

Corporate social responsibility and financial performance linkage evidence from Indian companies

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Abstract

This study aims at examining the relationship between corporate social responsibility (CSR) and business performance of Indian companies. Business performance is measured using both accounting and market based measures. Accounting based measures are ROA (return on assets), ROE (return on equity) and sales whereas market based measures are PE ratio and Beta. CSR is measured by ESG (environment, social & governance) scores developed by CRISIL India Ltd. Data is obtained for a sample of 100 companies classified into two sets; first represent in the designated socially responsible companies, called as “experiment group” and second the rest, called as “control group”. Data for the first portfolio corresponds to top 50 companies having highest ESG scores. Second portfolio represents bottom 50 companies having lowest ESG scores. Data is analysed using t-test to find out if there is any statistically significant difference between business performance of experiment group and control group. The results revealed that sales of the experiment group i.e. companies having high ESG score is higher as compared to that of the control group i.e. companies having low ESG score, while ROA, ROE, PE ratio and BETA of experiment group is not significantly different from that of control group.

Keywords: CSR (corporate social responsibility), business performance, ESG score

Introduction

The Indian business has traditionally been socially responsible, but the subject of corporate social responsibility has evolved during last about seven decades from simple philanthropic activities to integrating the interest of the business with that of the communities in which business operates. (Ministry of Corporate Affairs, Government of India, 2009). Genesis of Corporate Social Responsibility, lies in the ‘stake-holder theory’, which views corporate as socio-economic entities. (Vasal, 2009). Stakeholders are any group or individuals who can affect or are affected by the achievement of organisation’s objectives. (Freeman, 1984). These can include: employees, customers, suppliers, investors, community organizations, joint venture partners, etc. Businesses are an integral part of society, and have a critical and active role to play in the sustenance and improvement of healthy ecosystems, in fostering social inclusiveness and equity, and in upholding the essentials of ethical practices and good governance. Businesses exist at the pleasure of society and their behaviour and methods of operation must fall within the guidelines set by society; and businesses act as moral agents within society.” (Bowen, 1953). In considering the activities undertaken by a firm, different stakeholders can have differing opinions on what it means to be ‘socially responsible’.

According to Friedman (1970) the corporation is an economic institution and thus should specialize in the economic sphere. In his view business has only one social responsibility that is to maximize the profits of its owners. On the other hand, amongst others, Davis (1973) opines that , “the firm's consideration of, and response to, issues beyond the narrow economic, technical, and legal requirements of the firm is to accomplish social benefits along with the traditional economic gains which the firm seeks”. McWilliams and Siegel, (2001) observes, CSR to be a set of actions that appear to further some social good, beyond the interests of the firm and that which is required by law. Thus, what can be conceived as “social responsibility” can be viewed from simply maximization of profits, to satisfaction of stakeholders’ social needs, or fulfillment of social contractual obligations, or fulfillment of a firm’s needs, achievement of a social equilibrium or caring for profit, people and planet.

Impact of all business strategies and actions is reflected in business performance. Corporate social responsibility as an important element of business strategy is therefore expected to influence business performance. Business performance is the ultimate goal of every economic entity. Business performance is often measured in terms of accounting measures as well as market performance measures. With regard to business performance measurement, many empirical studies(Alexander and Buchholz, 1978; Vance, S. C., 1975), have used market measures such as beta, expected market valuation(EMV), growth in share price, etc., others put forth accounting measures (Waddock and Graves 1997; Cochran and Wood 1984)such as return on equity(ROE),return on total assets(ROTA), earnings per share(EPS), return on capital employed (ROCE) etc. and some adopt both of these (McGuire, J.B.1988). Accounting measures capture the historical aspects of a firm’s performance whereas market measures are forward looking. In the current study focus is on assessing business performance in terms of both accounting as well as market measures.

The strategic challenge to businesses of today is how to become socially and environmentally sustainable alongside immediate business issues of survival, competition and profitability. Realizing the importance of undertaking socially challenged activities and at the same time reporting it quantitatively in the corporate reports, the rising concern of organizations is to find whether their enhanced social performances has an impact on financial performance and if yes then whether positively or negatively. Viewing CSR as an important element of business strategy, a relevant question is - does a company’s performance in sustainability matters has a material impact on its business prospects? A lot of studies have been undertaken till date (Wright and Ferris, 1997; Balbanis,1998; Teoh, 1999; McWilliams, 2000; Mill, 2006; Rettab, 2009; Vasal, 2009) to find the relationship between corporate social responsibility and business performance, still the picture remains inconclusive and thus provides an adequate scope for further research.

This study adds to the empirical literature on the relation between CSR and business performance by providing a statistical analysis using multi-dimensional measures. This study

aims at examining the relationship between corporate social responsibility and business performance of companies in India. ESG scores are used to measure corporate social responsibility and accounting as well as marketing measures is used to measure business performance.

Conceptual background – CSR in India

Corporate social responsibility in India as represented by the contributions extended by companies towards the society through its core business activities, its social investment and philanthropic programmes and its engagement in public policy, in recent years has become a fundamental business practice and has gained much attention from chief executives, chairmen, boards of directors and executive management teams. The concept of corporate social responsibility in large industrial groups has occupied a prominent place in their policy making and strategic decision making. Corporate like Tata Group, ITC, Indian Oil Corporation, to name a few, have been involved in serving the community ever since their inception. Traditionally, CSR existed only as a philanthropic activity which largely revolved around activities like donations, planting trees, community development, setting up schools and hospitals, and so on. These are important components, but they are not self-sustainable. Hence, the need of adopting sustainable practices that in addition to bringing goodwill helps a company remain profitable is the need of the hour. Today, CSR in India has gone beyond merely charity and donations, rather it is considered as an integral part of corporate decision making. In today's corporate era companies have CSR teams that device specific policies, strategies, goals and budgets for their round the year CSR programs.

Literature review

Several studies have been conducted to find the relationship between corporate social responsibility and business performance both within India and overseas. Regarding the link between social responsibility and business performance, existing literature expresses varying, and at times contradictory findings on the subject. Friedman (1970), on one extreme asserts that a business's primary responsibility is to make money, and that the only interests that matter when making managerial decisions are those of the shareholders. Preston espouses an opposing viewpoint, arguing that social issues can be just as important as market factors in determining long-run success, and thus deserve the same attention and rigorous analysis that have been devoted in the past to the market environment. Some researchers argue that socially responsible initiatives create additional costs that may put a firm at an economic disadvantage compared to less socially responsible organizations whereas some researchers opines that a firm might benefit from CSR because its environmentally conscious decisions are often tied to lower waste and therefore lower costs and some have found no relationship between CSR and firm performance.

On one hand there are studies (Moscowitz(1972),Verschoor,(1998), McWilliams,.A(2000), Iamandi.I.E,(2007), Lin,C.H.(2009)) which say that socially responsible corporations obtain internal benefits that influence business performance i.e. confirming a positive correlation between corporate social responsibility and business performance. On the other hand, certain researches (Friedman,(1970) , Ullmann,(1985), McGuire.,(1988)), concluded that there is an adverse relationship between CSR and business performance due to the additional costs associated with high investments in social responsibility. Some of the studies (Aupperle (1985) have negated the presence of any correlation between the Corporate social responsibility and business performance. Thus, findings of the previous studies have been inconclusive about the relationship between the two variables i.e. corporate social responsibility and business performance, whether it remains negative, positive or unrelated.

Research Methodology

Data and Sampling Period

The study used secondary sources for data collection. Data was obtained for a sample of 100 companies classified into two sets; first representing the designated socially responsible companies and second the rest. Data for the first portfolio corresponds to top 50 companies having highest ESG scores (ESG scores are the quantitative ranking assigned every year by CRISIL India Ltd. to top 500 Indian companies by total market capitalization that are listed on National Stock Exchange of India Ltd. (NSE)). This portfolio is designated as “experiment group.” Second portfolio represents bottom 50 companies having lowest ESG scores. This portfolio is designated as “control group”. Data for both the portfolios was collected for a period of five years from 2008 to 2012. The data relating to business performance was collected from Prowess 12.1, a CMIE database and data related to corporate social responsibility was taken from CRISIL India ltd.

Variables

In the study, the following variables were used while formulating and testing the hypotheses:

Dependent Variables

- Return on Total Assets: Return on Total Assets is defined as the ratio of profit before taxes and interest to total assets. (In percentage)
- Return on Equity: Return on Equity is defined as the ratio of earnings after taxes to Common Equity holder funds.
- Beta : A measure of systematic risk
- Price earnings (P/E) ratio: It is defined as the ratio of market price of share divided by earnings per share.

Independent Variable

Corporate social responsibility is the independent variable. It is measured using the ESG (environment, social & governance) score. ESG score is a quantitative ranking assigned by CRISIL India Ltd. based on three factors – transparency and disclosure on corporate governance, environment, and social governance as per the company's published information. It is done for the top 500 Indian companies by total market capitalization every year, that are listed on National Stock Exchange of India Ltd. (NSE). For the purpose of this study, data related to top 50 and bottom 50 companies (having highest and lowest ESG scores) is used.

Hypotheses Development

Based on the above review of literature, following are the null hypotheses to be tested:-

H₀: There is no statistically significant difference between sales of companies of experiment group and control group.

H₁: There is no statistically significant difference between Return on Total Assets (ROA) of companies of experiment group and control group.

H₂: There is no statistically significant difference between Return on Equity (ROE) of companies of experiment group and control group.

H₃: There is no statistically significant difference between the price earnings ratio of the experiment group and control group.

H₄: There is no statistically significant difference between the beta of the experiment group and control group.

Results and Discussion

Above stated hypotheses were tested using parametric test - independent sample means two tail t-test. The data set for each dependent variable was checked for outliers and outliers i.e. values beyond 3 times standard deviation was removed. T-test was applied to both the data sets i.e. before and after removing outliers. There was no significant difference in the outcomes of the two scenarios (before and after outliers) and thus original data was retained. Analysis was carried out for each year and for each business performance measure separately. Thus, for each year a total of five tests were carried out and in total 25 tests were run. For the year 2008, descriptive statistics (Table 1.1) shows that all mean business performance measures i.e. ROA, ROE, sales, PE ratio are higher for companies having high ESG scores. Beta being a measure of risk is lesser for high CSR companies and thus reflecting the presence of relationship between CSR and business performance.

Looking at the t-test statistics(Table1.2), we find that only sales(p-value 0.002) are statistically significantly different for the two groups i.e. high ESG score group and low ESG score group. Sales of high CSR companies is higher than sales of low CSR companies. This indicates that CSR has a positive impact on revenue generation.

Thus for the year 2008 null hypothesis 1 is rejected and null hypothesis 2to 5 is not rejected. In the year 2009 (table2.1) also mean ROA, ROE and sales are higher for the high CSR group. Mean P/E ratio in this year is lower for high CSR companies than for low CSR companies. Mean Beta is lower for high CSR companies than for low CSR companies. T-test (table 2.2) in this year depicts that sales (p value -0.003) are statistically significantly different for the high CSR and low CSR group of companies. Thus, in this year also CSR has positively affected the revenue generation of the companies. The year 2010 shows the same picture as was in the year 2008 i.e. all mean business performance measures(table 3.1) viz. ROA, ROE, sales and PE ratio are higher for companies having high ESG score as compared to the companies having low ESG score. Mean beta is lower for high CSR companies.

In this year also sales (table3.2) only show a statistically significant difference between the two groups i.e. high CSR and low CSR group. The year 2011 shows a variation from the previous years. In this year, (table 4.1) mean ROA and ROE are lower for the high CSR companies as compared to that of low CSR companies. Mean sales and PE ratio continue with the previous year's trend and are higher for high CSR company group. Average Beta in this year is almost same for the two groups; none of the variables (table 4.2) are statistically significantly different for the two groups. Year 2012 also reflects the same scenario as that in the earlier previous years i.e. all average business performance measures (table 5.1) viz. ROA, ROE, sales and PE ratio are higher for experiment group than control group. Mean beta is lower for high CSR companies. In this year also only sales (table5.2) show a statistically significant difference between the two groups i.e. high CSR and low CSR group.

Thus, we can say that on an average ROA, ROE, sales and PE are higher for high CSR group for all the years with the exception of ROA and ROE for the year 2011. Similarly beta, on an average shows a lower value for high CSR group for all the years. Sales is found to be statistically significantly different for the two groups viz. high CSR group and low CSR group for the all the five years with the exception of the year 2011. Thus, from this empirical analysis one can conclude that revenue generation is positively affected by CSR activities of an organisation. All analysis is carried out at 5% level of significance.

Conclusion and Scope for Further Research

In the current study attempt has been made to answer two basic questions: first, is there any relationship between CSR and business performance and second if yes then what is the

nature of relationship. The findings of the study do reveal that there is a relationship between corporate social responsibility and business performance but it cannot be said conclusively that there is a positive relationship. Outcomes reflected that revenue generation of companies with high ESG scores is higher than those having lower ESG scores. For some years ROA also reflected a positive relationship.

The paper is concluded with discussions on some limitations of this study that need to be addressed in future studies. First, this paper focuses on relating CSR to financial performance measures which restricts the arena of study. One could always find out the relationship between CSR and non-financial measures also. Second, as a measurement of CSR, ESG score developed by CRISIL India Ltd. are used, no doubt it is the reliable measure of CSR, and there is a room for further improvement in the way firms are selected and in the process whereby qualitative and quantitative assessments determine the final score. Finally, the 5-year period this study covers may not be long enough to generalize the results.

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Appendix

Table 1.1 Group Statistics-2008

group	N	Mean	Std. Deviation
Roa 1.00	50	12.8808	9.63958
2.00	49	11.9449	10.49303
Roe 1.00	50	24.6646	14.94461
2.00	49	24.2986	18.82857
sales 1.00	44	221863.3409	450697.08686
2.00	48	14612.3979	26273.71284
Pe 1.00	50	17.7034	20.53216
2.00	49	15.8208	75.52319
Beta 1.00	50	.9482	.24634
2.00	36	1.0222	.28351
Esg 1.00	50	49.4040	6.08528
2.00	50	25.7120	1.65081

Table 1.2 Independent Samples Test -2008

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Roa	.020	.887	.462	97	.645
Roe	1.096	.298	.107	97	.915
Sales	18.776	.000	3.182	90	.002
Pe	4.020	.048	.170	97	.865
Beta	.745	.390	-1.290	84	.201
Esg	29.888	.000	26.570	98	.000

Table 2.1 Group Statistics - 2009

group	N	Mean	Std. Deviation
Roa 1.00	49	9.9935	9.14274
2.00	50	8.9114	14.30691
Roe 1.00	49	20.2641	21.65610
2.00	49	8.8541	51.61563
sales 1.00	42	262906.7333	556790.33849
2.00	49	17565.7551	27789.09841
Pe 1.00	49	11.8702	9.04769
2.00	50	17.2682	44.11892
Beta 1.00	49	.9749	.26996
2.00	44	1.0682	.34977
Esg 1.00	50	51.4420	6.78973
2.00	50	26.4760	1.53245

Table 2.2 Independent Samples Test - 2009

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Roa	.913	.342	.447	97	.656
Roe	.862	.355	1.427	96	.157
Sales	17.498	.000	3.083	89	.003
Pe	10.619	.002	-.839	97	.403
Beta	1.047	.309	-1.448	91	.151
Esg	43.039	.000	25.363	98	.000

Table 3.1 Group Statistics - 2010

group	N	Mean	Std. Deviation
Roa 1.00	50	11.5416	8.32048
2.00	50	9.0306	15.27921
Roe 1.00	50	20.8192	14.33493
2.00	49	11.6800	29.62228
sales 1.00	44	252746.3795	505498.04240
2.00	47	20726.0043	42466.54760
Pe 1.00	50	20.1602	14.94502
2.00	50	20.1248	91.64673
Beta 1.00	49	.9578	.31028
2.00	44	1.1784	.60209
Esg 1.00	50	51.4760	6.51061
2.00	50	27.3320	1.53655

Table3.2 Independent Samples Test – 2010

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Roa	5.614	.020	1.021	98	.310
Roe	4.448	.038	1.960	97	.053
Sales	15.037	.000	3.136	89	.002
Pe	6.830	.010	.003	98	.998
Beta	4.055	.047	-2.254	91	.027
Esg	59.696	.000	25.521	98	.000

Table 4.1 Group Statistics - 2011

	group	N	Mean	Std. Deviation
Roa	1	50	7.7710	8.97579
	2	50	9.3970	10.62575
Roe	1	49	13.0002	17.55129
	2	49	14.1886	20.10494
sales	1	44	151743.4227	531618.26864
	2	45	54531.1311	96592.00868
Pe	1	50	28.8744	86.00223
	2	50	28.2512	49.67611
Beta	1	47	1.0381	.32928
	2	46	1.0487	.41611
Esg	1	50	55.0440	6.20188
	2	50	28.1100	1.74113

Table 4.2 Independent Samples Test - 2011

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Roa	1.830	.179	-.827	98	.410
Roe	.666	.417	-.312	96	.756
Sales	5.150	.026	1.207	87	.231
Pe	1.039	.311	.044	98	.965
Beta	1.821	.181	-.137	91	.892
Esg	52.356	.000	29.566	98	.000

Table 5.1 Group Statistics - 2012

GROUP		N	Mean	Std. Deviation
ROA	TOP50 ESG	50	11.0482	11.26354
	BOTTOM 50 ESG	50	7.6286	11.47528
ROE	TOP50 ESG	50	19.2456	24.53576
	BOTTOM 50 ESG	48	12.0331	17.33420
SALES	TOP50 ESG	44	441625.5477	862695.03461
	BOTTOM 50 ESG	50	31038.7900	61269.64755
PE	TOP50 ESG	50	14.3926	11.96912
	BOTTOM 50 ESG	50	-128.1400	1096.37001
BETA	TOP50 ESG	50	.9524	.35520
	BOTTOM 50 ESG	37	1.0878	.35759
ESG	TOP50 ESG	50	56.7420	5.83806
	BOTTOM 50 ESG	50	29.2340	1.97128

Table 5.2 Independent Samples Test - 2012

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
ROA	.635	.428	1.504	98	.136
ROE	.470	.495	1.674	96	.097
SALES	18.346	.000	3.358	92	.001
PE	3.951	.050	.919	98	.360
BETA	.000	.984	-1.753	85	.083
ESG	45.254	.000	31.567	98	.000