

## Corporate Social Responsible Activities in PSUs: An Empirical Analysis

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### Abstract

**Purpose** – The object of this paper is to inspect how public sector units in India implement corporate social responsibility (CSR). The author has centred on four commonly known approaches: the ethical, the statistical, the liberal, and the stakeholder approach, the paper tried to find the reported drivers and barriers in implementing CSR practices.

**Design/methodology/approach** – The sample size was 425. The paper surveyed 399 PSU employees in managerial, supervisor and clerical position in PSUs currently engaging in a CSR initiative, representing a variety of industry sectors, as well as public dealing with PSUs. 26 General Public having direct link with PSU Factor Analysis, One way & Two way Anova and Regression Analysis are used as statistical tools.

**Findings** – The study finds that PSUs focus on Community development, Workplace and labour relations, Choosing business partners, Environmental benefits, Corporate governance, Legal compliance and Business ethics as the major stakeholders. Further, the results indicate that the most significant obstacles to CSR implementation are those related to lack of resources, followed by those related to the complexity and difficulty of implementing CSR.

**Key Words:** Corporate Responsibilities, CSR Drivers, CSR Implementation, PSUs.

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## 1. INTRODUCTION

As Corporate social responsibility (CSR) tend to play an important role in the Twenty-first century to ensure social justice and ethical practices, it has been a subject of considerable debate world over, particularly in West for several decades and it is becoming increasingly common practice for corporate sector to have established guidelines on ethical and social responsible issues such as environmental protection, support for the community, human rights and reducing social and financial exclusion. The past three decades have witnessed the emergence of (CSR) as a field of study and a framework for the role of business corporations and financial institutions in society. It outlines the standard of behaviour to which a firm must subscribe to impact society in a positive and a productive manner at the same time as abiding by values which exclude profit seeking at any cost.

Importance of the corporate social responsibility in the business has been rising due to contractual intermediaries. However, in developing countries like India, corporate social responsibility in the business corporations is at infant stage. CSR in developing countries is still relatively underdeveloped and tends to be working as a temporarily basis with a heavy reliance on convenience-based case studies or descriptive accounts. "It can be seen as a form of strategic management, encouraging the organization to scan the horizon and think literally about how its relationships will contribute long-term to its bottom line in a constantly changing world". In this scenario, the subject of corporate social responsibility is relevant for research to expose its' role in business corporations in developing countries like India to establish guidelines on ethical and social responsible issues such as environmental, charitable giving and support for the community, human rights and reducing social and financial exclusion.

### 1.1 History of Corporate Social Responsibility

The history of Corporate Social Responsibility (CSR) dates back as far as the nineteenth century, when Sir Titus Salt built his own village for his employees in the vicinity of his new factory. This village was called Saltaire; it had a school, a library, a hospital and a church. It was Sir Titus Salt's answer to the heavily polluted village of Bradford. Sir Titus Salt was a major player in the wool and textile industry in the United Kingdom and considered unpolluted and pleasant living conditions for his employees more important than merely being able to abuse their labour potential. Although Sir Titus Salt was probably not familiar with the term Corporate Social Responsibility, today he would have been classified as a corporate social responsible employer (Smith, 2003). Even though he might have been driven by his desire to do well, building Saltaire was also in Sir Titus Salt's self-interest.

With this new village, his employees would be more motivated, healthier and live longer, which would result in better and more productive employees and, therefore, higher profits for Sir Titus Salt himself.

India has a long rich history of close business involvement in social causes for national development. In India, CSR is known from ancient time as social duty or charity, which through different ages is changing its nature in broader aspect, now generally known as CSR. In initial years there was little documentation of social responsibility initiatives in India. Since then there is a growing realization towards contribution to social activities globally with a desire to improve the immediate environment (Shinde, 2005).

After Independence, JRD Tata who always laid a great deal of emphasis to go beyond conducting themselves as honest citizens pointed out that there were many ways in which industrial and business enterprises can contribute to public welfare beyond the scope of their normal activities. He advised that apart from the obvious one of donating funds to good causes which has been their normal practice for years; they could have used their own financial, managerial and human resources to provide task forces for undertaking direct relief and reconstruction measures.

## **2. REVIEW OF LITERATURE**

According to **Qu (2007)**, market orientation is the significant predictor of CSR followed by government regulations, whereas ownership structure is found to have a little effect.

**Smith (2007)** advocated that a firm must control the triple-bottom line, i.e, the environmental, societal, and economic aspects of the firm's performance, especially with the strategic aspects of the resources-based view of the firm as its foundation.

**Visser (2005)** argued that CSR in developing countries to represent 'the formal and informal ways in which business makes a contribution to improving the governance, social, ethical, labour and environmental conditions of the developing countries in which they operate, while remaining sensitive to prevailing religious, historical and cultural contexts'.

**Wise and Ali (2008)** depicted that if corporate social responsibility disclosure is made obligatory there is a strong case for it to follow international benchmarks. This would include the triple-bottom-line reporting method, which is increasingly being accepted as a useful method of conveying information on a firm's social performance.

According to **Juscus and Snieska (2008)** only the companies, which aim to save all universally accepted ethical standards of social behaviour, can expect a positive attitude and support in the modern society. Moreover, helping to solve burning social and ecological problems, they get competitive advantages and ensure their successful work in future.

## **3. OBJECTIVES AND HYPOTHESES OF THE STUDY**

### **3.1 Objectives**

For the present study on Corporate Social Responsibility in Public Sector Units (PSUs), the following objectives are designed:

- To evaluate the existing perceived status of Corporate Social Responsibility (CSR) and its performance concerning social issues in PSUs;
- To ascertain to what extent PSUs is protecting the interest of stakeholders;
- To analyze and identify the factors influencing the CSR activities in PSUs; and
- To summarize the findings, give conclusions and offer necessary suggestions.

### **3.2 Hypotheses of the Study**

For the present study on Corporate Social Responsibility in Public Sector Units (PSUs), the following hypotheses are tested:

H<sub>01</sub> : PSUs are not maintaining the proper status of Corporate Social Responsibility; and

H<sub>02</sub> : Interest of different stakeholders is not protected in PSUs.

#### **4. RESEARCH METHODOLOGY**

The data used in this study is the primary data, which are of qualitative in nature. The survey method is adopted to collect data from the randomly selected respondents among the population comprising employees in managerial, supervisor and clerical position in PSUs. The study was conducted among a sample of 425 respondents comprising 399 PSUs employees and 26 general public having direct link with PSU. A questionnaire instrument is used in the survey to collect the data. Various statements measuring existing status of CSR, PSUs performance concerning social issues and protecting the interest of stakeholders in addition to statement measuring CSR activities in PSUs with 5-point scale ranging from “strongly disagree” to “strongly agree” have been included in the questionnaire.

The collected data are subjected to various statistical techniques from descriptive to multivariate. Descriptive statistics were used to evaluate the extent of existing CSR status in PSUs. Cluster analysis was applied to segment the respondents into mutually exclusive groups on the basis of social issues and interest of stakeholders. Chi-square test is applied for examining association between any two factors and one-way Analysis of Variance (ANOVA) also called ‘F’ test is also applied wherever it is necessary to find out the significance of the difference in group mean perception scores. Factor analysis is applied to find out underlying aspects (dimensions) of CSR, Social issues, Interest of stakeholders. To elicit the determinants of CSR activities in PSUs, multiple regression analysis is used.

The variables used for measuring SRB and CSR in the present study are: Government; Customers; Environment; Employees; Shareholders; Business partners; Communities; Business is a part of the society and it must respond to social issues; People buy the products of a socially responsible companies; By being socially responsible, a company’s goodwill will increase; Social responsibility expenditure must be incurred even when the firm is not making profit; By ignoring social responsibility, a business can increase its profits; Even doing routine business properly is an act of social responsibility; and Social activities should be planned and not arbitrary.

#### **5. DATA ANALYSIS AND INTERPRETATION**

CSR activities in an organization can generally be clustered into seven main groups, namely Leadership-vision-values, Market place activities. Workforce activities, Supply chain activities, Stakeholder engagement, Community activities and Environmental activities. These main groups broadly follow mainstream of CSR guidelines and descriptions focusing on practical CSR activities. Though PSUs have formulated a CSR policy, it is not known that its CSR activities make use of environmental, social, workplace, community, etc. Further it is not clear to what extent PSUs perform CSR impact assessments of their production processes and their products. Therefore, in this study an attempt is made to explore the status of CSR activities in PSUs based on views of the PSUs employees and General Public associated with PSUs activities.

##### **5.1 CSR Activities**

To measure the activities of PSUs regarding Corporate Social Responsibility, 32 statements based on 5-point scale with values from ‘1’ for ‘strongly disagree’ to ‘5’ for ‘strongly agree’ are used.

**Table 1: Results of Reliability / Item analysis for scale items measuring “CSR activities” in PSUs**

Sr. No.	Description of scale items	Item to total correlation	Alpha if deleted
1	Pay clear attention to employee motivation	0.4104	0.8988
2	Respect for employees, good relations at work	0.5035	0.8972
3	Ensuring good safety and health conditions at work	0.4741	0.8978
4	Contribute to the personal and career development of its employees	0.5172	0.8970
5	Avoid business partners that do not behave according to the law	0.4182	0.8987
6	Involve its employees when taking important decisions	0.4752	0.8977
7	Take care of the quality of its product or service; whereby your company goes beyond legal requirements	0.4664	0.8979
8	Organizing or participating in public welfare activities	0.4788	0.8978
9	Encouraging employees' voluntary welfare programmes	0.5171	0.8971
10	Improving employee welfare (facilities and benefits)	0.4901	0.8976
11	Active contribution of tax to government	0.2499	0.9012
12	Improving pollution control/environment impact	0.3927	0.8993
13	Contribution to vulnerable group	0.4319	0.8985
14	Donation to charitable and public welfare organizations	0.4643	0.8979
15	Contribution to local sport, cultural, literary or other community activities	0.4317	0.8985
16	Taking actions to support local community	0.4347	0.8984
17	Financial/Organizational Support for Cultural events in local community	0.4388	0.8984
18	Providing jobs for people living in the region	0.4570	0.8980
19	Ensuring that prices of goods / services reflect their value	0.3561	0.8996
20	Take care of health and safety issues of its employees; whereby your company goes beyond legal requirements	0.4910	0.8975
21	Have an active waste reduction policy	0.5242	0.8968
22	Recycle materials	0.5071	0.8971
23	Using environment-friendly technologies	0.4509	0.8981
24	Using renewable resources in production	0.4625	0.8980
25	Take care of the safety of its product or service; whereby your company goes beyond legal requirements	0.3904	0.8991
26	Provide equal opportunities for disabled people, immigrants and women; whereby your company goes beyond legal requirements	0.3966	0.8991
27	Have a procedure to handle complaints; whereby your company goes beyond legal requirements	0.5098	0.8971
28	Have partnerships with community-based organizations	0.4592	0.8981

29	Report on the environmental consequences of its activities	0.4848	0.8976
30	Provide detailed information concerning its product or service; whereby your company goes beyond legal requirements	0.4114	0.8988
31	Have an ethical code for its suppliers and other business relations	0.3910	0.8991
32	Donate money to national or international charities	0.3908	0.8992
Cronbach's Alpha reliability coefficient		0.9011	

Source: Primary data

The opinion data of the respondents about the CSR activities are first subjected to Reliability / Item analysis to ascertain the reliability and validity of the scale items. After ascertaining the reliability / validity of the scale items, principal component method of factor analysis is run to extract the major CSR activities in PSUs. The results of the reliability and factor analysis are provided from Table 1 to 4.

An observation of the Table 5.1 indicates that "item to total correlation" for all 32 scale items except for 11th item is above 0.30, indicating that these items are valid items in the scale. Though "item to total correlation" of 11th items is less than 0.30, its "alpha if deleted" is less than the overall Cronbach alpha coefficient. That is, removing this item from the scale does not increase the overall reliability coefficient. Therefore, this item is also retained in the scale. From the Cronbach alpha coefficient, which is 0.9011, it is well apparent that the reliability of the items in the scale used for measuring CSR activities in PSUs is 'Excellent'.

**Table 2: Eigen values of factors underlying "CSR activities in PSUs"**

Factors	Eigen value	% of total variance	Cumulative % of total variance
1	7.9728	24.92	24.92
2	2.9246	9.14	34.06
3	2.5857	8.08	42.14
4	1.7129	5.35	57.49
5	1.4462	4.52	52.01
6	1.1695	3.65	55.66
7	1.0272	3.21	58.87
8	0.9027	2.82	61.69
9	0.8653	2.70	64.39
10	0.8108	2.53	66.92
11	0.7712	2.41	69.33
12	0.7277	2.27	71.60
13	0.7016	2.19	73.79
14	0.6286	1.98	75.77
15	0.6203	1.94	77.71
16	0.5978	1.87	79.58
17	0.5850	1.83	81.41
18	0.5623	1.75	83.16
19	0.5387	1.69	84.85

20	0.5005	1.56	86.41
21	0.4577	1.43	87.84
22	0.4536	1.42	89.26
23	0.4277	1.33	89.59
24	0.3954	1.24	91.83
25	0.3874	1.21	93.04
26	0.3693	1.16	94.20
27	0.3597	1.12	95.32
28	0.3350	1.05	96.37
29	0.3225	1.00	97.37
30	0.3051	0.96	98.33
31	0.2930	0.91	99.24
32	0.2422	0.76	100.00

Source: Primary data

As reported in the Table 2, eigen value of first seven factors is above '1', indicating that there are seven primary aspects underlying CSR activities in PSUs. The variance explained by the factor in the original data is 24.92 per cent. Similarly, the variance explained by second, third, fourth, fifth, sixth and seventh factor is 9.14 per cent, 8.08 per cent, 5.35 per cent, 4.52 per cent, 3.65 per cent and 3.21 per cent respectively. All seven factors together possess 58.87 per cent of the qualities of the actual data.

From the eigen value and explained variance, it is found that there are seven factors underlying CSR activities in PSUs. In order to ascertain each factor's characteristics, loadings of items with the extracted factors, produced by the factor analysis, are provided in Table 3. It can be seen from the table that loading of 14 (Donation to charitable and public welfare organizations) followed by items 16 (Taking actions to support local community), 15 (Contribution to local sport, cultural, literary or other community activities), 17 (Financial/Organizational Support for Cultural events in local community) and 32 (Donate money to national or international charities) is very high (factor loadings are more than 0.60) with first factors compared to the loadings of these items with all other factors. The loadings of items 13 (Contribution to vulnerable group) and 18 (Providing jobs for people living in the region) with first factor is more than that of those with any other factors.

The second factor is highly loaded with items 2 (Respect for employees, good relations at work), 3 (Ensuring good safety and health conditions at work), 1 (Pay clear attention to employee motivation), 4 (Contribute to the personal and career development of its employees), 9 (Encouraging employees' voluntary welfare programmes), 6 (Involve its employees when taking important decisions), 8 (Organizing or participating in public welfare activities), 10 (Improving employee welfare facilities and benefits) and the loading of item 20 (Take care of health and safety issues of its employees; whereby your company goes beyond legal requirements) is also highly compared with that of other factors.

Table 3: Factor loadings of items with extracted factors underlying “CSR activities in PSUs”

Item No.	Factor						
	1	2	3	4	5	6	7
14	<b>0.79</b>	0.06	0.10	0.11	0.09	-0.06	0.13
16	<b>0.77</b>	0.04	0.14	0.11	0.01	0.09	-0.07
15	<b>0.75</b>	0.13	0.02	0.10	0.15	-0.08	0.05
17	<b>0.69</b>	0.17	0.01	0.01	0.05	0.27	-0.04
32	<b>0.61</b>	-0.01	0.10	0.02	0.27	0.07	0.23
13	<b>0.54</b>	0.16	0.13	0.13	-0.28	-0.04	0.35
18	<b>0.53</b>	0.12	0.21	0.09	-0.02	0.39	-0.11
2	0.03	<b>0.80</b>	0.11	0.10	0.08	0.03	0.00
3	0.05	<b>0.74</b>	0.04	0.09	0.17	0.04	0.04
1	0.02	<b>0.72</b>	0.09	0.09	-0.10	-0.12	0.13
4	0.06	<b>0.71</b>	0.14	0.14	-0.06	0.05	0.14
9	0.16	<b>0.69</b>	0.07	0.11	0.07	0.15	-0.03
6	0.01	<b>0.67</b>	0.16	0.12	-0.22	0.08	0.24
8	0.19	<b>0.67</b>	0.02	0.06	0.07	0.16	-0.06
10	0.19	<b>0.64</b>	-0.01	0.12	0.29	0.07	-0.05
20	0.23	<b>0.48</b>	-0.13	0.25	0.11	0.25	0.08
5	0.08	0.12	<b>0.84</b>	0.11	0.02	0.04	0.04
7	0.14	<b>0.08</b>	<b>0.82</b>	0.10	0.11	0.12	0.10
27	0.11	0.09	<b>0.70</b>	0.24	0.03	0.22	0.15
23	0.06	0.09	0.08	<b>0.80</b>	0.14	-0.02	0.09
22	0.14	0.12	0.13	<b>0.76</b>	-0.07	0.14	0.04
21	0.11	0.18	0.09	<b>0.73</b>	-0.01	0.24	-0.02
24	0.02	0.16	0.18	<b>0.61</b>	0.05	0.08	0.20
12	0.17	0.13	0.12	<b>0.55</b>	0.23	0.03	-0.16
29	0.04	0.17	0.27	<b>0.53</b>	-0.05	0.06	0.30
11	0.12	0.10	0.10	0.09	<b>0.83</b>	-0.03	-0.01
19	0.32	0.08	0.14	0.02	<b>0.55</b>	0.02	0.28
26	0.08	0.11	0.20	0.11	-0.11	<b>0.71</b>	0.13
25	-0.01	0.06	0.15	0.20	0.16	<b>0.67</b>	0.21
28	0.14	0.12	0.19	0.25	-0.16	<b>0.52</b>	0.32
30	0.08	0.16	0.14	0.12	-0.02	0.23	<b>0.70</b>
31	0.11	0.05	0.19	0.09	0.19	0.20	<b>0.65</b>
Explained variance	3.63	4.54	2.40	3.15	1.58	1.86	1.68
% of total variance	11.35	14.20	7.49	9.83	4.95	5.81	5.24
Cumulative % of total variance	11.35	25.55	33.04	44.87	47.82	53.63	58.87

While third factor possess maximum characteristics (very high loadings) of items 5 (Avoid business partners that do not behave according to the law), 7 (Take care of the quality of its product or service; whereby your company goes beyond legal requirements) and 27 (Have a procedure to handle complaints; whereby your company goes beyond legal requirements), the



fourth factor is found to have maximum essence of items 23 (Using environment-friendly technologies), 22 (Recycle materials), 21 (Have an active waste reduction policy), 24 (Using renewable resources in production), 12 (Improving pollution control/environment impact) and 29 (Report on the environmental consequences of its activities). Similarly, the fifth factor is found with maximum qualities of items 11 (Active contribution of tax to government) and 19 (Ensuring that prices of goods / services reflect their value), sixth factor with items 26 (Provide equal opportunities for disabled people, immigrants and women; whereby your company goes beyond legal requirements), 25 (Take care of the safety of its product or service; whereby your company goes beyond legal requirements) and 52 (Have partnerships with community-based organizations) and seventh factors with qualities of items 30 (Provide detailed information concerning its product or service; whereby your company goes beyond legal requirements) and 31 (Have an ethical code for its suppliers and other business relations).

Based on the items loadings, the first factors is named as "Community development", second factor as "Workplace and labour relations", third factor as "Choosing business partners", fourth factor as "Environmental benefits", fifth factors as "Corporate governance", sixth one as "Legal compliance" and seventh factor as "Business ethics". Therefore, it is concluded that CSR activities in PSUs is meant for Community development, Workplace and labour relations, Choosing business partners, Environmental benefits, Corporate governance, Legal compliance and Business ethics (Table 4).

**Table 4: Labels for valid factors underlying "CSR activities in PSUs"**

FACTOR LABEL						
1	2	3	4	5	6	7
Community Development	Workplace and Labour relations	Choosing business partners	Environmental benefits	Corporate governance	Legal compliance	Business ethics

The score for each valid factor is calculated by averaging individual scores of highly loaded items with that factor. To get the status of the CSR activities, the perception of the entire sample about each activity (each factor) is evaluated using descriptive statistics like mean, standard deviation, etc. The mean scores for respondent groups based on the socio-economic characteristics are also calculated and compared using t-test (two groups) and F-test (more than two groups). Further, influence of perceived socially responsible behaviour, performance of PSUs concerning social issues and protecting the interest of stakeholders by PSUs on CSR activities is analyzed using multiple regression analysis. Table 5 presents the mean perception of the whole sample about CSR activities in PSUs'.

**Table 5: Status of CSR activities in PSUs**

Q. No.	Major CSR activities	Mean	S. D.
1	Community development	3.93	0.54
2	Workplace and Labour relations	3.97	0.52
3	Choosing business partners	3.80	0.62
4	Environmental benefits	3.90	0.57
5	Corporate governance	4.12	0.53
6	Legal compliance	3.93	0.59
7	Business ethics	3.95	0.62

It can be observed from the table that the mean scores of all CSR activity dimensions are in between 3.50 and 4.50, the range for 'agree' opinion. This clearly reveals that PSUs has properly undertaken CSR activities in the areas of community development, workplace and labour relations, choosing business partners, environmental benefits, corporate governance, legal compliance and business ethics. That is, CSR activities in PSUs have incorporated community, workplace, employee, business partner, environment, rules and regulation and business ethics as stakeholders. It further appears from the observation mean values (high to low) that corporate governance, workplace and labour relations, business ethics, community development and legal compliance are the five most considered CSR stakeholders for PSUs.

**Table 6: Status of CSR activities in PSUs - Comparison of opinion by respondent type**

Major CSR activities	Respondent type				t value (df = 473)
	Employee		Public		
	Mean	SD	Mean	SD	
Community development	3.62	0.55	4.12	0.34	1.88*
Workplace and Labour relations	3.96	0.53	4.13	0.38	1.65
Choosing business partners	3.78	0.62	4.09	0.45	2.52**
Environmental benefits	3.88	0.57	4.14	0.44	2.24**
Corporate governance	4.11	0.54	4.17	0.49	0.56
Legal compliance	3.92	0.59	4.19	0.52	2.32**
Business ethics	3.92	0.62	4.37	0.44	3.60***

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level;

As per t-test results reported in Table 6, there is a significant difference in the opinion between PSUs employees and General public associated with PSUs in respect of all CSR activities except "workplace and labour relations" and "corporate governance"

The mean perception of both PSUs employees and General public is very well in 'agree' level, and the degree of agreement among General public is more than that of PSUs employees. This envisages that the PSUs has adopted CSR activities with importance to community development, workplace and labour relations, choosing business partners, environmental benefits, corporate governance, legal compliance and business ethics and the perception of the General public is significantly higher compared to that of those working in PSUs.

From the perusal of the Table 7, which provides the results of t-test comparing the opinion about CSR activities between male and female respondents, it is understood that both male and female groups have given 'agree' opinion about all CSR activities.

**Table 7. Status of CSR activities in PSUs - Comparison of opinion by sex**

Major CSR activities	Sex				t value (df = 473)
	Male		Female		
	Mean	SD	Mean	SD	
Community development	3.92	0.95	3.99	0.49	0.95
Workplace and Labour relations	3.96	0.52	4.03	0.52	1.10
Choosing business partners	3.78	0.62	3.90	0.61	1.58
Environmental benefits	3.88	0.59	4.00	0.44	1.57
Corporate governance	4.12	0.52	4.08	0.58	0.63
Legal compliance	3.90	0.60	4.10	0.50	2.61***
Business ethics	3.92	0.62	4.11	0.61	2.38**

\*\*Significant at 5% level; \*\*\*Significant at 1% level

The difference in opinion between male and female groups can be seen only in the case of “legal compliance” (t-value = 2.61,  $p < 0.01$ ) and “Business ethics” (t-value = 2.38,  $p < 0.05$ ). That is, with regard to most of the CSR activities, the respondents regardless of difference in sex have given their opinion similarly. From the above results, it is found that there is no influence of sex on the respondents’ perceived status of CSR activities undertaken by PSUs.

The opinion among respondent groups by age is compared by one-way ANOVA and the results of the analysis are reported in Table 8. According to the table, all respondents regardless of their age have agreed that PSUs has properly undertaken CSR activities with community, workplace, employee, environment, corporate governance, legal compliance as important stakeholders.

**Table 8: Status of CSR activities in PSUs - Comparison of opinion by age**

Major CSR activities	Age						f value (df = 2, 472)
	Upto 45		46 to 50		More than 50		
	Mean	SD	Mean	SD	Mean	SD	
Community development	3.89	0.56	3.99	0.53	3.91	0.52	1.42
Workplace and Labour relations	3.94	0.54	3.98	0.50	3.99	0.51	0.43
Choosing business partners	3.81	0.66	3.76	0.62	3.82	0.55	0.33
Environmental benefits	3.90	0.55	3.90	0.57	3.90	0.59	0.01
Corporate governance	4.14	0.52	4.11	0.51	4.09	0.58	0.33
Legal compliance	3.96	0.56	3.90	0.59	3.93	0.63	0.36
Business ethics	3.96	0.59	3.94	0.60	3.94	0.68	0.08

From the results of the analysis obtained from the comparison of opinion across respondents groups by educational status, which are reported in Table 9, it is apparent that the respondents irrespective of their educational status have indicated that the PSUs has well engaged in CSR activities (the mean scores of all educated groups are very well in ‘agree’ range).

**Table 9: Status of CSR activities in PSUs - Comparison of opinion by education**

Major CSR activities	Education						f value (df = 2, 472)
	Secondary		Degree/Diploma		PG/Professional		
	Mean	SD	Mean	SD	Mean	SD	
Community development	3.91	0.40	3.89	0.63	3.95	0.52	0.56
Workplace and Labour relations	3.99	0.56	4.05	0.47	3.93	0.53	2.40**
Choosing business partners	3.88	0.56	3.78	0.63	3.79	0.63	0.55
Environmental benefits	3.99	0.46	3.87	0.59	3.90	0.58	0.83
Corporate governance	3.94	0.44	4.08	0.59	4.17	0.51	4.31***
Legal compliance	4.09	0.50	3.89	0.62	3.92	0.59	2.18
Business ethics	4.12	0.58	3.93	0.70	3.92	0.58	2.20

\*\*\*Significant at 1% level;

At the same time, level of agree opinion about “workplace and labour relations” (F value = 2.40,  $p < 0.05$ ) and “corporate governance” (F value = 4.31,  $p < 0.01$ ). But, in respect of most activities, there is no significant difference in opinion among three different educational groups. So, based on the insignificant difference in most of the activities, it is concluded that respondents’ opinion about PSUs in respect of its CSR activities engaging community, workplace, employee,

environment, corporate governance, legal compliance as importance stakeholders is independent of their educational status.

According to Table 10, the mean perception of rural and urban respondent groups is in between 3.50 and 4.50, the range for 'agree'. Further the level of agreement does not differ for CSR activities concerning all aspects except "Choosing business partners" (t-value = 2.28,  $p < 0.05$ ).

**Table 10: Status of CSR activities in PSUs - Comparison of opinion by location**

Major CSR activities	Location				t value (df = 473)
	Rural		Urban		
	Mean	SD	Mean	SD	
Community Development	3.98	0.46	3.91	0.57	1.23
Workplace and Labour Relations	4.01	0.49	3.95	0.53	0.97
Choosing Business Partners	3.90	0.51	3.75	0.66	0.97
Environmental Benefits	3.83	0.54	3.93	0.58	1.60
Corporate Governance	4.15	0.51	4.10	0.54	0.79
Legal Compliance	3.94	0.60	3.93	0.59	0.25
Business Ethics	3.97	0.56	3.94	0.64	0.40

\*\*Significant at 5% level.

Regarding most of the aspects of CSR activities, there is no significant difference in the opinion between rural and urban groups. Therefore, it is found that the respondents, regardless of their place of origin, have indicated PSUs as good adopter of CSR activities focusing on community, workplace, employee, environment, corporate governance, legal compliance and business ethics.

Table 11 shows F values for the difference in mean perception among three different occupational groups about CSR activities in PSUs. An examination of the table reveals that the mean values ranges between 3.84 and 4.06 for clerical, 3.81 and 4.12 for supervisors and between 3.74 and 4.14 for managerial groups. Thus, all occupational groups have indicated that the CSR activities in PSUs tend to focus on community, workplace, employee, environment, corporate governance, legal compliance and business ethics.

**Table 11: Status of CSR activities in PSUs-Comparison of opinion by occupation**

Major CSR activities	Occupation						f value (df = 2, 472)
	Clerical		Supervisor		Managerial		
	Mean	SD	Mean	SD	Mean	SD	
Development	3.88	0.58	3.94	0.56	3.95	0.48	0.53
Workplace and Labour Relations	3.96	0.57	4.01	0.50	3.91	0.52	1.51
Choosing business Partners	3.84	0.66	3.81	0.63	3.74	0.58	0.51
Environmental Benefits	3.96	0.65	3.93	0.50	3.81	0.60	2.54*
Corporate Governance	4.06	0.50	4.12	0.56	4.14	0.51	0.66
Legal Compliance	3.93	0.70	3.93	0.54	3.94	0.60	0.01
Business Ethics	3.98	0.70	3.94	0.63	3.95	0.55	0.13

\*Significant at 10% level.

The difference in the opinion among three occupational groups in respect of "environmental Benefits" is even just marginal (F value = 2.50,  $p < 0.10$ ). So, perceived status of CSR activities in PSUs is independent of the occupational status of the respondents.

**Table 12: Status of CSR activities in PSUs - Comparison of opinion by years of service**

Major CSR activities	Year						f value (df = 2, 472)
	Upto 20		21 - 25		Above 25		
	Mean	SD	Mean	SD	Mean	SD	
Community Development	3.85	0.59	4.02	0.49	3.92	0.52	3.58**
Workplace and Labour Relations	3.95	0.51	3.97	0.55	3.99	0.51	0.27
Choosing Business Partners	3.83	0.66	3.78	0.59	3.78	0.60	0.29
Environmental Benefits	3.89	0.58	3.89	0.54	3.92	0.59	0.17
Corporate Governance	4.12	0.53	4.17	0.51	4.07	0.55	1.08
Legal Compliance	3.95	0.56	3.92	0.56	3.93	0.66	0.11
Business Ethics	3.99	0.59	3.94	0.60	3.91	0.66	0.54

\*\*Significant at 5% level.

It can be seen from Table 12 that there is a significant difference in the opinion about “community development” (F value = 3.58,  $p < 0.05$ ) among the respondent groups with years of experience up to 20 years (Mean = 3.85), 21-25 years (Mean = 4.02) and above twenty five years (Mean = 3.92). Regarding CSR activities other than the above, there is no significant difference in the level of agree opinion by years of experience.

In sum, it is concluded from the above results that the respondents notwithstanding their years of experience have all perceived good CSR activities in PSUs considering community, workplace, employee, environment, corporate governance, legal compliance and business ethics as major stakeholders.

Table 13 is reported with the results of the analysis comparing the group means by respondents' family income. As reported in the table, the perception about all major CSR activities in PSUs across all family income groups is 'agree' (mean scores ranges between 3.50 and 4.50, the range for 'agree' opinion). There is a significant marginal difference in the level of agree opinion about “community development” (F value = 2.76,  $p < 0.10$ ) and “corporate governance” (F value = 2.45,  $p < 0.10$ ) among respondent groups with different family income levels. The difference in opinion by family income is obtained only for two out of seven CSR activities.

**Table 13: Status of CSR activities in PSUs - Comparison of opinion by family income**

Major CSR activities	Income (in Rupees)						f value (df = 2, 472)
	Upto 35000		35001 - 50000		Above 50000		
	Mean	SD	Mean	SD	Mean	SD	
Community development	3.84	0.59	3.96	0.54	3.99	0.46	2.76*
Workplace and Labour relations	3.98	0.55	3.96	0.52	3.98	0.48	0.09
Choosing business partners	3.86	0.65	3.78	0.60	3.75	0.61	1.02
Environmental benefits	3.90	0.58	3.88	0.58	3.92	0.54	0.15
Corporate governance	4.08	0.58	4.08	0.51	4.21	0.50	2.45*
Legal compliance	3.98	0.58	3.92	0.61	3.90	0.59	0.61
Business ethics	3.98	0.62	3.95	0.63	3.90	0.60	0.55

\*Significant at 10% level

Therefore, it is concluded that PSUs has undertaken the CSR activities to focus on community development, workplace and labour relations, choosing business partners, environmental

benefits, legal compliance and business ethics and there is no relationship between above perception of the respondents and their family income level.

The difference in opinion about PSUs's CSR activities between joint and nuclear family groups is evaluated using t-test. As per the results presented in the Table 14, there is a notable difference in the opinion about "Community development" (t-value = 2.01,  $p < 0.01$ ), "Corporate governance" (t-value = 1.93,  $p < 0.05$ ) and "business ethics" (t-value = 2.16,  $p < 0.05$ ) between joint and nuclear family groups.

**Table 14: Status of CSR activities in PSUs - Comparison of opinion by family type**

Major CSR activities	Family type				t value (df = 473)
	Joint		Nuclear		
	Mean	SD	Mean	SD	
Community Development	3.86	0.56	3.97	0.52	2.01**
Workplace and Labour Relations	4.01	0.48	3.95	0.54	1.21
Choosing Business Partners	3.80	0.61	3.79	0.62	0.13
Environmental Benefits	3.87	0.58	3.92	0.56	0.72
Corporate Governance	4.05	0.57	4.15	0.50	1.93**
Legal Compliance	3.91	0.59	3.95	0.59	0.59
Business Ethics	3.86	0.60	4.00	0.63	2.16**

\*\*Significant at 5% level.

With regard to other facets of CSR activities in PSUs, the respondents regardless of their family type have expressed their agreement with similar degree. Whether there is a difference or not, the mean scores against all facets of CSR activities between joint and nuclear family groups are in the 'agree' range'. So, it is found that the perception of the respondents about CSR activities in PSUs is unrelated to their family type.

**Table 15: Status of CSR activities in PSUs - Comparison of opinion by family size**

Major CSR activities	Family Size				t value (df = 473)
	Upto 3		Above 3		
	Mean	SD	Mean	SD	
Community Development	3.96	0.53	3.91	0.54	0.97
Workplace and Labour Relations	3.98	0.50	3.96	0.53	0.25
Choosing business Partners	3.80	0.62	3.80	0.62	0.04
Environmental Benefits	3.89	0.57	3.91	0.57	0.35
Corporate Governance	4.12	0.56	4.12	0.51	0.05
Legal Compliance	3.94	0.60	3.93	0.59	0.20
Business Ethics	3.96	0.59	3.94	0.64	0.28

From the results of t-test comparing the mean perceptions between respondent groups by family size, which are depicted in Table 15, it is understood that the respondents' perception about CSR activities in PSUs is unaffected by their family size. This is because the t-values for the difference in group mean values against all faces of CSR activities are insignificant.

At the same time, the mean perception of the respondents in both family size groups about all CSR activity dimensions are in 'agree' range.

In sum, it is found that the respondents irrespective of their family size have all agreed that PSUs have undertaken CSR activities focusing community, workplace, employees, business partners, environment, legal aspects and business ethics as important stakeholders.

## 5.2 Determinants of CSR Activities

The CSR activities in PSUs focusing on community, workplace, employee, business, environment, legalities, business ethics are likely to be linked with corporation's Socially responsible behaviour (SRB), its performance concerning social issues and its interest in protecting stakeholders. Thus, there might some factors of Socially responsible behaviour, performance concerning social issues and interest in protecting stakeholders determining the CSR activities in PSUs. Therefore, here an attempt is made to identify whether SRB, Social issues, Stakeholders related factors have unique influence on CSR activities or not. The multivariate statistical technique called multiple regression analysis is used for this purpose. In the regression analysis, CSR activity dimensions such as community development, workplace and labour relations, choosing business partners, environmental benefits, legal compliance and business ethics are the dependent variables and factors underlying SRB, performance concerning social issues and interest in protecting stakeholders are the independent variables. Table 16 reports the regression results for CSR activity dimension, community development.

**Table 16: Regression results for "Community Development" with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		performance concerning social issues		protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	2.0516***	7.77	2.1087***	8.50	2.1774***	8.88
Socially Responsible Behaviour	0.1519***	3.23	0.1540***	3.37	0.1592***	3.48
Business activities	-0.0128	-0.21				
Products and Service	0.1682***	3.36	0.1616***	3.35	0.1728***	3.61
Public activities	-0.0738	-1.52	-0.0792*	-1.75	-0.0760	-1.67
Respect to customers	0.0722	1.57	0.0682*	1.68		
Respect to subsidiary	0.0402	0.95				
Respect to consumers	-0.0442	-0.98				
Respect to stock holders	0.0646	1.55	0.0667*	1.73	0.0879**	2.41
Respect to employees	-0.0185	-0.46				
Respect to trade union	0.0285	0.75				
Respect to administration	0.0164	0.37				
Respect to local community	0.0707	1.56	0.0772*	1.92	0.0879**	2.21
<b>R Square</b>	<b>0.1447</b>		<b>0.1393</b>		<b>0.1335</b>	
<b>Adjusted R Square</b>	<b>0.1198</b>		<b>0.1269</b>		<b>0.1231</b>	
<b>F- value</b>	<b>5.81***</b>		<b>11.28***</b>		<b>12.91***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>6, 418</b>		<b>5, 419</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

An observation of the table indicates that there are three regression results, first one with all selected independent variables, second and third regressions with independent variables which are selected after dropping variables with least significant coefficients in first and second equations through step by step process. The step-wise approach is adopted to get the model of best fit. The model of best fit is identified based on the adjusted R<sup>2</sup> value. A model with highest R<sup>2</sup> value is identified as the model of best fit and the independent variables in the best fitted model are considered to be the important variables with unique influence (determinant power) on dependent variable.

The regression results reveals that all three regression models are fitted significantly at 1 per cent level with coefficient of determination of 14.47 per cent (R<sup>2</sup> = 0.1447, F = 5.81, p < 0.01), 13.93 per cent (R<sup>2</sup> = 0.1393, F = 11.28, p < 0.01) and 13.35 per cent (R<sup>2</sup> = 0.1335, F = 12.91, p < 0.01) by first, second and third models respectively. Based on adjusted R<sup>2</sup> values, it is understood that the independent variables in second and third model together could explain 12.69 per cent and 12.31 per cent of the variance in the dependent. Hence, among the three models, the second model (adjusted R<sup>2</sup> is high relative to that of other two models) is considered for making inference.

In the second model, estimated coefficients of independent variables are significant at required hypothetical. The sign of coefficient is positive for all except "public activities" ( $\beta = -0.0792$ ,  $t = -1.75$ ,  $p < 0.10$ ). Hence, based on the sign and significant level of the independent variables in the second model, it is found that CSR activities in PSUs focusing "community development" is positively influenced by SRB, social issues concerning "product and service", "respect to customers", respect to stockholders" and "respect to local community" when social issues concerning "public activities" is less.

**Table 17: Regression results for "Workplace and Labour Relations" with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	1.8986***	7.84	1.9788***	9.63	2.0184***	9.91
Socially Responsible Behaviour	0.0231	0.54				
Business activities	-0.0133	-0.23				
Products and Service	0.0952**	2.07	0.0940**	2.14	0.1018**	2.33
Public activities	0.0711	1.60	0.0716*	1.75	0.0796**	1.96
Respect to customers	0.0741*	1.76	0.1716**	2.01	0.0809**	2.31
Respect to subsidiary	-0.0125	-0.32				
Respect to consumers	0.0011	0.03				
Respect to stock holders	0.0009	0.02				
Respect to employees	0.1803***	4.86	0.1964***	5.79	0.2135***	6.75



Respect to trade union	0.0243	0.69				
Respect to administration	0.0213	0.52				
Respect to local community	0.0396	0.96	0.0520	1.38		
<b>R Square</b>	<b>0.2250</b>		<b>0.2222</b>		<b>0.2185</b>	
<b>Adjusted R Square</b>	<b>0.2024</b>		<b>0.2127</b>		<b>0.2110</b>	
<b>F- value</b>	<b>9.97***</b>		<b>23.91***</b>		<b>29.35***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>5, 419</b>		<b>4, 420</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

An examination of the Table 17, which presents the regression results for CSR activity dimension, “workplace and labour relations”, reveals that the fit of the first, second and third model is significant with coefficient of determination of 22.50 per cent (F value = 9.97,  $p < 0.01$ ), 22.20 per cent (F value = 23.91,  $p < 0.01$ ) and 21.10 per cent (F value = 29.35,  $p < 0.01$ ) respectively. At the same time, adjusted R<sup>2</sup> value, 0.2127 for second model and 0.2110 for third model is more than that of first model with all selected independent variables.

Between second and third models, the difference in adjusted R<sup>2</sup> value is just 0.17 per cent, this additional explained variables is due to “respect of local community”. But the coefficient of this explanatory variable in the second model is insignificant. So, presence of this variable in the model is not of much important. Therefore, third model is selected as the model of best fit for making interpretation.

In the selected third model, the coefficients of “product and service” ( $\beta = 0.1018$ ,  $t = 2.33$ ,  $p < 0.05$ ), “public activities” ( $\beta = 0.0796$ ,  $t = 1.96$ ,  $p < 0.05$ ), “respect to customers” ( $\beta = 0.0809$ ,  $t = 2.31$ ,  $p < 0.05$ ) and “respect to employees” ( $\beta = 0.2135$ ,  $t = 6.75$ ,  $p < 0.01$ ) are all significant with positive sign. From the results of third model, it is found that CSR activities in PSUs focusing “workplace and labour relations” is positively influenced by the social issues concerning “product and service”, “public activities” and protecting the interest of stakeholders “respect of customers” and “respect to employees”.

**Table 18: Regression Results for “Choosing Business Partners” with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	1.8018***	5.93	1.7859***	6.42	1.8123***	6.53
Socially Responsible Behaviour	0.0062	0.11				

Business activities	0.1321*	1.86	0.1268**	1.95	0.1330**	2.05
Products and Service	0.0951*	1.65	0.0910	1.64	0.0997*	1.81
Public activities	-0.0116	-0.21				
Respect to customers	0.1089**	2.06	0.1094**	2.09	0.1112**	2.12
Respect to subsidiary	0.1149**	2.37	0.1154**	2.40	0.1180**	2.46
Respect to consumers	-0.1481***	-2.85	-0.1522***	-2.99	-0.1458***	-2.87
Respect to stock holders	0.0866*	1.85	0.0890*	1.89	0.0996**	2.16
Respect to employees	0.0628	1.35	0.0553	1.28	0.0713*	1.73
Respect to trade union	0.0005	0.01				
Respect to administration	-0.0277	-0.54				
Respect to local community	0.0680	1.31	0.0587	1.19		
<b>R Square</b>	<b>0.1387</b>		<b>0.1380</b>		<b>0.1350</b>	
<b>Adjusted R Square</b>	<b>0.1136</b>		<b>0.1314</b>		<b>0.1205</b>	
<b>F- value</b>	<b>5.53***</b>		<b>8.32***</b>		<b>9.30***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>8, 416</b>		<b>7, 417</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

Results of regression identifying the determinants of "Choosing business partners" are shown in Table 18. According to the table, all three regression models are fitted significantly with coefficient of determination varying between 13.50 per cent and 13.87 per cent. The variance explained in the dependent after taking the number of variables into consideration is 11.36 per cent, 13.14 per cent and 12.05 per cent by first (Adjusted  $R^2 = 0.1136$ ), second (Adjusted  $R^2 = 0.1314$ ) and third Adjusted  $R^2 = 0.1205$ ) model respectively. The adjusted  $R^2$  value of second model is more than that of first and third model. From the comparison of adjusted  $R^2$  values between second and third models, it is apparent that the value in second model is higher by just 1.09 per cent due to presence of "respect of local community", whose coefficient is insignificant. Therefore, third model is taken into consideration for final inference.

In the selected third model, the coefficients of all explanatory variables except that of "respect to consumers" are significant with positive sign. For "respect of consumers", the estimated coefficient is negative and significant at one per cent level. Based on the results of third model, it is deduced that the PSUs' CSR activities in respect of "choosing business partners" is positively related to PSUs' social issues concerning "business activities" and "products & services", and protecting the interest of stakeholders such as "respect to customers", "respect to subsidiary, subcontract firms", "respect to stock holders" and "respect to employees" when there has been a significant decline in "respect to consumers".

**Table 19: Regression results for “Environmental Benefits” with Socially responsible Behaviour, and performance concerning social issues and protecting the interest of stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	1.4316***	5.26	1.4582***	5.51	1.4936***	5.67
Socially Responsible Behaviour	0.1464***	3.02	0.1498***	3.13	0.1585***	3.33
Business activities	0.0802	1.26	0.1085*	1.84	0.1166**	1.99
Products and Service	0.1132**	2.19	0.1351***	2.75	0.1331***	2.70
Public activities	0.0444	0.89				
Respect to customers	0.0416	0.88	0.0626	1.49	0.0832**	2.12
Respect to subsidiary	0.0152	0.35				
Respect to consumers	0.0251	0.54				
Respect to stock holders	0.0327	0.76	0.0531	1.38		
Respect to employees	0.0137	0.33				
Respect to trade union	-0.0187	-0.47				
Respect to administration	0.0729	1.58	0.0887**	2.36	0.0970***	2.62
Respect to local community	0.0375	0.81				
<b>R Square</b>	<b>0.1802</b>		<b>0.1753</b>		<b>0.1715</b>	
<b>Adjusted R Square</b>	<b>0.1563</b>		<b>0.1634</b>		<b>0.1616</b>	
<b>F- value</b>	<b>7.55***</b>		<b>14.81***</b>		<b>17.35***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>6, 418</b>		<b>5, 419</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

Regarding determinants of “environmental benefits”, it can be observed from Table 19 that, the third model with five explanatory variables is found to be the model of best fit as the variance explained by this model (Adjusted R<sup>2</sup> = 0.1616) is less by just 0.18 per cent in the absence of “respect to stock holders” (with insignificant coefficient) compared to that of second model. In the third model, the coefficient of “Socially responsible behaviour” ( $\beta = 0.1585$ ,  $t = 3.33$ ,  $p < 0.01$ ), “business activities” ( $\beta = 0.1166$ ,  $t = 1.99$ ,  $p < 0.05$ ), “products and services” ( $\beta = 0.1331$ ,  $t = 2.70$ ,  $p < 0.01$ ), “respect to customers” ( $\beta = 0.0832$ ,  $t = 2.12$ ,  $p < 0.05$ ) and “respect to public administration” ( $\beta = 0.0970$ ,  $t = 2.62$ ,  $p < 0.01$ ) is positive and significant at required hypothetical level.

On the whole, it is found from the positive and significant coefficients of explanatory variables in the third model that CSR activities of PSUs targeting “environmental benefits” is influenced

positively by SRB, “business activities” and “products & services” concerning social issues, “respect to customers” and “respect to public administration”.

**Table 20: Regression results for “Corporate Governance” with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of Stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	2.7921***	10.24	2.8313***	10.94	2.9102***	11.92
Socially Responsible Behaviour	0.0939**	1.93	0.0973**	2.06	0.1001**	2.12
Business activities	0.0861	1.35	0.0986*	1.70	0.1173**	2.16
Products and Service	0.0407	0.79	0.0443	0.92		
Public activities	0.0220	0.44				
Respect to customers	0.0288	0.61				
Respect to subsidiary	0.0644	1.48	0.0754**	2.09	0.0787**	2.20
Respect to consumers	0.0140	0.30				
Respect to stock holders	-0.0108	-0.25				
Respect to employees	-0.0419	-1.00				
Respect to trade union	0.0289	0.73				
Respect to administration	0.0142	0.31				
Respect to local community	-0.0153	-0.33				
<b>R Square</b>	<b>0.0641</b>		<b>0.0595</b>		<b>0.0576</b>	
<b>Adjusted R Square</b>	<b>0.0369</b>		<b>0.0505</b>		<b>0.0509</b>	
<b>F- value</b>	<b>2.35***</b>		<b>6.64***</b>		<b>8.58***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>4, 420</b>		<b>3, 421</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

It can be observed from regression results depicted in the Table 20 for “CSR activity – Corporate governance” undertaken by PSUs that the fit of all three models are significant with explained variance of 6.41 per cent, 5.95 per cent and 5.76 per cent before adjusting for degrees of freedom ( $R^2$  values) and 3.69 per cent, 5.05 per cent and 5.09 per cent after adjusting for degrees of freedom (Adjusted  $R^2$  values) in the dependent by first (F value = 2.35,  $p < 0.05$ ), second (F value = 6.64,  $p < 0.01$ ) and third (F value = 8.58,  $p < 0.01$ ) model respectively. As the purpose of the analysis is to identify the individual variable with significant explanatory power on dependent, only model fit is taken into consideration and not coefficient of determination.

So, from the comparison of adjusted  $R^2$  values, the third model with three explanatory variables is identified as the best model. In this model, the estimated coefficients of all three explanatory variables are positive and significant. In sum, from the significant and positive coefficients of

explanatory variables in the third model, it is concluded that PSUs' 'socially responsible behaviour', 'business activities' and 'respect to subsidiary, subcontract firms' play an important role in determining the PSUs' CSR activity concerning 'corporate governance'.

**Table 21: Regression results for "Legal Compliance" with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of Stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	1.8929***	6.48	1.9177***	7.00	1.9650***	7.23
Socially Responsible Behaviour	0.0883*	1.70	0.0957*	1.87	0.1020**	2.00
Business activities	0.1376**	2.02	0.1448**	2.37	0.1496**	2.45
Products and Service	-0.0108	-0.19				
Public activities	0.0185	0.34				
Respect to customers	0.0782	1.54	0.0857*	1.72	0.0861*	1.73
Respect to subsidiary	0.1247***	2.68	0.1327***	2.94	0.1325***	2.93
Respect to consumers	-0.1011**	-2.03	-0.0902*	-1.88	-0.0784*	-1.66
Respect to stock holders	0.0389	0.85				
Respect to employees	0.0178	0.40				
Respect to trade union	0.0034	0.08				
Respect to administration	0.0517	1.04	0.0579	1.30		
Respect to local community	0.0531	1.06	0.0677	1.44	0.0912**	2.10
<b>R Square</b>	<b>0.1349</b>		<b>0.1325</b>		<b>0.1289</b>	
<b>Adjusted R Square</b>	<b>0.1097</b>		<b>0.1179</b>		<b>0.1164</b>	
<b>F- value</b>	<b>5.36***</b>		<b>9.10***</b>		<b>10.31***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>7, 417</b>		<b>6, 418</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

The regression results identifying the determinants of 'legal compliance' are given in Table 21. From the perusal of results given in the table, it is understood that the overall fit of the first (F value = 5.36,  $p < 0.01$ ), second (F value = 9.10,  $p < 0.01$ ) and third (F value = 10.31,  $p < 0.01$ ) model with  $R^2$  value of 0.1349, 0.1325 and 0.1289 and adjusted  $R^2$  value of 0.1097, 0.1179 and 0.1164 is significant respectively.

From the comparison of the models, it is apparent that the adjusted  $R^2$  value of the second model is higher by more than one per cent relative to first model but it is almost equal to that of third model. There is no any change in the overall explanatory power (after adjusting for degrees of freedom) of third model in the absence of "respect to public administration" (coefficient is

insignificant in second model). Therefore, the third model with same explanatory power of second model with six variables in the independent set is considered for making final inference. The coefficients of all independent variables in the selected model are significant at required hypothetical level. The sign of coefficient is negative for “respect to consumer” and positive for all other remaining explanatory variables. Putting all the above together, it is deduced that Socially responsible behaviour of PSUs, performance of PSUs concerning business activities, protecting the interest of stakeholders by PSUs such as “respect to customers”, “respect to subsidiary, sub-contract firms” and “respect to local community” tend to significantly increase the CSR activities in PSUs focusing “legal compliance” when there has been a notable decline in “respect to consumers”.

**Table 22: Regression results for “Business Ethics” with Socially Responsible Behaviour, and performance concerning social issues and protecting the interest of Stakeholders by PSUs**

Independent Variable	Factor					
	Socially Responsible Behaviour		Performance concerning social issues		Protecting the interest of stakeholders	
	Regression Coefficient	SD	Regression Coefficient	SD	Regression Coefficient	SD
Intercept	2.3562***	7.52	2.4053***	8.01	2.3165***	8.23
Socially Responsible Behaviour	0.0964*	1.73	0.1038*	1.89	0.0933*	1.74
Business activities	-0.0730	-1.00	-0.0572	-0.85		
Products and Service	0.1250**	2.10	0.1346**	2.42	0.1181**	2.26
Public activities	0.0384	0.67				
Respect to customers	0.0229	0.42				
Respect to subsidiary	0.1016**	2.03	0.1024**	2.25	0.0974**	2.16
Respect to consumers	-0.0181	-0.34				
Respect to stock holders	0.1017**	2.06	0.0986**	2.23	0.0941**	2.14
Respect to employees	-0.0374	-0.78				
Respect to trade union	0.0006	0.01				
Respect to administration	0.0612	1.15				
Respect to local community	-0.0254	-0.47				
<b>R Square</b>	<b>0.0911</b>		<b>0.0859</b>		<b>0.0843</b>	
<b>Adjusted R Square</b>	<b>0.0646</b>		<b>0.0750</b>		<b>0.0756</b>	
<b>F- value</b>	<b>3.44***</b>		<b>7.88***</b>		<b>9.67***</b>	
<b>(degrees of freedom)</b>	<b>12, 412</b>		<b>5, 419</b>		<b>4, 420</b>	

\*Significant at 10% level; \*\*Significant at 5% level; \*\*\*Significant at 1% level

Table 22 is presented with the multiple regression results for “Business ethics” with “Socially responsible behaviour”, “performance concerning social issues” and “protecting the interest of stakeholders” in PSUs. As presented in the table, the first model, which is fitted significantly, is

found with significant estimated coefficients for only two out of eleven explanatory variables. The adjusted R<sup>2</sup> value of the first model is 0.0646. The second and third models obtained from successive elimination of variables with least coefficients are significantly fitted with adjusted R<sup>2</sup> values of 0.0750 and 0.0756 respectively. From adjusted R<sup>2</sup> values, it is understood that the explanatory power of second model with five variables is as same as that of third model with four variables in the independent set. Therefore, third model is identified as the final model for inference.

According to the third model, the coefficient of all explanatory variables are significant with positive sign. This exposes the fact that product and service performance of PSUs concerning social issues along with 'protecting the interest of stakeholders' by giving "respect to subsidiary, subcontract firms" and "respect to stock holders" tend to significantly increase the PSUs' CSR activity pertaining to 'business ethics' when there is a marginal increase in socially responsible behaviour.

In this paper important CSR activities in PSUs and factors determining the CSR activities are identified using factor analysis and multiple regression analysis respectively. The status of CSR activities in PSUs is evaluated by descriptive statistics. In order to prove that the opinion of the entire sample about CSR activities notwithstanding the socio-economic characteristics, the mean perception among respondent groups with different socio-economic categories is compared with t-test and F-test. From the factor analysis, it is identified that the CSR activities in PSUs targeted on Community development, Workplace and labour relations, Choosing business partners, Environmental benefits, Corporate governance, Legal compliance and Business ethics. That is, CSR activities in PSUs have incorporated community, workplace, employee, business partner, environment, rules and regulation and business ethics as important stakeholders. Most of socio-economic variables do not have any influence on the perception of the respondents about the above. From the regression results, it is concluded that socially responsible behaviour of PSUs is found to be key determinant of CSR activities in PSUs concerning all aspects except "workplace and labour relations" and "choosing business partners". Further 'respect to consumers' which is the part of protecting the interest of stakeholders play negative role in determining PSUs' CSR activities focusing on "choosing business partners" and "legal compliance". It is concluded that protecting the interest of stakeholders by PSUs like 'respect to customers', and 'respect to subsidiary, subcontract firms' are also found to be key determinants of most of the CSR activities.

## **6. CONCLUDING FINDINGS AND SUGGESTIONS**

The study was conducted among a sample 425 respondents comprising 399 PSU employees and 26 general public having direct link with PSU. The findings from the analysis of data obtained from respondents are summarized hereunder:

- The socially responsible behaviour of PSU is mainly associated with "Provision of quality products and services for customers", "Provision of a healthy and safe working environment", "Complying with state law and being a good tax payer", "Improving environmental quality and pollution control", "Creating value for company shareholders" whereas SRB in respect of "Doing business with its partners with integrity" and "Actively participating in social benefit activities" are secondary in PSU

- The socially responsible behaviour of PSU is good and this opinion of the respondents does not differ by their socio-economic characteristics. The general public have considered the CSR of PSU as high and differ significantly from PSU employees in this regard.
- The study found that performance of PSU concerning social issues comprises of three dimensions namely “business activities”, “products and services” and “public activities.
- The performance of PSU concerning social issues pertaining to “business activities”, “products and services” and “public activities is found to be at high level according to the respondents regardless of their socio-economic characteristics.
- Increased customer value in addition to Profit making tend to highly increase the activities of PSU in protecting the interest of consumers, local community, subsidiary and sub-contract firms and customers.
- The study also found that “Increased customer value” and “Profit making” moderately increase the activities of PSU in protecting the interest of employees and stock holders, whereas they marginally increase PSU activities in protecting the interest of trade union.
- The performance of PSU concerning social issues through business activities along with activities relating to products / services and public activities have high positive influence on PSU in protecting interest of customers, local community and customers.
- It is found from the study that CSR activities in PSU focus on Community development, Workplace and labour relations, Choosing business partners, Environmental benefits, Corporate governance, Legal compliance and Business ethics as the major stakeholders.
- It is identified that corporate governance, workplace and labour relations, business ethics, community development and legal compliance are the five most important stakeholders in CSR activities of PSU.
- From the regression analysis, the study found that CSR activities in PSU focusing “community development” is positively influenced by SRB, social issues concerning “product and service”, “respect to customers”, respect to stockholders” and “respect to local community” when social issues concerning “public activities” is less.
- PSU’s CSR activities in respect of “choosing business partners” is positively related to PSU’s social issues concerning “business activities” and “products & services”, and protecting the interest of stakeholder such as “respect to customers”, “respect to subsidiary, subcontract firms”, “respect to stock holders” and “respect to employees” when there has been a significant decline in “respect to consumers”.
- The CSR activities of PSU targeting “environmental benefits” is influenced positively by SRB, “business activities” and “products & services” concerning social issues, “respect to customers” and “respect to public administration”.
- The study also identified that Socially responsible behaviour of PSU, performance of PSU concerning business activities, protecting the interest of stakeholder by PSU such as “respect to customers”, “respect to subsidiary, sub-contract firms” and “respect to local community” tend to significantly increase the CSR activities in PSU focusing “legal compliance”.



## 7. CONCLUSION

The findings from the study have led to many conclusions. It is identified that the status of SRB is good and all CSRs except 'decreased productivity' is also good in PSU. The CSR regarding 'decreased productivity' is identified as moderate. There is no influence of the socio economic characteristics on respondents' perception about the SRB and CSR, in turn revealing the fact that status of SRB and CSR based on entire sample is conclusive and irrefutable. There is a significant positive relationship of SRB with CSR dimensions, namely Social accountability, Profit making and Increased customer value while SRB and Decreased productivity is unrelated with each other.

It is concluded that the CSR activities in PSU have incorporated community, workplace, employee, business partner, environment, rules and regulation and business ethics as important stakeholders. Most of socio-economic variables do not have any influence on the perception of the respondents about the above. It is further concluded that socially responsible behaviour of PSU is found to be key determinant of CSR activities in PSU concerning all aspects except "workplace and labour relations" and "choosing business partners". Further 'respect to consumers' which is the part of protecting the interest of stakeholder by PSU is playing negative role in determining PSU's CSR activities focusing on "choosing business partners" and "legal compliance". Also protecting the interest of stakeholder by PSU like 'respect to customers', and 'respect to subsidiary, sub-contract firms' are also found to be key determinants of most of the CSR activities.

## 8. SUGGESTIONS

Based on findings emerged out of the study, the following suggestions are put forth.

- There should be a strong consumer protection act to ensure consumers' rights to information. Consumers are also not aware of their rights, so a number of sensitizing activities like workshops, seminars, media campaigns should be conducted for the public.
- Society/community should be kept in high rank as a stakeholder of PSU. Various programs that illustrate the importance and the value of the community in the development of a sustainable, vibrant business sector are recommended.
- Similar activities/approaches are required to implant the concept of Corporate Social Responsibility (CSR) in the business activities of PSU.
- Good governance and good corporate governance are interlinked in present day economies. Businesses should be further encouraged to pursue best practices of good corporate governance. This can be promoted by organizing seminars/workshops & felicitating the best practitioners of CSR wherever it is required.
- Annual setting of the goals and assessment of stakeholders should be carried out to check that they are in keeping up with the latest developments on CSR so that they can be modified accordingly.

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