IMPACT OF ENVIRONMENTAL ACCOUNTING AND DISCLOSURE PRACTICES ON SHAREHOLDER'S VALUE CREATION OF SELECTED INDIAN CORPORATES

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ABSTRACT

The problem related to the environment, awareness about the environment and responsibility towards environment and the sustainable industrial growth has given to the birth of new way of reporting and accounting i.e. environmental accounting and this area which meant to guarantee that all shareholders, media, educational institutions and all the investors can get the access to clear and constituent information environment information akin to corporate financial reporting. Since we see the importance environment and Indian corporates coming forward to save the environment by changing their manufacturing process and implementing environmental reporting and auditing. The objective of the study is to see the impact of environmental accounting and disclosure practices of Indian corporates on shareholder's creation variables. Researcher has taken latest year 2016-17 data to analyse the study.

Keywords: Environmental accounting, Shareholder's value creation, Disclosure, Corporates, India

INTRODUCTION

Climatic change is one of the greatest challenges that world is facing today. Climatic change is the variation in the earth's global climate over the time. This variation may be due to dynamic process on the earth and some of the external influences. The climatic change create manifold problems like global warming, glacier meltdown, soil erosion, land degradation, deforestation, loss of biodiversity and all kinds of pollution. Human influence on the nature is one of the major causes of such problems. Indiscriminate use of resource and undue influence on nature in name of development can be identified as prime causes of this climatic change. As a result, since last few decades the adverse environmental effect of economic development has become a public concern all over the world.

Environmental accounting" - sometimes referred to as "green accounting", "resource accounting" or "integrated economic and environmental accounting" - refers to modification of the System of National Accounts to incorporate the use or depletion of natural resources (International Union for Conservation of Nature, 2010).

Environmental accounting is used to determine measures to promote sustainable environmental management. Reducing environmental impact, using measures that will lead to the creation of benefits, is crucial to promoting sustainable environmental management. The Ricoh Group uses environmental accounting to determine what measures should be taken for what processes and for what operations so that the maximum effect can be obtained. Therefore, we first identify those processes that have a high environmental impact in business operations, based on the Eco Balance. We examine a number of improvement plans to reduce the identified environmental impact, in consideration of developments in society and laws/regulations and competition. Then, using segment environmental accounting, we assess the effectiveness of each possible approach and decide what methods should be adopted to gain the best results.

APPLICATION OF ENVIRONMENTAL ACCOUNTING

Cost Allocation : Environmental accounting brings environmental costs to the limelight for all concerned, so as to enable and motivate them to identify the wages and means to reduce such costs, and side by side, to improve the environmental quality. Overhead cost is a group cost in which the environmental cost of a particular system/process/product is hidden. By allocating environmental cost to a process or a product that generates them, a company can motivate affected managers and employees to find creative pollution prevention alternatives that lower those costs and improve the bottom line. If this overhead cost is not allocated 100 correctly in a multi-product company, one product will bear more unwarranted burden in comparison with its contribution, while the other will have less than actual contribution, while a third may bear some load without any such contribution. Under these circumstances, manager cannot perceive the true cost of producing the products.

SHAREHOLDER's VALUE CREATION

It is one of the business orthodoxies of our age that the main goal of every enterprise is to maximize shareholder value. Even without embarking on the philosophical waters of whether this is indeed the most prudent or ultimate goal of a firm, a question that continually arises is how shareholder value creation can be explained and accurately measured. Finding an answer to this question is increasingly difficult, as the corporate world is constantly witnessing the birth of new shareholder value creation measures and is, therefore, faced with an ever-increasing array of research findings on ways to express shareholder value creation. The main traditional (accounting-based) measures to quantify shareholder value creation are earnings per share (EPS), return on equity (ROE), return on assets (ROA) and dividend per share (DPS). These traditional measures have now been challenged and supplemented by economic-based measures of shareholder value creation, such as economic value added (EVA), market value added (MVA), cash flow return on investment (CFROI), cash value added (CVA) and refined economic value added (REVA).

Numerous studies have been undertaken in the past few decades to decide which measure best expresses shareholder value creation. Sharma and Kumar (2010) summarize the results of 112 studies on EVA, and Hall (2013) discusses the results of 18 studies on such measures conducted during the period from 1991 to 2011. Possible reasons for differences between the results of these and other studies on shareholder value creation measures seem to be the shareholder value creation measure(s) used, the compilation of the sample, the country on whose data the analysis was conducted and the statistical technique(s) used. Moreover, most of these studies try to explain shareholder value creation, share price or excess market returns in respect of a homogenous sample of companies. Inevitably, these varying and sometimes conflicting findings are not able to provide a firm's management with a clear blueprint or path towards efficient shareholder value creation for that particular firm.

REVIEW OF LITERATURE

Malik (2015), Environmental accounting is in preliminary stage in India and whatever shows in the accounts in this regard is more or less compliance of relevant rules and regulation in the Act. Actually, unless common people of India are not made aware towards environmental safety, development of accounting in this regard is a little bit doubtful. It is the call of the time that corporates prepare a firm environmental policy, take steps for pollution control, comply with the related rules and regulations, and mention adequate details of environmental aspects in the annual statements.

Chauhan(2005), explains the various forms of environmental accounting, its scope, limitations and legal framework in Indian context. He suggested for sustainable development of country, a well-defined environmental policy as well as proper follow up and proper accounting procedure is a must.

Rondinelli and Vastag (2000) suggest that a voluntary, above-regulatory-standard approach is needed to advance national environmental policy. Interdependent principles of economic viability, energy conservation and environmental quality constitute a comprehensive environmental policy, and are given as the needed impetus. Basing the EMS on ISO 14001 standards puts the corporation in global markets and provides a competitive advantage (Owen and Lehman, 2000).

Lodhia (2003) examines the roles of accountants in environmental accounting and reporting. The findings of his study show that accountants were not involved in addressing environmental accounting in organisations. This lack of involvement has been attributed to the lack of expertise in social and environmental matters as well as the absence of regulation for mandatory environmental accounting practice.

Qureshi (2012) in their research paper, environmental accounting and reporting: an essential component of business strategy, describes the environmental component of the business strategy, producing the required performance reports and recognizing the multiple skills required to measure, compile and analyze the requisite data. Special emphasis of the research is on generation of reports and their standards, for the range of business and regulatory purposes. They also identified the major obstacles for environmental accounting and reporting and concluded that for sustainable development of country, a well-defined environmental policy as well as proper follow up and proper accounting procedure is a must. Unless common people of India are not made aware about environmental damages and safety, development of accounting in this regard is really becomes difficult.

Malarvizhi P (2008) in a study corporate environmental reporting on the internet: an insight into Indian practices tried to establish the approach and scope of environmental accounting and reporting, as it exists today. The study was based on a sample of 24 documents comprising annual reports, environmental or sustainability reports and other relevant reports of past years. Initially companies in the sample were classified as manufacturing and nonmanufacturing sectors. Since some companies operate in both sectors analyzed, the assignment to a specific one was determined on the basis of main activity carried out by the company. A structured data analysis sheet has been used for capturing corporate environmental reporting practices on the internet. The data collection and analysis sheet was framed to gather data on, key environmental indicator areas, as identified by the World Business Council for Sustainable Development and by the Global Reporting Initiative. The most relevant types of environmental information, as identified by them are: Environmental policy; Environmental impacts; Environmental management systems; Environmental targets and Environmental performance disclosure.

Belal (2001) examines the social and environmental disclosure practices of a small number of publicly traded companies operating in Bangladesh. Thirty annual corporate reports over a year were collected for analysis from companies listed on the country's stock exchange. The results of his study reveal that on average 13 lines were used by the companies to make social and environmental disclosures, which represents only 0.5 percent of the average total number of lines contained in the annual reports of sample companies. His study concludes that Bangladeshi companies are only disclosing social, ethical and environmental information on a limited scale.

SCOPE OF THE RESEARCH STUDY

Researcher has taken 50 leading listed companies of India and to analyse the impact of environmental accounting and disclosure practises on shareholder's value creation variable

RESEARCH METHODOLOGY

The research method followed is set out below. The various industries that were selected for analysis, the dependent and independent variables, as well as the statistical techniques that were applied, are discussed. The data used for this study were obtained from the annual reports, stock exchanges.

Research methodology guide researcher how to reach towards the objective of the study. In this study researcher has taken. Researcher has taken discloser as independent variable and 7 shareholder's value creation variables as depended variables. Data has been taken from the secondary sources for the year 2016-17

OBJECTIVES OF THE RESEARCH STUDY

1. To study environmental accounting and reporting practices in India
2. To study impact of disclosure of Existence of Policies and System variables on shareholder's value creation variables
3. To study impact of disclosure of Operational Aspects variables on shareholder's value creation variables

SOURCES OF DATA

Secondary sources of data has been utilised for this proposed research study

Secondary data have been collected from Company Annual Reports, Stock prices.

SAMPLE SIZE

Researcher has taken 50 leading listed Indian companies.

Total 11 environmental accounting variables have been taken in this study to see the impact of disclosure of these 11 variables in annual reports on the shareholder's value creation variables.

11 environmental accounting variables mentioned below

EXISTENCE OF POLICIES AND SYSTEMS
1. Environmental Clearance Certificate
2. Environmental Management System
3. Environmental Policy
4. ISO 14001 certificate
5. Separate Environmental Department
OPERATIONAL ASPECTS
6. External recognition for environmental protection
7. Internal reward system-Financial
8. Internal reward system-No System
9. Internal reward system-Non-Financial
10. Training to employees
11. Voluntary environmental protection

PERIOD OF DATA COVERAGE

Annual report for the year 2016-17 have been studied

TOOLS AND TECHNIQUES

Researcher has used Ms Excel and SPSS statistical software for this research study.

Regression analysis has been used to analyse the impact of disclosure of environmental variables on shareholder's value creation variables such as Revenue from Operations/Share, Dividend pay-out ratio, EV/net operating revenue. Disclosure of environmental variables have been taken as independent variable while shareholder's value creation variables taken as depended variables

LIMITATIONS OF THE RESEARCH STUDY

1. This research study is limited to 50 listed companies of India.

2. Secondary data has been taken for this study so error in secondary data can affect the study.

DATA ANALYSIS

A. IMPACT OF DISCLOSURE OF EXISTENCE OF POLICIES AND SYSTEMS VARIABLES ON SHAREHOLDER'S CREATION VARIABLES

A.1 Existence of Policies and Systems VS EV/Net Operating Revenue

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.111869
R Square	0.012515
Adjusted R Square	-0.00806
Standard Error	2.072251
Observations	50

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	2.612272	2.612272	0.608322	0.439249
Residual	48	206.1228	4.294225		
Total	49	208.7351			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	2.166016	0.813376	2.662996	0.010509	0.530615	3.801417
X Variable 1	0.156557	0.200726	0.77995	0.439249	-0.24703	0.560144

INTERPRETATION

Multiple R = 0.111, which indicates that there is no linear relationship between EV/Net Operating Revenue and disclosure of Existence of Policies and Systems variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.439 which is higher than specified α of 0.05, there is no linear relationship between EV/Net Operating Revenue and disclosure of Existence of Policies and Systems variable of companies taken under study.

A.2 Existence of Policies and Systems VS Dividend Pay-out Ratio

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.22989
R Square	0.052849
Adjusted R Square	0.033117
Standard Error	77.31449
Observations	50

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	16009.7	16009.7	2.678313	0.108264
Residual	48	286921.4	5977.53		
Total	49	302931.1			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	-4.29281	30.34657	-0.14146	0.888099	-65.3087	56.72306
X Variable 1	12.25614	7.488986	1.636555	0.108264	-2.80148	27.31376

INTERPRETATION

Multiple R = 0.229, which indicates that there is no linear relationship between Dividend Pay-out Ratio and disclosure of Existence of Policies and Systems variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.108 which is higher than specified α of 0.05, there is no linear relationship between Dividend Pay-out Ratio and disclosure of Existence of Policies and Systems variable of companies taken under study.

A.3 Existence of Policies and Systems VS Revenue from Operations/Share (Rs.)

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.170252
R Square	0.028986
Adjusted R Square	0.008756

Standard Error	977.9587
Observations	50

ANOVA

	df	SS	MS	F	Significance F
Regression	1	1370384	1370384	1.432851	0.237178
Residual	48	45907351	956403.1		
Total	49	47277734			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	113.2849	383.8568	0.295123	0.769173	-658.511	885.0806
X Variable 1	113.3922	94.72893	1.197018	0.237178	-77.0731	303.8575

INTERPRETATION

Multiple R = 0.170, which indicates that there is no linear relationship between Revenue from Operations/Share (Rs.) and disclosure of Existence of Policies and Systems variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.237 which is higher than specified α of 0.05, there is no linear relationship between Revenue from Operations/Share (Rs.) and disclosure of Existence of Policies and Systems variable of companies taken under study.

B. IMPACT OF DISCLOSURE OF OPERATIONAL ASPECTS VARIABLES ON SHAREHOLDER'S CREATION VARIABLES

B.1 Operational Aspects VS EV/Net Operating Revenue

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.015231
R Square	0.000232
Adjusted R Square	-0.0206
Standard Error	2.085099
Observations	50

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.048425	0.048425	0.011138	0.916389
Residual	48	208.6866	4.347638		
Total	49	208.7351			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	2.804575	0.53234	5.268393	3.21E-06	1.734234	3.874916
X Variable 1	-0.0158	0.149732	-0.10554	0.916389	-0.31686	0.285255

INTERPRETATION

Multiple R = 0.015, which indicates that there is no linear relationship between EV/Net Operating Revenue and disclosure of Operational Aspects variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.916 which is higher than specified α of 0.05, there is no linear relationship between EV/Net Operating Revenue and disclosure of Operational Aspects variable of companies taken under study.

B.2 Operational Aspects VS Dividend Pay-out Ratio

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.255056
R Square	0.065053
Adjusted R Square	0.045575
Standard Error	76.81477
Observations	50

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	19706.68	19706.68	3.339827	0.073842
Residual	48	283224.5	5900.509		
Total	49	302931.1			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	12.1962	19.61133	0.621896	0.536953	-27.235	51.62742
X Variable 1	10.08081	5.516117	1.827519	0.073842	-1.01009	21.17171

INTERPRETATION

Multiple R = 0.255, which indicates that there is no linear relationship between Dividend Pay-out Ratio and disclosure of Operational Aspects variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.07 which is higher than specified α of 0.05, there is no linear relationship between Dividend Pay-out Ratio and disclosure of Operational Aspects variable of companies taken under study.

B.3 Operational Aspects VS Revenue from Operations/Share (Rs.)

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.028714
R Square	0.000824
Adjusted R Square	-0.01999
Standard Error	992.0387
Observations	50

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	38979.47	38979.47	0.039608	0.84309
Residual	48	47238755	984140.7		
Total	49	47277734			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*
Intercept	583.8735	253.2741	2.305302	0.025516	74.6317	1093.115
X Variable 1	-14.1777	71.23892	-0.19902	0.84309	-157.413	129.0577

INTERPRETATION

Multiple R = 0.028, which indicates that there is no linear relationship between Revenue from Operations/Share (Rs.) and disclosure of Operational Aspects variable of companies taken under study.

From the ANOVA table, it can be seen that p-value 0.843 which is higher than specified α of 0.05, there is no linear relationship between Revenue from Operations/Share (Rs.) and disclosure of Operational Aspects variable of companies taken under study.

CONCLUSION

Based on the research study it can be concluded there is importance of the environmental accounting and reporting nowadays. Indian corporates and putting more efforts to save the environment and making mandatory to audit their internal system as well as train their employees to minimize the pollution which affects the environments. From the data analysis it can be concluded that disclosure of environmental variables not affect the shareholder's value creation variables. It suggest that performance of the Indian corporates not affected by their environmental accounting and disclosure practises. Stock market movement, profitability and efficiency of the Indian corporates are depends on their operational activity rather than affected by the environmental accounting and disclosure practises

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