



Environmental Accounting and Business Strategy A Study of Selected MNC's in India

KEYWORDS

Environmental Accounting, Environmental conservation cost, environmental conservation benefit.

Ravi Kumar K

Research Scholar, Department of Commerce, Bangalore University, Bangalore 560 001

ABSTRACT *Environmental Accounting is required to submit various types of user information on the financial position and performance of entities in the management of resources at their disposal. The environmental accounting is composed of the two factors such as environmental conservation cost, environmental conservation benefit and the economic benefit of environmental conservation activities. The environmental accounting system also identifies, measures, and communicates the environmental conservation benefit, which is the environmental performance portion represented in physical units. The present study is conducted on selected multinational corporations at Bangalore. A structured questionnaire was distributed to the respondents at their companies / work place at their convenience which includes their information about environmental reporting, practices and policies adopted in the organization.*

There is a correlation between environmental policy and business policy of the firm to achieve competitive advantage and Conscious reduction in environmental costs, & liabilities, will enhance environmental performance of the firm.

Introduction

Today organizations are becoming progressively more aware of environmental and social liabilities pertaining to their operations and products, with associated financial effects. Uncertainties in measuring these financial effects can be addressed by using environmental evaluation and accounting techniques. Environmental accounting assists in expressing environmental and social liabilities as environmental costs. Environmental accounting systems now part of organizational decision making.

Environmental accounting is an inclusive field of accounting. It provides reports for both internal use, generating environmental information to help make management decision on pricing, controlling overhead and capital budgeting, and external use, disclosing environmental information of interest to the public and to the financial community. Internal use is better termed as environmental management accounting.

Now a day's environmental policy is integrated with business policy of the organisations. The business firm's strategy includes responding to capital and operating costs of pollution control equipment. This is caused by increasing public concern over environmental issues, and by a recent government led to incentive based regulation.

Objectives of the Study:

1. To know how the environmental assets, liabilities and contingencies are identified, defined, what they should consist of and how they are valued by the sample firms;
2. To understand how environmental issues interact with management processes and control within sample organizations;
3. To know whether environmental policy of sample firms are integrated with business policy and environmental strategies with business strategies;

Review of Literature:

P. Caggiati - D. Viaggi - G. Zanni In his study aim is to verify the possible contribution of environmental accounting to environmental protection and improvement in agriculture and to identify policy strategies for the exploitation of such potentialities in order to improve agricultural and agri-environmental policies. The case study discussed here shows that the use of accounting tools for measuring and evaluating the multidimensional impact of policies and farming practices on

the environment can improve considerably the information available for the decision maker, allowing a higher effectiveness of agri-environmental policy measures.

Jennifer C. Chen and Robin W. Roberts (2010) in their paper they analyze the overlapping perspectives of legitimacy theory, resource dependence theory, and stakeholder theory. Our purpose is to explore how these theories can inform and be built upon by one another. Though our always we provide a broader theoretical understanding of these theories that may support and promote social and environmental accounting research. This article starts with a detailed analysis of legitimacy theory by bringing some recent critical discussion on legitimacy and corporations in the management literature into accounting research.

Les Coleman (2010)[3] in his article an old research question: do firms hurt their financial performance by damaging stakeholder interest ? The data base are US government on-line listings of fines for environmental breaches ,unsafe workplaces, fraudulent accounting standards, and product recalls. These measures are assumed to proxy for signals to stakeholders of the environmental, social and governance.

(ESG) risk in transacting with the firm and appear to have fewer biases than conventional measures of stakeholder standards. Using a sample of all non-financial performance. Results support the normative assumption that a firm's sale margin will be damaged by unethical treatment of stakeholders as evidenced by ESG breaches, presumably because risk-averse customers and suppliers are to signals of counterparty risk.

Dr. Bhagaban Das (May 2009)[4] in his research paper examines that environmental reporting is a recently developed research area, which would be classified under social responsibility accounting . Environmental issues being, an important area of corporate social responsibility had been widely advocated in literature continuously.

M.N.Murthy (March 2007)[5] in his paper examines some practical problems of natural resource accounting and highlights the importance of decentralized methods of accounting. The accounting principles for estimating green GDP are found to be different for the exhaustible resources from those for renewable environmental resources in the standard mod-

els of sustainable development.

Taylor et al (1994) -1 "silent destroyers" in his paper examines concern about the protection of the environmental have increased considerably amongst regulations, environmental and society in general. In this context, although companies, particularly those belonging to industrial sectors, have been generally considered one of the major sources of environmental impacts, it cannot be ignored the fact that public organizations also generate a significant amount of pollution (through the use of vehicles, the consumption of paper, electricity and water, etc.)

Research Methodology

The Research design used for the research problem in hand is causal research as the objective is to determine which variable might be causing for business decision, i.e. whether is a cause and effect, it is important to hold the variable that is assumed to cause the change in the other variable (s). This type of research is very complex and the factors influencing the causal relationship, especially when dealing with business decision and policy. Dependent variable are a) Competitive advantage b) Economic performance and c) Accounting models Independent variable a) Environmental and business policy b) Environmental costs and liabilities c) Organizational impacts and d) Organizational contribution

Sample design and Sample Size

The sample design adopted for the research problem in hand is Stratified Random Sampling and Judgmental Sampling. The sample size for the study was five companies selected and the sample unit of the study includes Top management, Environmental Officer, Finance directors, academicians of selected companies. The Sample research area for the study in hand was Bangalore.

Methods of Data Collection

Both the primary and secondary data were collected. The primary data for the study was collected directly from target respondents through structured questionnaire. This questionnaire includes the information about environmental implication in the company. The questions asked to respondents were Environmental accounting systems now from part of organizational decision making, environmental evaluation and accounting techniques, corporate social responsibility etc. The secondary data for the study was collected from different sources such as trade journals, articles, internet, periodicals, books etc. Statistical tools such as tables, percentages, Correlations, ANOVA- Coefficients tests were used for analyzing the data which help in arriving at sound conclusion.

Analysis of Data

Hypothesis -1: There is a correlation between environmental policy and business policy of the firm to achieve competitive advantage.

Descriptive Statistics			
	Mean	Std. Deviation	N
DV1	4.12	.512	30
IV1	4.06	.560	30

Correlations			
		D1	IV1
Pearson Correlation	DV1	1.000	.512
	IV1	.512	1.000
Sig. (1-tailed)	DV1	.	.002
	IV1	.002	.
N	DV1	30	30
	IV1	30	30

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.512 ^a	.262	.236	.447
a. Predictors: (Constant), IV1				
b. Dependent Variable: DV1				

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.989	1	1.989	9.936	.004 ^a
	Residual	5.605	28	.200		
	Total	7.594	29			
a. Predictors: (Constant), IV1						
b. Dependent Variable: DV1						

Coefficients ^a						
Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			Std. Error	Beta		
1	(Constant)	2.227	.608		3.665	.001
	IV1	.467	.148	.512	3.152	.004
a. Dependent Variable: DV1						

INFERENCE

The above inter- correlation value is 0.512 at 5% level of significant and ANOVA F value is 9.936 at 5% level of significant and co-efficient sig value .004 at 5% level of significant. Hence, the above statistical tests are proven that (co-efficient sig value is .004 < .05 significant) there exist a strong correlation between environmental and business policy and, competitive advantage. Therefore, hypothesis is accepted at 5% level of significant.

Hypothesis- 2: Conscious reduction in environmental costs, liabilities, and contingencies will enhance environmental performance of the firm and could lead to economic performance

Descriptive Statistics			
	Mean	Std. Deviation	N
DV2	4.06	.570	30
IV2	3.79	.747	30

Correlations			
		D2	IV2
Pearson Correlation	D2	1.000	.633
	IV2	.633	1.000
Sig. (1-tailed)	D2	.	.000
	IV2	.000	.
N	D2	30	30
	IV2	30	30

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.633 ^a	.401	.380	.449
a. Predictors: (Constant), IV2				
b. Dependent Variable: DV2				

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.787	1	3.787	18.765	.000 ^a
	Residual	5.651	28	.202		
	Total	9.438	29			
a. Predictors: (Constant), IV2						

ANOVA ^b						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.787	1	3.787	18.765	.000 ^a
	Residual	5.651	28	.202		
	Total	9.438	29			
b. Dependent Variable: DV2						

Coefficients ^a						
Model B		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	2.223	.431		5.154	.000
	IV2	.484	.112	.633	4.332	.000
a. Dependent Variable: DV2						

INFERENCE

The above inter-correlation value is 0.633 at 5% level of significant and ANOVA F value is 18.765 at 5% level of significant and co-efficient sig value .000 at 5% level of significant. Hence, the above statistical tests are proven that (co-efficient sig value is .000 < .05 significant) there exist a strong correlation between environmental costs, liabilities and contingencies and, economic performance. Therefore, hypothesis is accepted at 5% level of significant.

Findings

The paper highlights that for environmental accounting both internal and external dimension of the selected corporation Inter-correlation value is 0.512 at 5% level of significant and ANOVA F value is 9.936 at 5% level of significant and co-efficient sig value .004 at 5% level of significant. Hence,

there exist a strong correlation between environmental and business policy and, competitive advantage. And inter-correlation value is 0.633 at 5% level of significant and ANOVA F value is 18.765 at 5% level of significant and co-efficient sig value .000 at 5% level of significant. Hence, there exists a strong correlation between environmental costs, liabilities and contingencies and, economic performance. Environmental accounting is a structure for systematically identifying, measuring, and communicating environmental conservation cost and the economic benefit of environmental conservation measures; this is the financial performance portion of environmental accounting, representing the activities of companies and other organizations in monetary value.

Conclusion

The results derived from the study indicate that for environmental accounting concepts As one step of a company's environmental information system, internal function makes it possible to manage environmental conservation cost and analyze the cost of environmental conservation activities versus the benefit obtained, and promotes effective and efficient environmental conservation activities through suitable decision-making. It is desirable for environmental accounting to function as a business management tool for use by managers and related business units. By disclosing the quantitatively measured results of its environmental conservation activities, external functions allow a company to influence the decision-making of stakeholders, such as consumers, business partners, investors, local residents, and administration. It is hoped that the publication of environmental accounting results will function both as a means for companies to fulfill their responsibility for accountability to stakeholders and, simultaneously, as a means for appropriate evaluation of environmental conservation activities.

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