Evaluating the Impact of Sustainability Reporting on Financial Performance of Selected Indian Companies

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ABSTRACT

In today's world merely being a profitable firm is not enough. Transparency and accountability also are not sufficient to become a successful firm. Stakeholders expect the firms to be sustainable. "Sustainable" more commonly mean meeting the needs of the present generation without compromising for the future generation. With the raising measures towards sustainability, stakeholders and company itself has recognised the importance of sustainability. This paper is an attempt to study the impact of sustainability reporting on the Firm's profitability. The major issue is to examine the extent to which the sustainability measures of the firm affect its profitability. Global Reporting Initiative (GRI) guidelines help to identify the sustainability measures as overall sustainability reporting scores (OSR) and the scores of its four key variables viz. community (COM), employee (EMP), environment (EMP) and governance (GOV). This study thus attempts to evaluate the impact of these scores on the profitability of the selected firms (as measured by ROA, ROE, ROCE, PBT and GTA) using a sample of 103 companies listed on NSE and reporting on sustainability. Period of the study is of six years from 2009-2010 to 2014-15 and Multiple Regression Analysis has been used to evaluate the impact of sustainability on firm's profitability and test the significance of the sustainability components thereby. The study concludes that overall sustainability reporting practices have a significant positive impact on firm's profitability to some

extent. Thus the firms must take serious steps towards adequate adoption and reporting of the sustainability measures to improve their profitability.

Key Words: Sustainability Reporting, Global Reporting Initiative, Firm's Profitability, National Stock Exchange (NSE)

1. INTRODUCTION

In today's world merely being profitable is not enough. Transparency and accountability also are not enough. Stakeholders expect the firms to be sustainable. Stakeholders expect the firms to be sustainable. "Sustainable" more commonly means meeting the needs of the present generation without compromising for the future generation. With the raising measures towards sustainability stakeholders and company itself has recognised the importance of sustainability. They expect the firms to be environment friendly, have good governance, socially responsible; especially from big firms as they have huge resources. Companies have to embrace sustainability to enhance them and meet the expectations of the stakeholders. By reporting transparently and with accountability, organizations can increase the trust that stakeholders have in them. It is believed that sustainability reporting enhances business performance and brings along many advantages to the firm. But how far this is true? Is a firm engaged in sustainability really benefiting itself and the society in the real sense; or is it merely following the compulsions. This study is a humble attempt to explore and answer such questions. Global Reporting Initiatives (GRI-a non-profit organisation) provides sustainability guidance, also known as triple-bottom line reporting. It is the most prevalent guideline in the world. Its framework enables to measure and report on four key areas of sustainability- environmental, social, economicand governanceperformance. This paper is an attempt to study the impact of sustainability reporting (measured by overall sustainability reporting scores(OSR) and its four key variables (viz. community (COM), employee (EMP), environment (ENV) and governance (GOV)) on the firm's profitability (as measured by ROA, ROE, ROCE, PBT and GTA), using a sample of 103 companies listed on NSE and reports on sustainability (OSR, COM, EMP, ENV, GOV). Period of the study is of six years from 2009-2010 to 2014-15. Multiple regression analysis has been used to test the significance and impact of sustainability on firm's profitability. The study concludes that overall sustainability has impact on firm's profitability to some extent.

2. LITERATURE REVIEW

Bhatia and Tuli (2014) tried to study and assess the extent and level of sustainability reporting in India. They concluded saying that Indian companies are recognising the importance of sustainability reporting. Their results showed an optimistic picture regarding sustainability. Burhan and Rahmanti (2012) in their research attempted to examine the relationship between sustainability reporting as a whole and each of the elements of sustainability reporting with company performance. They measured the Sustainability variables by means of disclosure index, using Global Reporting Initiative (GRI) as the basis of calculating the index score. They used Return on Asset (ROA) as a measure of economic performance. Their result shows that sustainability reporting influences company performance. However, partially, only social performance disclosure influences the company performance. Eccles R. et. al. (2013) has investigated the effect of corporate sustainability on organizational processes and performance. They provided evidence that High Sustainability companies significantly outperform over the long-term, both in terms of stock market as well as accounting performance. Godha and Jain (2015) reviewed sustainability reporting and its benefits for the corporates. They examined the development in the Indian regulatory environment for sustainability reporting. Their findings reveal that the development of sustainability reporting is maturing in India. Indian companies are increasingly realizing that they have much to lose by not following sustainability reporting. Goyal Neeraj (2014) has attempted to find out level of disclosures among Indian companies, by selecting companies on BSE 500 index from different five sectors. He concluded saying that sustainability reporting is gaining more importance; therefore a framework is required to give space to the items ignored. Priyanka Aggarwal (2013) has conducted a research to find whether sustainable companies are more profitable. She analysed the impact of overall sustainability as well as separately analyzed the impact of four key components of sustainability (i.e. Community, Employees, Environment and Governance) on financial performance. Her research found no significant association between overall sustainability rating and financial performance. Weber et. al. (2005) on the basis of a sample of 100 companies and using binary logistic regression has studied the relation between sustainability measures and financial performance of the firms. They used the GRI framework for their study. His results demonstrated that companies performing well on GRI indicators also perform well financially.

3. RESEARCH METHODOLOGY:

Research Questions:

The present study attempts to answer the following questions.

- Are sustainable firms more profitable?
- Does investing in sustainability bring any financial benefit to the firms?

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- Does investing in sustainability bring any non-financial benefit to the firms?
- Should the firms invest in sustainability?

Objectives

On the basis of the above questions and the literature review, the following are the major objectives of the present study:

- > To study the impact of Sustainability on Firm's profitability of the selected listed Indian companies
- > To study the impact of Overall Sustainability and Firm Size on Firm's profitability of the selected listed Indian companies
- > To study the impact of the four key sustainability (Community, Employees, Environmental and Governance) on Firm's profitability of the selected listed Indian companies

Hypotheses

With reference to the review of literature and the objectives of the study, the following Hypothesis were framed:

- **Hypothesis 1:**There is a positive impact of Overall sustainability performance on financial performance of firms.
- **Hypothesis 2:** There is a positive impact of Community-related performance on financial performance of firms.
- **Hypothesis 3:**There is a positive impact of Employees-related performance of company on financial performance of firms.
- **Hypothesis 4:**There is a positive impact of Environment-related performance on financial performance of firms.
- **Hypothesis 5:**There is a positive impact of Governance-related performance on financial performance of firms.

Sampling Design:

This study aims to evaluate the impact of sustainability reporting on the financial performance of the firm. For the purpose of the study companies on CSRHub were chosen. All these companies are listed on NSE as well as BSE. Out of the companies on CSRHub, only those companies were selected which reported completely on all sustainability criteria viz. Overall, Employee, Environment, Community, Governance; and also whose financial data for all six years was available. The final sample size stood to 103. The research is based on the secondary data of publically listed companies. The financial data was obtained from the ACE Knowledge, while the sustainability data

was obtained from CSRHub; as it uses GRI framework. The period of study considered comprises of six years from 2009-10 to 2014-15. Correlation Analysis and Cross-sectional Multiple Regression Analysis have been carried out using the averages of all the considered variables over these six years.

Selection of Variables

The variables used to measure the financial performance of the firm in the study were –Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE), Profit before Tax (PBT), Growth in Total Assets (GTA). These variables were taken as dependent variables. The variables used to measure the sustainability performance of firms were –Overall Sustainability Rating (OSR), Community Performance Rating (COM), Employees Performance Rating (EMP), Environmental Performance Rating (ENV) and Governance Performance Rating (GOV). Size of firm (SIZE) has been controlled as they are likely to be profitable and have the resources to invest in sustainability. Size of firms is used by taking natural log of total assets.

Construction of Regression Models:

Regression analysis was run using the data so collected in order to identify the variable having the most significant impact. Two main Regression models were developed for the purpose of the study. The first model comprises of five sub models with five different profitability measures as dependent variables examines the impact of sustainability as a whole on firm's profitability, controlling the size of the firm. While in the second model the four components of sustainability are separately judged for their impact on firm's profitability, controlling the size of the firm using five sub models for five different profitability measures. These models are as under:

$$ROA = \alpha + \beta_1 OSR + \beta_2 SIZE + \varepsilon$$
 (1)

$$ROE = \alpha + \beta_1 OSR + \beta_2 SIZE + \varepsilon$$
 (2)

$$ROCE = \alpha + \beta_1 OSR + \beta_2 SIZE + \varepsilon$$
 (3)

$$PBT = \alpha + \beta_{1}OSR + \beta_{2}SIZE + \varepsilon$$
 (4)

$$GTA = \alpha + \beta_1 OSR + \beta_2 SIZE + \varepsilon$$
 (5)

Model 2:

$$ROA = \alpha + \beta_1 COM + \beta_2 EMP + \beta_3 ENV + \beta_4 GOV + \beta_5 SIZE + \varepsilon$$
 (6)

$$ROE = \alpha + \beta_{1}COM + \beta_{2}EMP + \beta_{3}ENV + \beta_{4}GOV + \beta_{5}SIZE + \varepsilon$$
 (7)

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ROCE =
$$\alpha + \beta_1 COM + \beta_2 EMP + \beta_3 ENV + \beta_4 GOV + \beta_5 SIZE + \epsilon$$
 (8)

$$PBT = \alpha + \beta_1 COM + \beta_2 EMP + \beta_3 ENV + \beta_4 GOV + \beta_5 SIZE + \varepsilon$$
 (9)

$$GTA = \alpha + \beta_1 COM + \beta_2 EMP + \beta_3 ENV + \beta_4 GOV + \beta_5 SIZE + \varepsilon$$
 (10)

Where:

'α' is constant

 β_i is the coefficient of the ith independent variable.

 ϵ is the error term of the regression

ROA- Return on Assets= Net Income/ Average Total Assets

ROE- Return on Equity= Net Income/Shareholder's Equity

ROCE- Return on Capital Employed= Earnings before Interest and Tax (EBIT) / Capital Employed

PBT- Profit before Tax

GTA- Growth in Total Assets = Current total assets - previous total assets/ previous total assets

OSR- Overall Sustainability Rating

COM- Community Performance Rating

EMP-Employees Performance Rating

ENV-Environmental Performance Rating

GOV-Governance Performance Rating

SIZE-Size of firm (taken as natural log of total assets)

*The sustainability variables (OSR, COM, EMP, ENV and GOV) are directly taken from CSR Hub

4. EMPIRICAL RESULTS

Descriptive Statistics:

Table 1 below shows Descriptive Statistics for the variables under study:

Table 1: Descriptive Statistics

Variable	N	Mean	Std. Deviation	C.V.
ROA (%)	103	8.1273	8.09244	99.57
ROE (%)	103	20.3770	21.30952	104.57
ROCE (%)	103	20.8165	19.95477	95.86
PBT (in cr.)	103	3493.7050	4943.95143	141.51
GTA (%)	103	0.2353	.61624	261.89
OSR (%)	103	57.6990	6.13226	10.62
COM (%)	103	55.3981	8.39507	15.15
EMP (%)	103	63.0680	8.85976	14.04
ENV (%)	103	59.2233	9.38912	15.85
GOV (%)	103	52.3883	8.77411	16.74
SIZE (Natural log of TA)	103	10.3005	1.47672	14.33

The mean of OSR is 57.6990, which is more than 50%, also the four variables of sustainability COM, EMP, ENV and GOV have their mean value above 50%. It indicates that Indian companies have started recognising and reporting on sustainability. Among the four sustainability variable employees sustainability practice contributes most to overall sustainability.

The CV of OSR is the least (10.62); it shows that the distribution of OSR is the most uniform.

Correlation Analysis

Table 2 shows the correlations between different variables under study.

Table 2 Correlations

	ROA	ROE	ROCE	PBT	GTA	OSR	COM	EMP	ENV	GO V	SIZ E
ROA	1										
ROE	0.599(**	1									
ROC E	0.830(**	0.726(**	1								
PBT	0.195(*)	0.064	0.125	1							
GTA	-0.048	-0.073	-0.060	-0.087	1						
OSR	0.171	-0.028	0.187	0.138	- 0.01 8	1					
COM	0.237(*)	0.120	0.234(*)	0.121	0.02	0.744(**	1				
EMP	0.084	-0.054	0.058	0.120	0.01	0.693(**	0.583(**	1			
ENV	0.142	-0.074	0.153	0.178	0.06 2	0.746(**	0.320(**	0.298(**	1		
GOV	0.008	-0.023	0.066	-0.108	0.01 6	0.520(**	0.293(**	0.150	0.11 5	1	
SIZE	- 0.447(**)	- 0.296(**)	0.333(**	0.535(**	0.12 9	0.130	0.128	0.142	0.12 9	- 0.07 9	1

^{**} Correlation is significant at the 0.01 level (2-tailed).

Table 2 indicates that overall sustainability and profitability are not highly correlated as their values are not more than 0.5. Also the four sustainability variables are not highly correlated with profitability, except community related sustainability variable to some extent.

Multiple Linear Regression Analysis:

Table 3 shows the regression analysis for the five sub models of Model-1 by taking ROA, ROE, ROCE, PBT and GTA as dependent variables respectively.

Table 3: Multiple Regression Analysis for Model-1

^{*} Correlation is significant at the 0.05 level (2-tailed).

Variables	Beta coefficient for OSR β_i	p-value	\mathbb{R}^2	F	p-value of F
ROA	0.233*	0.009	0.253	16.923*	0.000
ROE	0.010	0.914	0.087	4.794*	0.010
ROCE	0.234*	0.013	0.165	9.873*	0.000
PBT	0.070	0.412	0.291	20.500*	0.000
GTA	-0.036	0.723	0.018	0.909	0.406

^{*} Coefficient is significant at the 0.05 level (2-tailed).

It is observed from Tables 3 that Overall sustainability reporting has significant impact on ROA and ROCE; as their p values are less than 0.05. This indicates that OSR affects profitability to some extent.

Model 2:

Table-4 below summarizes the results of Regression Analysis for the five sub models of Model-2

Particulars ROA **ROE** ROCE **PBT GTA** Beta coefficient for COM 0.332* 0.300* 0.317* 0.049 0.022 β 1 p-value for COM 0.003 0.015 0.008 0.657 0.865 Beta coefficient for EMP -0.0056 -0.146 -0.105 0.001 0.003 β2 p-value for EMP 0.592 0.215 0.352 0.989 0.980 Beta coefficient for ENV 0.134 -0.075 0.138 0.108 -0.091 β3 0.139 0.459 0.398 p-value for ENV 0.155 0.238 Beta coefficient for GOV -0.136 -0.105 -0.057 0-.095 0.031 β4 p-value for GOV 0.126 0.293 0.551 0.290 0.773 0.144 0.212 0.307 0.025 \mathbf{R}^2 0.319 9.100* 3.266* 8.577* 5.232* 0.490* 0.000Significance of F 0.000 0.009 0.000 0.783

Table 4: Multiple Regression Analysis for Model-2

It is observed from Tables 4 that only the community related sustainability variable has significant impact on ROA, ROE and ROCE; the remaining three sustainability variables have no significant impact on firm's profitability, as their p values are more than 0.05.

5. FINDINGS:

The major finding of the study can be summarized as follows:

- ➤ Indian companies have recognized the importance of sustainability reporting and the major companies are reporting on it.
- > Overall sustainability has impact on firm's profitability to some extent.
- Community related sustainability reporting has a significant impact on profitability.

^{*} Coefficient is significant at the 0.05 level (2-tailed).

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- > Employee related sustainability reporting, Environment related sustainability reporting, and Governance related sustainability reporting has no impact on profitability.
- > Out of the four key sustainability variables community variable has a major contribution to the profitability of the firms.

6. CONCLUSION:

This paper is an attempt to analyze the impact of Sustainability Reporting on the Financial Performance of the selected listed Indian Companies and examine the significance of the sustainability components as per the GRI guidelines with reference to their contribution to the firm's profitability. The study indicates that the Indian companies have recognized the importance of sustainability reporting and the major companies are reporting on it but still they need to be more serious about their sustainability issues. There is a very less but significant impact of the sustainability reporting practices on the profitability of the firms. Out of the four key sustainability variables, community variable has a major contribution to overall sustainability reporting indicating that by adopting more sustainability measures in this area will lead to an increase in the profitability of the firms and thereby enhance their financial performance. Increased attention towards the sustainability measures and their reporting will lead to a better wellbeing of the firms as well as of the society at large.

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