

ENVIRONMENTAL ACCOUNTING AND FIRMS PROFITABILITY

Dr.C.Sengottuvel

Assistant Professor, PG and Research Department of Commerce, Salem Sowdeswari College, Salem

Email: drcsengottuvel@gmail.com

Abstract—*Environmental accounting, as defined in these guidelines, aims at achieving sustainable development, maintaining a favorable relationship with the community, and pursuing effective and efficient environmental conservation activities. These accounting procedures allow a company to identify the cost of environmental conservation during the normal course of business, identify benefit gained from such activities, provide the best possible means of quantitative measurement (in monetary value or physical units) and support the communication of its results. Environmental costs cover all cost; incurred concerning environmental protection such as emissions treatment as well as wasted material, capital and labour which so called ‘non-product output’ as a result of inefficiency production activities. Environment accounting involves the identification, measurement and allocation of environmental costs, and the integration of these costs into business and encompasses the way of communicating such information to companies’ stakeholders. In this sense, it is a comprehensive approach to ensure good corporate governance that includes transparency in its societal activities. The unserious attitudes of several forms not take environmental accounting into consideration makes performance below expectation. A study on the environmental accounting and firm’s profitability analysis of Bannariamman Spinning Mills has been found to be apt in this context which will throw light on the causes of fluctuations in performance.*

Keywords—*Corporate Governance, Environmental Accounting, Environmental Costs, Financial Performance, Firms Profitability.*

INTRODUCTION

The term environmental accounting is frequently used within the accounting and environmental management literatures. Environmental accounting is a broader term that relates to the provision of environmental-performance-related information to stakeholders both within, and outside, an organization. Environmental accounting, as defined in these guidelines, aims at achieving sustainable development, maintaining a favorable relationship with the community, and pursuing effective and efficient environmental conservation activities. These accounting procedures allow a company to identify the cost of environmental conservation during the normal course of business, identify benefit gained from such activities, provide the best possible means of quantitative measurement (in monetary value or physical units) and support the communication of its results. Environmental costs cover all cost; incurred concerning environmental protection such as emissions treatment as well as wasted material, capital and labour which so called ‘non-product output’ as a result of inefficiency production activities. Different firms may consider different elements into environmental costs but it is important that all significant and relevant costs are incorporated for sound decision making purpose. The general picture, which emerges from current reporting, is that since the disclosures of environmental information are voluntary, there is a diversity of reporting practice.

STATEMENT OF THE PROBLEM

Environment accounting involves the identification, measurement and allocation of environmental costs, and the integration of these costs into business and encompasses the way of communicating such information to companies’ stakeholders. In this sense, it is a comprehensive approach to ensure good corporate governance that includes transparency in its societal activities. The unserious attitudes of several forms not take environmental accounting into consideration makes performance below expectation. This is because environmental accounting helps the firm to record all environmental costs incurred by the business thereby finding a way of reducing the cost (environmental expenses) so that

the business can increase profit. The company's performance has been evaluated by analyzing its financial capability. A study on the environmental accounting and firm's profitability analysis of Bannariamman Spinning Mills has been found to be apt in this context which will throw light on the causes of fluctuations in performance.

REVIEW OF LITERATURE

Malla Nataraj and Uma. T. G. (2015), the study examined that the economic development as well as environmental protection is equally important but contradictory issue therefore a careful assessment of the benefits and costs of environmental damages is necessary to find the tolerance limit of environmental degradation and the required level of development. For that there is need for proper framework which can provide guidelines on the issue of environmental cost, environmental liability, environmental assets, capitalization of such cost and liability and reporting framework. **Magara, Aming'a and E. Momanyi (2015)**, focused on the impact of environmental accounting on financial performance of corporate organizations in Kisii County. The study was carried out at Kisii County, the target population was 144 consisting accountants and auditors in the 16 corporate organizations. Findings revealed that the perceived financial performance of the corporate organization in general was in good status as perceived by the employees. Analysis of individual perceived financial performance parameters shows that revenue generation has been improving, cash flows are seen to be in a good state and profitability has been on the increase. **Eze, et al., (2016)**, the study identifies environmental accounting issues and the effects of these environmental factors on the life of Nigerians. It was discovered that environmentally friendly organizations who voluntarily disclose their environmental activities enjoy high level of competitiveness. It was recommended that companies should adopt acceptable and uniform standards for the purpose of control and measurement of performance, and should design products which generate less waste or emission during their life cycle. **Neetu Prakash (2016)**, the study indicated that the identification of annual reports of eighty-five Indian companies and shows that Indian Companies are disclosing environmental accounting on a voluntary basis with in a positive manner only. Finally, the study also highlights some suggestions for the encouragement of environmental accounting in India. **Omnamasivaya and Prasad (2016)**, the study examined the factors determining the level of environmental disclosure information by taking a sample of NIFTY 50 companies from National Stock Exchange (NSE). The environmental information disclosure is measured by using an Environmental Accounting Disclosure Index (EADI) and the variables used in the study are profitability, corporate size, age, financial leverage, industry type, legal ownership and foreign operations. The results show that there is a positive relationship between EADI and profitability, financial leverage, industry type and legal ownership, and a negative relationship between EADI and corporate size, age and foreign operations. **Nnamani, John Nnaemeka, Onyekwelu, Uche Lucy and Ugwu O. Kevin (2017)**, evaluates the effect of sustainability accounting on the financial performance of listed manufacturing firms in Nigeria. Firms used for the study were chosen from the Nigerian brewery sector. The study reveals that sustainability reporting has positive and significant effect on financial performance of firms studied. Following the findings, the study recommends that firms in Nigeria should invest reasonable amount of their earnings on sustainability activities while specific accounting templates be articulated by professional accounting regulating bodies to guide firms' reportage on sustainability activities. **Pradip Kumar Das (2017)**, the study noticed that how the concept of environmental accounting and corporate reporting practices is relevant and beneficial to the society and also focused on the emerging environmental accounting and reporting practices being undertaken by Indian corporate sectors and the reasons behind the poor disclosure practices in environmental issues in India.

RESEARCH GAP

From the above reviews of empirical work, it is clear that different authors have approached environmental accounting and its profitability analysis in different ways in varying level of analysis. These different approaches helped in the emergence of more and more literature on the subject over the time. It gives an idea on extensive and diverse works on profitability. It has been noticed that the studies on environmental accounting in various sectors provide divergent results resulting to the study period overlap or coincide. The main reason for diversion in the results is the difference in the methods used for the measurement of the factors like profitability, liquidity, etc. Survey of the existing literature indicates that so far, no specific study has been carried on to examine the environmental accounting and profitability analysis of Tamil Nadu textile industry after liberalization in the manufacturing sector.

OBJECTIVES OF THE STUDY

1. To analyse the profitability from the view point of financial management.
2. To offer suggestions for further improvement.

RESEARCH DESIGN

Research design is considered as a "blueprint" for research, dealing with at least four problems: which questions to study, which data are relevant, what data to collect, and how to analyze the results. Keeping in view the scope of the study, it is decided to select Bannariamman Spinning Mills purposively. The period 2008 to 2017 is selected for this study. This 10 years period is chosen in order to have a fairly long, cyclically well-balanced period, for which reasonably homogeneous, reliable and up-to-date financial data would be available. For the purpose of this study, secondary data have been used for collection of secondary, published annual reports of the selected units for the relevant periods. The data has been collected from PROWESS' Database of centre for monitoring Indian economy (CMIE).

DATA ANALYSIS AND RESULTS

Financial Management can be defined as taking a commercial business as the most common organisational structure, the key objectives of financial management would be to create wealth for the business, generate cash and Provide an adequate return on investment bearing in mind the risks that the business is taking and the resources invested. Management need to ensure that enough funding is available at the right time to meet the needs of the business. In the short term, funding may be needed to invest in equipment and stocks, pay employees and fund sales made on credit. In the medium and long term, funding may be required for significant additions to the productive capacity of the business or to make acquisitions. Investments must be financed in some way however there are always financing alternatives that can be considered. A key financing decision is whether profits earned by the business should be retained rather than distributed to shareholders via dividends. If dividends are too high, the business may be starved of funding to reinvest in growing revenues and profits further.

1. Operating Profit Margin

Operating margin or operating profit margin measures what proportion of a company's revenue is left over, after deducting direct costs and overhead and before taxes and other indirect costs such as interest. Operating margin is used to measure company's pricing strategy and operating efficiency. It gives an idea of how much a company makes (before interest and taxes) on each dollar of sales. It shows the operational efficiency of the firm and is a measure of the management efficiency in running the routine operations of the firm. Operating margin formula is:

$$\text{Operating Profit Margin Ratio} = \frac{\text{Operating Profit}}{\text{Net sales}} \times 100$$

It is evident from the Table 1.0 that the operating profit margin ratio of Bannariamman Spinning Mills had a fluctuating trend during the study period. The higher ratio 1.07 per cent was found in the year 2012. The operating margin ratio has an inefficient position. It was not satisfactory to the company. The mean operating profit margin was worked out as 0.95 per cent during the study period. The analysis of CV value 0.06 showed that operating profit margin of Hyundai Motor India Ltd registered consistent Bannariamman Spinning Mills during the study period. Further, positive compound annual growth rate showed good performance of the company during the study period.

Table 1.0
Operating Profit Margin

<i>Year</i>	<i>Ratio (in %)</i>
2008	0.92
2009	0.97
2010	0.94
2011	0.85
2012	1.07
2013	0.93

Environmental Accounting and Firms Profitability

2014	0.93
2015	0.97
2016	0.96
2017	0.97
Mean	0.95
C.V	0.06
CAGR	0.62

Source: Computed from annual accounts of Hyundai Motor India Ltd

2. Gross profit margin - A financial metric used to assess a firm's financial health by revealing the proportion of money left over from revenues after accounting for the cost of goods sold. Gross profit margin serves as the source for paying additional expenses and future savings. Gross profit ratio measures the relationship with gross profit to net sales and is usually represented as a percentage. Thus, it is calculated by dividing the gross profit by sales.

$$\text{Gross Profit Margin Ratio} = \frac{\text{Gross Profit}}{\text{Net sales}} \times 100$$

Table 2.0

Gross Profit Margin

<i>Year</i>	<i>Ratio (in %)</i>
2008	8.07
2009	3.34
2010	6.33
2011	14.93
2012	-7.35
2013	7.26
2014	6.57
2015	2.81
2016	3.59
2017	2.79
Mean	4.83
C.V	1.16
CAGR	-11.13

Source: Computed from annual accounts of Bannariamman Spinning Mills

The above Table 2.0, it shows that the gross profit margin ratio of Banariamman Spinning Mills had decreasing trend during from the study period. The gross profit margin ratio was ranged from -7.35 in 2012 to 14.93 in 2011. The mean

gross profit margin was worked out as 4.82 per cent during the study period. The analysis of CV value 1.16 showed that gross profit margin of Bannariamman Spinning Mills registered highly flexible during the study period. Further, negative compound annual growth rate showed poor performance of the company during the study period.

3. Return on capital employed

A ratio that indicates the efficiency and profitability of a company's capital investments. ROCE should always be higher than the rate at which the company borrows, otherwise any increase in borrowing will reduce shareholders' earnings. It is calculated as:

$$\text{Return on capital employed} = \frac{\text{Profit before interest and tax}}{\text{Capital employed}} \times 100$$

Table 3.0

Return on Capital Employed

Year	Ratio (in %)
2008	3.05
2009	1.56
2010	3.67
2011	11.25
2012	-5.34
2013	6.59
2014	6.30
2015	2.47
2016	3.12
2017	2.72
Mean	3.54
C.V	1.20
CAGR	-1.30

Source: Computed from annual accounts of Bannariamman Spinning Mills

The above Table 3.0 reveals that the return on capital employed of Bannariamman Spinning Mills from the period of 2008 to 2017. The return on capital employed ratio found a fluctuating trend during the study period. The higher ratio is 11.25 per cent during 2011. The mean return on capital employed was worked out as 3.54 per cent during the study period. The analysis of CV value 1.20 showed that return on capital employed of Bannariamman Spinning Mills registered erratically fluctuated during the study period. Further, negative compound annual growth rate showed poor performance of the company during the study period.

FINDINGS

Operating profit margin ratio of Bannariamman Spinning Mills had a fluctuating trend during the study period. The statistical analysis shows that the mean value of operation profit margin ratio was satisfactory and co-efficient of variation

value were consistent. The Gross profit margin ratio of Bannariamman Spinning Mills had fluctuating trend from 2008 to 2017. The gross profit margin ratio was ranged from -7.35 in 2012 to 14.93 in 2011. The mean value of gross profit margin ratio was satisfactory. The CV value is also indicated highly flexible that the gross profit margin ratio during the study period. The return on capital employed ratio found a fluctuating trend during the study period. The higher ratio is 11.25 per cent during 2011. From the statistical analysis shows that the mean value of return on capital employed ratio was satisfactory and the coefficient of variation value which is erratically fluctuated.

SUGGESTIONS AND CONCLUSION

Operating profit ratio has decreased trend in most of the years during the study period, it means that the company has not better cost control. It is suggested that, the company may generate good cost control which helps the sales are increasing faster than costs. The decreased gross profit margin ratio indicates that the business is unable to control its production cost. So, the company can make able to control the production costs. It will help to made a reasonable profit, as long as it keeps the overhead cost in control. Return on total assets ratio has found fluctuating trend during the study period. It indicates low profitable position of the company. The company may be using its assets to generate earnings, it will be help to increase the investing wisely and likely higher profitable. This study has done the ten years financial performance analysis, with the help of the balance sheet & profit and loss accounts of Bannariamman Spinning Mills from 2008-2009 to 2016-2017. It is functioning effectively successfully. The financial effectiveness of the company shares the positive impact on future business. If the management of the company address the suggestions given in this project that will enrich the performance better in future.

REFERENCES

- [1] B Omnamasivaya and M S V Prasad (2016) "Factors Influencing Environmental Accounting and Disclosure Practices in India: Empirical Evidence from NIFTY Companies", *The IUP Journal of Accounting Research and Audit Practices*,
- [2] Pradip Kumar Das (2017) *An Introduction to the Concept of Environmental Accounting and Reporting- Indian Scenario*, *Imperial Journal of Interdisciplinary Research (IJIR)*, Vol.3(4): 13-22.
- [3] Eze, Joseph Chukwudi; Nweze, Augustine Uchechukwu and Enekwe, Chinedu (2016), *The Effects of Environmental Accounting on A Developing Nation: Nigerian Experience*, *European Journal of Accounting, Auditing and Finance Research*, Vol.4(1): 17-27.
- [4] Neetu Prakash (2016) *Environmental Accounting in India – A Survey of selected Indian Industries*, *Asian Journal of Research in Social Sciences and Humanities*, Vol.6 (7):1690-1705.
- [5] Nnamani, John Nnaemeka, Onyekwelu, Uche Lucy and Ugwu O. Kevin (2017) *Effect of Sustainability Accounting and Reporting on Financial Performance of Firms in Nigeria Brewery Sector*, *European Journal of Business and Innovation Research*, Vol.5(1):1-15.
- [6] R. Magara, N. N. Aming'a and E. Momanyi (2015) *Effect of Environmental Accounting on Company Financial Performance in Kisii County*, *British Journal of Economics, Management & Trade*, 10(1): 1-11.
- [7] Malla Nataraj, Mrs. Uma. T. G. (2015) "Environmental Accounting in India- A Conceptual Study", *International Journal of Humanities and Social Science Research*, Vol.1(2): 49-51.
- [8] Vijayakumar, A and Kadirvel, S. (2003). "Profitability and Size of the firm in Indian Minerals and Metals industry", *The Management Accountant*, 816-821.
- [9] Ghosh, Mishra and Gagula (2003), "Environment Reporting", *ICFAI Journal of Corporate Government* January, 21-41.
- [10] Yakhou, M & Dorweiler, V (2004). "Environmental Accounting: An Essential Component of Business Strategy", USA, John Wiley and Sons Ltd.
- [11] Bhatt. K. (2005) "Environmental Accounting Corporate Disclosure Practices in India", 5(1):51-56.
- [12] Mitchell, J., Percy, M., & McKinlay, B. (2006). "Voluntary environmental reporting practices: A further study of "poor" environmental performers", *Australian Journal of Corporate Law*, 19 (2), 64-81.
- [13] Seetharaman, A; Mohamed, I & Saravanan, A.S (2007). "Environmental Accounting as a tool for Environmental management system", *Journal of Applied Science, Environment and Management*, 2(2): 137-145.
