

A Study of the Participation of the Private Sector Companies of India in Corporate Social Responsibility Activities through Conjoint Analysis

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Abstract

This paper aims to explore into the aspect of establishment of a pattern of participation of corporate social responsibility (CSR) activities amongst the private sector companies as reflected in the respective company documents in the public domain, taking rate of growth of profit as the parameter. An empirical and analytical study was undertaken whereby the corporate official websites of the companies were analyzed. Data were then generated from such an analysis using qualitative document analysis. For this study, we used 'number of sentences' as the unit for measurement of CSR participation. Data were entered into SPSS to generate descriptive statistics, Pearson's correlation, multiple regression analysis and conjoint analysis. The most preferred CSR activities were observed to be education, health and environment. Drinking water and sanitation was least preferred activity. A high level of dispersion was observed with respect to drinking water and sanitation and a low level with respect to education, health, environment and 'others'. The pattern across the deciles was observed to be random with respect to average sentences spent as well as coefficient of variance (CV). The activities that had an impact on the deciles at different levels as per the multiple regression analysis were: *education, health, environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others*. Companies belonging to the *manufacturing sector and the services sector* have shown the highest responsiveness towards all the activities. Companies had attached the highest importance (Level 1) to the following CSR activities: *education, environment and 'others'*.

Key Words

Corporate Social Responsibility, Pattern of Participation of CSR Activities, Qualitative Document Analysis, Conjoint Analysis

Introduction

Corporate social responsibility (CSR) is a fluid concept and both a means and an end. It is an integral element of the firm's strategy—the way the firm delivers its products or services to markets (means), and also a way of maintaining the legitimacy of its actions in the larger society by bringing stakeholder concerns to the foreground (end). CSR is a vehicle for discussing the obligations a business has towards its immediate society, a way of proposing policy ideas on how those obligations can be met, as well as a tool by which the mutual benefits for meeting those obligations can be identified. The success of a firm's CSR reflects how well it has navigated stakeholder concerns while implementing relationships that exist among business, their stakeholder groups, the economic system and the communities within which they exist. Simply put, CSR addresses a company's relationships with its stakeholders.

However, for corporate enterprises, the capacity to influence the CSR activities taken up by them depends on

the capacity to communicate with different stakeholders and on the support obtained from them. In fact, CSR is an extremely complex web of interaction between an organization and its stakeholders.

There have been extant studies addressing various issues pertaining to CSR, either with respect to the CSR activities undertaken by the corporate sector or with respect to their communication. However, most of these discussions focus on the phenomenon in the US or Europe, more precisely on the western front with little emphasis on the developing countries.

The rationale behind studying CSR in developing countries as distinct from CSR in the developed countries is manifold:

- developing countries represent the most rapidly growing economies and hence a lucrative growth market for business (IMF, 2006);
- social and environmental crisis is more acutely felt in the developing countries (UNDP, 2006);

- developing countries are the ones where the impact of globalization, economic growth, investment and business activity are likely to have a strong impact on societal and environmental issues (World Bank, 2006) and
- challenges faced by the developing countries with respect to CSR are different as compared to challenges faced by the developed countries.

One of the visions of the Millennium Development Goals as imbibed in it was 'a world with less poverty, hunger and disease, greater survival prospects for mothers and their infants, better educated children, equal opportunities for women and a healthier environment' (UNDP, 2006). Unfortunately, these visions remain far from being met in many developing countries like India today. In this research paper, we would focus our attention on India because India is a country which has always tried to exhibit the hallmark of a 'harmony-with-nature relationship' between humans and their environment. Chakraborty (1985) had shown the deep roots of the Indian ethos from which Indian managers can develop a structure of values on the basis of which they can develop stakeholder policies. Gandhi's theory of social trusteeship epitomizes this 'prosperity for all' attitude. His theory of social trusteeship is a weapon to address economic inequalities (Sivakumar, 1995).

Corporate India has always boasted of its strong tradition of corporate philanthropy, and the Indian society had viewed its business leaders as leaders of social development (Mohan, 2001). An eye for creative CSR intervention where CSR was successfully integrated into business strategies was seen in ITC Ltd with their 'e-choupal initiative' and Tata Consultancy Service in the form of their 'M-krisi phones'. Regardless of this strong tradition on philanthropy, it is difficult to imagine that we have achieved political freedom but not economic freedom, the freedom from hunger, disease and illiteracy. It is not just the government or the regulators that have a role to play to transform India to a 'Better India' but even the corporate should come together and effectively contribute towards a country's holistic development that is not just profit-driven but is also value-driven. This study therefore explores the extent of participation of the private sector companies in CSR activities.

Under such circumstances, with the inclusion of this introduction, the paper has been organized into eight sections. Section 2 gives a brief insight into the work that has been done in this area. Section 3 outlines the objectives. Section 4 outlines the theoretical frame work and hypotheses. Section 5 states the methodology. Section 6 looks into the analysis. Section 7 presents the conclusion and highlights the policy prescriptions.

Development of CSR in India

The development of CSR in India can be divided into four main phases:

First phase: CSR motivated by charity and philanthropy. The first phase of CSR was predominantly determined by culture, religion, family tradition and industrialization. In the pre-industrial period up to the 1850s, merchants committed themselves to society for religious reasons, sharing their wealth, for instance, by building temples. The merchant class in pre-industrial India played an important role in laying the cornerstones of philanthropy in their society. They built and maintained educational and religious establishments, social infrastructures and donated from their repositories at times of hardship (Sundar, 2000). Religious undertones characterized these charitable efforts and were often restricted to members of the same caste. At the turn of the nineteenth century, these charities expanded to include all members of the society. The term 'CSR' did not exist at that time, being coined only in the twentieth century. 'A company's engagement in social aspects was rather seen as philanthropy, in times of crisis, such as famine or epidemics throwing open godowns of food and treasure chests' (Arora and Puranik, 2004). Under colonial rule, Western types of industrialization reached India and changed CSR from the 1850s onwards. The pioneers of industrialization in the nineteenth century in India were a few families such as the Tata, Birla, Bajaj, Lalbhai, Sarabhai, Godrej, Shriram, Singhanian, Modi, Naidu, Mahindra and Annamali, who were strongly devoted to philanthropically motivated CSR (Mohan, 2001).

Second phase: CSR for India's social development (1914–1960). The second phase of Indian CSR (1914–1960) was dominated by the country's struggle for independence and influenced fundamentally by Gandhi's theory of trusteeship, the aim of which was to consolidate and amplify social development. During the struggle for independence, Indian businesses actively engaged in the reform process. Not only did companies see the country's economic development as a protest against colonial rule, they also participated in its institutional and social development. The corporate sector's involvement was stimulated by the vision of a modern and free India. Gandhi introduced the notion of trusteeship in order to make companies the 'temples of modern India': businesses (especially well-established family businesses) set up trusts for schools and colleges; they also established training and scientific institutes (Mohan, 2001). The heads of the companies largely aligned the activities of their trusts with Gandhi's reform programmes. These programmes included activities that sought in particular the abolition of untouchability, women's empowerment and rural development (Arora and Puranik, 2004).

A strong nationalistic element was visible among the philanthropic practices, and many of the upcoming and prominent business leaders contributed to the causes of social reforms, poverty alleviation, women empowerment, caste systems, etc. (Sundar, 2000). After independence in 1947, the overall socio-political goal focused on building a solid industrial base while nurturing the Indian cultural traditions. This led to a highly centralized economy (Davies, 2002) and saw a rapid growth in capital-intensive manufacturing plants. Consequently, by the 1960s, Indian economy had entered an era of focused growth and protectionism for the domestic industries and the government took on many social obligations. Kumar et al. (2001) call this 'Nehruvian Statism', after India's first Prime Minister Jawaharlal Nehru, who introduced this practice.

Third phase: CSR under the paradigm of the 'mixed economy' (1960–1980). The paradigm of the 'mixed economy', with the emergence of public sector units (PSUs) and ample legislation on labour and environmental standards, affected the third phase of Indian CSR (1960–1980). This phase is also characterized by a shift from corporate self-regulation to strict legal and public regulation of business activities. Under the paradigm of the 'mixed economy', the role of the private sector in advancing India receded. The 1960s have been described as an 'era of command and control' because strict legal regulations determined the activities of the private sector (Arora and Puranik, 2004). The increased encouragement for domestic industries also led to a concentration on maximizing profit, resulting in corruption and unethical practices by many companies (Sundar, 2000). As a result, corporate governance, labour and environmental issues rose on the political agenda and quickly became the subject of legislation. In 1970s, India began to adopt industrial pollution control measures, and the first set of environmental regulations began to emerge. However, the assumption and anticipation that the public sector could tackle developmental challenges effectively materialized to only a limited extent. Consequently, what was expected of the private sector grew, and the need for its involvement in socio-economic development became indispensable.

The fourth phase: CSR at the interface between philanthropic and business approaches (1980 onwards). In the fourth phase (1980 until the present), Indian companies and stakeholders began abandoning traditional philanthropic engagement and, to some extent, integrated CSR into a coherent and sustainable business strategy, partly adopting the multi-stakeholder approach. In the 1990s, the Indian government initiated reforms to liberalize and deregulate the Indian economy by tackling the shortcomings of the 'mixed economy' and tried to integrate India into the global market. The Indian economy experienced a

pronounced boom, which has persisted until today (Arora and Puranik, 2004). This rapid growth did not lead to a reduction in philanthropic donations; on the contrary, 'the increased profitability also increased business willingness as well as ability to give, along with a surge in public and government expectations of businesses' (Arora and Puranik, 2004). However, Indian companies realized that if it had to compete with the Western market they need to comply with international standards. So from 1990s onwards, the companies started adopting the modern approach with its underlying objective, 'doing all that we can to do the most good, not just some good' since it supports corporate objectives as well. This was regarded as a win-win situation for all because when a particular company does well to the society genuinely and for a cause, it has to be good and along with this process, it succeeds in building a name for itself.

CSR therefore has been steadily gaining exposure in India in the recent past. However, empirical evidence from CSR research in India suggests that there are differences with regard to India's perceptions, operationalization and expectations of CSR practices when compared to those of the West (Kumar et al., 2001; Mohan, 2001). Several studies (e.g., Arora and Puranik, 2004) found CSR policies to be positioned far from the core corporate activities and are regarded as philanthropy, with companies not expecting much in (immediate financial) return for their CSR efforts. As a result, and despite being around for a while, CSR is not as yet a popular term in the Indian business parlance.

Some researchers (Arora and Puranik, 2004; Husted, 2000; Kumar et al., 2001) are of the opinion that India's economic reforms and its rise to become an emerging market and global player had not resulted in a substantial change in its CSR approach. Researchers had observed that companies had highlighted on just 'how to carry on CSR'. Contrary to various expectations that India would adopt the global CSR agenda, its present CSR approach still largely retains its own characteristics, adopting only some aspects of global mainstream CSR.

A few CSR studies on emerging economies (including India) that has been carried out tend to rely on the companies' CSR reporting. Chambers et al. (2003) reveal that although India leads in providing coverage to their CSR practices in annual reports in Asia, only 2 per cent of Indian companies produce dedicated CSR reports, and they point to Maitland's (2002) observations that there is high probability of CSR reports to consist of inconsequential information.

In a study conducted by Singh and Ahuja (1983) on 40 Indian public sector companies for the years 1975–1976, they found that only 40 per cent of the companies disclosed about 30 per cent of the total social disclosure

items included in their survey. This is the first study in India on CSR that could be found in international journals and is based on CSR practices of the country 35 years ago.

Another study on CSR in India conducted by Hedge et al. (1997) is a case study of the Steel Authority of India Limited (SAIL) a public sector manufacturing company. SAIL had a social balance sheet and income statement. They also reported on human resources. In the most recent study conducted by Raman (2006), the annual reports of the top 50 companies in India were examined to understand how the top management perceived CSR and reported on it. This study found that the nature and extent of such disclosures is varied with a large emphasis placed on products and services and the development of human resources. Community involvement is highlighted by less than 50 per cent of the sample organizations. Hossain and Reaz (2007) examined determinants of voluntary disclosure in annual reports for Indian banking companies. Social disclosure represented one category of voluntary disclosure categories. The empirical results, based on a sample of 38 banking companies, show that corporate size and assets in-place are significantly associated with disclosure, while corporate age, multiple exchange listing, business complexity and board composition (percentage of non-executive directors) are not associated with disclosure.

If we assume that '*CSR in India has moved beyond corporate philanthropy, and has become more methodical in its approach*', then the 2009 report from Karmayog, a Mumbai-based online organization, which found that while 51 per cent of Indian companies practice CSR in some form, only 2 per cent publishes a separate sustainability report, and only 3 per cent report the amount they spent on CSR and the Emerging Markets Disclosure Project of the US-based Social Investment Forum, *Lessons Learned: The Emerging Markets Disclosure Project, 2008–2012*, showing that Indian companies were among those in emerging markets with the lowest disclosure rate on CSR rating and in adhering to CSR benchmarks and goals, would really be an eye opener.

The government is trying to encourage the best practices in corporate governance and CSR for which it had issued guidelines at the conclusion of the First India Corporate Week (14–21 December 2009). The guidelines set out *six core elements* for companies. Companies should engage with all stakeholders, it must function in an ethical manner, respect the rights of workers in the areas of workplace environment, career advancement, and freedom of association, should not employ child or forced labour, and should maintain equality of opportunities without discrimination, respect human rights, adopt sustainable environmental policies, undertake activities for economic and social development of communities. What is noteworthy is

the fact that the report highlighted that in order to facilitate implementation of the CSR guidelines, '*companies should disseminate information on CSR policy, activities and progress in a structured manner to all their stakeholders and the public at large through their website, annual reports and other communication media*' (First India Corporate Week, 14–21 December 2009).

In a climate that is arguably marked by more informed publics and a critical media, companies are facing more clearly articulated expectations from customers and consumers regarding their contributions to sustainable development, which puts pressure on them to maintain transparency and be proactive in communicating with its publics. Researchers have shown that apart from annual reports, now websites are also being considered a very important tool for CSR communication. However, studies in this regard have been extremely limited in India so the question as to how far have we been successful in transparent and proactive communication of CSR remain unanswered.

Literature review also reveals that there have been studies conducted by researchers to establish CSR pattern amongst companies by studying the annual reports, standalone reports and websites in the western front. But very little investigation has been done regarding the CSR pattern amongst companies in the Indian sub-continent with the exception of studies conducted by Singh and Ahuja (1983), Hedge et al. (1997), Raman (2006) and Hossain and Reaz (2007), being the most prominent and cited ones.

The problem with CSR in India is that nobody is very clear about what exactly it encompasses. Today, CSR to some companies means providing lunch to employees. To others, it is about tackling global warming and environmental issues, to some it is organizing marathons and campaigns and collecting funds to be given to trusts or non-governmental organizations (NGOs). Instead of defining CSR, the Indian government recast it as 'responsible business' in a set of voluntary guidelines for firms; hence, there are very limited studies which have attempted to investigate into the aspect of pattern of participation of CSR activities by the private sector companies. The present study would therefore attempt to fill the above gaps by trying to establish a pattern of CSR activities amongst private sector companies in India.

Objectives

In the light of the above discussion, the main objective of the study is to analyze the extent to which the group of private sector companies have disclosed their proactiveness/responsiveness towards various CSR activities and identify a pattern across the private sector companies as reflected in

the respective company documents in the public domain. The companies have been analyzed on the basis of growth rate of profit. Apart from the main objective, the study also intends to look into the following:

- To estimate the extent of information that the companies had communicated with respect to their field of CSR activities that they were responsive to.
- To estimate those CSR activities that had a significant impact on the private sector companies divided into decile groups, deciles being characterized on the basis of growth rate of profit.
- To identify the sectors and their responsiveness towards CSR activities.
- To estimate the relative importance attached to different CSR activities by all the decile groups, deciles being characterized on the basis of growth rate of profit.
- To estimate the relative importance attached to different levels of the CSR activities, by all the decile groups, deciles being characterized on the basis of growth rate of profit.

Theoretical Framework and Hypotheses

The role of corporations is currently undergoing an important transformation as stakeholders develop and modify their perceptions of the place and responsibilities of such organizations in society. The responsibility of business has become central to the agendas of corporations, governments, supranational organizations, civil society groups such as NGOs and the general public. The appropriate relationship between business and society has become the focus of the debate (Schwartz and Carroll, 2003, p. 503). This would help them to enter new markets and build up a reputation which in turn would have a positive impact on their products and their profitability. Genuine commitment to sustainability and CSR can bring about opportunities for new products and services, markets and business models. So based on this, the argument is that it would be the usual behaviour of companies to be more responsiveness towards CSR and its communication as rate of growth of profit increased.

The following hypotheses have therefore been developed for this study.

Hypothesis 1: Average sentences used to communicate about their responsiveness towards different CSR activities disclosed in the websites for the stakeholders are likely to be higher amongst companies belonging to the higher deciles than those belonging to the lower deciles for private sector companies, deciles being characterized on the basis of growth rate of profit.

Hypothesis 2: Level of dispersion with respect to the sentences used to communicate about their responsiveness towards different CSR activities disclosed in the websites for the stakeholders is likely to be less amongst companies belonging to the higher deciles than those belonging to the lower deciles for private sector companies.

Hypothesis 3: Pattern with respect to the communication of information about their CSR activities varies across all decile groups for private sector companies under growth rate of profit.

Hypothesis 4: Responsiveness of the sectors towards significant CSR activities is not uniform for private sector companies.

Hypothesis 5: Relative importance attached to communication of significant CSR activities varies across all decile groups for private sector companies under this parameter.

Hypothesis 6: Relative importance attached to different levels of CSR activities communicated varies across all decile groups for private sector companies under this parameter.

Methodology

Data Source and Study Design

An empirical and analytical study is undertaken for the study. In our study, we explored the opportunities of finding a pattern of CSR activities undertaken by the private sector companies in India by taking *growth rate of profit as the parameter*, for the financial years 2006–2007, 2007–2008 and 2008–2009. We had taken this as a parameter keeping this in mind that it would be the usual behaviour of companies to be more responsiveness towards CSR as the growth rate of profit increased.

The study is based on secondary sources, that is, by analyzing the corporate official websites of the companies. Data are then generated from such an analysis using qualitative document analysis. Qualitative document analysis describes the meanings, prominence and the theme of messages and emphasized the understanding of the organization as well as how it is presented. For this study, CSR has been defined as corporate discourse and/or programmes that constitute (1) responsibility to the environment and (2) responsibility to community development (Besser, 1998). The array of terminology to be used within the broad CSR realm includes CSR, corporate citizenship, stakeholder engagement, community development, social contribution, philanthropy (Waddock, 2004). Through qualitative document analysis, we identified the dominant fields of CSR activities and also the extent of information that the companies had disclosed to communicate their proactiveness/responsiveness towards those activities.

Units of analysis under qualitative document analysis may be number of words, phrases, character, lines or sentences, pages or proportion of pages devoted to different categories of social disclosure (Unerman, 2000). For this study, we used 'number of sentences' as the unit for measurement of CSR, since sentences provided complete, meaningful and reliable information for further analysis (Milne and Adler, 1999). The measurement in terms of sentences is justified in that (1) sentences can be counted with more accuracy than words, (2) sentences are used to convey meaning whereas discerning the meaning of individual words in isolation is problematic, (3) sentences overcome the problem of allocation of portions of pages and remove the need to account for the number of words and (4) sentences are a more natural unit of written English than words (Hackston and Milne, 1996, pp. 84–85). Walden and Schwartz (1997) argued that a sentence consider conventional unit of speech and writing, while portion of pages is not. We counted the number of sentences the companies had dedicated for the various fields of activities disclosed on their corporate websites.

Selection of Companies

Top 500 private sector companies were selected from the BT 500 list published in Business Today, belonging to the India Today Group, for the years 2006–2007, 2007–2008 and 2008–2009 as per average market capitalization. Market capitalization refers to stock price multiplied by the number of outstanding shares. Average market capitalization is chosen to rank the 500 most valuable companies since this parameter gives us an indication of not only the present but future prospects of the company as well. To arrive at the list of India's most valuable companies, BT relied on the Centre for Monitoring Indian Economy's Corporate Database Prowess for all the years under consideration, for the study. Now from the list of 500 most valuable companies for the years 2006–2007, 2007–2008 and 2008–2009, the common companies which had succeeded in maintaining its rank and position within the list of '500 most valuable companies' for all the three years were selected. The total data set consisted of 329 companies. From this total data set, companies with negative or declining profit were excluded. After exclusion, the comprehensive list (select data set) consisted of 208 companies. The rate of growth of profit was calculated as follows: $\sqrt{a_3/a_1} - 1$, where a_3 denotes profit for the year 2008–2009 and a_1 denotes profit for the year 2006–2007. The 208 companies which constituted the select data set were ranked on the basis of the rate of growth of profit, in the descending order. They were divided into decile groups consisting of 21 companies each, that is, 10 per cent of the select data set. The companies under each decile group

were analyzed on the basis of the study design specified above. Our data set is not pertaining to sample. We have gone for complete enumeration of all the organizations.

Empirical Model

With reference to the sentences spent on the different fields of CSR activities, the companies were first divided into decile groups consisting of 21 companies each, that is, 10 per cent of the select data set on the basis of growth rate of profit. Having stratified, we calculated the average sentences (mean) spent on the various fields of CSR activities disclosed by the companies in their corporate websites with respect to all decile groups. Coefficient of variance was also calculated with respect to the sentences spent on various fields of activities to study the level of consistency or dispersion. Pearson's correlation analysis was conducted to establish a pattern with respect to the average number of sentences spent on the various CSR activities by the companies across deciles. Similarly, Pearson's correlation analysis was also conducted to establish a pattern with respect to the CV regarding the extent of information disclosed and communicated by the companies in their corporate websites about the various field of CSR activities undertaken by them across deciles. Our objective was to examine whether there has been any variation across deciles in respect of mean (number of sentences) and also with respect to dispersion across deciles. We wanted to examine whether there was any parity with respect to the CSR activities. This parity had been reflected in the correlation matrix amongst the CSR activities. A multiple regression analysis was conducted to identify those attributes in the form of CSR activities that had a significant impact on the deciles and the levels at which they had a significant impact on the deciles where Level 1 indicated (very high level), Level 2 (high level), Level 3 (medium level) and Level 4 (low level). For conducting the regression analysis, we re-calculated the average sentences (mean) spent by the companies on various CSR activities that they were responsive to for all the deciles under the parameter specified above by removing the outliers. The model which is used in this conjoint analysis is as follows:

$$\text{rank} = \alpha_0 + \alpha_1 \text{ED}_1 + \alpha_2 \text{ED}_2 + \alpha_3 \text{ED}_3 + \alpha_4 \text{H}_1 + \alpha_5 \text{H}_2 + \alpha_6 \text{H}_3 + \alpha_7 \text{EN}_1 + \alpha_8 \text{EN}_2 + \alpha_9 \text{EN}_3 + \alpha_{10} \text{DR}_1 + \alpha_{11} \text{DR}_2 + \alpha_{12} \text{DR}_3 + \alpha_{13} \text{EM}_1 + \alpha_{14} \text{EM}_2 + \alpha_{15} \text{EM}_3 + \alpha_{16} \text{DW}_1 + \alpha_{17} \text{DW}_2 + \alpha_{18} \text{DW}_3 + \alpha_{19} \text{RU}_1 + \alpha_{20} \text{RU}_2 + \alpha_{21} \text{RU}_3 + \alpha_{22} \text{O}_1 + \alpha_{23} \text{O}_2 + \alpha_{24} \text{O}_3 + \alpha_{25} \text{UU}_1 + \alpha_{26} \text{UU}_2 + \alpha_{27} \text{UU}_3 + \alpha_{28} \text{O}_1 + \alpha_{29} \text{O}_2 + \alpha_{30} \text{O}_3 + \varepsilon,$$

where rank = ordinal scaling of the parameter (parameter defined by growth rate of profit) with highest integer

corresponding to lowest values of the parameter, next highest integer for the next lowest value of the parameter and so on, α_0 = constant term, ED_i = i th level of education, H_i = i th level of health, EN_i = i th level of environment, DR_i = i th level of disaster relief, EM_i = i th level of employability, DW_i = i th level of drinking water and sanitation, RU_i = i th level of rural upliftment, O_i = i th level of other activities and epsilon (ϵ) = error or random term.

It is to be noted here that only three levels (out of four as specified above) have been considered so as to avoid the problem of multi-collinearity and in all cases coefficients associated with the fourth level of CSR activities are calculated as sum total of the coefficients associated with all the other three levels of other CSR activities.

Once the significant activities were identified, conjoint analysis was performed to estimate the following:

- To estimate the relative importance attached to the significant CSR activities by the deciles, deciles characterized on the basis of growth rate of profit.
- To estimate the relative importance attached to different levels of the CSR activities by the deciles, deciles characterized on the basis of growth are of profit.

Analysis

After analyzing the corporate websites we had found that the companies had involved themselves mainly in the fields: education, environment, rural upliftment, employability and livelihood, health, women empowerment, disaster relief, drinking water and sanitation, urban development. Besides these, some companies had involved themselves in volunteering programmes, sports, raising funds, protection of art and culture which we had combined together and placed them as 'other field of activities'.

Comparative Analysis of Mean across and within Deciles

In order to make a comparative analysis across deciles with respect to the extent of information disclosed about the various field of CSR activities that they were involved in their corporate websites, the mean was calculated. This has been represented in Table 1.

On the basis of rate of growth profit, the following was observed: average sentences disclosed with respect to *education, health, 'others', empowerment and urban upliftment* were observed to be the highest amongst companies with the highest growth rate of profit (decile 10). Average sentences disclosed with respect to *environment, disaster relief, employability, drinking water and sanitation and rural upliftment* were observed to be the highest amongst companies with lower growth rate of profit. Average sentences disclosed with respect to some of the CSR activities were observed to be the lowest amongst companies with higher growth rate of profits barring *drinking water and sanitation and 'others'*. None of the companies belonging to deciles 9 and 4 had disclosed information on *drinking water and sanitation*. With respect to *'others'*, average sentences disclosed were observed to be the lowest amongst companies with lower growth rate of profit (decile 4). It was noteworthy that with respect to *urban upliftment*, none of the companies with high growth rate of profit (decile 8) had disclosed information on this activity. The most preferred activity on the basis of mean value was observed to be *education and environment*, out of which *environment* was the most prominent amongst most of the deciles. The least preferred activities on the basis of mean value with respect to the deciles were observed to be mostly *drinking water and sanitation and urban upliftment*.

Table 1. Average Sentences Spent on the Fields of CSR Activities

Decile	Education	Health	Environment	Disaster Relief	Employability	Drinking Water & Sanitation	Rural Upliftment	Others	Empowerment	Urban Upliftment
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Decile 10	99.67	91.05	167.52	5.67	15.90	4.00	18.33	32.76	27.90	19.52
Decile 9	4.19	1.62	27.86	0.19	1.19	0.00	0.33	10.29	1.48	3.52
Decile 8	23.19	18.00	45.48	0.33	9.43	1.00	5.76	6.00	3.33	0.00
Decile 7	80.05	2.00	9.95	1.14	0.10	0.10	0.24	13.24	2.10	1.62
Decile 6	18.43	14.71	73.76	1.62	3.38	1.14	10.10	8.19	5.29	2.14
Decile 5	26.48	25.52	58.62	1.48	2.33	1.05	11.33	25.19	10.19	0.48
Decile 4	9.38	10.90	11.24	0.76	11.00	0.00	5.14	3.95	2.24	0.24
Decile 3	61.67	62.57	246.05	3.43	29.90	5.48	30.62	27.71	7.67	0.62
Decile 2	41.90	36.57	127.38	5.81	10.76	0.95	41.38	10.48	7.05	1.24
Decile 1	57.11	18.21	176.95	8.11	17.74	7.21	11.11	12.63	12.32	3.05

Note: Highest and lowest mean corresponding to different attributes have been highlighted.

Comparative Analysis of Coefficient of Variance across and within Deciles

In order to make a comparative analysis across deciles, coefficient of variance was also calculated with respect to the sentences spent on various field of activities to study the level of consistency or dispersion under this parameter. A high CV indicated a high level of dispersion and a low CV indicated a high level of consistency. This has been represented in Table 2.

On the basis of rate of growth of profit, the following was observed: a high level of dispersion was observed amongst companies with higher growth rate of profit (upper deciles) with respect to all the CSR activities barring *health and urban upliftment* where a high level of dispersion was observed amongst companies with lower growth rate of profit (lower deciles). A low level of dispersion was observed amongst companies with lower growth rate of profit barring *education, health, 'others' and urban upliftment* where a low level of dispersion was observed amongst companies with very high growth rate of profit. *Disaster relief, drinking water and sanitation and urban upliftment* were the activities with the highest level of dispersion as observed amongst the deciles. Higher level of consistency was observed amongst the other CSR activities across deciles but the pattern was random.

Analysis of the Correlation Results

To examine the relationship between deciles and the average numbers of sentences disclosed by the companies for each of the CSR activities undertaken by them, Pearson's correlation analysis was performed. Analysis was also made to find out the relationship between the various variables; here, variables signified the different fields of CSR activities.

Table 3 presents the correlation results between the average numbers of sentences disclosed by the companies

for each of the CSR activities undertaken by them and communicated in their corporate websites on the basis of the above specified parameter. The following results were noteworthy.

The results showed that there existed no significant correlation between the deciles and the average numbers of sentences disclosed by the companies for each of the CSR activities undertaken by them, hence the pattern was random across deciles with respect to the various CSR activities taken. A further analysis of the correlation table revealed the following:

Average numbers of sentences disclosed by the companies on *education* was found to be positively correlated with health (0.650, $p = 0.042$) 'others' (0.667, $p = 0.035$) and empowerment (0.682, $p = 0.030$). It signifies that in respect of average sentences spent, *education* is likely to be positively associated with health, others and empowerment. Similarly, *health* is observed to be positively correlated with education, environment, employability, others, empowerment and urban upliftment. *Environment* is observed to be positively correlated with health, disaster relief, employability, drinking water and sanitation and rural upliftment. *Disaster relief* is observed to be positively correlated with environment, drinking water and sanitation and empowerment. *Employability* is observed to be positively correlated with health, environment and drinking water and sanitation. *Drinking water and sanitation* is observed to be positively correlated with environment, disaster relief and employability. *Rural upliftment* is observed to be positively correlated with environment. *Others* are observed to be positively correlated with education, health and empowerment. *Empowerment* is observed to be positively correlated with education, health, disaster relief, others and urban upliftment. *Urban upliftment* is observed to be positively correlated with health and empowerment.

Table 2. Coefficient of Variance (CV) with Respect to the Fields of CSR Activities

Decile	Education	Health	Environment	Disaster Relief	Employability	Drinking Water & Sanitation	Rural Upliftment	Others	Empowerment	Urban Upliftment
	CV	CV	CV	CV	CV	CV	CV	CV	CV	CV
Decile 10	198.05	157.57	215.49	256.12	298.42	313.05	241.36	153.73	237.29	243.36
Decile 9	270.16	251.25	265.22	458.26	322.74	–	458.26	387.38	387.74	257.39
Decile 8	211.86	198.94	286.50	289.83	280.84	275.68	206.81	198.96	190.05	–
Decile 7	419.12	264.58	205.32	458.26	458.26	458.26	458.26	294.52	301.06	339.13
Decile 6	266.24	262.86	339.64	381.98	231.29	317.04	212.89	236.33	304.07	375.74
Decile 5	319.47	226.56	328.42	310.15	278.19	436.88	272.14	256.58	388.35	315.83
Decile 4	199.21	323.36	211.00	458.26	347.85	–	267.41	318.28	324.02	458.26
Decile 3	242.40	201.95	197.15	192.05	218.67	238.84	180.67	204.68	241.37	458.26
Decile 2	236.10	255.02	314.64	218.79	272.05	342.62	306.27	201.26	271.55	458.26
Decile 1	332.09	203.89	225.78	404.01	289.85	349.62	251.42	184.86	339.33	299.93

Note: Highest and lowest CV corresponding to different attributes have been highlighted.

Table 3. Correlation Results (Mean) on Rate of Growth of Profit

		Correlations										
		DECILES	EDU	HEALTH	ENVT	RELIEF	EMPLOYA	WATER	RURALUP	OTHERS	EMPOWER	URBANUP
DECILES	Pearson Correlation	1.000	.076	.097	-.402	-.501	-.431	-.414	-.500	.152	.173	.524
	Sig. (2-tailed)	-	.835	.790	.249	.140	.213	.234	.141	.674	.633	.120
	N	10	10	10	10	10	10	10	10	10	10	10
EDU	Pearson Correlation	.076	1.000	.650*	.539	.577	.401	.529	.290	.667*	.682*	.625
	Sig. (2-tailed)	.835	-	.042	.108	.081	.251	.116	.416	.035	.030	.054
	N	10	10	10	10	10	10	10	10	10	10	10
HEALTH	Pearson Correlation	.097	.650*	1.000	.751*	.518	.665*	.531	.622	.812**	.839**	.709*
	Sig. (2-tailed)	.790	.042	-	.012	.125	.036	.115	.055	.004	.002	.022
	N	10	10	10	10	10	10	10	10	10	10	10
ENVT	Pearson Correlation	-.402	.539	.751*	1.000	.755*	.875**	.878**	.711*	.622	.583	.320
	Sig. (2-tailed)	.249	.108	.012	-	.012	.001	.001	.021	.055	.077	.368
	N	10	10	10	10	10	10	10	10	10	10	10
RELIEF	Pearson Correlation	-.501	.577	.518	.755*	1.000	.562	.781**	.590	.355	.649*	.406
	Sig. (2-tailed)	.140	.081	.125	.012	-	.091	.008	.073	.315	.042	.244
	N	10	10	10	10	10	10	10	10	10	10	10
EMPLOYA	Pearson Correlation	-.431	.401	.665*	.875**	.562	1.000	.793**	.590	.432	.392	.168
	Sig. (2-tailed)	.213	.251	.036	.001	.091	-	.006	.072	.213	.263	.642
	N	10	10	10	10	10	10	10	10	10	10	10
WATER	Pearson Correlation	-.414	.529	.531	.878**	.781**	.793**	1.000	.355	.494	.568	.298
	Sig. (2-tailed)	.234	.116	.115	.001	.008	.006	-	.314	.147	.087	.404
	N	10	10	10	10	10	10	10	10	10	10	10
RURALUP	Pearson Correlation	-.500	.290	.622	.711**	.590	.590	.355	1.000	.364	.324	.080
	Sig. (2-tailed)	.141	.416	.055	.021	.073	.072	.314	-	.301	.361	.826
	N	10	10	10	10	10	10	10	10	10	10	10
OTHERS	Pearson Correlation	.152	.667*	.812**	.622	.355	.432	.494	.364	1.000	.755*	.593
	Sig. (2-tailed)	.674	.035	.004	.055	.315	.213	.147	.301	-	.012	.071
	N	10	10	10	10	10	10	10	10	10	10	10
EMPOWER	Pearson Correlation	.173	.682*	.839**	.583	.649*	.392	.568	.324	.755*	1.000	.875**
	Sig. (2-tailed)	.633	.030	.002	.077	.042	.263	.087	.361	.012	-	.001
	N	10	10	10	10	10	10	10	10	10	10	10
URBANUP	Pearson Correlation	.524	.625	.709*	.320	.406	.168	.298	.080	.593	.875**	1.000
	Sig. (2-tailed)	.120	.054	.022	.368	.244	.642	.404	.826	.071	.001	-
	N	10	10	10	10	10	10	10	10	10	10	10

Notes: * Correlation is significant at the 0.05 level (2-tailed).
 ** Correlation is significant at the 0.01 level (2-tailed).

Table 4. Correlation Coefficient (CV) on Rate of Growth of Profit

		Correlations									
DECILES		EDU	HEALTH	ENVT	RELIEF	EMPLOY	WATER	RURALUP	OTHERS	EMPOWER	URBANUP
EDU	Pearson Correlation	1.000	-.236	.001	.162	.280	.024	.303	.232	-.146	-.644
	Sig. (2-tailed)	—	.512	.998	.655	.434	.955	.394	.519	.688	.061
	N	10	10	10	10	10	8	10	10	10	9
HEALTH	Pearson Correlation	-.135	1.000	-.063	.446	.546	.810*	.560	.243	.459	-.276
	Sig. (2-tailed)	.710	—	.862	.197	.102	.015	.092	.499	.182	.472
	N	10	10	10	10	10	8	10	10	10	9
ENVT	Pearson Correlation	.123	.1000	.108	.606	.382	.491	.380	.700*	.437	.517
	Sig. (2-tailed)	.735	—	.766	.063	.276	.217	.279	.024	.206	.154
	N	10	10	10	10	10	8	10	10	10	9
RELIEF	Pearson Correlation	-.063	.108	1.000	-.146	-.430	.127	-.115	-.012	.194	.008
	Sig. (2-tailed)	.862	.766	—	.687	.215	.764	.751	.974	.591	.983
	N	10	10	10	10	10	8	10	10	10	9
EMPLOY	Pearson Correlation	.446	.606	-.146	1.000	.654*	.637	.603	.729*	.606	-.288
	Sig. (2-tailed)	.197	.063	.687	—	.040	.090	.065	.017	.063	.452
	N	10	10	10	10	10	8	10	10	10	9
WATER	Pearson Correlation	.546	.382	-.430	.654*	1.000	.722*	.767**	.486	.215	-.223
	Sig. (2-tailed)	.102	.276	.215	.040	—	.043	.010	.154	.550	.564
	N	10	10	10	10	10	8	10	10	10	9
RURALUP	Pearson Correlation	.810*	.491	.127	.637	.722*	1.000	.826*	.705	.724*	-.381
	Sig. (2-tailed)	.015	.217	.764	.090	.043	—	.011	.051	.042	.399
	N	8	8	8	8	8	8	8	8	8	7
OTHERS	Pearson Correlation	.560	.380	-.115	.603	.767**	.826*	1.000	.721*	.509	-.356
	Sig. (2-tailed)	.092	.279	.751	.065	.010	.011	—	.019	.133	.346
	N	10	10	10	10	10	8	10	10	10	9
EMPOWER	Pearson Correlation	.243	.700*	-.012	.729*	.486	.705	.721*	1.000	.655*	-.058
	Sig. (2-tailed)	.499	.024	.974	.017	.154	.051	.019	—	.040	.881
	N	10	10	10	10	10	8	10	10	10	9
URBANUP	Pearson Correlation	.459	.437	.194	.606	.215	.724*	.509	.655*	1.000	-.359
	Sig. (2-tailed)	.182	.206	.591	.063	.550	.042	.133	.040	—	.343
	N	10	10	10	10	10	8	10	10	10	9
OTHERS	Pearson Correlation	-.644	.517	.008	-.288	-.223	-.381	-.356	-.058	-.359	1.000
	Sig. (2-tailed)	.061	.154	.983	.452	.564	.399	.346	.881	.343	—
	N	9	9	9	9	9	7	9	9	9	9

Notes: * Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

Table 4 presents the correlation results between CV regarding the extent of information disclosed and communicated by the companies in their corporate websites about the various fields of CSR activities undertaken by them on the basis of the above specified parameter. The following results were noteworthy.

The results showed that there is no significant correlation between the deciles and the CV with respect to all the fields of CSR activities undertaken by them; hence the pattern was random across deciles. A further analysis of the correlation table revealed the following:

Positive correlation was observed only between CV with respect to the average numbers of sentences disclosed on *education* and CV with respect to the average numbers of sentences disclosed on drinking water and sanitation (0.810, $p = 0.015$). It signifies that regarding CV with respect to average numbers of sentences disclosed by the companies, disclosure on education is likely to be positively associated with drinking water and sanitation. Similarly, CV with respect to the average numbers of sentences disclosed on *health* is likely to be positively associated with 'others'. Positive correlation was observed between *disaster relief* and employability and others. Positive correlation was observed between *employability* and drinking water and sanitation, disaster relief and rural upliftment. Positive correlation was observed between *drinking water and sanitation* and education, employability, rural upliftment and empowerment. Positive correlation was observed between *rural upliftment* and drinking water and sanitation, employability and others. Positive correlation was observed between 'others' and disaster relief rural upliftment and empowerment. Positive correlation was observed between *empowerment* and drinking water and sanitation and others.

Regression Analysis

A multiple regression analysis was conducted to identify those attributes in the form of CSR activities that had a significant impact on the deciles identified, on the basis of growth rate of profit. For conducting the regression analysis, we re-calculated the average sentences (mean) spent by the companies on various CSR activities that they were responsive to for all the deciles under this parameter by removing the outliers. The re-calculated mean has been presented in Table 5. Table 6 presents the model specifications on the basis of the re-calculated mean.

As reported in Table 6, we observe the following:

$$\begin{aligned} \text{Decile 10} = & 10.209 - 14.022 \text{ Edu1} - 20.516 \text{ Edu2} \\ & \qquad \qquad \qquad 0.081 \qquad \qquad \qquad 0.084 \\ & + 11.963 \text{ Health1} + 18.368 \text{ Health2} \\ & \qquad \qquad \qquad 0.094 \qquad \qquad \qquad 0.064 \end{aligned}$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.857$. This means that 85.7 per cent of the variation in *education and health* can explain the variation of decile 10 and 14.3 per cent remained unexplained.

$$\begin{aligned} \text{Decile 9} = & 10.742 + 9.625 \text{ Env1} - 5.642 \text{ 'Others' 1} \\ & \qquad \qquad \qquad 0.011 \qquad \qquad \qquad 0.089 \\ & - 5.267 \text{ 'Others' 2} - 4.142 \text{ 'Others' 3} \\ & \qquad \qquad \qquad 0.008 \qquad \qquad \qquad 0.021 \end{aligned}$$

(It must be noted that the values are specified in the parenthesis under the equation.)

Table 5. Recalculated Average Sentences Spent on the Fields of CSR Activities

Decile	Education	Health	Environment	Disaster Relief	Employability	Drinking Water & Sanitation	Rural Upliftment	Others	Empowerment	Urban Upliftment
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Decile 10	90.11	73.05	61.74	6.26	7.37	1.26	8.42	28.11	24.93	19.26
Decile 9	4.19	1.62	27.86	0.19	1.19	0	0.33	10.29	1.48	3.52
Decile 8	23.19	18	45.48	0.33	9.43	1	5.76	6	3.33	0
Decile 7	4.89	2.21	6.93	0	0.11	0.11	0.26	1.95	1.16	1.74
Decile 6	13.05	7.35	20.1	1.7	2.2	0.55	7.5	7.55	3.45	2.25
Decile 5	7.58	8.74	16	0.37	2.58	1.16	5.95	8.58	1.73	0.53
Decile 4	8.94	4.24	6.44	1.28	4.11	0	2.22	5	2.38	0
Decile 3	9.53	1.47	32.93	1.4	0	3.47	3	4.53	0	0
Decile 2	10.5	7.31	14.75	4.06	2.25	0.88	2.25	5.13	2.56	1.63
Decile 1	11.71	17	49.94	0.65	14.18	1.63	6.47	6.88	0.65	3.41

Note: Significant CSR activities on the basis of regression analysis have been highlighted.

Table 6. Model Specifications on Rate of Growth of Profit

Attributes	Decile 10 COL 1	Decile 9 COL 2	Decile 8 COL 3	Decile 7 COL 4	Decile 6 COL 5	Decile 5 COL 6	Decile 4 COL 7	Decile 3 COL 8	Decile 2 COL 9	Decile 1 COL 10
Edu1	-14.002 (0.081)**		1.484 (0.371)	6.600 (0.005)*	-5.651 (0.041)*	31.000 (0.001)*	8.642 (0.084)**	-6.667 (0.001)*	-8.125 (0.042)*	
Edu2	-20.516 (0.084)**			-2.500 (0.190)		21.333 (0.006)*	6.904 (0.223)		-8.625 (0.078)**	4.500 (0.231)
Edu3	-4.710 (0.208)		-5.365 (0.001)*		-0.476 (0.791)		-10.338 (0.036)*	1.556 (0.275)	5.375 (0.085)**	8.681 (0.085)**
Health1	11.963 (0.094)**					19.000 (0.016)*				
Health2	18.368 (0.064)**					76.667 (0.004)*				
Health3									-8.000 (0.025)*	
Env1	-8.349 (0.133)	9.625 (0.011)*	-4.000 (0.097)**	-2.875 (0.092)**	5.601 (0.054)**	-93.667 (0.002)*		18.000 (0.001)*	-20.000 (0.050)*	9.319 (0.068)**
Env2	-2.449 (0.355)			-4.775 (0.027)*	-2.010 (0.344)	-36.667 (0.005)*			-11.000 (0.098)**	
Env3	12.917 (0.141)		-1.245 (0.734)	-2.375 (0.024)*	-2.184 (0.330)		18.663 (0.089)**			
Relief1									31.000 (0.016)*	
Relief2									31.000 (0.013)*	
Relief3										
Employ1							15.884 (0.049)*			-8.418 (0.063)**
Employ2							27.337 (0.022)*			-12.918 (0.050)*
Employ3										-8.237 (0.060)**
Water1								8.000 (0.052)**		
Water2										
Water3										
RuralUP1						46.667 (0.010)*		-12.056 (0.029)*		
RuralUP2										
RuralUP3						63.333 (0.011)*				
Others1	3.727 (0.258)	-5.642 (0.008)*				-7.208 (0.287)	-30.121 (0.030)*	-4.093 (0.050)*	-27.750 (0.009)*	
Others2	16.902 (0.089)**	-5.267 (0.008)*				-47.875 (0.005)*	-15.554 (0.035)*		4.250 (0.227)	
Others3	-12.415 (0.057)**	-4.142 (0.021)*				-71.542 (0.007)*	-26.227 (0.068)**	-5.315 (0.008)*	-8.250 (0.030)*	
Empower1	6.985 (0.285)									
Empower2	-8.743 (0.130)									
Empower3	-3.622 (0.276)									
UrbanUPI										
UrbanUP2										

Attributes	Decile 10 COL 1	Decile 9 COL 2	Decile 8 COL 3	Decile 7 COL 4	Decile 6 COL 5	Decile 5 COL 6	Decile 4 COL 7	Decile 3 COL 8	Decile 2 COL 9	Decile 1 COL 10
UrbanUP3										
R ²	0.857	0.631	0.733	0.896	0.610	0.896	0.719	0.917	0.962	0.541
Constant	10.209 (0.001)*	10.742 (0.000)*	9.916 (0.000)*	8.475 (0.000)*	11.800 (0.000)*	14.875 (0.000)*	10.027 (0.000)*	15.815 (0.000)*	12.375 (0.000)*	6.428 (0.003)*

Notes: *Significant at 5 per cent; **significant at 10 per cent.

Again the goodness of fit of the model can be explained with the help of $R^2 = 0.631$. This means that 63.1 per cent of the variation in *environment and 'others'* can explain the variation of decile 9 and 36.9 per cent remained unexplained.

$$\text{Decile 8} = 9.961 - 4.000 \text{Envt1} \\ 0.097$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.733$. This means that 73.3 per cent of the variation in *environment* can explain the variation of decile 8 and 26.7 per cent remained unexplained.

$$\text{Decile 7} = 8.475 + 6.600 \text{Edu1} - 2.875 \text{Envt1} \\ 0.005 \quad 0.092 \\ - 4.775 \text{Envt2} - 2.375 \text{Envt3} \\ 0.027 \quad 0.024$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.896$. This means that 89.6 per cent of the variation in *education and environment* can explain the variation of decile 7 and 10.4 per cent remained unexplained.

$$\text{Decile 6} = 11.800 - 5.651 \text{Edu1} + 5.601 \text{Envt1} \\ 0.001 \quad 0.054$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.610$. This means that 61 per cent of the variation in *education and environment* can explain the variation of decile 6 and 39 per cent remained unexplained.

$$\text{Decile 5} = 14.875 + 31.000 \text{Edu1} + 21.333 \text{Edu2} \\ 0.001 \quad 0.006 \\ + 19.000 \text{Health1} + 76.667 \text{Health2} \\ 0.016 \quad 0.004$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.896$. This means that 89.6 per cent of the variation in *education, health, environment and rural upliftment* can explain the variation of decile 5 and 10.4 per cent remained unexplained.

$$\text{Decile 4} = 10.027 + 8.642 \text{Edu1} - 10.338 \text{Edu3} \\ 0.084 \quad 0.036 \\ + 18.663 \text{Envt3} + 15.884 \text{Employ1} \\ + 0.089 \quad 0.049 \\ 27.337 \text{Employ2} - 30.121 \text{'Others'1} \\ - 0.022 \quad 0.030 \\ 15.554 \text{'Others'2} - 26.227 \text{'Others'3} \\ 0.035 \quad 0.068$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.719$. This means that 71.9 per cent of the variation in *education, environment, and employability and 'others'* can explain the variation of decile 4 and 28.1 per cent remained unexplained.

$$\text{Decile 3} = 15.815 - 6.667 \text{Edu1} + 18.000 \text{Envt1} \\ 0.001 \quad 0.001 \\ + 8.000 \text{Water1} - 12.056 \text{Ruralup1} \\ 0.052 \quad 0.029 \\ - 4.093 \text{'Others'1} - 5.315 \text{'Others'3} \\ 0.050 \quad 0.008$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.917$. This means that 91.7 per cent of the variation in *education, environment, drinking water and sanitation, rural upliftment and 'others'* can explain the variation of decile 3 and 8.3 per cent remained unexplained.

$$\text{Decile 2} = 12.375 - 8.125 \text{Edu1} - 8.625 \text{Edu2} \\ 0.042 \quad 0.078 \\ + 5.375 \text{Edu3} - 8.000 \text{Health3} - 20.000 \text{Envt1} \\ 0.085 \quad 0.025 \quad 0.051 \\ - 11.000 \text{Envt2} + 48.500 \text{Relief1} + 31.000 \text{Relief2} \\ 0.098 \quad 0.016 \quad 0.013 \\ - 27.750 \text{'Others'1} - 8.250 \text{'Others'3} \\ 0.009 \quad 0.030$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.962$. This means that 96.2 per cent of the variation in *education, health, environment, disaster relief and 'others'* can explain the variation of decile 2 and 3.8 per cent remained unexplained.

$$\begin{aligned} \text{Decile 1} = & 6.428 + 8.681 \text{ Edu3} + 9.319 \text{ Eenvt1} \\ & \quad \quad \quad 0.085 \quad \quad \quad 0.068 \\ & - 8.418 \text{ Employ1} - 12.918 \text{ Employ2} - 8.237 \text{ Employ3} \\ & \quad \quad \quad 0.063 \quad \quad \quad 0.050 \quad \quad \quad 0.060 \end{aligned}$$

(It must be noted that the values are specified in the parenthesis under the equation.)

The goodness of fit of the model can be explained with the help of $R^2 = 0.541$. This means that 54.1 per cent of the variation in *education, environment and employability* can explain the variation of decile 1 and 45.9 per cent remained unexplained.

Hence, *education, health, environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others* at different levels had a significant impact on the deciles under this parameter.

Sectors and Their Responsiveness towards Significant CSR Activities

Table 7 specifies the sectors and their responsiveness towards activities that were found to be significant as per the multiple regression analysis. Through this section,

we tried to identify the sectors that were consistently responsive to the CSR activities that were observed to have a significant impact on the deciles on the basis of multiple regression analysis discussed earlier. Deciles were characterized on the basis of rate of growth of profit. The activities which had an impact on the deciles at different levels as per the multiple regression analysis were *education, health, environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others*.

For this analysis out of the 208 companies, we deduced the non-CSR companies and the companies who had failed to disclose information on the corporate websites regarding these selected CSR activities. Therefore, there were 92 companies who had shown their responsiveness to education, 77 towards health, 94 towards environment, 46 towards employability, 52 towards rural upliftment and 83 towards 'others'. These companies were then categorized under different sectors on the basis of their activities and their proportion calculated to achieve our objective. Detailed discussion with respect to establishment of a pattern and a theoretical framework under this parameter identified above is given in the following. As reported in Table 7, we observe that education, health, environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others had a significant impact on the deciles at different levels as per the multiple regression analysis. It was observed that the companies belonging to the manufacturing sector and the services sector have shown the highest responsiveness towards all the activities identified under this parameter.

Table 7. Responsiveness of the Sectors and Significant CSR Activities on the Basis of the Multiple Regression Analysis

Sectors	Edu		Health		Envt		Relief		Employ		Water		RuralUP		Others	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Diversified	8	8.70	8	10.39	10	10.64	4	13.33	5	10.87	4	18.18	6	11.54	11	13.25
Engineering	5	5.43	5	6.49	6	6.38	2	6.67	3	6.52	0	0	2	3.85	5	6.02
Financial	9	9.78	8	10.39	7	7.45	2	6.67	4	8.70	1	4.55	5	9.62	8	9.64
Infrastructure and Construction	9	9.78	5	6.49	8	8.51	4	13.33	4	8.70	0	0	7	13.46	7	8.43
Manufacturing	27	29.35	24	31.17	27	28.72	6	20	10	43.48	5	22.73	12	23.08	20	24.10
Pharmaceutical and Healthcare	4	4.35	5	6.49	5	5.32	0	0	2	4.35	1	4.55	2	3.85	5	6.02
Real Estate	3	3.26	2	2.60	1	1.06	0	0	2	4.35	0	0	2	3.85	3	3.61
Services	14	15.22	14	18.18	13	13.83	9	30	9	19.57	4	18.18	7	13.46	12	14.46
Technology	8	8.70	5	6.49	9	9.57	1	3.33	3	6.52	3	13.64	4	7.69	6	7.23
Telecommunication	3	3.26	2	2.60	3	3.19	1	3.33	3	6.52	3	13.64	2	3.85	3	3.61
Utilities	2	2.17	3	3.90	3	3.19	1	3.33	1	2.17	1	4.55	3	3.85	3	3.61
Total	92	100	77	100	94	100	30	100	46	100	22	100	52	100	83	100
Non-CSR Companies	53		53		53		53		53		53		53		53	
Companies without Disclosure on These Activities	63		78		61		125		109		133		103		72	
Grand Total	208		208		208		208		208		208		208		208	

Conjoint Analysis

This analysis was conducted in two parts illustrated in Tables 8 and 9. Table 8 shows the relative importance attached to the attributes (different CSR activities) by the deciles, deciles characterized on the basis of *rate of growth of profit*.

From Table 8, we observe that barring deciles 1, 2 and 3 all the other deciles have attached the highest degree of importance to education, environment and 'others'. Decile 1 has attached the highest degree of importance on employability, decile 2 on disaster relief and decile 3 on health.

Table 9 shows the relative importance attached to different levels of the CSR activities by the deciles, deciles characterized on the basis of rate of growth of profit.

With respect to decile 10, it is observed that companies have given the greatest emphasis on Level 3 for education and Level 2 for health which signifies that although education and health are significant CSR activities for the companies of this decile, yet the importance attached to education was very low as compared to health. It was noteworthy that companies of this decile attached the higher level of importance for *health (Level 2)*. With respect to decile 9, companies of this decile attached the highest importance for *environment (Level 1)*. With respect to decile 8, it is observed that companies have given the greatest emphasis on *Level 2 for environment* which signifies that even if this activity was significant companies of this decile attached the lowest level of importance to it. With respect to decile 7, companies of this decile attached the highest importance for *education (Level 1)*. With respect to decile 6, companies of this decile attached the highest importance for *environment (Level 1)*. With respect to decile 5, companies of this decile attached the highest importance for *education and rural upliftment (Level 1)*. With respect to decile 4, companies of this decile attached the highest importance for *education (Level 1)*. With respect to decile 3, companies of this decile attached the highest importance for *environment and drinking*

water and sanitation (Level 1). With respect to decile 2, companies of this decile attached the highest importance for *disaster relief (Level 1)*. With respect to decile 1, it was noteworthy that companies of this decile attached the highest importance for *environment (Level 1)*.

Conclusion

- From the above analysis, we therefore observed that the companies have been responsiveness to *education, environment, rural upliftment, others, employability and livelihood, health, empowerment, disaster relief, drinking water and sanitation and urban development*.
- The most preferred activity on the basis of mean value was observed to be *education, health and environment*. *Drinking water and sanitation* was least prominent amongst most of the deciles on the basis of mean value.
- A high level of dispersion was observed amongst most of the deciles with respect to *drinking water and sanitation*. *Education, health, environment and 'others'* were the activities with the lowest level of dispersion as observed amongst the deciles.
- Average sentences used to communicate about their responsiveness towards different CSR activities in the corporate websites for the stakeholders were not observed to be more amongst companies belonging to higher deciles (deciles defined by growth rate of profit) than those belonging to the lower deciles for private sector companies, so it varied across deciles.
- Level of dispersion with respect to the sentences used to communicate about their responsiveness towards different CSR activities in the corporate websites for the stakeholders was not observed to be less amongst companies belonging to the higher deciles (deciles defined by growth rate of profit) than those belonging to the lower deciles for private sector companies, so it varied across deciles.

Table 8. Degree of Importance Attached to the CSR Activities by the Deciles (%)

CSR Activity	D10	D9	D8	D7	D6	D5	D4	D3	D2	D1
Edu	53.06			47.14	50.22	14.54	8.73	13.66	7.86	
Health	46.94					30.08		36.87	20.04	
Envt		48.65	100	52.86	49.78	39.09				30.49
Relief									50.29	
Employ							35.66			69.51
Water								16.39		
RuralUP						16.29		24.70		
Others		51.35					55.61	8.38	21.81	
Empower										
UrbanUP										

Note: Highest degree of importance attached to the CSR activities has been highlighted.

Table 9. Relative Importance Attached to Different Levels of the CSR Activities

CSR Activity	D10	D9	D8	D7	D6	D5	D4	D3	D2	D1
Edu1	0.2514			0.7940	0.0000	0.5603	0.4212	0.3148	0.5576	
Edu2	0.7838			0.0000	1.0000	0.5177	0.2808	0.6852	0.5537	
Edu3	1.0000					0.1917			0.6631	
Edu4									0.7100	
Health1	0.6520					0.5074				
Health2	.7507					0.7625				
Health3	0.0000					0.0000				
Health4										
Env1		0.7801	0.0000	0.2241	0.9956	0.0088		1.0000	0.4648	0.5233
Env2		0.0000	1.0000	0.1098	0.0044	0.2611		0.0000	0.5352	0.0847
Env3				0.2541		1.0000			0.8633	
Env4				1.0000						
Relief1									1.0000	
Relief2									0.8633	
Relief3									0.0000	
Relief4										
Employ1							0.4800			0.1059
Employ2							0.5730			0.0000
Employ3							0.0000			0.1102
Employ4										1.0000
Water1								0.7222		
Water2								0.2778		
Water3										
Water4										
RuralUP1						0.6298		0.1651		
RuralUP2						0.2168		0.8349		
RuralUP3										
RuralUP4										
Others1		0.1614					0.1063	0.3863	0.4043	
Others2		0.1766					0.2247	0.6137	0.8379	
Others3		0.2222					0.1380			
Others4		1.0000					1.0000			
Empower1										
Empower2										
Empower3										
Empower4										
UrbanUPI										
UrbanUP2										
UrbanUP3										
UrbanUP4										

Note: Highest emphasis level is highlighted.

- With respect to *identification*, a pattern across deciles in relation to average sentences spent to communicate their responsiveness towards CSR activities, the following were observed:
 - The pattern was random across deciles with respect to average sentences disclosed by the companies about their responsiveness towards various CSR activities.
- With respect to *identification*, a pattern across deciles in relation to CV, the following were observed:
 - The pattern was random across deciles with respect to the level of dispersion of the various fields of CSR activities.
- With companies categorized by deciles (10 per cent of select data set), defined by growth rate of profit, it is observed that the activities which had an impact on the deciles at different levels as per the multiple regression analysis were *education, health, environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others*.
- Regarding *estimating a pattern with respect to the 'responsiveness of the sectors and significant CSR activities'*, the following observations were made:
 - Companies belonging to the *manufacturing sector and the services sector* have shown the highest responsiveness towards education, health,

environment, disaster relief, employability, drinking water and sanitation, rural upliftment and others under this parameter. Hence, responsiveness of the sectors towards significant CSR activities was not uniform for private sector companies.

- Regarding *estimating 'the relative importance attached to the CSR activities'* by the private sector companies, the following observations were made:
 - With companies categorized by deciles (10 per cent of select data set), defined by absolute profit, it is observed that most of the deciles have attached the highest degree of importance to *education, environment and 'others'*. Hence, relative importance attached to different CSR activities varied across all decile groups for private sector companies.
- Regarding *estimating the 'relative importance attached to different levels of the CSR activities'* by the private sector companies, the following observations were made:
 - With companies categorized by deciles (10 per cent of select data set), defined by absolute profit, it is observed that companies have attached the highest importance (Level 1) to the following CSR activities: *education, environment, rural upliftment, disaster relief and drinking water and sanitation*. Hence, relative importance attached to different levels of the CSR activities varied across all decile groups for private sector companies.

It was noticeable that with respect to private sector companies, attitude towards CSR in India has still not changed and undoubtedly CSR in India is still in a confused state where, the business community has shown its responsiveness towards various CSR activities but the level of importance that was attached to such activities was not uniform across deciles, deciles being characterized by growth rate of profit. Responsiveness and inspirations to involve in CSR activities and its communication do not seem to show any particular association with growth rate of profit. The association seems to be haphazard, so nothing concrete could be concluded at this stage. Hence, it can be stated that India's progress from the concept of 'corporate philanthropy' characterized by randomness to 'CSR activities', which is systematic and integrated with the core business objectives, is still to reach its peak. When the business community engages in responsible social action towards amelioration of poverty or deprivation of the suffering humanity, the questions are more important than, quick-fix answers. Are we ready to learn from the circumstances of the receiving community before we prescribe our mental morals of their progress or development? The business community must address the needs of the recipients (stakeholders) as they experience and not as we think that they would desire to experience, then only can the corporate

sector be successful in helping and supporting the government in implementing policies for the well-being of the society at large, otherwise removing poverty, illiteracy and unemployment will still remain a distant dream.

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