

INTRODUCTION

Corporate Social Responsibility (CSR) and other sustainability related activities are gaining more importance globally than ever before. In India, in February 2012, the Bombay Stock Exchange (BSE) launched S&P BSE Greenex index to promote energy efficient practices among the industries and to encourage investors to make investments in sustainable companies. In August 2012, the Securities Exchanges Board of India mandated Business Responsibility Reporting for top 100 companies based on their market capitalization. The Companies Act, 2013 mandated CSR spending for certain category of Indian corporates. **In December 2015, SEBI extended BRR to top 500 listed companies based on their market capitalization(PTI, 2015).** These recent regulations reiterates the importance of sustainable business practices and insists that the corporates must not only do their business' responsibly but also report that to its various stakeholders. Global Reporting Initiatives (GRI) guidelines on sustainability reporting is the most widely accepted sustainability reporting framework.

(Aparna Bhatia., 2014) studied the extent and level of sustainability reporting of fourteen Sensex companies producing separate sustainability reports in India in 2010-11. They also found that there is no difference in the disclosure based on the type of industry. The study by NGOBOX (PTI, 2016) suggests that the overall CSR spent of companies in India is 92 per cent of their mandatory spending limit in 2015-16 which is higher than the 2014-15 spent of 79 per cent.(Kumar, Gunasekaran, Singh, Papadopoulos, & Dubey, 2015) compared the information content of sustainability reports of 36 Indian companies and found that there was no difference in the information content among different sectors.(Barkemeyer, Preuss, & Lee, 2015) found that the GRI promoted the dissemination of sustainability reporting and was successful in terms of output effectiveness among Asian and South American companies.(Pandit & Rubenfield, 2016) studied the current state of sustainability reporting of 100 small companies in S&P 500 index and found that 52 percent of the companies use GRI framework to report sustainability.(Withisuphakorn & Jiraporn, 2015) explored the effect of firm maturity on CSR and found that more matured firms invest more in CSR activities. (Vartiak, 2016)studied the CSR reporting of companies in a global scale and found that there is a positive growth in the percentage of companies producing CSR reports and this will continue to increase as more importance is given to sustainability reporting.(Jain & Winner, 2016) in their study on CSR and sustainability reporting practices of top companies in India found that the overall CSR/Sustainability climate in India is showing signs of positive reform. While most of the previous studies on CSR focused on factors influencing sustainability disclosures, quality of disclosures (Ortas, Gallego-Alvarez, & Alvarez Etxeberria, 2015), (Park & Ghauri, 2015), (Adnan, van Staden, & Hay, 2010), (Mulyadi & Anwar, 2012), this study aims to find the relationship between the actual amount of money spent on CSR activities and the Global sustainability reporting practices adopted by the company in the light of mandatory CSR spending norms in India.

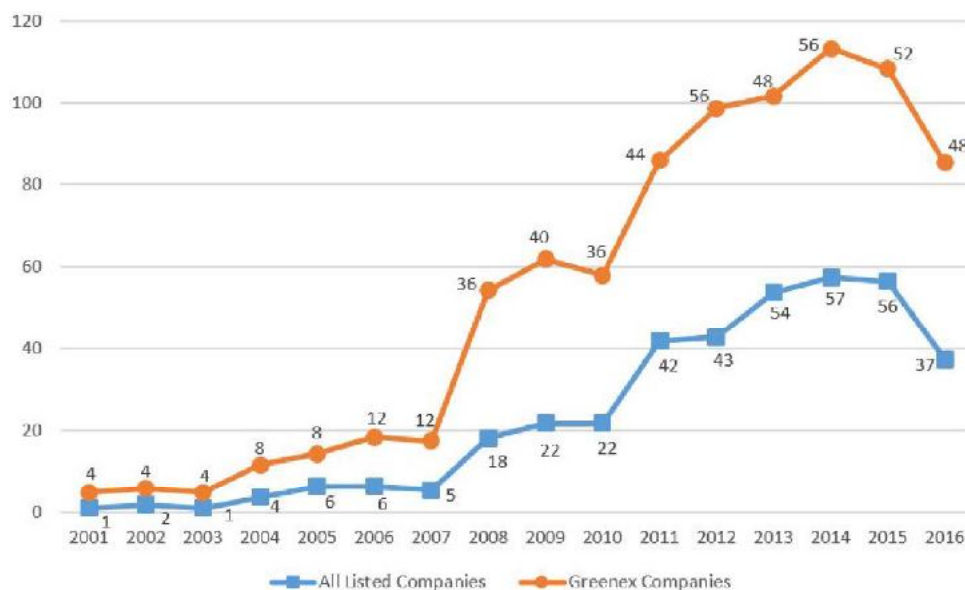
METHODOLOGY

First we collected the list of Indian companies reporting their sustainability as per GRI guidelines from GRI Report Services. Then we identified the S&P BSE Greenexindex companies for our study as this index was launched in the same year when SEBI mandated business responsibility reporting in India and these companies are considered to be the environmentally sustainable companies in terms of their carbon emission (Correspondent, n.d.). In the following year Companies Act, 2013 mandated CSR spending for Indian corporates. We collected the CSR spending information pertaining to Greenex companies for the year 2014-15 and 2015-16 from ProwessIQ. Wherever CSR spending data is missing we referred to the annual reports of the companies. CSR spending data is available for the year ending March 2015 and 2016. We used SPSS 20 for data analysis and Mendeley for referencing.

DATA ANALYSIS

Since 2001 164 companies operating in India prepared their sustainability report as per GRI guidelines. Among them 110 are listed companies and 54 are non-listed companies. We compared the sustainability reporting done by all reported listed companies and Greenex companies in the last 16 years and the result is shown in figure 1.

Figure 1. Sustainability Reporting in GRI Framework: All Listed Companies Reported Vs. Greenex Companies (%).



There is a gradual increase in the number of Indian listed companies adopting GRI Framework for sustainability reporting. From just one company in 2001 it rose to 20 companies in 2008, 63 companies in 2014 and 41 companies in 2016. Though there is a gradual increase, the number is very low as there is 9000 listed companies trading in Indian stock market. Sustainability reporting by Indian companies using a globally accepted reporting framework like GRI framework is still in infant state in India. In terms of Greenex index companies in 2016, it started with one company in 2001, 9 companies in 2008 and with maximum of 14 companies in 2012. After 2012 there is no increase in the number of companies till 2016.

We run a descriptive statistics to understand the basic nature of CSR spending and sustainability reporting information of Greenex companies and the results are shown in table 1.

Table 1. CSR spending and sustainability reporting information of Greenex Companies in 2015 and 2016

Variable	Mean	Minimum	Maximum	Sum
Company Age	47.76	21	109	
No. of years sustainability reports produced as per GRI Framework	4.68	0	14	117
Avg. Net Profit for 3 preceding years in 2015 (million)	44476.42	-1804.00	142500.00	1111910.48
Prescribed CSR Spend in 2015 (million)	892.28	0.00	2850.00	22307.10
Amount spent on CSR in 2015 (million)	679.49	24.10	2395.40	16987.20
Avg. Net Profit for 3 preceding years in 2016 (million)	49522.67	-20340.00	179940.00	1238066.80
Prescribed CSR Spend in 2016 (million)	1002.81	0.00	3600.00	25070.30
Amount spent on CSR in 2016 (million)	899.26	104.00	2940.00	22481.60
Net in Profit in 2015 (million)	4472.85	-11373.48	20059.70	111821.21
Net Profit in 2016 (million)	4913.78	-6136.97	24374.94	122844.55

From the above table we found that the average age of Greenex companies is 47 years with minimum age of 21 years (Bharti Airtel) and maximum age of 109 years (Tata steel). The average number of years the Greenex companies reported sustainability using GRI framework is 4 years with only one company reporting sustainability using GRI framework for 14 years since 2001.

In 2015, the total amount spent on CSR activities by the Greenex companies is only 1.5 per cent of their average net profit for 3 preceding years which is less than the 2 per cent mandate of the companies Act, 2013. Whereas in 2016 it is 1.8 per cent, an increase in CSR spending compared to 2015 but still less than the 2 per cent mandate. The table also shows

that there was an increase in the total net profit of the Greenex companies by 11023.34 million in 2016.

We done a cross tabulation of GRI compliant status of Greenex companies with their industry type and global presence and the results are shown in table 2.

Table 2. GRI compliant status of Greenex companies based on their industry type, global presence and age group.

Variable		GRI Compliant Status		Total
		No	Yes	
Industry Type	Services	3	6	9
	Manufacturing	5	11	16
Global Presence	No	5	7	12
	Yes	3	10	13

From the above table we find that seventeen of the Greenex companies are GRI compliant and eight of them did not produce their sustainability report based on GRI framework in the last 16 years from 2001. Thirteen of the Greenex companies have their business presence globally among which ten of them are GRI compliant. We also find that eleven of the sixteen manufacturing companies in the Greenex index are GRI complaint. Nineteen of the Greenex companies are incorporated before 1985 of which thirteen of them produce their sustainability report based on GRI framework. Among the 25 Greenex companies only two are Government owned companies against 23 private companies.

To find out the relationships among company age, amount of money spent on CSR activities and the no. of years of sustainability reporting as per GRI framework we ran Pearson's product moment correlation and the results are shown in table 3.

Table 3. Relationship between company age, amount spent on CSR activities and no. of years of sustainability reporting as per GRI framework.

N=25		Company Age
Amount spent on CSR in 2015	Pearson Correlation	0.172
	Sig. (2-tailed)	0.412
Amount spent on CSR in 2016	Pearson Correlation	0.103
	Sig. (2-tailed)	0.623
Total No. of GRI Reports	Pearson Correlation	0.485
	Sig. (2-tailed)	0.014

The correlation between company age and GRI reporting in last sixteen years was found to be statistically significant, $r_{25} = 0.485$, $p < .05$, two-tailed. However there is no correlation between company age and amount of money spent on CSR activities in 2015 ($r_{25} = 0.172$, $p = 0.412$) and 2016 ($r_{25} = 0.103$, $p = 0.103$).

As mentioned earlier the Companies Act, 2013 encourage companies to spend least 2% of their average net profit in the previous three years on CSR activities. To understand the relationship between amount spent on CSR and the profits of the company we ran correlation test and the results are shown in table 4.

Table 4. Relationship between average net profit in three preceding years and amount spent on CSR activities in 2015 and 2016.

N=25		Avg. Net Profit 2015	Avg. Net Profit 2016	Net Profit in 2015	Net Profit in 2016
Amount spent on CSR 2015	Pearson Correlation	.916**	.867**	.540**	.614**
	Sig. (2-tailed)	.000	.000	.005	.001
Amount spent on CSR 2016	Pearson Correlation	.944**	.827**	.550**	.625**
	Sig. (2-tailed)	.000	.000	.004	.001
**. Correlation is significant at the 0.01 level (2-tailed).					

The amount of money spent on CSR activities by the companies in 2015 and 2016 is significantly correlated with their corresponding average net profit for the three preceding years in 2015 ($r_{25} = 0.916$, $p < 0.01$, two-tailed) and 2016 ($r_{25} = 0.827$, $p < 0.01$, two-tailed). Similarly, the amount of money spent on CSR activities by the companies in 2015 and 2016 is significantly correlated with their corresponding net profit in 2015 ($r_{25} = 0.540$, $p < 0.01$, two-tailed) and net profit in 2016 ($r_{25} = 0.625$, $p < 0.01$, two-tailed).

To understand the relationship between global sustainability reporting as per GRI framework and the amount of money spent on CSR activities we ran a correlation test and the results are shown in table 5.

Table 5. Relationship between sustainability reporting as per GRI framework and the amount spent on CSR activities in 2015 and 2016.

N=25		GRI Report 2015	GRI Report 2016
Amount spent on CSR 2015	Pearson Correlation	.456*	.382
	Sig. (2-tailed)	.022	.060
Amount spent on CSR 2016	Pearson Correlation	.429*	.288
	Sig. (2-tailed)	.032	.162
*. Correlation is significant at the 0.05 level (2-tailed).			

The correlation between amount spent on CSR in 2015 and GRI reporting in 2015 was found to be statistically significant, $r_{25} = 0.456$, $p < 0.05$, two-tailed. But the correlation between amount spent on CSR in 2016 and GRI reporting in 2016 was not found to be statistically significant, $r_{25} = 0.288$, $p = 0.162$, two-tailed. Thirteen of the 25 Greenex companies do their business globally. To determine the difference in sustainability reporting done by companies with and without global presence we ran an independent samples t-test and the results are shown below in table 6. Throughout this study while performing the independent samples t-test we interpreted the results using significant value of 'Equal variances not assumed' row wherever Levene's Test for Equality of Variances is significant.

Table 6. Sixteen years of sustainability reporting by Greenex companies based on their business presence.

N=25		Levene's Test for Equality of Variances		t-test for Equality of Means			Group Statistics			
		F	Sig.	t	df	Sig. (2-tailed)	Global Presence	N	Mean	Mean difference
Total No. of GRI Reports	Equal variances assumed	.942	.342	2.21	23	.037	Yes	13	6.46	3.71
	Equal variances not assumed			2.22	22.88	.036	No	12	2.75	

There is a significant difference between companies with global presence and companies without global presence in reporting their sustainability as per GRI framework. Out of 16 years, companies without global presence mean reported years is 2 while companies with global presence reported their sustainability in GRI framework for more than 6 years.

Eight of the 25 Greenex companies never prepared their sustainability as per GRI guidelines in the last 16 years. To identify the difference in CSR spending of GRI compliant and non-compliant companies we run an independent sample t-test and the results are shown in table 6below.

Table 6. CSR spending of GRI complaint and non-complaint companies in 2015 and 2016

N=25	t-test for Equality of Means			Group Statistics			
	t - value	df	Sig. value	GRI Compliant Status	N	Mean	Mean Difference
Amount spent on CSR in 2015	3.37	19.16	0.003	Yes	17	900.5	690.68
				No	8	209.82	
Amount spent on CSR in 2016	2.53	22.99	0.018	Yes	17	1109.97	658.46
				No	8	451.51	

From the above table it is clear that there is a significant difference in the amount spent on CSR activities by GRI compliant companies and non-compliant companies. The mean difference in the amount spent on CSR activities by these companies are 690 million and 658 million in 2015 and 2016 respectively. To find out the mean difference in the profits and CSR spending of companies belonging to different industry type we run an independent sample t-test and the results are shown in table 7.

Table 7. CSR spending and profits of manufacturing and service companies

N=25	t-test for Equality of Means		Group Statistics			
	t-value	Sig. value	Industry Type	N	Mean	Mean Difference
Avg. Net Profit 2015	2.418	0.031	Manufacturing	16	30178	39718
			Services	9	69895.9	
Amount spent on CSR 2015	1.689	0.105	Manufacturing	16	499.04	501.23
			Services	9	1000.28	
Avg. Net Profit 2016	3.037	0.006	Manufacturing	16	30542	52724
			Services	9	83266	
Amount spent on CSR 2016	1.472	0.155	Manufacturing	16	721.68	493.30
			Services	9	1214.98	
Net Profit 2015	2.356	0.027	Manufacturing	16	2457.25	5598.90
			Services	9	8056.14	
Net Profit 2016	2.692	0.013	Manufacturing	16	2717.69	6100.27
			Services	9	8817.95	
			Services	9	37.49	

There is a significant difference in the net profit and average net profit for the preceding three years in 2015 and 2016 between manufacturing and service companies. The mean difference in the average net profit for preceding three years in 2015 is 39718 million and that of 2016 is 52724 million. However there is no significant difference between the manufacturing and service companies in the amount spent on CSR in 2015 and 2016.

CONCLUSION

Globally there are evidences that corporate social performance of a firm improves its financial performance and vice versa (Rodriguez-Fernandez, 2016)(Wahba & Elsayed, 2015)(Kwatra, Singh, & Patel, 2013)(Palmer, 2012)(Rajput, Batra, & Pathak, 2012). Though there is a lack of incentives to voluntary spending or reporting practices sure there are intangible benefits in the long run. In 2012, thirteen Indian companies were ranked among the 'greenest' companies in the world by the Newsweek(Chacko, 2013) which is a global recognition. But in our study 2016 we found that the concept of CSR spending and sustainability reporting using a globally recognized framework is converging towards just meeting the mandatory requirements. We suggest that the policy makers to design and implement a 'immediate recognition system' for companies adopting voluntary practices to make their practices sustainable.

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