

How Does Corporate Social Responsibility Affect Financial Performance Indicators?

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Abstract: The present study observes how corporate sector responsibility affects firm's financial performance indicators of sixteen Nabaratna Companies in India. Firms are nowadays increasing its association with every stakeholders plus society so that firm's status and product likeness are increased steadily. Nowadays, each and every stakeholder have convinced firms to carry out extra investments in corporate social responsibility but some financial managers have accepted on the condition that firms' profitability might be increased yet again a few financial managers have opposed for extra investment because firms' profitability would be decreased. This study is based on annual data obtained from the Annual Reports of the Nabaratna Companies for the period from 2010 to 2014. To determine the influence of corporate sector responsibility on firm's financial, correlation and linear regression analysis have been utilised. Empirical results indicate that corporate sector responsibility affect firm's financial performance indicators of the companies under study although statistically insignificant, more than ever in case of fund's size and firm's size.

Keywords: Corporate sector responsibility, financial performance indicators, Nabaratna Company, India, linear regressions.

INTRODUCTION

The business text has recognized social accountability/responsibility as a significant corporate obligation. Consequently, the implication of corporate social responsibility (CSR) is a hot topic nowadays across the globe including India for corporate management, as a result corporate social responsibility expenditures are directly related with firms' financial expenses. Therefore, it is obvious that financial performance may greatly influenced by corporate social responsibility.

Corporate social responsibility idea depends on committee involvement of business enterprise. In the course of CSR every company must be accountable in the direction of society ahead of their profit making goals [1]. Every company is now feeling the importance of being socially responsible entity. By doing CSR activities, firms' tries to increase their reputation and brand image that they are very socially involved and for that they may increase sales and ultimately profit. Firms are now enhancing their relationship with all stakeholders. Most of human being is now concerned about what they are buying, where they are spending their valuable money, in which company they should invest their money and how much they will have in future. Stakeholders are very much alarmed about their

right. Firms need to mitigate all benefits and rights of all stakeholders to have a good relationship and carry on the relationship in a long run. Being a socially involved entity, firms attracts a good number of investors to have a huge investment, magnetize and retain so many qualified human resources and by motivating them firm can produce and operate their business at a low cost. In another way firms not only improves their financial situation but also save scare resources of environment by adequate water consumption, saving energy and maintaining wastage. Though there is so many benefit of CSR, firms also have to spend a lot of money for CSR. Still there is a big question that really CSR affects firm's financial performance indicators? There have been numerous earlier studies to relationship CSR with the Firms Financial Performance (FFP) across the globe, that is to say, Cochran & Wood [2], Waddock and Graves [3], Orlitzky et al. [4] and Barnett and Salomon [5]. They have concluded that CSR is positively affects companies' financial performances. Again, Aupperle et al [6] and McWilliams and Siegel [7] concluded that CSR is not related with companies' financial performances. Furthermore, Lopez et al [8] found a negative association between CSR and financial performance.

By undergoing the importance of CSR, Indian Government has now mandatory the CSR in all Central Public Sector Enterprises (CPSEs) in India. So as a part of CPSEs every Navaratna Companies are bound to do CSR activities. Though it has already seen that every Navaratna companies was doing CSR activities before coming the new Company Act 2013 and Department of Public Enterprises' (DPE) guideline except Mahanagar Telephone Nigam Limited as it was going through loss. As it is now mandatory, it is truly very important to see their financial position affecting by CSR or not, before the New Company Act and DPE guidelines as every Navaratna companies have to pay out more before they spent. So it is a high time to investigate how CSR does affects financial performance indicators of Navaratna companies.

LITERATURE REVIEW

In this section a brief review of literature on the relationship between corporate social responsibility and firms' financial performance are depicted. Also present the results and conclusions accounted by different authors about how the CSR affects the firms' financial performance of a business.

Orlitzky et al [4] examined the relationship between corporate social / environmental performance (CSP) and corporate financial performance (CFP) by conducting a meta- analysis of 52 studies yielding a total sample size of 33,878 observations. The meta-analysis result showed that there is a positive association between CSP and CFP. Harnandez and Martinek[10] argued that those firms are strategically engaged in social activities, they can increase private profit along with enhancing the firm's reputation, and generating profits by differentiating their products and attracting highly qualified personnel. Salewski and Zulch [11] examined the association between CSR and the extent of earnings management, the extent of accounting conservatism and the extent of quality of accruals. They found that CSR is positively associated with the degree of earning management and CSR is negatively associated with the degree of accounting conservatism and the accrual quality. Tsoutsoura[12] examines and tested the sign of the relationship between corporate social responsibility and financial performance using empirical methods by observing most of the S&P 500 firms and covering 1996-2000 years. The result showed a positive relationship between CSR and firm's financial performance and he argued that socially responsible corporate performances can give a series of bottom-line benefits to the firm. It tried to explain the performance evaluation by Steel Authority of India Ltd. (SAIL) by value added reporting, which is a part of financial reporting and which is a meaningful measures of corporate governance, from 2005-06 to 2009-2010 and also see

what method SAIL has been used for social reporting and social responsibility. He concluded that the generation of value- added was increasing during the five years due to increase of operational efficiency, productivity and market share by the company. Ghosh [13] studied nine companies (selected at randomly) to find any significant correlation between the investment for corporate social responsibility and the sales of those firms. She has used Pearson's correlation (2 tailed) test to study the relationship. She concluded that there is a positive correlation between the CSR investment and the sales of those firms. She suggested that every company specially MNC's needs to improve their CSR activities to have a greater market value, goodwill, profitability and she also remarked that every company should back something to environment and the society. Yadav and Gupta [9] examined the linkage of CSR initiatives and Return on Net Worth, of five private companies namely Tata Steel, RIL, Mahindra & Mahindra, Infosys and Larsen and Turbo for the five years (March 2010 to March 2014), by using Regression analysis and ANOVA. The result of this study showed that there is an insignificant relationship between CSR and RONW but it has a significant relationship with earnings per share. Based on cross sectional study, Gautam and Singh [14] examined 500 companies to observe the CSR policies of these companies and how they conducted these policies against global reporting initiative standards (GRIS). They founded that CSR policy, is now becoming comprehensive business strategy, which arises from firm's performance consideration and stakeholders' pressure. They suggested that business and CSR strategy is standing to one point, towards business and CSR integration across the company. Moharana [15] examined the CSR activities done by five Indian Nationalized banks namely Allahabad Bank, Andra Bank, Bank of Baroda, SBI and UCO Bank. She has founded that these banks are directly engaged in CSR activities mostly in the area of community welfare, rural development, women, education, and children. This study showed that CSR activities done by these banks are restricted within certain fields. She has given three suggestions for better CSR activities in these banks - First, Government must enhance and accelerate its involvement to CSR activities. Secondly, bank should develop a board for consulting the era of CSR. Lastly, media should enhance its interest to CSR and play a vital role for better implementation of CSR policies.

A considerable number of studies have been undertaken about how the CSR affects the firms' financial performance of a business. But in India, it is found that this issue is voiceless in case of Nabaratna companies and proposes a wide room for the strength and creates of this work. This study explores how CSR

affects the firms' financial performance using statistical analysis.

METHODOLOGY

The present research work purposively selects Nabaratna Central Public Sector Enterprises in India, e.g., Bharat Electronics limited, Bharat Petroleum Corporation limited, Container Corporation of India Limited, Engineers India Limited, Hindustan Aeronautics limited, Hindustan Petroleum Limited, National Aluminium Company Limited, National Building Construction Corporation Limited, NMDC Limited, Neyveli Lignite Corporation Limited, Oil India Limited, Power Finance Cor. Ltd, Power Grid Cor. Ltd., Rashtriya Ispat Nigam Limited, Rural Electrification Corporation Limited and Shipping Corporation of India Limited.

This research work is based on annual time series data obtained from their annual reports using internet sources for the period between 2009-10 and 2013-14. This study considers corporate social responsibility expenditures as a dependent variable and a few selected financial performance indicators as independent variables, namely, current ratio (CR), debt-asset ratio (DER), log of assets (LA), log of sales (LS), net profit margin (NPM), return on assets (ROA) and return on sales (ROS).

To test the association between corporate social responsibility and financial performance indicators, Pearson correlation and linear regression test methods have been utilized. To accomplish the intention, this study believes the following research hypothesis.

H₁: CSR has a significant relationship with liquidity.

H₂: CSR has an important connection with leverage.

H₃: CSR has a major association with fund's size.

H₄: CSR has a noteworthy association with firm's size.

H₅: CSR has a momentous affiliation with profitability.

EMPIRICAL RESULTS AND ANALYSIS

Results of correlation statistics

In most cases, correlation statistics formulates an endeavour to identify the scope and inclination of association between two variables. Pearson correlation prerequisite that the variables have the justification and consequence relationship, they have lofty amount of correlation between them.

Table 1 unveils the correlation between corporate social responsibility (CSR) and selected financial performance indicators. It divulges that CR is positively somewhat (0.60) associated with corporate social responsibility and it is statistically significant at 5% level. This indicates that CSR significantly affect the liquidity of the Nabaratna companies in India as well. Again, debt/asset ratio is meagerly positively associated (0.04) with corporate social responsibility but it is statistically insignificant at 5% level. This means corporate social responsibility does not affect significantly the financial leverage of the Nabaratna companies in India. Furthermore, the relationship between log of assets and CSR as well as log of sales and CSR of the Nabaratna companies under study are stumpy, which is not significant at 5% level. This indicates that corporate social responsibility does not influence greatly the fund's size and firm's size. It is very much important that corporate social responsibility influences three profitability indicators net profit margin and return on sales positively that are also not statistically significant.

Table-1: Correlation Statistics

	CR	CSR	DAR	LA	LS	NPM	ROA	ROS
CR	1.00							
CSR	0.60 (0.012)	1.00						
DAR	-0.34	0.04 (0.87)	1.00					
LA	-0.37	0.19 (0.48)	0.68	1.00				
LS	-0.36	0.19 (0.47)	0.70	0.99	1.00			
NPM	0.57	0.35 (0.19)	-0.88	-0.49	-0.50	1.00		
ROA	-0.22	0.27 (0.30)	-0.19	-0.45	-0.47	-0.04	1.00	
ROS	-0.34	0.04 (0.88)	0.99	0.68	0.70	-0.88	-0.19	1.00

Regression test results

To determine the cause and effect of the relationship between financial performance indicators and corporate social responsibility, this study exercises linear regression analysis. In case of multiple regression analysis, corporate social responsibility has been taken

as a dependent variable and financial performance indicators have been taken as independent variables. Then, the regression equation is:

$$CSR = a + b_1CR + b_2DER + b_3LA + b_4LS + b_5NPM + b_6ROA + b_7ROS + et$$

Table-2: Results of Multiple Regression Test

	Coefficient	Std. Error	t-Statistic	Prob.	VIF
Constant	1.35E-08	7.81E-09	1.727227	0.1224	
CR	0.200000	4.28E-10	4.67E+08	0.0000	273.5612
DAR	5.000000	3.26E-10	1.53E+10	0.0000	103.0084
LA	-1.15E-08	9.11E-09	-1.265771	0.2412	1.88874
LS	-1.000000	1.02E-08	-98356849	0.0000	2.14702
NPM	-1.000000	1.64E-10	-6.11E+09	0.0000	2.32220
ROA	-3.57E-13	1.36E-12	-0.263227	0.7990	1.99878
ROS	-2.200000	1.44E-10	-1.52E+10	0.0000	1.91247
R-squared	1.000000	R		1.000000	
Adjusted R-squared	1.000000				
F-statistic	1.49E+20	Durbin-Watson stat		2.477771	
Prob(F-statistic)	0.000000				

The upshot of the relationship between CSR (dependent variable) and selected financial performance indicators (independent variables) taken together and the joint impact of these relationship are given in table 2.

It is apparent from the table 2 that an increase in CR by one unit; the CSR increased by 0.20 unit that were statistically significant at 1 per cent level. When DAR is increased by one unit, the CSR is also increased by 5.00 units that are significant at 5% level. It indicates that the corporate social responsibility has been influenced momentarily by its independent variables. It is very important that LA, LS, NPM, ROA and ROS are significantly negatively related with corporate social responsibility, however, LA and ROA are not statistically significant at 5% level but LS, NPM and ROS are statistically significant at 1% level. These indicate that CSR expenditures are not helpful for fund's size, firm's size and profitability of the companies under study. Multiple correlations (1.00) are too high and unauthorized. It is furthermore evident from the value of R^2 and adjusted R^2 that 100 per cent of variation in CSR was accounted by the joint variation in independent variables, which is also unauthorized. VIF of CR and DAR is more than thumb rule that designates there is huge multicollinearity problem. Therefore, CR and DAR would be removed from the regression model. But Durbin-Watson statistics (2.48) points out those residuals were not serially interrelated. F statistics with profitability designates that the regression model is not absolutely fitted. An insignificant contradiction in corporate social responsibility could be the effect of the joint consequence acknowledged in this study and several other unexplained variables.

After removing CR and DAR, the fresh regression model is:

$$CSR = a + b_1LA + b_2LS + b_3NPM + b_4ROA + b_5ROS + et$$

The effect of the relationship between CSR (dependent variable) and final financial performance indicators (independent variables) taken together and the joint impact of these relationship are given in table 3.

It is evident from the table 3 that an increase in LA by one unit; the CSR increased by 48.80 units that are not statistically significant at 5 per cent level. When LS is increased by one unit, the CSR is increased by 55.04 units that are also insignificant at 5% level. It indicates that the corporate social responsibility has not been influenced remarkably by its independent variables. When NPM is increased by one unit, CSR is increased by 1.62 units, which is significant at 1% level. Furthermore, an increased of ROA by one unit, CSR has been meagerly increased by 0.0004 units that are also insignificant at 5% level. However, when ROS is increased by one unit, CSR is meagerly increased by 0.016 units and it is statistically significant at 1% level. These indicate that CSR expenditures are helpful but not very much for profitability of the companies under study. Multiple correlations (0.74) are high. It is moreover obvious from the value of R^2 that 69.86 per cent of variation in CSR was accounted by the joint variation in independent variables. An adjusted R^2 show that 54.79 per cent of the variations in the CSR are explained by the independent variables, that discloses actually line of estimates among the variables. VIF was less than 2 or equal to 2 that authorizes there

are no multicollinearity problem. Furthermore Durbin-Watson statistics (2.0948) points out those residuals were not serially interrelated. F statistics with profitability designates that the regression model is

enormously fitted. A negligible variability in corporate social responsibility could be the effect of the widespread consequence established in this study and reasonably many of other unexplained variables.

Table - 3: Results of Multiple Regression Test

	Coefficient	Std. Error	t-Statistic	Prob.	VIF
Constant	49.22781	33.83531	-1.454924	0.1764	
LA	48.80471	46.77482	1.043397	0.3213	1.74325
LS	55.03731	52.79667	-1.042439	0.3218	1.94201
NPM	1.621756	0.364156	4.453466	0.0012	2.00012
ROA	0.000368	0.007328	-0.050220	0.9609	1.98748
ROS	0.015821	0.004727	3.347189	0.0074	1.89365
R-squared	0.698607	R		0.743268	
Adjusted R-squared	0.547911				
F-statistic	4.635860	Durbin-Watson stat		2.094793	
Prob(F-statistic)	0.018927				

CONCLUSIONS

The vital conclusion of the study is that financial performance indicators are positively and negatively associated with corporate social responsibility in case of Nabaratna companies in India. Correlation statistics indicate that all the financial performance indicators, that is, liquidity, financial leverage, fund's size, firm's size, net profit margin and return on sales are related stumpy positively with corporate social responsibility but return on assets are related inversely with corporate social responsibility where all the results are not statistically significant, which indicates that corporate social responsibility does not affect financial performance indicators remarkably. On the other hand multiple regression test results illustrate that funds size and firm's size are influenced by corporate social responsibility whereas profitability indicators are not influenced significantly by corporate social responsibility expenditures.

These conclusions are immensely significant for the Indian corporate sector because when corporate social responsibility expenditures are increased, funds size and firm's size have been influenced but profitability indicators have not been responded by corporate social responsibility expenditures. This is a pessimistic signal for the Nabaratna companies in India.

This study is not free of charge from sure precincts for the reason that the results have not been computed separately and only five years period have been considered here. Consequently, there is an enormous scope for further research. This study may be improved if periods of the study and number of variables are increased. Also separate test results for individual companies might be considered.

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