International Journal of Advanced Research in
Management and Social Sciences ISSN: 2278-6236

IMPACT OF MARGINAL COSTING AND LEVERAGES FOR CEMENT INDUSTRIES

Dr. L. Leo Franklin*

Dr. K. Uma**

Abstract: *Cement being one of the basic building materials its availability in significant quantities plays an important role in the developmental process in all sectors of the economy. Without cement all modern construction activities will come to a half. Cement being a product it is to be justified in the annals of economic analysis.*

Finance is regard as the lifeblood as business enterprise. No enterprise can exist without finance. The owners all always eager to know the financial position of the business, which can be know with the help of financial statements.

According to American Institute of Certified Public Accounts, Financial Statements reflects a combination of recorded facts, accounting principles and personal judgements.

*Assistant Professor and Research Adviser, PG. and Research Department of Commerce, JJ College of Arts and Science (Autonomous), Pudukkottai, Tamil Nadu. S. India

**Associate Professor and Research Adviser, PG. and Research Department of Management Studies, JJ College of Arts and Science (Autonomous), Pudukkottai, Tamil Nadu. S. India

INTRODUCTION

The word cement is derived from the Latin word "cacummentum" which meant store chippings such as were used in Roman Motar, the building materials itself. Cement being one of the basic building materials its availability in significant quantities plays an important role in the developmental process in all sectors of the economy. Without cement all modern construction activities will come to a half. Cement being a product it is to be justified in the annals of economic analysis.

FINANCIAL ANALYSIS

Finance is regard as the lifeblood as business enterprise. No enterprise can exist without finance. The owners all always eager to know the financial position of the business, which can be know with the help of financial statements. i.e. Profit and Loss account and Balance Sheet.

Profit and Loss account shows the profitability of the business during the accounting period. It indicates the earning capacity and potential of the firm. It presents summary, revenues, expenses and Net Income or Net Loss of a firm for a period of time.

The Balance Sheet indicates the financial position of the last day of the accounting period. It contains information about resources and obligations entity and about its owner's interests in the business of particular period of time.

According to American Institute of Certified Public Accounts, Financial Statements reflects a combination of recorded facts, accounting principles and personal judgements.

FINANCIAL STATEMENT ANALYSIS

Financial statement contains a wealth of information which, it properly analyzed and interpreted, can provide valuable insight into a firm's performance and position.

financial statements analysis is largely is a study of the relationship among the various financial factors in a business as disclosed by a single set of statements and a study of the trend of these factors as shown in a serious of statements.

OBJECTIVES OF THE STUDY

The main objectives of the study

- To analysis financial performance of sample unit.
- To findout the performance of cement units in terms of marginal cost statement

- To access the performance of the sample units in terms of leverages

PERIOD OF THE STUDY

To be more precise in analysis it was necessary to define the period of the study. The study period is taken as five years from 2007 - 08 to 2011 – 12. These are the financial years commencing from 1st April and ending 31st March every year. The period of five years is quite enough to determine the liquidity position and examine the performance of finance.

METHODOLOGY

The present study the impact of marginal cost and leverages of cement industries is based on secondary data. The data have been collected from sample cement units, mainly annual reports, books, journals, periodicals and available websites in the field.

The collected data were grouped tabulated and analyzed in order to impact of marginal cost and leverages of selected cement units.

RESEARCH DESIGN

As the study is made to ascertain the impact of marginal cost and leverages is undertaken .

This study is to offer to the researcher a deep knowledge into the new topic and to better comprehend the nature of the problem since very few studies might have been conducted in that area.

SAMPLING TECHNIQUES

The researcher have undertaken sampling for the study, as it is most often used during the project and its perhaps the best way of getting some basic information quickly and efficiently.

SAMPLING AREA

The company is situated at Ariyalur. The researcher has collected the data at company itself.

LIMITATIONS OF THE STUDY

The present study is based on secondary data only but it ignores the primary data. i.e. drawback for the study and also the selected area for the study is limited to Ariyalur districts only.

Further study deals with impact of marginal cost and leverages of selected cement units but do not consider the other areas like, production, marketing, personnel, employment, other problems.

LITERATURE REVIEW

KK SHARMA has studied the pains and problems of shortage and surplus cement industry in the past decades. The transformation of cement scenario from acute scarcity to huge surplus has depressed prices for uneconomic levels playing have wind the bottom line of many producers.

RAMACHANDIRA REDDY & YUVARAJA REDDY 2007 examined the effect as selected variables on MVA. This study was conducted with 10 cement companies in Indian and the objective of his study was to examine the effect of select variables on MVA. For this purpose multiple regression technique has been used to test the effect of select variable on MVA. The study found that none of the factors is found to have an impact on MVA and BPS is found to have a negative and significant impact on MVA. The study concluded that the performance of select cement companies in terms of profitability cannot be increased unless the improved problems like modernization, cost reduction, control taxes etc, are solved.

J.O. THOMAS, BRIENT, & PAUL A. VANDERHEIDEN in their study "empirical measurement of operating leverage for growing units', have discussed the relationship between the degree of operating leverage and the ratio between Total Assets & Net Sales, depreciation and Total Assets.

MARGINAL COSTING

Marginal costing is a technique of cost accounting which plays a special attention to the behaviour of costs with changes in the volume of output.

Definitions

This method proposes that fixed expenses be classified as period expenses and be written off currently as is generally done with selling and administration expenses, and that only the variable costs become the basis of inventory value and profit determination. - National Association of Accounts.

Thus, the technique of Marginal Costing lies in

i. Differentiation between fixed and Variable cost.

ii. Ascertainment of Marginal Costs.

iii. Finding out effect on profit due to change in volume or type of output.

Basic terms used in marginal costing

Contribution: it establishes the differences between the sales value and the variable cost.

Contribution: Sales – Variable cost or Fixed cost + profit.

Profit volume ratio. It establishes the relationship between the sales value and contribution.

P/V Ratio = Contribution / sales X100 or Change in Profit / Change in salesX100

Break Even Point: When you are recovered your expenses from your revenue that point is called breakeven point. If you reach that point you have no profits and no loss.

BEP (UNITS) = FIXED COST/CONTRIBUTION PER UNIT (Or)

(RS) = FIXED COST / PROFIT VOLUME RATIO

LEVERAGES

The employment of an asset or funds for which the firm pays a fixed cost or fixed return.

J.E. WAITER has defined leverages as ' the percentage return on equity to percentage return on capitalization.

Type of leverages

i. Operating Leverage

The tendency of the operating profit to vary disproportionately with sales. It is calculated by CONTRIBUTION/ OPERATING PROFIT

ii. Financial Leverage

- The tendency of the residual net income to vary disproportionately with operating profit. It is calculated by

OPERATING PROFsIT/ PROFIT BEFORE TAX

iii. Composite Leverage

The relationship between revenue on account of sales and the Taxable income

CONTRIBUTION/ PROFIT BEFORE TAX

COMPANY PROFILE

TamilNadu Cements Corporation Ltd., Ariyalur, a wholly owned Government of TamilNadu undertaking , started business from 1st April 1967 with an authorized share capital of Rs. 18

crores taking over cement plant at Alangulam and setting up another plant at Ariyalur in the year 1979.

TANCEM, as its expansion and conversion activities, set up Asbestos Sheet unit at Alangulam during 1981. TANCEM also took over during 1968, a Stoneware pipe plant from TACEL with a view provided employment to the retrenched employees.

TANCEM has, thus become a multi plants, multi locations and multi products company with an annual turnover of around Rs.250 crores and the authorized capital as of now is Rs.37.43 Crores.

The company has its main objects in production of cement and cement based products and primarily cater to the needs of Government departments. Limestone being the main raw material, the company acquired and reserved enough limestone bearing lands in and around Alangulam and Ariyalur which are sufficient to run the cement plants for decades to come. Hence, the role of TANCEM in the development of state is immense.

PLANTS -CERMETS PLANTS

Alangulam Cement Works

Located at Alangulam in Virudhunagar District, Commercial production was commenced in 1970-71 with a capital outlay of Rs.6.66 Crores.with the rate capacity of 4 lakh tones per annum , this unit provides direct employment to 787 people and indirect employment to 2000 people

The unit manufactures and markets ARASU brand 43 Grade OPC/PPC Cements in TamilNadu and Kerala. Major consumption is by Government Department for their construction activities such as Bridges, Dams, High raises Multistory buildings etc. It has a wide network of stockists both in TamilNadu and Kerala. Modernisation of plants is on. Portland pozzalana Cement (PPC) Ordinary Portland Cement (OPC)(43 Grade) are manufactured at this unit

Ariyalur Cement Works

Commercial production in this unit was commenced during October 1979. set up with a capital outlay of Rs. 29 crores and a rate capacity of 5 lakhs tonnes per annum of cement, this unit provides direct employment to 1500 people.

With the best limestone deposit available it is able to produce the high quality cement of various grades and supplies to Government Department and public. Wide appreciations have been received from various quarters for its ARASU brand cement being marketed in Tamilnadu and Kerala

Our business

The company is engaged in the manufacture and selling of Cement, Asbestos Cement sheets, Asbestos Cement sheets and stoneware pipes

The factories are situated in various districts of TamilNadu as under

1. Alangulam Cement Works, Alangulam, Virudhunagar district.
2. Ariyalur Cement works, Ariyalur, Permbalur district
3. TamilNadu Asbestos (Sheet) Unit, Alangulam, Virudhunagar district.
4. Stoneware pipe Factory, Virudhachalam, Cuddalore distrist

RESULTS AND DISCUSSION

1. The Profit of the concern shows fluctuating trend, but it is the high level for the year 2012.
2. The Profit Volume Ratio of TANCEM shows fluctuating trend. It was 11% in 2010 and 62% in 2011. So the Profit Volume Ratio has been good.
3. Thecontribution of the study unit also shows mixed tren.
4. The Breakeven Point was peak in 2011 even though a sales has increased the Breakeven point shows up and down.
5. The Margin of Safety of the company shows a mixed trend.
6. The Operating Leverages of the study unit has been fluctuated over the study period. The higher operating profit shows a good positive movement of the concern.
7. The financial leverage of the study unit shows mixed trend. It was very low in 2012.
8. The composite leverage also shows a mixed trend. During 2010 it was very peak that is 31.65 and lowest was .696 in 2012.

SUGGESTIONS

- Company must take action to increase sales by creating awareness of brand among the consumer's.
- Packing charges of study unit has been rising year by year so the company should reduce packing charges. So that the cost of production will be coming down.
- Company should take action against increasing trend of miscellaneous expenses.
- Study unit must focus on cutting down the cost of sales.

- Company has to renew the credit policy
- Company must maintain increasing operating leverage through raising sales. So that operating profit goes up.
- Financial leverage of the company should be termed into a positive through raising EBIT.

CONCLUSION

From the above study the impact of marginal cost and leverages of the company analyzed in various parameters and it is found satisfactory. Further the impact of marginal cost can be enriched by following the above said recommendations. For every organization the good financial performance is essential for the operation of other functional areas, thus it is completely integrated with the organization and with all the departments, in this study also it is proved, that the financial performance on the company completely govern all the operations of the concern effectively.

Annextures

Table 1

Statement Showing The Marginal Cost

Statement	**2008**	**2009**	**2010**	**2011**	**2012**
a. Sales	10546.29	10618.76	10343.10	12398.86	14303.03
b. V.cost	10103.35	8495.01	9205.36	4711.56	6150.29
C=a-b Contribution	442.94	2123.75	1137.74	7687.29	8152.71
d. Fixed cost	4192.43	1744.66	1084.87	6318.69	5698.08
e. Profit	-3749.09	379.08	52.86	1368.60	2454.63

Source: Annual Reports

Table 2

Statement showing the Profit Volume Ratio

Statement	**2008**	**2009**	**2010**	**2011**	**2012**
Contribution	4429.44	2123.75	1137.74	7687.29	8152.71
Sales	10546.29	10618.76	10343.10	12398.86	14303.03
P.V.Ratio	42.3	20	11	62	57

Source: Annual Reports

Table 3

Statement Showing Break Even Point

Year	Fixed Cost	P.V.Ratio (%)	BEP(Rs)
2008	4192.43	42.3	9981.05
2009	1744.66	20	8723.33
2010	1084.87	11	9535.23
2011	6138.69	62	10191.43
2012	5698.08	57	9996.63

Source: Annual Reports

Table 4

Statement Showing Break Even Point

Year	Sales	Contribution	BEP (Rs)
2008	10546.29	4429.44	9981.05
2009	10618.76	2123.75	8723.33
2010	10343.10	1137.74	9535.23
2011	12398.86	7687.29	10191.43
2012	14303.03	8152.71	9996.63

Source: Annual Reports

Table 5

Margin of safety

Year	Sales	BEP	Margin of Safety
2008	10546.29	9981.05	565.24
2009	10618.76	8723.33	1895.42
2010	10343.10	9535.23	8078.65
2011	12398.86	10191.43	2207.42
2012	14303.03	9996.63	4306.37

Source: Annual Reports

Table 6

Operating Leverage

Year	Contribution	Operating Profit	Leverrage
2008	4429.44	237.40	18.65
2009	2123.75	379.08	5.60
2010	1137.74	1368.60	12.80
2011	7687.29	2454.63	5.61
2012	8152.71	454.63	3.32

Source: Annual Reports

Table 7

Financial Leverage

Year	Operating Profit	PBT	Leverage
2008	237.40	333.08	0.712
2009	379.08	154.16	2.458
2010	1368.60	359.40	2.472
2011	2454.63	843.87	1.621
2012	454.63	11703.16	0.209

Source: Annual Reports

Table 8

Composite Leverage

Year	Contribution	PBT	Leverage
2008	4429.44	333.08	13.29
2009	2123.75	154.16	13.77
2010	1137.74	359.40	31.65
2011	7687.29	843.87	9.10
2012	8152.71	11703.16	0.696

Source: Annual Reports

REFERENCE:

1. I.M. Pandey “Financial Management” Vikas Publishing House, U.p.
2. M.A, Shaf “Management Accounting principles and practices” Vikas Publishing House,
3. S.N. Maheswari “Financial & Management Accounting” Sultan chand and sons, New Delhi.
4. R.M. Srivastava “Financial Management’ Himalaya Publishing House, Mumbai.
5. Reddy & Hary Prasad Reddy, “Financial Management” Margham Publication , Chennai.
6. K.K. Sharma, ‘cement industry from pains of scarcity to problems of surplus’ the Management Accountant, April 2001
7. Ramachandira Reddy and yuvaraja reddy 2007 ‘Financial Performance through Market Value Added Approach’ the Management Accountant, Jan 2007
8. J.O.Thomas ‘Financial Management’ Volume 16, no 2 1987
9. V.K.Bhall, “ financial Management & Policy” Anmol Publications & Private Limitted, New Delhi.