Scholars Journal of Arts, Humanities and Social Sciences **ISSN 2347-5374 (Online)**
Sch. J. Arts Humanit. Soc. Sci. 2015; 3(8B):1321-1331 **ISSN 2347-9493 (Print)**

(An International Publisher for Academic and Scientific Resources) DOI: 10.36347/sjahss.2015.v03i08.009

Impact of Company Specific Factors on the Extent of Corporate Social Disclosure in India

Debansu Das[1], Anindita Pramanik[2]
[1]Associate Professor, Department of Commerce, University of Kalyani, Nadia – 741235, West Bengal, India
[2]Research Scholar, Department of Commerce, University of Kalyani, Nadia – 741235, West Bengal, India

***Corresponding Author:**
Debansu Das
Email: debansudas_ku@yahoo.co.in

Abstract: The paper examines and analyses the impact of five company-specific factors on the extent of voluntary social disclosure in annual reports of 65 manufacturing companies listed in Bombay Stock Exchange. Our study reveals that average level of corporate social disclosure is very low with a considerable variation among sample companies. While mean disclosure score is 20%, the range and standard deviation are 67% and 14% respectively. Using multiple linear regression, it has been observed that out of five company-specific factors, company size, nature of industry and government ownership have significant positive impact on the extent of overall social disclosure in India. However, profitability and dominance of independent directors on corporate board is found to have no significant impact on such disclosure.
Keywords: Voluntary Social Disclosure, Company Specific Factors, Company Size, Nature of Industry, Government Ownership, Profitability, Dominance of Independent Directors, India.

INTRODUCTION

The concept of social responsibility is not a new one. But “the growth of the idea of social responsibility is closely linked to society’s heightened sensitivity to the externalities of business activities – a topic with an equally long tradition in economics” [1]. Over the years, public has become aware of the negative externalities of business operations. This has created a growing demand for disclosure of environmental and social performance of business enterprises, particularly of corporate entities. With increasing pressure of demand for such information, a large number of companies all over the world have started reporting on environmental and social issues [2].

Meek *et al.* [3] opines that understanding why firms disclose information voluntarily is useful to both the preparers and users of accounting information as well as to accounting policymakers [cited in 4]. For improving the quality and quantity of corporate social reporting, it is important to study not only the current extent and quality of disclosure to determine best practice, but also to study the factors influencing corporate social accountability and reporting [5]. From review of available literature in Indian context, we find that knowledge on motivating factors behind corporate social disclosure in India is not adequate.

In this backdrop, the paper makes an attempt to measure the variation in the extent of social disclosure in India and to identify some factors that could explain such variation.

More specifically, the objective of the present paper is to identify some of the company specific factors which have significant influence on the extent of voluntary social disclosure in annual reports of companies listed in Indian Stock Exchange and to assess their impact on such disclosure.

Theoretical Framework of Corporate Social Reporting

Though there is no universally accepted theoretical framework of corporate social reporting [6], accounting researchers have articulated different theoretical perspectives which provide a number of valuable insights in explaining motivation behind corporate social disclosure. For example, Haider [7] used political economy theory to explain the social and environmental reporting practice in the context of developing countries [cited in 8]. Haniffa and Cooke [9] and Rizk *et al.* [10] used legitimacy theory to explain the corporate social reporting (CSR) practices in the context of Malaysia and Egypt respectively. Both legitimacy and political cost theory were used by Ghazali [11] in the context of Malaysia. Using stakeholder theory Belal [12] examined social accounting practices in Bangladesh. A combination of different theories (namely, political economy, legitimacy, stakeholder and accountability) was used by Naser *et al*. [13] in the context of Qatar. Setyorini and Ishak [14] applied positive accounting theory to explain corporate social and environmental reporting in Indonesia.

Gray *et al*. [15] opines that CSR reporting is a very complex activity to be understood by any single theoretical perspective. Sometimes it might be useful to take into account insights provided by different theoretical perspectives in order to obtain a fuller and better explanation of CSR reporting [16] cited in [12]. In the present study also, we have used different theoretical perspectives in explaining CSR practices in India.

LITERATURE REVIEW

On review of relevant literature on corporate social reporting, it is found that a number of studies have investigated the factors attributable to variations in the extent of corporate social disclosure (CSD). These factors include size [17, 18, 9], profit [9], industry affiliation [17, 18], etc. The studies recognize that corporate social reporting (CSR) practices are different across countries [17] and inter alia, between developed and developing countries [19]. It has been found that CSR differs significantly across different industry sectors [20]. CSR practices differ over time period also [21, 20, 18, 9].

In social disclosure studies, some researchers have used content analysis to measure the level of social disclosure [18, 6, 13, 22, 23]. While many other studies have used disclosure index method [11, 10, 24, 25, 26, 27, 20], Haniffa and Cooke [9] used both content analysis and disclosure index method.

Researchers tried to explain the variation in the extent of corporate social disclosure by several firm-specific characteristics. The number and variety of company characteristics used by the authors differ significantly. Said *et al*. [24] used two company characteristics, namely, firm size and profitability. Hackston and Milne [6] used three company characteristics, namely, company size, industry type and profitability. Haniffa and Cooke [9] took five firm-specific characteristics, namely, size, profitability, gearing, listing status and industry type. In most cases, selection of company characteristics was based on theoretical considerations.

To examine the association between several company characteristics and extent of social disclosure, various statistical tools were used by earlier researchers. For example, Gao *et al*. [18] used Pearson Correlation and ANOVA, Hackston and Milne [6] used pair-wise Pearson's and Spearman's rank correlations, Haron *et al*. [22] used Independent t-test. Many social disclosure studies had used multiple regression analysis [20, 9, 11, 24].

In Indian context, a limited number of studies have been undertaken which have attempted to identify factors having significant influence on the extent of corporate social disclosure. Such studies include Singh and Ahuja [28], Porwal and Sharma [26], Vasal [20], Dhar and Mitra [29]. From review of available literature in Indian context, first, we find that the number of study on corporate social reporting is very limited. Second, very few of them have attempted to search the motivating factors behind corporate social disclosure in India. Third, most of the studies in Indian context, except a few, were undertaken in the last quarter of the twentieth century. Consequently, these studies fail to provide adequate empirical evidence on factors influencing the level of corporate social disclosure in Indian context.

In this backdrop, the present study seeks to identify different company specific factors which have significant influence on the extent of social disclosure in India and to examine their impacts on such disclosure.

RESEARCH METHODOLOGY

The present study is based on annual reports of 65 manufacturing companies for the accounting year 2007-2008. These companies were selected by random sampling without replacement from top 500 companies listed in Bombay Stock Exchange (BSE), ranked on the basis of their market capitalization as on 31.03.2008. The list of these 65 companies is exhibited in APPENDIX I.

For measuring the extent of corporate social disclosure, we prepared a preliminary checklist of voluntary[1] social information. This checklist was based on the disclosure checklist used in previous studies [9, 11, 10] on voluntary social disclosure practices in the context of developing countries. The preliminary checklist was modified by including additional voluntary social information items, which were disclosed in annual reports of at least two sample companies. The final disclosure checklist comprises 49 information items relating to four different areas of corporate social responsibility, namely, environment, employee, community and product (APPENDIX II).

For measuring the extent of corporate social disclosure, annual report of each of the sample company was thoroughly examined. A company was awarded a score one ('1') if it disclosed an information item contained in our checklist. On the contrary, a company got a score zero ('0"), if an information item was found to remain undisclosed in the annual report.

When awarding of scores for all information items was over, the extent of overall social disclosure or overall social disclosure score of each company was measured by the following index of disclosure:

$$\textbf{Corporate Social Disclosure Index (CSDI)} = \frac{\text{Total score obtained by the Company}}{\text{Maximum score attainable by the Company}}$$

The above ratio (CSDI)[2] measuring social disclosure score actually represents the extent of overall social disclosure in entire corporate annual reports.

Empirical results relating to the extent of corporate social disclosure, obtained by applying the above CSDI, are reported below.

Extent of Overall Social Disclosure

The overall social disclosure score of all sample companies as measured by their disclosure indices are presented in Table 1.

From overall social disclosure score, some descriptive statistics have been measured which are reported in Table 2.

Table 1: Overall Social Disclosure Score of 65 Sample Companies in Descending Order

Overall Social Disclosure Score	Overall Social Disclosure Score	Overall Social Disclosure Score	Overall Social Disclosure Score	Overall Social Disclosure Score
0.69	0.31	0.20	0.12	0.10
0.57	0.31	0.20	0.12	0.08
0.51	0.29	0.18	0.12	0.06
0.47	0.29	0.18	0.12	0.06
0.41	0.27	0.16	0.12	0.06
0.39	0.27	0.16	0.12	0.04
0.39	0.24	0.16	0.12	0.04
0.37	0.24	0.14	0.10	0.04
0.37	0.24	0.14	0.10	0.04
0.35	0.24	0.14	0.10	0.04
0.33	0.22	0.14	0.10	0.04
0.33	0.22	0.14	0.10	0.02
0.33	0.20	0.12	0.10	0.02

Source: Computed from Examination of Annual Reports

Table 2: Descriptive Statistics relating to Overall Social Disclosure Score

Mean	20%
Range	67%
Standard Deviation	14%

Source: Computed from figures of Table 1

From Table 2, it is found that average level of overall social disclosure is as low as 20%. The range (67%) and standard deviation (14%) indicate that there is a wide variation in the extent of overall social disclosure among sample companies.

There are many factors, which may contribute to the observed variations in the extent of social disclosure. In the present study, we have selected some company characteristics and made an attempt to examine how far these characteristics can explain the observed variation.

Selection of Company Specific Factors and Formulation of Hypothesis

Based on the previous empirical works on corporate social disclosure [9, 11, 24], theoretical considerations and availability of data, following five company characteristics have been selected as potential explanatory variables[3] for explaining the variation in the extent of social disclosure among the companies listed in the Bombay Stock Exchange:

- Company Size,
- Profitability,
- Nature of Industry,
- Government Ownership and
- Dominance of Independent Directors on Corporate Board

Company Size

Company size is believed to be positively associated with the extent of voluntary social disclosure for a number of theoretical reasons. Belkaoui and Karpik [30] indicated that image-building and public interest concerns might influence the companies to decide to spend on socially responsible activities and to make their disclosure. Large companies have the capacity to spend on social activities. According to legitimacy theory, large companies are expected to undertake such activities and disclose them in order to legitimize their existence and enhance their image in the eye of public. In the opinion of Cowen *et al*. [31], large companies are subject to greater scrutiny by various groups in the society and therefore, would be under greater pressure to disclose their social activities to legitimize their business [cited in 9].

Most empirical social disclosure studies have found significant and positive association between the company size and extent of social disclosure [see, for example, 30, 26, 20, 9, 13]. However, the relation between company size and corporate social disclosure was not supported by all CSD studies. For example, Roberts [32] could not find any such association in the context of US [6].

Because of theoretical justification and presence of empirical evidence in support of positive association between the company size and social disclosure, we hypothesize that the *extent of social disclosure of a company is influenced positively by its size* (*Alternative hypothesis $H_1 1$*).

In this study, we measure company size in terms of total assets. *Total assets are measured at their book values at the end of the reporting year.*

Profitability

Companies have the incentive to undertake social activities and make disclosure to increase their image and legitimize their business. Companies with higher profitability may afford to spend on social activities because they can meet such expense out of their profit. Heinze [33] contends that profitability is the factor that allows the management freedom and flexibility to undertake and disclose to shareholders more extensive social programmes [6]. Haniffa and Cooke [9] opine that profitable companies disclose social information to demonstrate their contribution to society's well-being. However, if the earning margin is low, then the company cannot be expected to spend more on social obligation and will also hesitate to disclose it [2].

The empirical evidence on the relation between CSR disclosure and profitability is inconclusive. While Belkaoui and Karpik [30], Patten [34], Davey [35], Ng [36] have not found any significant association between these two variables [cited in 6], Singh and Ahuja, [28 cited in 26] and Balabanis *et al*. [37 cited in 11] provide evidence of a significant positive association between them.

Even if empirical findings provide mixed results, in view of theoretical justification in favor of positive association between these two variables, we predict *a positive impact of company's profitability on the extent of its social disclosure* (Alternative hypothesis $H_1 2$).

In this study, return on equity is used to represent profitability. Return on equity is measured in terms of *ratio of net profit after tax to book value of equity.*

Nature of Industry

Studies on CSD have provided both theoretical reasoning and empirical evidence in support of the claim that the nature of industry influences corporate social disclosure. Diversified characteristics of industries in terms of potential growth, risk to society, employment opportunities, competition and government interference, etc. may provide scope for adoption of differential corporate social and environmental disclosure (CSED) policy [18]. Deegan and Gordon [38] opined that an industry, whose activities modify or affect the environment, might disclose more detailed social responsibility information than the companies in other industries [cited in 5]. Harte and Owen [39] indicate that industry sensitivity towards the environment influences the level of CSED [cited in 18].

Several studies have provided empirical evidence of positive association between industry classification and extent of social disclosure [6, 5, 18, 10].

We hypothesize that *the extent of social disclosure made by companies belonging to highly polluting industry is greater than that by companies not belonging to such industry* (Alternative hypothesis $H_1 3$).

A dummy variable 'HPI' is used to test this hypothesis. The variable takes the value one, if the company belongs to a highly polluting industry, and zero otherwise. For ascertaining whether a company belongs to a highly polluting industry or not, we have used the list of highly polluting industry wherein seventeen categories of Industries have been identified by the Ministry of Environment & Forests, the Government of India, as highly polluting industries (APPENDIX III).

Government Ownership

Government ownership is another variable which has been tested by previous researchers [40, 11, 10, 24] to find out its association with social disclosure. Government ownership implies ownership of general public. In developing country like India, where the level of social infrastructure (like health, education, etc.) and public amenities are poor, there is a greater public expectation that the government companies will be guided by social motive rather than profit motive. Ghazali [11] argues that government owned companies are expected to engage in more social activities and make disclosure to justify their existence.

We hypothesize that *government owned companies make greater social disclosure than that by companies not owned by government* (Alternative hypothesis $H_1 4$).

To test this hypothesis, a dummy variable "GOC" is used which takes the value one, if the reporting company is a government owned company, and zero otherwise. In this study, companies with more than 50% shareholding in the hands of the Government of India have been considered as government owned company.

Dominance of Independent Directors on Corporate Board

Choi *et al*. [41] opine that national differences in disclosures are driven by the form of corporate governance prevailing in a country. Corporate governance system focuses on improving the supervisory function of the board [42]. As a part of corporate governance measures, in many countries, the corporate legislations ask for appointment of independent director(s) on the board of companies. In India, the appointment of Independent Directors on the Board is a mandatory requirement for the listed Companies. The purpose is that the independent directors would act as a watchdog on company's operations and safeguard the overall interest of company.

The role of independent directors is to frame policies and strategies in the best interest of the company. Porter and Kramer [43] argue that there is a deep linkage between corporate strategy and their social responsibility. For the sake of long term sustainability, it is expected that independent directors will insists on formulation and implementation of corporate strategies which embrace responsibility for the company's actions, and encourage a positive impact through its activities on the environment, consumers, employees, communities and all other stakeholders. Dominance of independent directors on the corporate board may encourage them to insist on social performance and making extensive disclosure of social information in order to build corporate image and legitimize their business.

In this backdrop, it may be interesting to explore whether the dominance of independent directors in the corporate board can influence social disclosure level in their annual reports. In the present study, it is hypothesized that *the extent of social disclosure in annual reports of companies is greater if majority of directors on their boards is independent than that of companies without such majority directors on their boards (*Alternative hypothesis $H_1 5$).

This hypothesis is tested by using a dummy variable 'INDPD' which *takes the value one, if the reporting company has more than 50% independent directors on its board, and zero otherwise.*

Impact of Company Specific Factors on the Extent of Corporate Social Disclosure

In the present study, we have used multiple linear (OLS) regression analysis to examine the impact of selected company characteristics (independent variables) on the extent of corporate social disclosure in annual reports (dependent variable). We have considered corporate social disclosure index (CSDI) as a function of the five independent or explanatory variables representing the selected company characteristics. In other words,

CSDI = f (TA, ROE, HPI, GOC, INDPD)

On the basis of above discussion, we have estimated the following equation:

$$CSDI_j = a + b_1 TA_j + b_2 ROE_j + b_3 HPI_j + b_4 GOC_j + b_5 INDPD_j + e_j$$

where,

j = Index of company (1, 2………65);
CSDI = Corporate social disclosure index;
TA = Company's total assets at the end of reporting year;
ROE = The ratio of a company's total earnings after tax for the reporting year to its total outstanding equity at the end of reporting year;
HPI = 1, if the company belongs to highly polluting industry, or 0 otherwise;
GOC = 1, if the company is owned by the Government of India, or 0 otherwise;
INDPD = 1, if the majority of the directors on the Board of a company is independent director, or 0 otherwise;
a = Constant;
b = Parameter;
e = Error term.

Regression Results

The results of the final regression, obtained by using SPSS (version 10.0) statistical package, are reported in Table 3.

Table 3: Estimates from the OLS Regression of Index of Corporate Social Disclosure on Company Characteristics

Sources	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.583	5	0.117	9.772	.000
Residual	0.704	59	0.0193		
Total	1.287	64			

Number of observation = 65
F (5, 59) = 9.772
R^2 = .453
Adj. R^2 = .407
Durbin-Watson statistic = 1.573
Standard error of the estimate = .1092

	Regression Co-efficient	Standard Error	t	p Values	Collinearity Statistics	
					Tolerance	VIF
Constant	.107	.036	2.961	.004		
TA	.000003515	.000	4.980	.000	.936	1.069
ROE	.03147	.072	.438	.663	.913	1.095
HPI	.09329	.029	3.227	.002	.884	1.131
GOC	.09634	.047	2.031	.047	.974	1.027
INDPD	.003253	.028	.115	.909	.914	1.094

Source: SPSS (Version 10.0) Output

Now we shall attempt to analyze and interpret these results.

Analysis and Interpretation of Regression Results

From the table 3 it is observed that the value of R^2 is 45.3%. The average VIF[4] (1.0832) is more than 1 which indicates that there is no multicollinearity problem. The overall significance of the regression model is indicated by its F-value. The value of F is 9.772 with probability 0.00. This value for the Model is found significant at 1% level. The overall explanatory power of the Model, represented by adjusted R^2 of .407, indicates that the model explains nearly 41% of the variation in the extent of social disclosure by the selected company characteristics.

The regression coefficients and their p values reported in Table 3 reveals the following:

(i) The coefficient of total assets (b_1=0.000003515) is significant at 1% level of significance and is positive which indicates a positive contribution of volume of total assets on the corporate social disclosure index (CSDI). This result suggests that extent of social disclosure increases with the increase in company's size.

(ii) The coefficient (b_3) of dummy variable 'HPI' shows the additional contribution of a company belonging to highly polluting industry on CSDI. A positive and significant value of b_3 is supposed to confirm our prediction ($H_1$3). The result shows that b_3 (.09329) is positive and significant at 1% level of significance. Hence, it can be stated that a company belonging to highly polluting industry makes a positive impact on the extent of social disclosure and that incremental disclosure of such companies is statistically acceptable. The result indicates that the extent of social disclosure by companies belonging to highly polluting industry is greater than that by companies which do not belong to such industry.

(iii) The coefficient of dummy variable 'GOC', i.e., b_4 (.09634) is positive and significant at 5% level of significance which indicates that a company owned by government makes a positive impact on the extent of social disclosure. The result suggests that government owned companies make greater social disclosure than that by companies not owned by government.

(iv) However, the association between CSDI and other two explanatory variables 'ROE' and 'INDPD' are not statistically significant which indicate that profitability (i.e., economic performance) and dominance of independent director in the corporate board do not bear any significant impact on the extent of social disclosure.

Analysis and Interpretation of Impact of Company Size (Total Assets)

Consistent with our expectation, 'total assets' is found to be positively associated with the extent of corporate social disclosure and statistically significant at 1% level. The significance of company size is consistent with the finding of most prior studies, see for example, Hackston and Milne [6] in context of New Zealand, Cormier and Gordon [40] in context of Canada, Vasal [20], Porwal and Sharma [26], Dhar and

Mitra [29] in context of India, Haniffa and Cooke [9] and Ghazali [11] in context of Malaysia, Gao *et al*. [18] in context of Hong Kong.

Indian socio-economic condition is characterized by several problems like large scale poverty, massive economic disparity, poor public health, high illiteracy, low level of women empowerment, etc. This socio-economic condition demands positive contribution in social sector from Indian companies. Since larger companies are more visible in the public eyes and more politically sensible, it seems that they have engaged in diverse social activities and make extensive social disclosure in order to reduce political cost and increase corporate image in the eye of huge domestic stakeholders.

Analysis and Interpretation of Impact of Nature of Industry (HPI)

As expected, companies belonging to highly polluting industry is found to have a positive significant impact on the extent of social disclosure suggesting that these companies disclosed more social information in comparison to companies not belonging to highly polluting industry. Our finding is consistent with Vasal [20] in Indian context and Hackston and Milne [6] in context of New Zealand. However, Dhar and Mitra [29] in Indian context and Haron *et al*. [22] in the context of Malaysia have found no significant association between types of industry and level of corporate social disclosure.

It appears that in Indian context companies belonging to 'highly polluting industry' are making more adverse impact on environmentin comparison to other companies (less polluting). Hence, such companies attempt to justify their existence and continuity in the society by undertaking more social activities and making extensive social disclosure.

Analysis and Interpretation of Impact of Government Ownership (PSU)

As predicted, government ownership is found to have a significant positive influence on the extent of corporate social disclosure indicating that companies owned by the Government of India disclosed more social information in comparison to companies not owned by it. In India, government companies were established for the fulfillment of certain socio-economic objectives. Such companies are accountable in the Parliament for fulfillment of these objectives. Moreover, these companies are closely observed by general people and hence, more politically sensible. It seems that government companies in India have undertaken social activities as per their agenda to fulfill public demand for social services. It is likely that these companies have made additional disclosure of social information in order to reduce political cost and legitimize their existence by giving signal to the society that they are operating in accordance with public expectation [11].

Our finding is consistent with Ghazali [11] and Said *et al*. [24] in the context of Malaysia who have found that Government ownership is positively correlated with the level of CSR disclosure.

Analysis and Interpretation of Impact of Profitability (ROE)

Impact of profitability has been found to be insignificant which implies that it does not influence the extent of corporate social disclosure in India. Our result is contrary to the findings of Singh and Ahuja [28] in the context of India and Balabanis *et al*. [37] in the context of Britain but consistent with Vasal [20] and Dhar & Mitra [29] in Indian context and Ghazali [11] in the context of Malaysia.

Non-significant relation between corporate social disclosure and profitability may be due to the fact that higher profitability did not enable Indian companies to spend on social activities and report on them. Ability to spend depends not only on the rate of profit but also on the magnitude of profit. Moreover, profitable concerns, unless they are big ones, may not be politically visible and under pressure of different stakeholders for undertaking social activities and making their disclosure. It appears that the contention of Ghazali [11] and Williams [17] that 'social disclosure is more closely related to public pressure rather than economic performance' becomes true in Indian context.

Analysis and Interpretation of Impact of Dominance of Independent Directors on Corporate Board (INDPD)

Like profitability, impact of the variable 'INDPD' is not statistically significant which signifies that dominance of independent directors on corporate board does not influence the extent of corporate social disclosure in India. Our result is consistent with Said *et al*. [24] in the context of Malaysia but contrary to the finding of Rouf [25].

In companies having controlling shareholders, as is common to India, the nomination and selection of independent directors presents an inherent conflict with the very independence of so-called independent directors [44, p. 48]. In reality, they cannot go against the decision of the representative directors of the promoter group who may be focused only on company's financial interest. It seems that, in Indian context, due to lack of real independence, independent directors have not been successful in embedding societal expectation in decision-making process and could not play an effective role to encourage and motivate in undertaking extensive social activities and make corporate social disclosure.

CONCLUSION

The present study has observed that average level of voluntary corporate social disclosure in India is very low which comes to 20%. There is considerable variation in the extent of social disclosure among sample companies, with range and standard deviation being 67% and 14% respectively. The results of the multiple regressions show that company size, nature of industry and government ownership, have significant positive impact on the extent of overall social disclosure in the annual reports of companies listed in the Indian stock exchange. However, two other selected company characteristics, namely, profitability and dominance of independent directors on corporate board, are found statistically insignificant, suggesting that these two variables have failed to explain the variation in the extent of overall social disclosure in Indian context.

Like any other social study, the present study is not free from limitations. First, the scope of the present research has been restricted to disclosure of social information in the corporate annual reports. Other means of communicating social information like company's website, television, newspaper, etc. have not been considered in this study. Second, in measuring social disclosure scores, an unweighted disclosure index has been used which could not capture relative importance of different social information item. Instead of Weighted index, an unweight index has been purposefully used in order to avoid assignment of subjective weights to different social information items. Third, our disclosure index could not measure the volume of social disclosure like number of sentences or number of words which could have been measured if we had used content analysis. Since our objective was to measure the extent of variety of social responsibility disclosure rather than its volume, we used disclosure index instead of content analysis. Fourth, in the present study, regression analysis has been made on one-year data. This makes us unable to make trend analysis of data over time. Finally, the study examined the social disclosure practice of listed manufacturing companies and hence, findings of the study cannot be generalized for all companies in India.

Caution should be made in interpreting the results of this study. As involvement in social activities may not always be reflected in corporate annual reports [11], in a few cases, it may so happen that social performance of a company with lower social disclosure score is better than that of a company with higher disclosure score. Moreover, higher disclosure score signifies disclosure of information on greater variety of social activity. It does not mean greater volume of social performance by the reporting company.

There is need for continuing research on different aspects of social disclosure, particularly, to examine whether social reporting reflects the changing needs and aspirations of different stakeholders in the society. Apart from annual report, future research may be extended to cover social disclosure in other medium of communication such as company's newsletter and website. Instead of focusing on one-year data, disclosure practices in corporate annual reports for several years may be examined in future, as this could provide stronger and more relevant result. Other than the explanatory variables considered in the present study, future research may study the impact of cultural factors[5] and corporate governance factors[6] on corporate social disclosure practices in Indian context. Future study on social disclosure practices among different industry sectors may reveal interesting results. Besides, future research may also examine how far corporate social reporting meets the newly introduced legal requirements for social disclosure under the Listing Agreement and Companies Act, 2013.

Notes

1. In this study, we have used the words voluntary information in the sense that such information is not required to be disclosed in the annual report of listed companies by virtue of any provision contained in the Companies Act, 1956 or any rules made their under.
2. This ratio is calculated in decimal form. However, in many places of this study, the disclosure index or score has been expressed in percentage form which is obtained by multiplying the decimal figure of the disclosure index by 100.
3. The words 'explanatory variable' and 'independent variable' are used interchangeably in this study.
4. Average VIF = (1.069 + 1.095 + 1.131 + 1.027 + 1.094)/5 = 1.0832
5. Cultural factors include ethnicity, culture and educational level of directors, professional qualifications of chairman of the audit committee, etc.
6. Corporate governance factors include ownership structure, domination of foreign shareholders, whether chairman or managing director is a family member of controlling shareholders, etc.

REFERENCES

1. Ullmann A; Data in search for a theory: A critical evaluation of the relationship among social Performance, social disclosure and economic performance of US firms. Academy of Management Review, 1985; 10(3): 540-577.
2. Pahuja S; Relationship between environmental disclosure and corporate characteristics: A study of large manufacturing companies in India. Social Responsibility Journal, 2009; 5(2): 227-244.

3. Meek GK, Roberts CB, Gray SJ; Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations. Journal of International Business Studies, 1995, Third Quarter; 555–572.
4. Chau GK, Gray SJ; Ownership structure and corporate voluntary disclosure in Hong Kong and Singapore. International Journal of Accounting, 37, 247-265.
5. Adams CA, Hill WY, Roberts CB; Corporate social reporting practices in Western Europe: Legitimating corporate behavior. British Accounting Review, 1998; 30, 1-21.
6. Hackston D, Milne MJ; Some determinants of social and environmental disclosures in New Zealand companies. Accounting, Auditing and Accountability Journal, 1996; 9 (1): 77-108.
7. Haider MB; An overview of corporate social and environmental reporting (CSER) in developing countries. Issues in Social & Environmental Accounting, 2010; 4(1): 3-17.
8. Ali W, Rizwan M; Factors influencing corporate social and environmental disclosure (CSED) practices in the developing countries: An institutional theoretical perspective. International Journal of Asian Social Science, 2013; 3(3): 590-609.
9. Haniffa RM, Cooke TE; The impact of culture and governance on corporate social reporting. Journal of Accounting and Public Policy, 2005; 24: 391–430.
10. Rizk R, Dixon R, Woodhead A; Corporate social and environmental reporting: A survey of disclosure practices in Egypt. Social Responsibility Journal, 2008; 4(3): 306-323.
11. Ghazali NAM; Ownership structure and corporate social responsibility disclosure: Some Malaysian evidence. Corporate Governance, 2007; 7(3): 251-266.
12. Belal AH; Corporate social responsibility reporting in developing countries: The case of Bangladesh. USA: Ashgate Publishing Company, 2008.
13. Naser K, Al-Hussaini A, Al-Kwari D, Nuseibeh R; Determinants of corporate social disclosure in Ddeveloping countries: The case of Qatar. Advances in International Accounting, 2006; 9, 1–23.
14. Setyorini CT, Ishak Z; Corporate social and environmental disclosure: A positive accounting theory view point. International Journal of Business and Social Science, 2012; 3(9): 152-164.
15. Gray R, Kouhy R, Lavers S; Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. Accounting, Auditing & Accountability Journal, 1995; 8(2): 47-77.
16. Deegan C, Rankin M, Voght P; Firms disclosure reaction to major social incidents: Australian evidence. Accounting Forum, 2000; 24(1): 101-130.
17. Williams SM; Voluntary environmental and social accounting disclosure practices in the Asia-Pacific region: An international empirical test of political economy theory. International Journal of Accounting, 1999; 34(2): 209-238.
18. Gao SS, Heravi S, Jason Xiao JZ; Determinants of corporate social and environmental reporting in Hong Kong: A research note. Accounting Forum, 2005; 29, 233 – 242.
19. Imam S; Corporate social performance reporting in Bangladesh. Managerial Auditing Journal, 2000; 15(3): 133-141.
20. Vasal VK; Corporate characteristics and extended social reporting - Some Indian evidence. Indian Journal of Accounting, 1994; 25, 63-77.
21. Ratanajongkol S, Davey H, Low M; Corporate social reporting in Thailand: The news is all good and increasing. Qualitative Research in Accounting & Management, 2006; 3(1): 67-83.
22. Haron H, Ismail I, Yahya S; Factors influencing corporate social disclosure practices in Malaysia. Journal Management Tahun, 2008; 12(1): 86-100.
23. Uwuigbe U, Egbide B; Corporate social responsibility disclosures in Nigeria: A study of listed financial and non-financial firms. Journal of Management and Sustainability, 2012; 2 (1): 160-169.
24. Said R, Zainuddin YH, Haron H; The relationship between corporate social responsibility disclosure and corporate governance characteristics in Malaysian public listed companies. Social Responsibility Journal, 2009; 5(2): 212-226.
25. Rouf MA; The corporate social responsibility disclosure: A study of listed companies in Bangladesh. Business and Economics Research Journal, 2011;2(3): 19-32.
26. Porwal, LS, Sharma N; Social responsibility disclosure by Indian companies. Chartered Accountant, 1991; 630-635.
27. Agarwal RS; Social reporting by central public enterprises: A case study. The Management Accountant, 1992; 349-351.
28. Singh DR, Ahuja JM; Corporate social reporting in India. International Journal of Accounting Education & Research, 1983; 18(2): 150-169.
29. Dhar S, Mitra, S; Extent and determinants of corporate social reporting in India. Indian Accounting Review, 2010; 14(2): 57-78.
30. Belkaoui A, Karpik PG; Determinants of the corporate decision to disclose social information. Accounting, Auditing and Accountability Journal, 1989; 2(1): 36-51.
31. Cowen SS, Ferreri LB, Parker LD; The Impact of corporate characteristics on social Responsibility disclosure: A typology and frequency-based analysis. Accounting, Organizations and Society, 1987; 12(2): 111-122.

32. Roberts RW; Determinants of corporate social responsibility disclosure: An application of stakeholder theory. Accounting, Organizations and Society, 1992; 17 (6): 595-612.
33. Heinze DC; Financial correlates of a social involvement measure. Akron Business and Economic Review, 1976;Spring.
34. Patten DM; Exposure, legitimacy, and social disclosure. Journal of Accounting and Public Policy, 1991; 10, 297-308.
35. Davey HB; Corporate social responsibility disclosure in New Zealand: An empirical investigation. Unpublished working paper, 1982, Massey University, Palmerston North.
36. Ng LW; Social responsibility disclosures of selected New Zealand companies for 1981, 1982 and 1983. Occasional paper No. 54, 1985, Massey University, Palmerston North.
37. Balabanis G, Phillips HC, Lyall, J; Corporate social responsibility and economic performance in the top British companies: Are they linked? European Business Review, 1998; 98(1): 25-44.
38. Deegan C, Gordon B; A study of the environmental disclosure practices of Australian corporations. Accounting and Business Research, 1996; 26(3): 187–199.
39. Harte G, Owen DL; Environmental disclosure in the annual reports of British companies: A research note. Accounting Auditing and Accountability Journal, 1991; 4(3): 51–61.
40. Cormier D, Gordon I; An examination of social and environmental reporting strategies. Accounting, Auditing & Accountability Journal, 2001; 14(5): 587-616.
41. Choi FDS, Frost CA, Meek GK; International Accounting, 1999, New Jersey: Prentice Hall.
42. Bhattacharyya AK; Corporate financial reporting in corporate governance, economic reforms, and development - Indian experience. New Delhi, 2004, Oxford University Press.
43. Porter ME, Kramer MR; Strategy& society: The link between competitive advantage and corporate social responsibility. Harvard Business Review, 2006 December;84(12): 78-92, 163.
44. Khanna V, Mathew SJ; The Role of Independent Directors in Controlled Firms in India: Preliminary Interview Evidence.National Law School of India Review, 2010 22(1): 35 – 66.

APPENDIX I

Name of Sample Companies

(In alphabetical order)

Sl. No.	Name of Companies	Sl. No.	Name of Companies
1.	ACC Ltd.	33.	India Cements Ltd
2.	AdhunikMetaliks Ltd.	34.	Ingersoll-Rand (India) Ltd.
3.	Akruti City Ltd.	35.	Jaiprakash Associates Ltd.
4.	Alok Industries Ltd.	36.	Jaiprakash Associates Ltd.
5.	Ambuja Cements Ltd.	37.	Jyoti Structures Ltd.
6.	Ansal Properties & Infrastructure Ltd.	38.	K S Oils Ltd.
7.	Arvind Ltd.	39.	Kansai Nerolac Paints Ltd.
8.	AshapuraMinechem Ltd.	40.	KEC International Ltd.
9.	Astrazeneca Pharma India Ltd.	41.	Kesoram Industries Ltd.
10.	Bajaj Electricals Ltd.	42.	Lloyds Metals & Engineers Ltd.
11.	BalarampurChini Mills Ltd.	43.	Maharashtra Elektrosmelt Ltd.
12.	BEML Ltd.	44.	Mahindra & Mahindra Ltd.
13.	BGR Energy Systems Ltd.	45.	Mahindra Forgings Ltd.
14.	Biocon Ltd.	46.	Marico Ltd.
15.	Britannia Industries Ltd.	47.	National Aluminium Co. Ltd.
16.	Cadila Healthcare Ltd.	48.	Omaxe Ltd.
17.	Colgate-Palmolive (India) Ltd.	49.	Opto Circuits (India) Ltd.
18.	Coromandel Fertilisers Limited	50.	Orchid Chemicals & Pharmaceuticals Ltd.
19.	Dishman Pharmaceuticals & Chemicals Ltd.	51.	Panacea Biotec Ltd.
20.	Divis Laboratories Ltd.	52.	Pfizer Ltd.
21.	Elecon Engineering Co. Ltd.	53.	Pidilite Industries Ltd.
22.	Ess Dee Aluminium Ltd.	54.	Plethico Pharmaceuticals Ltd.
23.	Finolex Industries Ltd.	55.	Praj Industries Ltd.
24.	Grasim Industries Ltd.	56.	Procter & Gamble Hygiene and Health Ltd.
25.	Gujarat Mineral Development Corporation Ltd.	57.	Reliance Industries Ltd.
26.	Gujarat NRE Coke Ltd.	58.	S. Kumars Nationwide Ltd.
27.	Gujarat State Fertilisers& Chemicals Ltd.	59.	Sarda Energy and Minerals Ltd.
28.	Havells India Ltd.	60.	Sesa Goa Ltd.
29.	Hindustan Construction Co. Ltd.	61.	Tata Steel Ltd.
30.	Hindustan Copper Ltd.	62.	Tube Investments of India Ltd.
31.	Hindustan Petroleum Corp Ltd.	63.	Unitech Ltd.
32.	HMT Ltd.	64.	United Breweries Ltd.
		65	Videocon Industries Ltd.

APPENDIX II
Social Disclosure Checklist

Sl. No.	Information Items	Sl. No.	Information Items
Environment		25.	Operating Mobile Health Centre/ Mobile Dispensaries
1.	Environmental Policy	26.	Financing Health Services and Voluntary Activities
2.	Emission Reduction	27.	Health Programme
3.	Prevention of Environmental Damage	28.	Promotion of Community Education
4.	Conservation of Natural Resources	29.	Training for Skill Development
5.	Recycling / Reduction of Waste	30.	Upliftment of Weaker Section of Society
6.	Environmental Audit	31.	Employment to Underprivilleged Classes
7.	Energy Audit	32.	Establishment / Operating Hospital with Subsidised Treatment
8.	Encouragement for Use of Renewable / Environment Friendly Sources of Energy	33.	Establishment of School
9.	Using Renewable / Environment Friendly Sources of Energy	34.	Establishment of libraries
10.	Environmental Award Received	35.	Development/ Maintenance of Other Community Infrastructure (like construction/ repair of roads, panchayat offices, community halls in rural areas)
Employees		36.	Social Campaign Programme
11.	Diagnostic and Curative Services	37.	Disaster Management
12.	Health Audits and Occupational Hazard Assessment	38.	Other Community Development Activity / Programme
13.	Health and Safety at Work	39.	Social Activity Award Received
14.	Safety Training to Employees	Product	
15.	Incidence of Accident	40.	Discussion of Major Types of Products
16.	Recruitment Policy	41.	Pictures of Major Types of Products
17.	Employee Development/ Training Programmes	42.	New Product Launched
18.	System of Tracking and Rewarding Innovations by Employees	43.	Product Quality/ ISO
19.	Sport and Recreation	44.	Environment Friendly Product
20.	Total Number of Employees	45.	Regular Assessment under Rigid Product Quality Rating
21.	Involvement of Employees in Planning Process	46.	Product Safety
22.	Employee Relation with Management	47.	Improvement in Customer Services
23.	Health and Safety Award Received	48.	Distribution of Marketing Network - Domestic and/ or Foreign
Community Involvement		49.	Product/ Customer Award Received
24.	Charitable Donation and Social Activity Sponsorship		

APPENDIX III
Sector-wise of Highly Polluting Industries (17 Categories)

Sl. No.	Industrial Sector
1.	Aluminium
2.	Cement
3.	Chlor – Alkali
4.	Copper
5.	Distillery
6.	Dyes & Dye Intermediate
7.	Fertilizer
8.	Iron & Steel
9.	Oil Refineries
10.	Pesticides
11.	Petrochemicals
12.	Pharmaceuticals
13.	Pulp & Paper
14.	Sugar
15.	Tannery
16.	Thermal Power
17.	Zinc

Source: Central Pollution Control Board, Annual Report, December 31, 2007.