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RELATIONSHIP BETWEEN CORPORATE SOCIAL PERFORMANCE AND FINANCIAL PERFORMANCE – AN EXAMINATION OF FRIFP MODEL

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ABSTRACT

The study on the relationship between Corporate Social Performance and Corporate Financial Performance is a crucial issue of business concerns. There is no model for finding out the relationship between CSP and CFP, using the data available in the books and records of firms. Hence this paper proposes to develop a model to measure the Corporate Social Performance and Financial Performance of firms. This study developed a new model, namely, FRIFP model, for identifying the relationship between Corporate Social Performance variable and financial performance variables. Under the FRIFP model, one CSP variable, namely, FRI and four CFP variables, namely, ROA, ROE, ROCE, and Size of the firms, were identified for the study. The BSE listed 30 firms were taken as a sample for this study. This study covered a period of eight years from 1.4.2014 to 31.3.2022. The study found that there was positive relationship between Corporate Social Performance variable and Corporate Financial Performance variables of the BSE listed firms in India. This new model would help to know the importance of corporate social performance in the improvement of the corporate financial performance of the firms in the long run.

Keywords: Corporate Social Performance, Corporate Financial Performance and Fortune Reputation Index

1. INTRODUCTION

The Corporate Social Performance (CSP) has emerged as vital component of all business concerns (Berns et al., 2009). The CSP Reputation is a dynamic and path dependent understanding by stakeholders about prospects of the firm; it is also based on the observations of the firm's historical trajectory of CSP actions over time. It is true that there is no theoretical basis for the manner in which the reputation has been developed in business and society.

The concepts and measures for measuring the reputation of CSP, do lack clarity in the literature (Wartick, 2002). Firms' CSP always involves acts of social responsibility over time and it shapes the firms to perform better (Barnett, 2007). Now a days firms are more active in identifying social activities, with the focus on discharging various welfare activities for society (McWilliams and Siegel 1997; Jensen 2002). Social performance is an effective means for establishing and improving the overall reputation of the firms in a much better manner, which could ultimately improve the financial performance of a firm in the long run (Orlitzky et al. 2003).

In the changed business environment, the CSP has become the fundamental responsibility of firms. Every firm is expected to take care of its own survival as well as the well-being of society. The sound business operations need to address the demand of all primary stakeholders, particularly the society (Maignan and Ferrell 2003). At the same time, every firm must also comply with different legal aspects, along with its business principles, while discharging social responsibilities.

2. REVIEW OF LITERATURE

Many studies have been conducted to measure corporate social performance. The selected reviews of previous studies on Corporate Social Responsibility, Corporate Social Performance and Corporate Financial Performance in India and other related studies are briefly reviewed below. Weigelt and Camerer (1988) examined the reputation models, based on the firm's linked behavior, coupling past actions with future expectations. Heil and Robertson (1991) described how the key resource providers interpret a company's initiatives, based on its past action and future prospects. Peter A. Stanwick and Sarah (1998) used Fortune's Reputation Index rank for measuring the CSP and this study found a positive relationship between CSP and organizational variables such as Financial Performance and Environmental Performance. Fombrun (2001) assessed the abilities of firms to deliver valued outcomes and their reputation is a function of the historical series of signals, communicated by a sender, over time. Gary Simpson Theodor Kohers (2002), using empirical analysis for the sample companies from the banking industry, supported the hypothesis linking social performance and financial performance of firm and found it to be positive. Hill et al., (2006) reported that there was a positive impact of CSP on the performance of firms. It supported the positive relationship between CSP and CFP. Catherine Liston Heyes and Gwen Ceton (2008) stressed that Fortune Rank significantly impacted the allocation of resources. Janet M. Thomas (2009) examined the evolution of research on Corporate Social Responsibility, by using appropriate control variables while estimating the relationship between CSP and CFP.

Kim and Statman (2012) found that CFP increases with CSP up to a certain point but diminishes beyond that point. Dawn Patricia Miller (2016) examined the corporate social performance, measured by Fortune Reputation Index composite score. There was positive correlation between CSP (FRI) and Financial Performance (ROA, ROE, EPS and Total Assets) of banks in United States of America. Selvam et al., (2016) suggested a subjective model, with nine determinants and dimensions, including corporate governance and social performance of firms. Shen et al., (2016) found that financial performance was higher in banks, with greater corporate social performance. Jacob Brower et al., (2017) suggested that firms must approach CSR from integrated and strategic perspective to reap the rewards. Pasquale Ruggiero and Sebastiano Cupertino (2018) identified financial performance variables like ROA & Size and found a positive relationship between CSP and CFP. Dhanasekar et al., (2020b) found positive relationship between Corporate Social Performance (FRI) and Corporate Financial Performance (ROA & Size) and Research and Development (R&D) of Fortune top ranking companies in India. According to Dhanasekar et al., (2020c), there was positive relationship between CSP and CFP in private banks of India. Dhanasekar et al., (2020d) indicated that the Board of Directors influenced the Corporate Social Performance, measured by the CSR amount and the financial performance of the firms, measured by Return on Assets.

To sum up the review of literature, earlier studies have offered different measures for CSP. Some studies found a positive relationship between CSP and CFP while few other studies found no relationship in different firms. However, the literature clearly revealed that there was no appropriate model, revealing the relationship between CSP and CFP. In order to measure the relationship, the present study attempts to develop a new model (FRIFP), in order to examine the relationship between corporate social performance and corporate financial performance in India.

3. FRIFP MODEL FOR THE RELATIONSHIP BETWEEN CSP AND CFP

In recent days, the measurement of CSP has become a crucial issue for every firm. The Government of India also implemented many initiatives, to encourage and ensure the discharge of social activities by Indian firms. As a result, the issue of CSP has received considerable attention in the CSP literature. The fortune magazine's annual ranking data provide a lot of information about Indian companies, on qualitative attributes like quality of management, quality of products or services, values as a long-term investment, innovativeness, soundness of financial position, ability to attract, develop and keep talented people, responsibility to the community and environment and wise use of corporate assets (Catherine Liston-Heyes and Gwen Ceton, 2009).

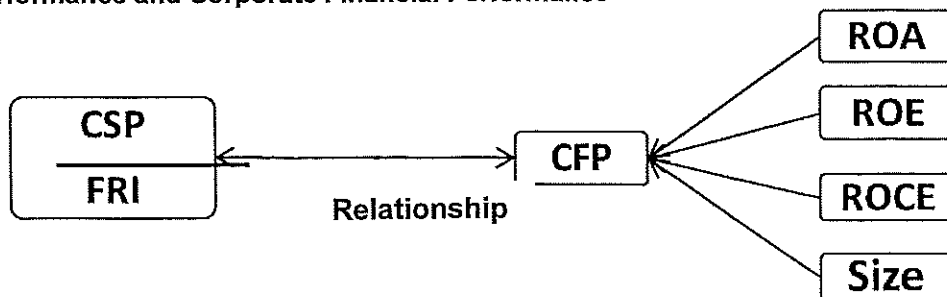
The Fortune Reputation Index was developed more than sixty years ago. It is an annual list, compiled and published by Fortune Magazine. The Fortune Reputation Index Composite Score (FRI score), as suggested by Peter A. Stanwick and Sarah D. Stanwick, (1998), Dawn Patricia Miller, (2016) and Dhanasekar et al., (2020b) was used in this study, for testing the new model, developed to examine the relationship between CSP and CFP.

Mark Sharfman (1996) found a positive relationship between KLD Score and Fortune Reputation Score for Corporate Social Performance. The CSP Model developed by Wood (2010) covered the factors namely Principles of Social Responsibility, Process of Social Responsiveness and Outcomes and Impact of Performance. The many earlier studies supported the Fortune Reputation Index Rank/Score (McGuire et al., 1988; Marc Orlitzky, 2001; Yijing Wang and Guido Berens, 2015; Dawn Patricia Miller, 2016; Jacob Brower et al., 2017; Nait Douch Abdelkarim, EL Haddad Salim, 2018 and Dhanasekar et al., 2020b). As stated earlier, the Fortune Reputation Index rank/score covers the factors like Environment, Community, Employees, Customers, Ethics, Governance, Uses of Corporate Assets, Financial Health and Long-term Investment value (Nait Douch Abdelkarim and EL Haddad Salim, 2018). This model (FRIFP) has also developed in light of the findings of earlier studies. Besides, FRIFP model used in this study includes the financial performance variables namely ROA - Return on Assets, ROE – Return on Equity, ROCE – Return on Capital Employed and Size of the company.

The Corporate Financial Performance (CFP) is a subjective measure of firms that uses the assets from their primary mode of business to generate revenues and reputation. The firm's financial performance was divided into three measures namely Market-based measures, Accounting-based measures and Perceptual-based measures (Orlitzky et al., 2003). According to Sandra et al., (1997), the CFP of a firm was measured by using three accounting variables like Return on Assets (ROA), Return on Equity (ROE) and Return on Sales (ROS). The Cochran and Wood (1984) pointed out that accounting-based indicators namely firms' Return on Assets (ROA), Return on Equity (ROE), or Earnings Per Share (EPS), captured the internal efficiency of firms in some way.

As discussed above, Fortune Reputation Index Rank in India is the only data available for assessing the Corporate Social Performance. The data on financial performance variables are available in the annual reports of firms. There is no model in academic literature for testing the relationship between Corporate Social Performance and Corporate Financial Performance, by using the information available in the books and records of firms (secondary data). Against this background, an attempt has been made in this study, to develop a new model named FRIFP, based on the data of Fortune Reputation Index composite score namely FRI Rank for CSP and data available in annual reports for CFP of firms. This new model called FRIFP is a composite study of FRI (Fortune Reputation Index) and FP (Financial Performance) of the firms. The conceptual Model of FRIFP is described in Figure-1.

Figure -1: Conceptual Model of FRIFP showing relationship between Corporate Social Performance and Corporate Financial Performance



Sources: FRIFP Model was Developed by Authors in line with Peter A. Stanwick and Sarah D. Stanwick, 1998, Rupal Tyagi, 2013, Dawn Patricia Miller, 2016 & Dhanasekar et al., 2020b.

Variables of FRIFP Model

A) Corporate Social Performance Variable

FRI = *Fortune Reputation Index Rank* was used for measuring the CSP as suggested by Peter A. Stanwick and Sarah D. Stanwick, 1998, Dawn Patricia Miller, 2016 & Dhanasekar et al., 2020b.

B) Corporate Financial Performance variables

ROA = Return on Assets (return on assets is a profitability ratio that determines how much profit a company is able to generate from its assets).

ROE = Return on Equity (return on equity is a measure of the profitability of a business in relation to equity).

ROCE = Return on Capital Employed (return on capital employed is a financial ratio that can be used in assessing a company's profitability and capital efficiency)

Size = Size of the Company (size of a company is determined by thresholds for turnover, balance sheet total and the average number of employees). It was computed as Log of TA.

The above four variables were identified for measuring the **Financial Performance**, as suggested by Cochran and Wood, 1984 & Pasquale Ruggiero and Sebastiano Cupertino, 2018 and Dhanasekar et al., 2020a.

As stated earlier, Figure-1 shows the conceptual model of FRIFP, showing the relationship between Corporate Social Performance and Corporate Financial Performance of firms. This model clearly confirmed the relationship between CSP and CFP (Peter A. Stanwick and Sarah D. Stanwick, 1998, Catherine Liston Heyes and Gwen Ceton, 2009; Dawn Patricia Miller, 2016 and Dhanasekar et al., 2020b).

4. STATEMENT OF THE PROBLEM

The measurement of CSP and CFP is a complex issue and there is no model applicable for all firms for testing the relationship between CSP and CFP. There are many earlier studies, which identified the variables for Corporate Social Performance and Financial Performance. But there is mixed evidence for positive nexus with the financial performance of the firm. Besides, there is no perfect model for testing the relationship between CSP and CFP, by using the data available in the books and records of Indian firms. A perfect measure of Corporate Financial Performance and Corporate Social Performance is required by all firms to develop their reputation in the long run. Hence this study developed a new model called FRIFP, for the measurement of CSP and finding its relationship with CFP in BSE listed firms in India.

4.1 NEED OF THE STUDY

Each company is expected to discharge its corporate social performance, without compromising the financial performance. The absence of an appropriate model to test the relationship between Corporate Social Performance and Corporate Financial Performance is a crucial issue before the corporate firms and researchers. Hence this study developed a new model, for examining the relationship between CSP and CFP. As stated earlier, the various kinds of factors for corporate social performance, like community development, employee welfare and quality of product were covered in the new model, to fulfill the needs of all the stakeholders. Therefore, this study would be useful to all stakeholders, to identify the relationship between Corporate Social Performance and Corporate financial Performance. The Researcher proposes to use the new model in future too.

4.2 OBJECTIVE OF THE STUDY

The aim of the study was to develop a new model, for the measurement of Corporate Social Performance and to find out its relationship with Corporate Financial Performance, in BSE listed companies of India.

4.3 HYPOTHESES OF THE STUDY

The literature analysis, on the relationship of CSP and CFP, showed mixed evidence, especially its positive impact on financial performance of the Indian firm. However, the relationship between CSP and

CFP is still a controversial issue. Against this background, the present study was carried out, to test the following two Null Hypotheses:

NH-1: There is no significance of data relating to Corporate Social Performance and Corporate Financial Performance in BSE listed firms in India.

NH-2: There is no relationship between Corporate Social Performance and Corporate Financial Performance in BSE listed firms in India.

4.4 SAMPLE SELECTION OF THE STUDY

As stated earlier, the objective of this present study was to develop a new model, to find out the relationship between Corporate Social Performance and Corporate Financial Performance in BSE listed companies of India. The BSE listed 30 companies were selected as the sample for this study (www.bseindia.com), as BSE Sensex is a very old and reputed index in India. This study mainly depended on secondary data. The data, for Corporate Social Performance, were collected from Fortune Reputation Index Rank (FRI Rank) and the required data for Corporate Financial Performance variables (ROA, ROE, ROCE and Size of the company) were collected from the website of www.fortune500india.com (for CSP), and PROWESS Database and www.moneycontrol.com (for CFP). The other relevant data for this study were collected from reputed websites, books, journals, magazines and websites, etc.

In India, CSR was incorporated in the Companies Act of 2013. The Indian companies started discharging the CSR activities, for the society, from 2014 onwards. Therefore, the study covered a period of eight years from April 1, 2014 to March 31, 2022. For the purpose of analyses, tools like descriptive statistics and correlation analysis were used in this study, with the help of statistical software, namely, SPSS 20.

5. RESULT AND DISCUSSION

The results are broken down as follows:

- a) Significance of Data (descriptive statistics) for Corporate Social Performance and Corporate Financial Performance.
- b) Relationship (correlation analysis) between Corporate Social Performance and Corporate Financial Performance.
- c) Testing the FRIFP Model (correlation analysis) for Corporate Social Performance and Corporate Financial Performance.

5.1 SIGNIFICANCE OF DATA (DESCRIPTIVE STATISTICS) FOR CORPORATE SOCIAL PERFORMANCE AND CORPORATE FINANCIAL PERFORMANCE

Table-1 shows the results of significance (fitness of the data), using descriptive statistics for corporate social performance and corporate financial performance of BSE 30 firms. The sample variable for CSP was FRI while three variables, namely, ROA, ROE, ROCE and Size were used for CFP. According to the analysis, the highest positive mean value of 145 for CSP variable, namely, FRI was received by Bajaj Finance Limited and the lowest mean value (1.800) of CSP (FRI) was recorded by Reliance Industries Limited.

The highest positive mean value (124.144) of CFP variable, namely, ROCE was achieved by Hindustan Unilever Limited and the lowest value of mean of 0.354 for CFP variable (ROA) was recorded by State Bank of India. In the case of standard deviation, its value of 50.512 for FRI, a variable of CSP, was achieved by Bajaj Financial Limited and the lowest standard deviation value of 0.417 for CSP (FRI) was registered by Tata Consultancy Services Limited. At the same time, the highest standard deviation value (positive) of CFP variable (ROE) was registered at 32.191 by Nestle while the lowest value of standard deviation (0.022) was recorded by Sunpharma Limited. According to the results of significance (fitness of

the data), using descriptive statistics, all the sample companies and sample variables were significant positively during the study period from 1.4.2014 to 31.3.2022. This positive significant value prompted the Researcher, to confirm correlation between CSP and CFP in BSE listed Companies in India. Therefore,

NH1 – There is no significance of data relating to Corporate Social Performance and Corporate Financial Performance of BSE listed firms in India, was rejected.

5.2 RELATIONSHIP (CORRELATION ANALYSIS) BETWEEN CORPORATE SOCIAL PERFORMANCE AND CORPORATE FINANCIAL PERFORMANCE

As stated earlier, the main objective of this study was to find out the relationship between Corporate Social Performance and Corporate Financial Performance. The results of correlation analysis, between CSP and CFP of BSE listed companies in India are displayed in Table-2. As pointed out earlier, the CSP variable, namely, FRI and CFP variables like ROA, ROE, ROCE and Size were used in the correlation analysis. The Pearson correlation analysis revealed that the value of $p < 0.05$ was positive, showing the relationship between CSP and CFP. According to the analysis, the significant values of correlation, showing the relationship between CSP and CFP, were recorded for seventeen Indian firms, during the study period. These seventeen sample companies, out of 30, included State Bank of India, Tata Steel Limited, Infosys Limited, Reliance Industries Limited, HDFC Housing Finance Limited, Larson and Turbo Limited, Hero Motor Corporation Limited, ICICI Bank Limited, Tata Consultancy Service Limited, India Tobacco Company Limited, Maruti Suzuki India Limited, Kotak Mahindra Bank, Axis Bank Limited, Mahindra and Mahindra Limited, Sun Pharmaceutical Industries Limited, Oil and Natural Gas Limited and NTPC Limited.

Interestingly, these seventeen firms achieved a positive correlation between Corporate Social Performance and Corporate Financial Performance. The positive correlation was considered as a good signal for the firms that their reputation will improve ultimately. But there were thirteen other sample companies, namely, Bajaj Housing Finance Limited, HDFC Bank Limited, Hindustan Unilever Limited, IndusInd Bank Limited, HCL Limited, Bharti Airtel Limited, Nestle, Asian Paint Limited, Titan, Power Grid Corporation of India Limited, Tech Mahindra Limited, Ultra Cement Industries Limited and Bajaj Auto Limited which recorded negative association between Corporate Social Performance and Corporate Financial Performance. It is to be noted that the positive correlation between CSP and CFP would help the firms to improve their financial performance, along with the social activities. The negative relationship between Corporate Social Performance and Corporate Financial Performance indicated that these companies should concentrate more on social performance through social welfare activities. Otherwise, the reputation of firms could be damaged in the long run. The overall analysis of Pearson correlation clearly revealed that out of 30 sample firms, seventeen firms (majority) realised positive correlation while other thirteen firms did not record positive correlation during the study period. Hence, the NH2- There is no relationship between Corporate Social Performance and Corporate Financial Performance of BSE listed firms in India, was not accepted.

5.3 TESTING THE FRIFP MODEL (CORRELATION ANALYSIS) FOR CSP AND CFP

In line with the objective of this study of testing the new model (FRIFP), the results of correlation analysis for BSE 30 companies considered in this study, during the study period are given in Table-3. It is interesting to record that out of 30 sample firms, only one company, namely, Reliance Industries Limited, achieved a highly positive relationship between corporate social performance and corporate financial performance during the study period.

Tata Steel Limited registered correlation values of 0.003, 0.005 and 0.025 for ROA, ROCE and Size; HDFC Housing Finance Limited received values of 0.009, 0.008 and 0.008 for ROA, ROE; Size while TCS Limited recorded values of 0.038, 0.001 and 0.042 for ROA, ROE and Size and NTPC Limited reported values of 0.009, 0.000 and 0.049 for ROA, ROE and ROCE during the study period. These four sample firms achieved a positive correlation between CSP and CFP during the study period.

On the other hand, State Bank of India achieved values of 0.002 and 0.005 for ROA and ROE, Infosys Limited recorded values of 0.049 and 0.009 for ROA and ROE and L & T Limited registered values at

0.004 and 0.017 for ROA and ROCE. Similarly, Hero Motor Corporation Limited achieved values of 0.049 and 0.009 for ROA and Size, ICICI Bank Limited earned values of 0.000 and 0.034 for ROA and ROCE while Maruti Suzuki India Limited received values of 0.022 and 0.028 for ROA and Size. It is also clear that Kotak Mahindra Bank Limited registered values of 0.032 and 0.004 for ROA and Size, Axis Bank Limited earned values of 0.028 and 0.041 for ROA and Size while Mahindra and Mahindra Limited received values at 0.027 and 0.046 for ROA and Size. According to the results of the Table, Sun Pharmaceutical Industrial Limited achieved values of 0.000 for ROA and 0.030 for ROCE while ONGC Limited recorded values of 0.005 and 0.007 for ROA and ROE. Thus these eleven firms achieved partially positive correlation between CSP and CFP, during the study period, 0out of BSE 30 companies considered for this study.

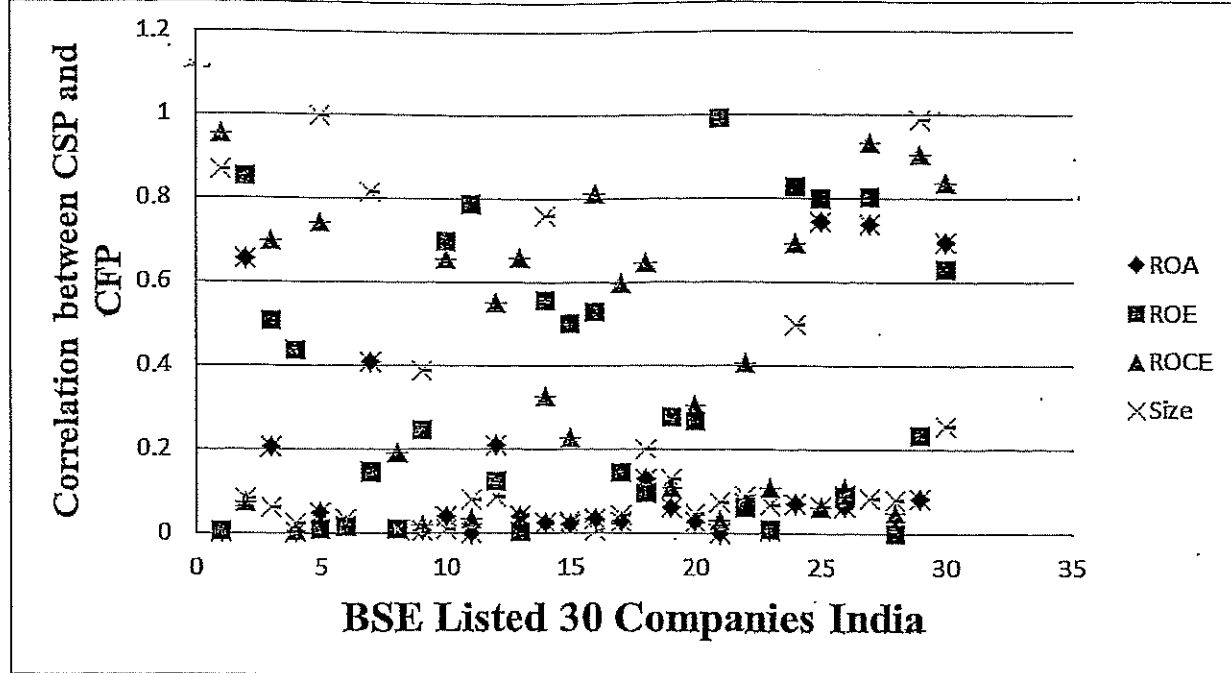
But the analysis of sample variables of CFP (ROA, ROE, ROCE and Size) revealed that the sample companies, namely, Bajaj Housing Finance Limited recorded a negative correlation value of 0.654, 0.851, 0.074 and 0.081, HDFC Bank Limited received values at 0.205, 0.506, 0.696 and 0.061, Hindustan Unilever Limited reported values at 0.407, 0.146, 0.144 and 0.815, IndusInd Bank Limited registered values at 0.207, 0.122, 0.549 and 0.085, ITC Limited recorded values at 0.555 for ROE, 0.324 for ROCE and 0.759 for Size, HCL Limited recorded values at 0.128, 0.094, 0.644 and 0.198 and Bharti Airtel Limited received values at 0.061, 0.277, 0.108 and 0.127.

Similarly, few other sample firms like Nestle achieved values at 0.071, 0.060, 0.405 and 0.088, Asian Paints Limited earned values of 0.071, 0.826, 0.692 and 0.499, Titan received values of 0.744, 0.799, 0.061 and 0.063 while Power Grid Corporation Ltd recorded values of 0.064, 0.087, 0.107 and 0.091 and Tech Mahendra Limited earned values of 0.737, 0.801, 0.930 and 0.081 for CFP variables of ROA, ROE, ROCE and Size during the study period. Ultra Cement Industries Limited registered values of 0.083, 0.232, 0.905 and 0.986 and Bajaj Auto Limited earned values at 0.694, 0.631, 0.836 and 0.256 for ROA, ROE, ROCE, and Size during the study period. These fourteen firms out of 30 firms recorded **NEGATIVE CORRELATION** between CSP and CFP during the study period.

6. SCATTER PLOT CHART FOR THE CORRELATION BETWEEN CSP AND CFP UNDER FRIFP MODEL

The relationship between CSP and CFP was further examined by using the Scatter Plot Chart. The results of the relationship, mapped in the Scatter Plot Chart between Corporate Social Performance and Corporate Financial performance in BSE listed companies in India, by using FRIFP model, are exhibited in **Chart - 1**. In this Chart, the values of ROA (CFP variable) are indicated in blue color dot or quadrilateral symbol, the brown color or square symbol indicates the values of ROE, the value of ROCE was indicated with green color or triangle symbol and the value of Size was highlighted in hash color or x symbol. According to the correlation analysis, displayed in the scatter plot chart, the significant value of < 0.05 shows positive relationship and value of > 0.05 indicates negative relationship. The Chart clearly reveals that four sample variables (ROA, ROE, ROCE, and Size) had achieved highly positive correlation for one company, positive correlation for four companies, partial positive correlation for 11 companies and realised negative correlation for 14 companies, in respect of thirty sample companies, during the study period. The overall analysis of this Chart also confirmed the fact that the FRIFP model reflected the relationship between CSP and CFP of sample firms. Besides, this study supports the findings of earlier studies by Bowman and Haire, 1975; McGuire et al., 1988; Forburn and Shanley, 1990 and Dhanasekar et al., 2020b.

Chart-1 Scatter Plot Chart for the Correlation between CSP and CFP under FRIFP model



Source: Scatter Plot Chart computed using Excel.

7. CONCLUSION OF THE STUDY

In today’s financial and business world, corporate firms are expected to discharge various welfare activities for the development of society. The measurement of corporate social performance and its relation to corporate financial performance is essential to discharge the social responsibility, without compromising financial performance. The CSP reputations have not been fully covered in the finance literature. This study applied the new model, namely, FRIFP with the sample variables of FRI for CSP and ROA, ROE, ROCE, and Size for CFP. This study analyzed the relationship between CSP and CFP of BSE listed firms in India. According to the analysis, one firm achieved highly positive correlation, four samples’ firms recorded positive correlation between CSP and CFP, eleven sample companies achieved partial positive relationship while fourteen firms registered negative correlation between CSP and CFP, during the study period. The CSP reputations were used as signals of strength, for discharging social performance by firms. This study found that there was significance of data (positive) relating to CSP and CFP under FRIFP model and positive relationship between CSP and CFP was registered.

The new model of FRIFP, used in this study, reflects the relationship between CSP and CFP. Many sample firms were successful financially, but they did not spend their dues on welfare activities. This would adversely affect the reputation of such companies because they would lose support from society in the long run. For the socially responsible companies that continue to invest in CSR activities, the financial performance of such companies had improved in the long run. The collective efforts to discharge the CSP are the need of the hour for the betterment of society in general and of firms in future. All the Indian firms need to develop strategies for the sustainability of society.

This study provided evidence for sound financial performance of firms, through their positive relationship between CSP and CFP. This study creates scope for further research on a periodical basis to test the relationship. The future study may cover more sample companies of India and abroad, longer period and more sample variables for financial performance and social performance. Similar studies could be carried out by using primary data: This study suffered from some limitations. Firstly, this study mainly depended on secondary data. It focused only on the relationship between CSP and CFP of (BSE listed companies) Indian firms. Secondly, only five sample variables namely, FRI for CSP and ROA, ROE, ROCE, and Size

for CFP were used, for testing the new model, namely, FRIFP. FRI database was considered as the standard for quantitative measure of CSP. Under FRIFP model, the FRI value alone was taken as the reflection of the CSP of Indian firms. The different domains of CSP were not elaborately covered. Lastly, this study covered a limited period of eight years from April 1, 2014 to March 31, 2022.

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Table-1: Results of significance of data using Descriptive Statistics for Corporate Social Performance and Corporate Financial Performance for BSE listed Company in India, during the study period from 1.4.2014 to 31.3.2022.

Descrip. Stat.		Mean	Std. Dev.	Descrip. Stat.		Mean	Std. Dev.	Descrip. Stat.		Mean	Std. Dev.
Variables				Variables				Variables			
1. State Bank of India				11. ICICI Bank Limited				21. Sun Pharmaceutical Industrial Limited			
CSP	FRI	3.800	0.447	FRI	12.800	0.837	FRI	50	6.595		
	ROA	0.354	0.250	ROA	1.086	0.537	ROA	2.022	1.593		
CFP	ROE	5.812	3.869	ROE	9.002	4.163	ROE	3.26	2.662		
	ROCE	4.518	2.892	ROCE	3.138	0.434	ROCE	5.502	3.373		
	SIZE	6.416	0.084	SIZE	5.897	0.069	SIZE	4.556	0.022		
2. Bajaj Finance Limited				12. IndusInd Bank Limited				22. Nestle			
CSP	FRI	145	50512	FRI	79.600	17.952	FRI	141.6	13.145		
	ROA	3.020	0.357	ROA	1.534	0.198	ROA	17.454	7.026		
CFP	ROE	18.188	1.554	ROE	14.54	1.962	ROE	46.438	32.191		
	ROCE	9.592	5.434	ROCE	3.072	0.109	ROCE	37.662	11.806		
	SIZE	4.789	0.205	SIZE	5.245	0.160	SIZE	3.848	0.045		
3. HDFC Bank Limited				13. TCS Limited				23. ONGC Limited			
CSP	FRI	77.200	47.557	FRI	10.2	0.447	FRI	5.800	2.588		
	ROA	2.884	0.508	ROA	28.922	1.808	ROA	7.738	0.878		
CFP	ROE	16.064	6.702	ROE	35.914	4.621	ROE	11.020	1.596		
	ROCE	12.886	5.375	ROCE	41.296	5.918	ROCE	11.610	3.338		
	SIZE	5.276	0.495	SIZE	4.919	0.077	SIZE	5.400	0.071		
4. Tata Steel Limited				14. ITC Limited				24. Asian Paints Limited			
CSP	FRI	9.000	1.224	FRI	34.8	1.643	FRI	80.400	2.966		
	ROA	4.250	2.711	ROA	19.252	1.604	ROA	17.332	1.411		
CFP	ROE	8.546	5.187	ROE	25.414	4.795	ROE	27.458	3.972		
	ROCE	9.688	1.847	ROCE	30.41	1.699	ROCE	32.708	2.890		
	SIZE	5.087	0.035	SIZE	4.743	0.078	SIZE	3.996	0.104		
5. Infosys Limited				15. Maruti Suzuki India Limited				25. Titan			
CSP	FRI	20.800	0.837	FRI	21.200	2.280	FRI	96.800	14.788		
	ROA	19.764	1.361	ROA	12.62	1.231	ROA	11.714	1.787		
CFP	ROE	23.928	2.048	ROE	17.702	1.809	ROE	21.792	3.307		
	ROCE	32.144	3.085	ROCE	21.240	5.052	ROCE	27.286	5.351		
	SIZE	4.866	0.045	SIZE	4.686	0.112	SIZE	3.905	0.120		
6. Reliance Industries Limited				16. Kotak Mahindra Bank Ltd.				26. Power Grid Corp. Ltd.			
CSP	FRI	1.800	0.447	FRI	45.800	10.756	FRI	59.400	12.13		
	ROA	5.480	0.564	ROA	1.502	0.252	ROA	3.652	0.377		
CFP	ROE	10.432	1.041	ROE	11.324	1.697	ROE	14.842	1.409		
	ROCE	11.178	5.638	ROCE	2.726	0.304	ROCE	7.408	3.313		
	SIZE	5.735	0.113	SIZE	5.311	0.179	SIZE	5.292	0.073		
7. Hindustan Unilever Ltd				17. Axis Bank Limited				27. Tech Mahendra Ltd.			
CSP	FRI	42.200	1.303	FRI	27.4	3.286	FRI	49.800	5.541		
	ROA	32.660	1.743	ROA	0.874	0.680	ROA	14.206	1.146		
CFP	ROE	87.754	21.307	ROE	9.19	6.716	ROE	20.700	2.069		
	ROCE	124.14	30.571	ROCE	2.800	0.368	ROCE	22.270	1.458		
	SIZE	4.173	0.046	SIZE	5.781	0.094	SIZE	4.36625	0.098		

Table-1: Results of significance of data using Descriptive Statistics for Corporate Social Performance and Corporate Financial Performance for BSE listed Company in India, during the study period from 1.4.2014 to 31.3.2022. (Continue)

Descrip. Stat.		Mean	Std. Dev.	Descrip. Stat.		Mean	Std. Dev.	Descrip. Stat.		Mean	Std. Dev.
Variables				variables				Variables			
8. HDFC Housing Finance Limited				18. HCL Limited				28. NTPC Limited			
CSP	FRI	16.800	2.280	FRI	32.600	3.209	FRI	16.400	1.140		
	ROA	1.838	0.033	ROA	21.744	2.769	ROA	4.644	0.590		
CFP	ROE	17.990	1.026	ROE	26.938	3.820	ROE	11.454	0.933		
	ROCE	17.308	0.881	ROCE	29.848	4.754	ROCE	6.614	0.824		
	SIZE	5.936	0.130	SIZE	4.484	0.072	SIZE	5.368	0.069		
9. Larson and Turbo Limited				19. Bharti Airtel Ltd.				29. Ultra Cement Ltd.			
CSP	FRI	12.000	0.707	FRI	15.400	4.561	FRI	51.600	5.177		
	ROA	5.452	0.521	ROA	3.802	4.521	ROA	5.232	1.377		
CFP	ROE	12.354	1.694	ROE	2.438	10.032	ROE	9.968	1.236		
	ROCE	13.982	2.393	ROCE	5.632	4.855	ROCE	10.168	2.430		
	SIZE	5.020	0.063	SIZE	5.262	0.095	SIZE	4.645	0.098		
10. Hero Motor Corporation Limited				20. Mahindra and Mahindra Ltd.							
CSP	FRI	47.000	1.871	FRI	16.800	1.095	FRI	59.400	3.781		
	ROA	22.458	2.222	ROA	9.298	0.440	ROA	18.886	2.825		
CFP	ROE	33.402	4.994	ROE	14.704	1.454	ROE	24.228	3.634		
	ROCE	39.44	3.522	ROCE	14.886	1.958	ROCE	28.43	1.877		
	SIZE	4.150	0.093	SIZE	4.613	0.085	SIZE	4.308	0.104		

Sources: Data collected from www.fortuneindia.com and PROWESS Database and Computed using E-Views.

Note: CSP - Corporate Social Performance, CFP – Corporate Financial Performance, FRI – Fortune Reputation Index Rank, ROA - Return on Assets, ROE – Return on Equity, ROCE – Return on Capital Employed, SIZE – Size of the firm and Std. Dev. – Standard Deviation.

Table – 2: Results of correlation showing relationship between CSP and CFP in BSE listed Companies in India during 2014 to 2020

Variables		1. State Bank of India				
		CSP	CFP			
		FRI	ROA	ROE	ROCE	SIZE
CSP	FRI	1				
CFP	ROA	0.002	1			
	ROE	0.005	0.000	1		
	ROCE	0.953	0.050	0.064	1	
	SIZE	0.857	0.186	0.217	0.015	1
		2. Bajaj Finance Limited				
CSP	FRI	1				
CFP	ROA	0.654	1			
	ROE	0.851	0.645	1		
	ROCE	0.074	0.368	0.969	1	
	SIZE	0.081	0.031	0.878	0.140	1
		3. HDFC Bank Limited				
CSP	FRI	1				
CFP	ROA	0.205	1			
	ROE	0.506	0.396	1		
	ROCE	0.696	0.914	0.118	1	
	SIZE	0.061	0.126	0.500	0.708	1
		4. Tata Steel Limited				
CSP	FRI	1				
CFP	ROA	0.003	1			
	ROE	0.437	0.001	1		
	ROCE	0.005	0.979	0.836	1	
	SIZE	0.025	0.413	0.390	0.852	1
		5. Infosys Limited				
CSP	FRI	1				
CFP	ROA	0.049	1			
	ROE	0.009	0.015	1		
	ROCE	0.739	0.237	0.064	1	
	SIZE	0.996	0.170	0.049	0.011	1
		6. Reliance Industries Limited				
CSP	FRI	1				
CFP	ROA	0.017	1			
	ROE	0.015	0.005	1		
	ROCE	0.017	0.016	0.009	1	
	SIZE	0.033	0.067	0.165	0.160	1
		7. Hindustan Unilever Ltd.				
CSP	FRI	1				
CFP	ROA	0.407	1			
	ROE	0.146	0.881	1		
	ROCE	0.144	0.912	0	1	
	SIZE	0.815	0.125	0.494	0.485	1
		8. HDFC Housing Finance Limited				
CSP	FRI	1				
CFP	ROA	0.009	1			
	ROE	0.008	0.220	1		
	ROCE	0.190	0.150	0.186	1	
	SIZE	0.008	0.128	0.022	0.326	1
		9. Larson and Turbo Limited				
CSP	FRI	1				
CFP	ROA	0.004	1			
	ROE	0.244	0.300	1		
	ROCE	0.017	0.776	0.568	1	
	SIZE	0.387	0.814	0.302	0.159	1
		10. Hero Motor Corporation Limited				
CSP	FRI	1				
CFP	ROA	0.040	1			
	ROE	0.696	0.013	1		
	ROCE	0.655	0.871	0.811	1	
	SIZE	0.009	0.241	0.071	0.424	1
		11. ICICI Bank Limited				
CSP	FRI	1				
CFP	ROA	0.000	1			
	ROE	0.788	0.000	1		
	ROCE	0.034	0.112	0.116	1	
	SIZE	0.080	0.001	0.000	0.160	1
		12. IndusInd Bank Limited				
CSP	FRI	1				
CFP	ROA	0.207	1			
	ROE	0.122	0.279	1		
	ROCE	0.549	0.616	0.494	1	
	SIZE	0.085	0.161	0.246	0.707	1
		13. TCS Limited				
CSP	FRI	1				
CFP	ROA	0.038	1			
	ROE	0.001	0.031	1		
	ROCE	0.657	0.573	0.533	1	
	SIZE	0.042	0.447	0.268	0.445	1
		14. ITC Limited				
CSP	FRI	1				
CFP	ROA	0.025	1			
	ROE	0.555	0.019	1		
	ROCE	0.324	0.377	0.133	1	
	SIZE	0.759	0.017	0.041	0.481	1
		15. Maruti Suzuki India Limited				
CSP	FRI	1				
CFP	ROA	0.022	1			
	ROE	0.500	0.001	1		
	ROCE	0.228	0.118	0.137	1	
	SIZE	0.028	0.481	0.576	0.107	1
		16. Kotak Mahindra Bank Ltd.				
CSP	FRI	1				
CFP	ROA	0.032	1			
	ROE	0.528	0.008	1		
	ROCE	0.811	0.003	0.013	1	
	SIZE	0.004	0.669	0.528	0.810	1
		17. Axis Bank Limited				
CSP	FRI	1				
CFP	ROA	0.028	1			
	ROE	0.143	0.000	1		
	ROCE	0.597	0.108	0.123	1	
	SIZE	0.041	0.092	0.113	0.104	1
		18. HCL Limited				
CSP	FRI	1				
CFP	ROA	0.128	1			
	ROE	0.094	0.003	1		
	ROCE	0.644	0.096	0.169	1	
	SIZE	0.198	0.868	0.732	0.423	1
		19. Bharat Airtel Limited				
CSP	FRI	1				
CFP	ROA	0.061	1			
	ROE	0.277	0.279	1		
	ROCE	0.108	0.004	0.333	1	
	SIZE	0.127	0.016	0.107	0.018	1
		20. Mahindra and Mahindra Ltd.				
CSP	FRI	1				
CFP	ROA	0.027	1			
	ROE	0.267	0.006	1		
	ROCE	0.304	0.756	0.665	1	
	SIZE	0.046	0.327	0.277	0.036	1

Table – 2: Results of correlation showing relationship between CSP and CFP in BSE listed Companies in India during 2014 to 2020 (Continue)

21. Sun Pharmaceutical Industrial Limited						
Variable		CSP	CFP			
		FRI	ROA	ROE	ROCE	SIZE
CSP	FRI	1				
CFP	ROA	0.000	1			
	ROE	0.991	0.000	1		
	ROCE	0.030	0.593	0.559	1	
	SIZE	0.072	0.551	0.512	0.068	1
22. Nestle						
CSP	FRI	1				
CFP	ROA	0.071	1			
	ROE	0.060	0.014	1		
	ROCE	0.405	0.009	0.004	1	
	SIZE	0.088	0.324	0.655	0.528	1
23. ONGC Limited						
CSP	FRI	1				
CFP	ROA	0.005	1			
	ROE	0.007	0.019	1		
	ROCE	0.107	0.513	0.320	1	
	SIZE	0.068	0.974	0.711	0.043	1
24. Asian Paints Limited						
CSP	FRI	1				
CFP	ROA	0.071	1			
	ROE	0.826	0.024	1		
	ROCE	0.692	0.247	0.048	1	
	SIZE	0.499	0.034	0.023	0.145	1
25. Titan						
CSP	FRI	1				
CFP	ROA	0.744	1			
	ROE	0.799	0.002	1		
	ROCE	0.061	0.709	0.724	1	
	SIZE	0.063	0.706	0.652	0.093	
26. Tech Mahendra Ltd.						
Variable		CSP	CFP			
		FRI	ROA	ROE	ROCE	SIZE
FRI	FRI	1				
ROA	ROA	0.064	1			
ROE	ROE	0.087	0.017	1		
ROCE	ROCE	0.107	0.006	0.067	1	
SIZE	SIZE	0.091	0.019	0.002	0.061	1
27. Tech Mahendra Ltd.						
FRI	FRI	1				
ROA	ROA	0.737	1			
ROE	ROE	0.801	0.044	—		
ROCE	ROCE	0.930	0.784	0.873	1	
SIZE	SIZE	0.081	0.674	0.928	0.369	1
28. NTPC Limited						
FRI	FRI	1				
ROA	ROA	0.009	1			
ROE	ROE	0.000	0.017	1		
ROCE	ROCE	0.049	0.008	0.064	1	
SIZE	SIZE	0.079	0.011	0.071	0.039	1
29. Ultra Cement Limited						
FRI	FRI	1				
ROA	ROA	0.083	1			
ROE	ROE	0.232	0.006	1		
ROCE	ROCE	0.905	0.705	0.957	1	
SIZE	SIZE	0.986	0.031	0.011	0.817	1
30. Baja Auto Limited						
FRI	FRI	1				
ROA	ROA	0.694	1			
ROE	ROE	0.631	0.048	1		
ROCE	ROCE	0.836	0.939	0.496	1	
SIZE	SIZE	0.256	0.271	0.057	0.370	1

Sources: Data collected from www.fortuneindia.com and PROWESS Database and Computed using E-Views.

Note: CSP - Corporate Social Performance, CFP – Corporate Financial Performance, FRI – Fortune Reputation Index Rank, ROA - Return on Assets, ROE – Return on Equity, ROCE – Return on Capital Employed and SIZE – Size of the firm.

Table – 3: Testing the FRIFP Model using Correlation Analysis for sample variables of CSP and CFP during the study period from 2014 to 2020

Sl. No.	Name of the Sample Company	Relationship between CSP and CFP					Results of FRIFP Model
		CSP Variables	CFP variables				
			ROA	ROE	ROCE	Size	
1	State Bank of India	FRI	0.002	0.005	0.953	0.867	Partially Positive
2	Bajaj Housing Finance Limited	FRI	0.654	0.851	0.074	0.081	Negative
3	HDFC Bank Limited	FRI	0.205	0.506	0.696	0.061	Negative
4	Tata Steel Limited	FRI	0.003	0.437	0.003	0.025	Positive
5	Infosys Limited	FRI	0.049	0.009	0.739	0.996	Partially Positive
6	Reliance Industries Limited	FRI	0.017	0.015	0.017	0.033	Highly Positive
7	Hindustan Unilever Limited	FRI	0.407	0.146	0.144	0.815	Negative
8	HDFC Housing Finance Ltd.	FRI	0.009	0.008	0.190	0.008	Positive
9	Larsen and Turbo Limited	FRI	0.004	0.244	0.017	0.387	Partially Positive
10	Hero Motor Corporation Ltd.	FRI	0.040	0.696	0.655	0.009	Partially Positive
11	ICICI Bank Limited	FRI	0.000	0.788	0.034	0.080	Partially Positive
12	IndusInd Bank Limited	FRI	0.207	0.122	0.549	0.085	Negative
13	TCS Limited	FRI	0.038	0.001	0.657	0.042	Positive
14	ITC Limited	FRI	0.025	0.555	0.324	0.759	Negative
15	Maruti Suzuki India Limited	FRI	0.022	0.500	0.228	0.028	Partially Positive
16	Kotak Mahindra Bank Limited	FRI	0.032	0.528	0.811	0.004	Partially Positive
17	Axis Bank Limited	FRI	0.028	0.143	0.597	0.041	Partially Positive
18	HCL Limited	FRI	0.128	0.094	0.644	0.198	Negative
19	Bharti Airtel Limited	FRI	0.061	0.277	0.108	0.127	Negative
20	Mahindra and Mahindra Ltd.	FRI	0.027	0.267	0.304	0.046	Partially Positive
21	Sun Pharmaceutical Indstl Ltd.	FRI	0.000	0.991	0.030	0.072	Partially Positive
22	Nestle	FRI	0.071	0.060	0.405	0.088	Negative
23	ONGC Limited	FRI	0.005	0.007	0.107	0.068	Partially Positive
24	Asian Paints Limited	FRI	0.071	0.826	0.692	0.499	Negative
25	Titan	FRI	0.744	0.799	0.061	0.063	Negative
26	Power Grid Corporation Ltd	FRI	0.064	0.087	0.107	0.091	Negative
27	Tech Mahendra Limited	FRI	0.737	0.801	0.930	0.081	Negative
28	NTPC Limited	FRI	0.009	0.000	0.049	0.079	Positive
29	Ultra Cement Limited	FRI	0.083	0.232	0.905	0.986	Negative
30	Baja Auto Limited	FRI	0.694	0.631	0.836	0.256	Negative

Source: Data analyzed from correlation analysis, computed from Excel.

Note: CSP - Corporate Social Performance, CFP – Corporate Financial Performance, FRI – Fortune Reputation Index Rank, ROA - Return on Assets, ROE – Return on Equity, ROCE – Return on Capital Employed and SIZE – Size of the firm.