INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

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CORPORATE SOCIAL RESPONSIBILITY AND FINANCIAL PERFORMANCE IN IRON AND STEEL INDUSTRY OF INDIA

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ABSTRACT

The Iron and steel sector of India is a combination of public and private sector which alone contributes over three per cent to the national GDP. To study the relationship between the corporate social responsibility and corporate financial responsibility for the sector, top 10 companies accounting for 87% of the industry net worth & total revenue and 99% of the total profits were selected. In the 17-year period from 1998 to 2014, the 10 selected companies spent huge amount on the four variables of corporate social performance—tax, donation, wages, and R&D. For analysis, a t- test was done which has shown significant association between the corporate social performance and corporate financial performance of all the companies - Bhushan, Jindal Saw, Jindal Stainless, Jindal Steel & Power, JSW Steel, Lloyds, SAIL, Tata Steel, Uttam Glava and Welspun. The correlation and regression has shown significant association in the all the companies from the period of 1998 to 2014.

KEYWORDS

corporate social responsibility (CSP), corporate financial performance (CFP), corporate social performance (CSP).

INTRODUCTION

Over the past 20 years, the managerial philosophy of businesses and firms has changed significantly. Earlier, the foremost objective was profit maximization. Now the objective has shifted to corporate social responsibility. In the second half of the last century, the profit maximization principle gave way to Balance Interest managerial philosophy. This means the firm has to keep a balance amongst the shareholders, suppliers, employees and customers. The concept of Corporate Social Responsibility originated in the 1950's (Bowen 1953). It refers to the obligations of businessmen to pursue those policies, make those decisions, or follow those lines of relations which are desirable in terms of the objectives and values of our society. But to achieve these social objectives, funds are required. William E Halal (1977) recognised the fact that no corporate social posture will be value-free, and this makes corporate social responsibility a tremendously difficult task.

In the current paradigm, the goals of the firms have become more aligned to the welfare of the society in the form of ecology and environmental pollution. A firm has to take into consideration various dimensions which have been outlined in the form of employee's empowerment, employee's motivation, customer relationship management, selling & promotion scheme, supply chain management, credit facility, etc.

In India, individual companies have been alive to social responsibility since the beginning of industrial revolution. Tata group founder Mr. Jamshed Tata used to grant scholarships for studies abroad in 1892. He also supported Gandhi Ji's campaign for racial equality in South Africa. The group, which started its presence on the industrial scene with the steel industry, gave India its first science centre and atomic research centre. In July 2004, Tata Steel announced that it would not deal with companies that do not conform to the company's Corporate Social Responsibility (CSR) standards (Srivastava, Negi, Mishra, & Pandey, 2012).

The new Companies Bill, 2012 enjoins on every company having net worth of ₹500 crore or more, or turnover of ₹1,000 crore or more or a net profit of ₹5 crore or more during any financial year to constitute a Corporate Social Responsibility committee and spend at least two per cent of the average net profits of the company made during the three immediately preceding financial years in pursuance of its corporate social responsibility policy (Government of India, 2012).

The objective of the present study was to find the relationship between the corporate social responsibility and corporate financial performance of the steel industry. The steel industry was chosen because it is a compact group contributing three per cent to the national Gross Domestic Product (GDP). The steel sector for any country is the engine of economic growth.

ESSENCE OF CORPORATE SOCIAL RESPONSIBILITY

The concept of Corporate Social Responsibility emerged in the 1950's. According to Bowen (1953), CSR refers to the obligations of businessmen to pursue those policies, make those decisions, or follow those lines of relations which are desirable in terms of the objectives and values of our society. Frederick (1960) stated that social responsibility means businessmen should oversee the operation of an economic system that fulfils the expectations of the people. Davis (1960) said that social responsibility is a nebulous idea but should be seen in a managerial context. He asserted that some socially responsible business decisions can be justified by a long, complicated process of reasoning as having a good chance of bringing long-run economic gain to the firm, thus paying it back for its socially responsible outlook. Eells and Walton (1969) argue when people talk about corporate social responsibilities they are thinking in terms of the problems that arise when corporate enterprises casts its shadow on the social scene, and of the ethical principles that ought to govern the relationship between the corporation and society. According to Joseph McGuire (1963) "the idea of social responsibilities supposes that the corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond these obligations. But in his famous article titled '*The social responsibility of business is to increase its profits'* Milton Friedman (1970) stated that managers' only responsibility was to increase shareholders' wealth. He thus focused on a very distinct aspect of corporate and managerial responsibility. Managers and even executives are employees of the stockholders. Therefore, their only responsibility is ''to conduct the business in accordance with their [the owners] desires to make as much money as possible conforming to the basic rules of society". Another definition of CSR was given by Carrol (1979): "The social responsibility of business encompasses the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time.'' Wood (1991) distinguished three principles of CSR which each operate on a different level: 1) The principle of legitimacy. This principle operates on an institutional level. 2) The principle of public responsibility. It operates on an organizational level. 3) The principle of managerial discretion. This principle operates on an individual level.

Freeman (Freeman, 1994) proposed that social performance is needed to attain business legitimacy. "Managers have a fiduciary responsibility to all stakeholders and not just to shareholders." He suggested a positive correlation between social responsibility and financial performance in the long run. The central idea in stakeholder theory is that the success of an organization depends on the extent to which the organization is capable of managing its relationships with key groups, such as financers and shareholders, but also customers, employees, and even communities or societies. A particular definition, which puts the concept in a broad yet understandable perspective, was presented at the World Business Council for Sustainable Development: ''Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development, while improving the quality of life of the workforce and their families as of the local community at large''(Holme & Watts, 1999).

Goyder (2003) argues that the industry in the 20th century can no longer be regarded as a private arrangement for enriching shareholders. It has become a joint enterprise in which workers, management, consumers, the locality, govt. and trade union officials all play a part. If the system which we know by the name private enterprise is to continue, some way must be found to embrace many interests whom we go to make up industry in a common purpose. CSR implies some sort of commitment, through corporate policies and action. The acting in a socially responsible way is a consequence of a deliberate managerial choice that results from internal decision processes, which are of a complex nature (Irene Goll and Abdul A. Rasheed, 2004).

CSR has been described as the obligation of organizations to be accountable for their environment and for their stakeholders in a manner that goes beyond mere financial aspects (Gössling & Vocht, 2007).

Boyd et al. (1996) suggest that a strong reputation makes it easier for a firm to signal consumers about product quality, and enhances the ability to charge premium prices. Based on these considerations, they predict and find a relationship between reputation strength and return on sales. Preston and O'Bannon (1997) describe different possible interactions between profit and CSR. There are mainly two approaches which stand out and justify a positive connection between financial return and social performance. The first one considers that an increase in profits will stem from an overall increase in factor productivity; the second one that the benefits in terms of image will induce an increase in profits. Roberts and Dowling (1997) provide further support for a link between reputation and operational performance, showing that firms with stronger reputations are more likely to attain and sustain higher than average return. Various studies reveal an ambiguous relationship between corporate social responsibility and financial performance variables. In which some showed the positive, negative or non-significant relationship. A meta-analysis conducted by the Pieter and Tobas (2008) shows clear empirical evidence for a positive correlation between corporate social and financial performance and states that in the present Western society, ''Good Ethics is Good Business.'' In his study, 21 cases showed a positive relationship, 9 showed a non-significant relationship and 2 showed negative relationship between CSP and CFP. Another study by Masud and Chand (2006) states that once the industry type is established as a boundary condition, the relationship between CSP and CFP is clear and positive.

In contrast, another study using the slack resource theory, showed non-significant relationship of 383 firms but found that company size had a significant positive moderating effect on the relationship between CSP and CFP (Hasan Fauzi, Lois S. Mahoney, & Azhar Abdul Rahman, 2007). However, a study that was also done under the slack resource theory and under good management theory in 2009 showed a positive relationship between the CSP and CFP (Hassan Fauzi and Kamil M. Idris, 2009). A latest study (Mohammad Tazul Islam, 2012) finds that CSR initiatives represented by CSR expenditure of banks are positively connected with the size of business, ROE and AstQt, and negatively with CAR. The policy implication of the study recommends that better regulatory requirements will foster more CSR initiatives. Most studies found that there was a positive correlation between CSR and CFP in most of the cases.

METHODOLOGY

The sample for the study was selected from the BS 1000 Report (Standard, 2013) which was published in February, 2013. The report had selected 10 Iron & Steel companies out of the total of 69, based on their performance as these companies accounted for 87% of the Iron & steel industry net worth & total revenue or 99% of the total profit earned by the Iron & steel industry.

The data was collected through secondary sources including Company Annual Reports and CMIE PROWESS Software. For Corporate Social Performance, five variables were selected—total taxes paid, donation, research & development, wages and power expressed as percentage of total assets. And for Corporate Financial performance, three variables were selected—profit as percentage of capital employed, profit as a percentage of total assets and P/E for a period of seventeen years. Further, composite index was calculated for the corporate social and financial performance. Regression and t-test were applied on the two variables thus obtained. Both parameters were further converted into a standardized value by applying the formula:

Standardized value = $\{(x - \bar{x}) \div \sigma * 10\} + 50$

Here x is the each value of the data, $\bar{x}$ is the mean of the, and σ is the standard deviation of the x

With the help of standardized value, composite index was calculated by adding all variables under each head. For e.g., CSP includes tax, donation, R&D, wages and power & fuel and after that divided by the number of variables shown in Table 1. Regression analysis, correlation and t-test were applied to find out the relationship between the corporate social performance (CSP) and corporate financial performance. T-test used to test the significance mean difference between the composite index of the corporate social performance and corporate financial performance. And regression and correlation was used to ascertain of the relationship between the corporate social performance and corporate financial performance.

TABLE 1: COMPOSITE INDEX OF THE CORPORATE SOCIAL PERFORMANCE (CSP) AND CORPORATE FINANCIAL PERFORMANCE FOR A PERIOD OF 1998-14

Year			Mar-98	Mar-99	Mar-00	Mar-01	Mar-02	Mar-03	Mar-04	Mar-05	Mar-06	Mar-07	Mar-08	Mar-09	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14
Bhushan	CSP	Composite index	44.47	36.69	33.60	31.70	29.67	26.84	29.85	29.49	27.37	27.39	26.48	25.93	26.12	25.60	25.38	33.45	17.17
	CFP	Composite index	44.81	44.78	44.80	43.39	41.30	35.27	52.30	62.64	53.83	65.14	59.40	47.72	58.73	55.42	50.28	35.24	27.11
Jindal SAW	CSP	Composite index	38.67	43.19	37.74	42.07	47.86	46.88	38.92	35.39	34.00	38.70	38.70	34.87	40.33	34.39	32.54	41.23	23.49
	CFP	Composite index	47.91	49.69	47.29	50.04	51.84	56.43	50.57	50.66	51.48	68.54	68.54	52.40	58.78	52.76	48.46	47.96	45.37
Jindal Stainless	CSP	Composite index	44.32	44.32	44.32	44.32	44.32	54.96	54.28	50.74	51.52	48.67	46.04	40.19	48.63	46.69	43.85	61.23	35.05
	CFP	Composite index	35.82	35.82	35.82	35.82	35.82	48.19	52.47	54.63	56.49	53.65	53.10	28.55	48.83	48.60	35.03	29.68	35.82
Jindal Steel & Power	CSP	Composite index	41.67	48.78	59.91	60.25	50.25	49.04	47.56	45.89	43.52	43.38	48.32	47.22	44.39	43.40	42.82	55.09	39.79
	CFP	Composite index	29.94	49.70	44.47	48.46	44.55	45.29	55.57	60.57	53.08	50.41	60.40	54.90	55.79	52.89	47.76	37.54	35.17
JSW steel	CSP	Composite index	36.88	38.91	39.48	47.81	44.61	48.00	54.01	52.77	51.61	51.09	55.93	50.17	51.04	50.70	50.36	58.34	43.53
	CFP	Composite index	33.73	34.27	31.80	34.09	28.51	33.12	51.15	55.93	53.24	56.79	60.09	49.75	59.16	55.70	53.08	40.03	38.08
Lloyds	CSP	Composite index	51.69	47.56	44.64	37.34	44.95	45.64	52.39	55.91	51.37	51.57	51.77	50.60	51.52	51.28	51.48	67.94	40.17
	CFP	Composite index	57.42	46.58	41.38	34.14	44.70	43.29	59.96	49.04	54.11	53.50	54.93	40.78	49.81	39.01	49.81	60.18	60.04
SAIL	CSP	Composite index	48.43	48.33	47.69	47.45	41.75	48.39	48.54	48.79	52.08	52.59	51.48	50.09	50.03	49.28	49.03	72.73	38.94
	CFP	Composite index	54.10	37.92	37.21	38.86	36.25	39.73	50.13	60.37	53.68	57.16	57.99	51.60	54.01	50.79	48.13	42.33	40.57
Tata steel	CSP	Composite index	42.91	42.85	42.92	48.25	42.74	43.13	43.46	48.14	43.67	49.17	45.83	45.20	46.20	44.06	44.34	67.09	33.42
	CFP	Composite index	50.81	47.27	49.50	44.08	45.53	45.68	54.04	63.11	60.90	55.10	52.14	43.30	49.12	48.13	45.20	38.07	33.24
Uttam Glava	CSP	Composite index	57.28	44.45	36.04	35.92	40.94	49.32	50.44	55.24	50.59	50.43	53.03	48.23	47.59	47.51	47.82	60.42	34.97
	CFP	Composite index	48.46	49.74	35.22	33.61	37.90	46.83	49.16	62.14	54.66	54.92	53.32	50.45	52.94	55.36	54.45	45.50	43.33
Welspun	CSP	Composite index	22.09	50.83	47.28	46.76	46.69	46.98	56.16	49.78	47.34	47.30	47.89	48.19	51.99	46.74	46.48	53.72	33.90
	CFP	Composite index	39.59	42.61	41.87	42.04	42.72	52.38	63.94	49.76	50.04	52.17	58.31	49.29	56.60	51.18	51.39	42.66	41.75

ANALYSIS AND FINDINGS

T-test has been used to test the significant mean differences between the composite index of corporate social performance and composite index of corporate financial performance for the year 1998 to 2014. In the present study, paired-sample t-test used which is based on groups of individuals who experience both conditions of the variables of interest. In this, comparison was done to measure the significant differences from each other. The paired-sample t-test (presented in table 2) value for the different companies were -6.6 for Bhushan at 0 % significance level, -7.9 in Jindal Saw at 0 % significance level, 2.08 in Jindal Stainless at 5 % significance level, -3.5 in Jindal Steel & Power at 5 % significance level. This means that companies for a period 1998 to 2014 have significant association between the composite index of corporate social performance and composite index of corporate financial performance.

TABLE 2: **PAIRED SAMPLE T-TEST BETWEEN THE CORPORATE SOCIAL PERFORMANCE (CSP) AND CORPORATE FINANCIAL PERFORMANCE (CFP) FOR THE PERIOD 1998 TO 2014.**

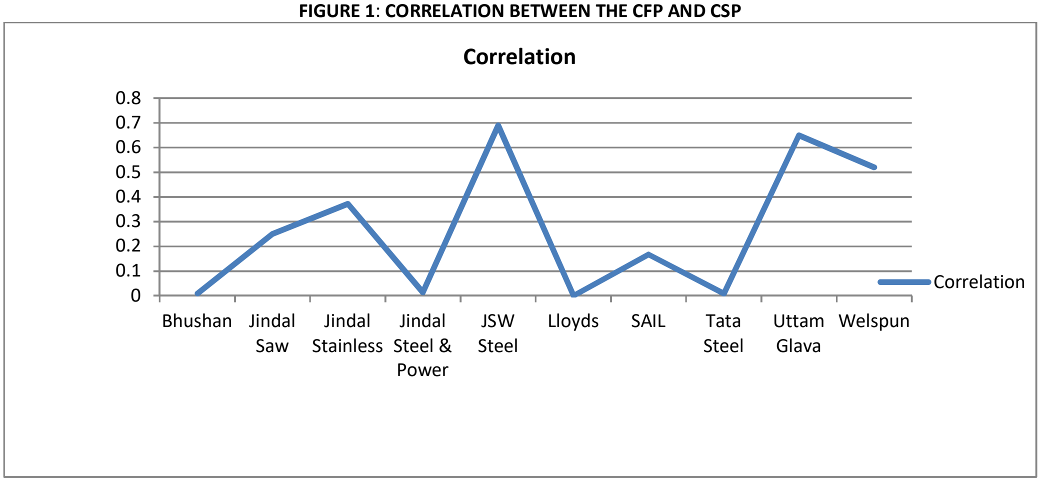
Years	Mean		Std Deviation		Mean difference	Std. Dev. difference	t-test	Significance
	CSP	CFP	CSP	CFP				
Bhushan	29.24	48.36	5.83	10.37	-1.911	11.94	-6.60	0.00*
Jindal Saw	38.17	52.86	5.71	6.73	-1.46	7.655	-7.9	0.00*
Jindal Stainless	47.26	42.60	6.09	9.58	4.66	9.24	2.08	0.05
Jindal Steel & Power	47.72	48.64	5.93	8.51	-.89	10.44	-.35	.729
JSW Steel	48.54	45.21	6.03	11.22	3.33	8.30	1.65	.117
Lloyds	49.87	49.33	6.68	7.99	.537	7.45	.297	.77
SAIL	49.74	47.69	6.81	8.14	2.04	9.71	.868	.398
Tata Steel	45.49	48.54	6.54	7.41	-3.05	9.93	-1.26	.224
Uttam Glava	47.66	48.70	7.32	7.68	-1.04	6.25	-.69	.50
Welspun	46.47	48.72	7.77	6.89	-2.24	7.22	-1.28	.218

After the t-test, correlation value was used to finds out the relationship between the different companies that may be positive or negative. The correlation value (presented in Table 3) for the different years were 8% in Bhusahn, 25% in Jindal Saw, 37% in Jindal Stainless, 14% in Jindal Steel & Power, 69% in JSW Steel, 49% in Lloyds, 16.7% in SAIL, .9% in Tata Steel, 65% in Uttam Glava, 52% in Welspun. From the above values, it is clear that the in the period between 1998 to 2014 all companies were showing a positive correlation between the corporate social responsibility and the corporate financial performance. And companies like JSW Steel, Lloyds, Uttam Glava, were showing a correlation more than 50%.

TABLE 3: CORRELATION BETWEEN THE CFP AND CSP AND THEIR SIGNIFICANCE LEVELS

Years	Bhushan	Jindal Saw	Jindal Stainless	Jindal Steel & Power	JSW Steel	Lloyds	SAIL	Tata Steel	Uttam Glava	Welspun
Correlation	.008	.25	.373	.014	.69	.49.	.167	.009	.65	.52
t-test	-0.32	1.01	1.55	-.0.56	3.68	2.2	.656	-.036	3.34	2.36
Beta	-.008	.252	.373	-.014	.68	.49	.167	-.009	.653	.52
Sig (2-tailed)	.975	.328	.14	.956	.002	.043	.522	.972	.004	.032

FIGURE 1: **CORRELATION BETWEEN THE CFP AND CSP**



Above graph exhibits the trend between the corporate social performance and corporate financial performance. It is clear from the graph that relation started growing after the year 2002 and in the 2004 & 2005 it showed the effective bonding between the CSP and CFP. But after 2005, the trend declined slowly. The present values show huge decline from the 2004 and 2005 values.

Regression analysis depicted a significant association between the CSP and CFP among all the companies form a period 1998 to 2014 (presented in table 3). Both correlation and regression analysis exhibited a significant association between the CSP and CFP in the year's 1998 to 2014. All companies are showing a significant association i.e. Bhushan shows the Beta coefficient.8% (t values -0.32) and Jindal Saw (25% Beta coefficient & T values 1.01), Jindal Stainless (37 % Beta coefficient & T values 1.55), Jindal Steel & Power (14 % Beta coefficient & T values -0.56), JSW Steel (68 % Beta coefficient & T values 3.68), Lloyds (49 % Beta coefficient & T values 2.2), SAIL (17 % Beta coefficient & T values.656), Tata Steel (.9 % Beta coefficient & T values -0.36), Uttam Glava (65 % Beta coefficient & T values 3.34), Welspun (52 % Beta coefficient & T values 2.36).

RESULTS AND DISCUSSION

The results show significant association between the corporate social performance and corporate financial performance in all the companies - Bhusahn, Jindal Saw, Jindal Stainless, Jindal Steel & Power, JSW Steel, Lloyds, SAIL, Tata Steel, Uttam Glava and Welspun. The results of correlation and regression show significant association in all the companies from a period of 1998 to 2014. It's clear from the results that there is a significant association between CSR and CFP which basically means that companies that are socially more responsible are also performing well on the financial front and vic versa. The companies like JSW, Llloyds, Uttam Galva, SAIL show positive values for all the factors of correlation between corporate social performance with the corporate financial performance after the year 2004. Tata steel, Jindal SAW and Jindal stainless started investing in R&D after 2005 and gave donations after 2004. All these changes impact the values of data, which is ultimately responsible for the positive relationship between the two variables.

CONCLUSION

The steel sector in India is a mix of public and private sector and it alone contributes over three per cent to the national GDP. The sector has also been upfront in taking social responsibility. During the 17-year period covered under this study, the 10 selected companies spent ₹ 346,533 crore on four variables of corporate social performance—tax, donation, wages, and R&D. However, the relationship between corporate financial performance and corporate social performance shows significant correlation in all the companies. But some companies have shown a correlation more than 50% which are the JSW Steel, Lloyds**,** Uttam Glava which indicates that these companies have not only linked and inculcated in their policies the concept of CSR but are also practicing it in a manner that also increases their financial output. The results of this study are in line with several international studies conducted on other companies and at different geographical locations which is an indication of a trend that may spread across regions and bring about a positive change with regard to corporate responsibilities.

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