). Size may reflect its effect on earnings quality (Becker, DeFond, Jiambalvo, & Subramanyam, 1998).

(ii) Leverage : To reflect the debt effect, we include the *LEV* variable, which measures the risk of debt or default and is calculated as the ratio of debt to equity (Clarkson, Li, Richardson, & Vasvari, 2008 ; Ghosh & Moon, 2010). We hypothesize that firms with a higher level of debt will disclose more social and environmental information to satisfy their suppliers' interest in knowing their CSR strategy (Solomon & Lewis, 2002). Clarkson et al. (2008) also incorporated the level of debt in their study, and found that voluntary disclosures increased with leverage. Leverage may capture manager's opportunistic behaviour pertaining to earnings quality to avoid violation of debt covenant (Defond & Jiambalvo, 1994).

(iii) ROA : ROA gives an idea as to how efficient management is at using its assets to generate earnings. ROA as an accounting based measurement gauges the operating and financial performance of a firm (Klapper & Love, 2002). Higher ROA also reflects the company's effective use of its assets in serving the economic interests of its shareholders (Ibrahim & Samad, 2011). A company showing a positive performance through ROA indicates its achievement of prior planned high performance (Nuryanah, Islam, & Amstrong, 2011).

(iv) Sales: Following Laksmana and Yang (2009) and Francis, LaFond, Olsson, and Schipper (2004), we added sales variability as a determinant of FRQ, because this variability reduces the quality of accruals. Francis et al. (2004) used sales as one of the components of accrual quality and showed that an increase in sales variability was associated with a higher quality of accruals and ,therefore, with higher financial performance.

Proposed Models

We test our hypotheses making use of two basic specifications - one explains CSR and the other explains EM. The main independent variables in both cases are the financial performance variables; such as *LEV, sales, ROA, firm size,* and CG variables such as *audit, board size,* and *representation of women*. In order to explain CSR and test hypothesis Ha1, we apply the following regression :

$$CSR_{it} = \beta_1 + \beta_2 DA_{it} + \beta_3\, Size_{it} + \beta_4\, ROA_{it} + \beta_5\, Lev_{it} + \beta_6\, Sales_{it} + \beta_7\, Board_{it} + \beta_8\, Rep\ of\ Women_{it} + \beta_9\, Audit_{it} + \varepsilon_{it} \quad \text{.....(2)}$$

Hypothesis Ha1 is supported when β_2 is positive and significant.

Finally, in order to identify whether or not *DA* is affected by the relationship of CSR and financial performance, we use the regression model as :

$$ROA_{it} = \beta_1 + \beta_2\, DA_{it} + \beta_3 CSR_{it} + \beta_4\, Size_{it} + \beta_5\, Lev_{it} + \beta_6\, Sales_{it} + \beta_7\, Board_{it} + \beta_8\, Rep\ of\ Women_{it} + \beta_9\, Audit_{it} + \varepsilon_{it} \quad \text{.....(3)}$$

Similar models for other financial indicators like *size, Lev,* and *sales* are analysed in empirical tests, but mainly we have developed an equation for *ROA* only.

Hypothesis Ha2 is supported when either of the coefficients of *DA* term β_2 and *CSR* term β_3 are negative and significant. In both the models, we use fixed-effect estimations in order to prevent endogeneity problems, relying on the eventual correlation between the fixed unobservable component of error term and some explanatory variables.

Analysis and Results

The Table 1 reports means, standard deviations, and minimum and maximum values. The descriptive analysis shows that the CSR variable shows a mean value of 39.26 % of on a scale between 0 and 100. The analysis of the correlation matrix (Table 2) shows that variations in *DA* show a negative correlation with variations in *CSR* (r = -.076, p<.05). This correlation conforms to hypothesis Ha1. Also, we observe that variations in *DA* are positively correlated with financial performance indicators (*ROA* = .086, *Lev* = .041, *sales* = .130) except for *firm size* (r = -.085). This result is consistent with the idea that managers manipulate earnings in order to boost profits. Finally, we also find a positive correlation between CSR and governance indicators (*board size* = .137, *women representation* = .049), but interestingly, a negative correlation with *audit* (-.162**) is observed. This means that managers took CSR initiatives without any fear of frequency of audit meetings that took place in a financial year. This finding again conforms to hypothesis Ha1 as when CSR is an outcome of EM, governance is affected.

The analysis of our models is performed in Table 3 and Table 4, while some robustness checks are conducted

Table 1. Descriptive Statistics

Descriptive Statistics					
	N	*Minimum*	*Maximum*	*Mean*	*Std. Deviation*
Board size	360	3	10	5.81	1.956
Women Rep	360	0	4	1.54	.952
Audit	360	4	8	4.68	1.097
Size	360	.00	1630559.50	39874.4652	200039.00596
ROA	360	.00	136489.90	7704.4195	23360.52005
Lev	360	.00	123624.70	2474.1133	14886.10101
Sales	360	-1422.00	880997.10	43747.2133	124609.06017
DA	360	-11623.50	306831.80	18597.0661	50766.76170
CSR	360	10	85	39.26	21.501
Valid *N* (listwise)	360				

Table 2. Bi - Variate Correlation Matrix

	Board size	*Women Rep*	*Audit*	*Size*	*ROA*	*Lev*	*Sales*	*DA*	*CSR*
Board size	1								
Women Rep	.043	1							
Audit	.019	.068	1						
Size	.306**	-.034	-.088	1					
ROA	-.360**	-.018	.034	-.621**	1				
Lev	-.137**	-.029	.259**	-.596**	.618**	1			
Sales	.040	.149**	.098	.141**	.272**	.112	1		
DA	-.055	.035	-.120*	-.085	.086	.041	.130	1	
CSR	.137	.049	-.162**	.101	.039	-.084	-.002	-.076	1

*** Correlation is significant at the level of .10, ** correlation is significant at the level of .01, and * correlation is significant at the level of .05.

Table 3.Multiple-Regression Analysis of CSR with Earnings Management and Corporate Governance

Intercepts	*DA*	*Women Rep*	*Audit*	*Board size*
CSR	.70**	.013	- .063	.046
	(.463)	(.605)	(.011)**	(.001)**
Size	-.158	891.3	575.44	-644.07
	(.428)	(.933)	(.000)***	(.217)
ROA	-.035	593.5	610.5	144.2
	(.148)	(.649)	(.000)***	(.822)
Lev	-.013	-155.6	303.07	166.2
	(.375)	(.055)*	(.668)	(.000)***
Sales	-.073	120.3	-985.3	90.4
	(.571)	(.083)*	(.104)	(.979)
DA	Omitted	-129.6	-400.5	-117.5
		(.646)	(.104)	(.396)
Women Rep	-4.57	Omitted	.018	.045
	(.646)		(.683)	(.078)*
Audit	-1.85	.024	Omitted	.061
	(.104)	(.683)		(.039)*
Board size	-1.72	.190	.193	Omitted
	(.396)	(.078)*	(.039)*	
Constant	461.7	1.19	4.32	4.64
	(.001)**	(.000)***	(.000)***	(.000)***
R^2	1.14%	1.07%	2.14%	2.43%
F- value	.252	.278	.052	.032

Note : *** Correlation is significant at the level of .10, ** correlation is significant at the level of .01, and * correlation is significant at the level of .05.

Table 4. Moderating Effect of Financial Performance on CSR and Earnings Management Relationship

Dependent variable	*ROA*	*Lev*	*Sales*	*Size*
ROA	Omitted	.004	.185	-.019
		(.989)	(.000)	(.026)
Size	-.013	-.003	.084	Omitted
	(.026)**	(.352)	(.010)**	
Lev	.001	Omitted	-.360	.651
	(.989)		(.429)	(.352)
Sales	.066	.004	Omitted	.158
	(.000)***	(.429)		(.010)**
Board size	-214.9	181.3	224.6	392.1
	(.730)	(.000)***	(.523)	(.426)
Women Rep	-291.9	-142.7	118.4	-146.9
	(.812)	(.078)**	(.087)**	(.890)
DA	-.030	-.015	-.077	-.167
	(.184)	(.293)	(.550)	(.399)
Audit	249.4	184.8	-154.8	568.5
	(.029)**	(.805)	(.002)**	(.000)***
CSR	650.01	-426	-278.18	-362.6
	(.007)**	(.006)**	(.004)**	(.081)**
R^2	14.58%	7.9%	15.98%	12.35%
Prob> chi	.0000	.0001	.0000	.0000
Hausman test	.0023			
N	360	360	360	360

*** Correlation is significant at the level of .10, ** correlation is significant at the level of .01, and * correlation is significant at the level of .05.

for both. More specifically, in Table 3, we test the effect of a firm's earnings management practices on CSR (hypothesis Ha1). Also, we study the significance of this effect by incorporating governance indicators as predictor variables for *DA* (column 2). In Table 3, we test the direct effect of CSR on earnings management practices.

The results indicate that the effect of CSR on EM practices is positive and significant (t = .463, p <.01), thus providing support for hypothesis Ha1. Also, two governance indicators, that is, *audit* (column 4) (r = -.063) is negatively correlated and *board size* (column 5) (r = .046, p = .001< .05) is positively correlated with CSR. Hence, CSR as an outcome of EM practices influences governance. Also, the variable : *women's representation* (column 3) (r = .013, p = .605) is positively correlated with CSR, but does not show any significance.

The results from the estimation of EM are presented in the Table 4. We incorporated all financial performance indicators as predictor variables. We test the fixed effect of EM practices on the CSR and financial performance relationship. In line with our theory, we expect that the coefficient of such variable to be negative, suggesting the regular disclosure of CSR, afraid of accounting manipulation, reduces the positive effect of CSR on financial performance. All the coefficients of *lev, sales,* and *size* are negative (- 426, -278.18, -362.6, respectively). Remarkably, the total effect of CSR on financial performance is negative. These results provide support for Ha2 concerning the negative moderating effect of EM practices in the relationship between CSR and financial performance. Also, *ROA, Lev, sales, size* (coefficients are -.030, -.015, -.077 and -.167, respectively) are negative. This finding suggests that EM practices deplete financial performance and negatively influence CSR activity of a firm.

Supplemental Tests for Robustness Check : In our proposed hypothesis 1, we investigate the robustness of our results by applying the Breusch - Pagan Lagrange Multiplier (LM) test for random effects. The estimated result is $p >$ chi = (.0000). Here, $p < .05$, hence our proposed model H01 is accepted. The random - effect model is appropriate. That is, evidence of significant influence of CSR over corporate governance is found, and therefore, we can run our random - effect PLS regression. Summarily, it concludes that H01 is accepted, inferring CSR as an outcome of earnings management directly influences corporate governance practices, and hence, results in rejection of our alternative hypothesis Ha1.

For hypothesis H02, which assumes that for increasing level of earnings management in mining firms, CSR positively impacts financial performance. While running random effect GLS model for H02, we find a significantly less value of *R* square as compared with the fixed model. So, we stick to the fixed model and conduct a robustness check for H2 through Hausman specification test to check whether our model fits best to explain our dependent variable, that is, *CSR*. Chi square is (0.0023 < 0.05), so the fixed - effect model is appropriate. With the regression values of corporate governance variables, *women's representation* and *audit* are found to have no significant values and no relationship with *CSR* in presence of *DA*. So, we conclude that corporate governance could not impact much on the control of increasing use of earnings management, irrespective of the good amount of investment done in CSR. This result is in consonance with a study based in the U.S. context. The researchers found that firms with more effective governance made significantly less investment in CSR. They also posited that when governance quality improves over time, CSR investments also decline significantly (Chintrakarn, Jiraporn, Kim, & Kim, 2016).

Discussion and Conclusion

In this paper, we investigate the relationship between CSR and EM practices of all the listed mining firms operating in India. We observe that corporate governance could not have much affect on the nexus, may be because of voluntary norms incorporated in the Indian industry. Neither women's representation and board size nor audit frequency could affect significantly the operations of CSR activities. We predict that women's representation on corporate boards is capable of improving financial performance and social responsibility, though we could not find much impact of its significance. This is rather imminent because although women's representation on boards has improved, but it is still very low in comparison to developed economies (Yaroson & Giwa, 2016). The second result which we observe is that the connection between EM and CSR is robust due to the inclusion of a factor like financial performance. Our empirical evidence shows that the linkage between EM and CSR is weakened or rather less affected by governance.

Firms scoring best in social and environment reporting was attributed to increased vigilance by auditors. This result is in line with the findings of Mariri and Chipunza (2011) as they also conducted a study on 10 listed mining firms in the Johannesburg Stock Exchange. Most of the listed mining firms scored less than 50 points. This means that they failed to solve the negative impacts of mining on the environment, society, economy, and local and national governance. Hence, we can conclude that governance could not have much impact on the proper implementation of CSR. A similar outcome was also observed by Jenkins and Obara (2008), who studied a case on two multinational companies operating in the Western region of Ghana, South Africa. However, we cannot substantiate it for Indian mining firms because of difference in sample size and governance pattern. Thus, we conclude that our first null hypothesis H01 is accepted; indicating clearly that its alternate hypothesis Ha1 is rejected.

The effects of financial performance indicators such as *ROA, leverage, and sales* are found to be dominant in imposing positive effect on CSR. Mining firms scoring highest marks are found to perform financially poorly because whatever CSR expenditure may be, earnings manipulation was aggressively high which ultimately affected their financial performance. This result conforms the outcomes of a study undertaken by Adi, Handayani, and Rahayu (2013) where they analyzed 23 mining firms listed on the Indonesian Stock Exchange for the period from 2009 - 2012.This implies our null hypothesis H02 is accepted, thereby rejecting alternate hypothesis Ha2.

Implications, Limitations of the Study, and Directions for Further Research

Although, we assume robustness of empirical results, this study has the following limitations. First, we have used the sample of mining firms listed on NSE/BSE, thereby restricting our sample to be relatively small. Second, similar to many empirical studies, the results of this study are subjected to measurement errors that may exist in the CSR model.

(1) Managerial Implications : The expenditure that organizations make on CSR activities prompts the need for a better understanding of the motivations behind socially responsible behaviour as well as its implications on financial performance. This study highlights the actual operating activities undertaken by mining firms and encourages researchers to do a rigorous investigation on the newly amended corporate laws and its implementation. Corporate owners and managements of mining sector firms should implement corporate governance principles and their regulations rigorously and continuously. The financial service authority and Institute of Chartered Accountants of India (ICAI) along with Bombay Stock Exchange (BSE) should set standards and regulations in order to manage good corporate governance.

(2) Social Implications : Given the fact that Companies Act, 2013 and corporate tax policies have drastically changed from the year 2013 (the prior one came into effect from April 1, 2014 and the latter started from April 1, 2016), we lagged in collecting and examining sufficient financial documents complying with the requisite modifications. Hence, we suggest that future studies may be conducted to analyze the post and pre effect of such policy changes in mining firms for identifying the relationship of CSR and earnings management practices. Further studies may focus on developing appropriate CSR and governance indices which would result in accurate and unbiased measurement of both CSR as well as governance practices in mining firms. Further studies should involve other governance indicators, for example, percentage of shareholdings, education background of boards of commission, and number of board meetings while establishing the relationship between CSR and governance practices. Further studies may also involve other financial indicators such as return on investment, growth in revenue, and debt - equity ratio to measure the financial implications of mining firms while pursuing CSR practices as an effective governance measure.

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Appendix 1. List of Mining Firms Listed on Bombay Stock Exchange (BSE) and National Stock Exchange (NSE)

Sl. No.	Name of the Listed Companies	Index Name
1	20 Microns Ltd.	BSE/NSE
2	Aditya Lime Inds. Ltd.	BSE
3	Alpha Hi-Tech Fuel Ltd.	BSE
4	Associated Marmo & Granites Ltd.	BSE
5	Associated Stone Inds. (Kotah) Ltd.	BSE
6	Auroma Coke Ltd.	BSE
7	Cairn India Ltd.	BSE/NSE
8	Cochin Minerals & Rutile Ltd.	BSE
9	E I C L Ltd.	BSE
10	Eastern Mining & Allied Inds. Ltd.	BSE/NSE
11	Eastern Mining & Co. Ltd.	BSE
12	Femnor Mineral (India) Ltd.	BSE/NSE
13	Gujarat Bauxite Ltd.	BSE
14	Gujarat Mineral Devp. Corpn. Ltd.	BSE/NSE
15	Gujarat N R E Coke Ltd.	BSE/NSE
16	Hindustan Oil Exploration Co. Ltd.	BSE/NSE
17	I B Industries Ltd. [Merged]	BSE
18	Inani Marbles &Inds. Ltd.	BSE
19	Insilco Ltd.	BSE/NSE
20	Jain MarmoInds. Ltd.	BSE
21	M O I L Ltd.	BSE/NSE
22	M T Z Industries Ltd.	NSE
23	Mayur Floorings Ltd.	BSE
24	N M D C Ltd.	BSE/NSE
25	Neelkanth Rockminerals Ltd.	BSE
26	Oil & Natural Gas Corpn. Ltd.	BSE/NSE
27	Oil India Ltd.	BSE/NSE
28	Oriental Carbon & Chemicals Ltd.	BSE/NSE
29	Oriental Trimex Ltd.	BSE/NSE
30	Pandian Graphites (India) Ltd.	NSE
31	Presha Metallurgical Ltd.	BSE
32	Renewable Power Projects Ltd.	BSE
33	Sandur Manganese & Iron Ores Ltd.	BSE
34	Sankardev Coke Products Ltd.	BSE
35	Selan Exploration Technology Ltd.	BSE/NSE
36	Sinner Energy India Ltd.	BSE
37	Southern Fuel Ltd.	BSE
38	Southern Magnesium & Chemicals Ltd.	BSE
39	UshaUdyog Ltd. [Merged]	BSE
40	VikasEcotech Ltd.	BSE/NSE