



## Financial Strength of Select Sugar Industries of Tamil Nadu (Path Analysis Approach on Return on Total Assets)

### KEYWORDS

Ratios; long-term assets; short term assets; financial analysis.

**G. SANKARANARAYANAN**

Assistant Professors of Commerce Vel Tech Ranga Sanku Arts College, Avadi, Chennai

**Ms. M. ELAKKIYA**

Assistant Professors of Commerce Vel Tech Ranga Sanku Arts College, Avadi, Chennai

**ABSTRACT** Financial strength may be described as one's ability to overcome or meet a financial obligation. The term financial strength has a reference to the ability of a business to meet the claims of creditors not only under current economic and business conditions but also under the unfavourable situations that may occur in future; to take advantage of business dealings or expansion which require presently owned resources, additional funds obtained through the sale of long term debt obligations and capital stock, or a favourable credit rating, and to continue interest and dividend payments without interruption. There are two aspects of the financial strength of a business - the short term and the long term. The short-term financial strength may be described as the liquidity (or) technical solvency of the business. The long-term financial strength depends on the structure that has been imposed on the business in financing more permanent asset requirements

### INTRODUCTION

Financial strength may be described as one's ability to overcome or meet a financial obligation. The term financial strength has a reference to the ability of a business to meet the claims of creditors not only under current economic and business conditions but also under the unfavourable situations that may occur in future; to take advantage of business dealings or expansion which require presently owned resources, additional funds obtained through the sale of long term debt obligations and capital stock, or a favourable credit rating, and to continue interest and dividend payments without interruption. Bankers and current creditors are interested in the current debt paying ability of a business, that is, the short-term financial strength of the business. Debenture holders and long-term lenders are mostly concerned with the long-term financial strength of the business. To judge the financial strength of private sector sugar industries in Tamil Nadu, the ratios relating to short-term and long-term financial strength has been computed and analysed in the following paragraphs.

### RATIONALE FOR THE STUDY

Short-term financial strength is the ability of a firm to meet its current obligations as and when they become due for payment. The importance of short-term financial strength can hardly be overstressed. A critical analysis of the financial performance of selected sugar industries was made and it has brought to fore many interesting observations throwing light on the financial performance of select industries. Conclusions that are drawn from the findings as well as recommendations aimed at achieving financial strength of the private sugar industries in Tamil Nadu and areas for further research.

### OBJECTIVES OF THE STUDY

The following are the main objectives of the study

- 1) To understand the financial strength of select sugar industry
- 2) To analyses the financial position using path analysis
- 3) To Offer valuable suggestions and scope for further re-

search

### SCOPE OF THE STUDY

It was confined with six major sugar industries of Bannaramman sugars Ltd, Dharani Sugars and Chemicals Ltd, EID Parry (India) Ltd., Rajshree Sugars and Chemicals Ltd, Sakthi Sugar Ltd. and Thiru Arooran Sugars Ltd.,

### PERIOD OF THE STUDY

Study period was consisted upon for the period of from 2002-2003- to 2011-2012

### RESEARCH METHODOLOGY

The study was carried out with the secondary data. The data was collected through recognized web portals of sugar industries and also it was collected through administrative offices of select sugar industries in Tamil Nadu.

### LIMITATIONS OF THE STUDY

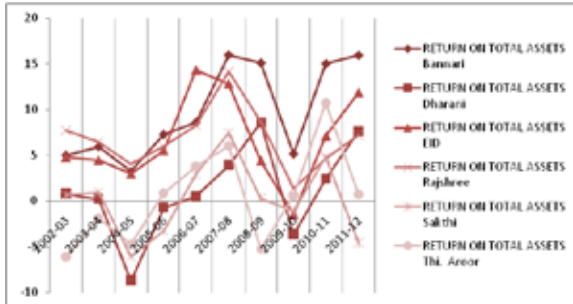
The study was confined with six sugar industries of Tamil Nadu only & The study period was from 2002 -03 to 2011-12 only

### RETURN ON TOTAL ASSETS

Assets turnover ratio tells us the relative efficiency with which the firm utilizes its resources in order to generate output. It varies according to the type of company being studied. The turnover ratio is a function of the efficiency with which the various asset components are managed:

RETURN ON TOTAL ASSETS						
Year	Bannari	Dharani	EID	Rajshree	Sakthi	Thi. Aroor
2002-03	4.99	0.84	4.79	7.76	0.65	-6.11
2003-04	5.92	0.22	4.43	6.46	0.96	-1.87
2004-05	3.23	-8.71	2.97	4.07	-6.11	-4.71
2005-06	7.25	-0.71	5.51	5.97	-3.23	0.88
2006-07	8.59	0.51	14.32	8.29	2.89	3.81

2007-08	15.95	3.92	12.81	14.19	7.48	6.06
2008-09	15.08	8.6	4.39	8.72	0.29	-5.24
2009-10	5.14	-3.65	-1.49	1.36	-1.15	0.56
2010-11	15.01	2.45	7.1	4.64	4.85	10.75
2011-12	15.91	7.63	11.84	7.21	-4.54	0.74



**PATH ANALYSIS APPROACH**

The main principle of path analysis is that any correlation coefficient between two variables or a gross or overall measure of empirical relationship can be decomposed into a series of parts: separate paths of influence leading through chronologically intermediate variable to which both correlated variables have links. The direct and indirect effect of independent variables on the dependent variable is calculated for six sugar industries for periods consisting of from 2002 – 2003 to 2011 - 2012.

**TABLE -1  
DIRECT AND INDIRECT EFFECTS OF INDEPENDENT VARIABLES ON RETURN ON THE TOTAL ASSETS OF SUGAR INDUSTRIES IN TAMIL NADU**

BANNARIAMMAN SUGARS LTD		
Vari-ables	Ratio's of	Standardised Coefficients - BETA
X <sub>11</sub>	Inventory Turnover	.508
X <sub>14</sub>	Inventory to Total Assets	.266
X <sub>31</sub>	Net Profit to Sales	.830
DHARANI SUGARS AND CHEMICALS LTD.,		
X <sub>23</sub>	Cash to Current Liabilities	.201
X <sub>31</sub>	Net Profit to Sales	.882
EID PARRY (INDIA) LTD.,		
X <sub>2</sub>	Return on Net worth	.808
X <sub>5</sub>	Net worth to Debt	.297
X <sub>25</sub>	Current Ratio	.110
X <sub>28</sub>	Working Capital Turnover	.082
RAJSHREE SUGARS & CHEMICALS		
X <sub>6</sub>	Current Liabilities to Proprietors Fund	.025
X <sub>7</sub>	Current Assets Turnover	.248

X <sub>11</sub>	Inventory Turnover	.115
X <sub>15</sub>	Inventory to Working Capital	-.038
X <sub>28</sub>	Working Capital Turnover	.414
X <sub>32</sub>	Operating Profit to Sales	1.098
SAKTHI SUGARS LTD.,		
X <sub>2</sub>	Return on Net worth	.640
X <sub>6</sub>	Current Liabilities to Proprietors Fund	.027
X <sub>11</sub>	Inventory Turnover	-.038
X <sub>13</sub>	Inventory to Current Assets	-.040
X <sub>18</sub>	Current Assets to Working Capital	.015
X <sub>24</sub>	Cash to Total Assets	-.039
X <sub>32</sub>	Operating Profit to Sales	.417
THIRU AROORAN SUGARS LTD.,		
X <sub>3</sub>	Debt Equity	.729
X <sub>10</sub>	Fixed Assets Turnover	.366

Source: Computed

It can be observed from the above Table that during the study period of 2002-2003- to 2011-2012, . An insight that reveals the variables X<sub>11</sub>, X<sub>14</sub>, X<sub>31</sub>, contributes towards profitability position of the Bannariamman sugars Ltd. Variables X<sub>23</sub>, X<sub>31</sub> contributes towards profitability position of the Dharami Sugars and Chemicals Ltd. Statistically not significant. Finally, an insight that reveals the variables X<sub>2</sub>, X<sub>5</sub>, X<sub>25</sub>, X<sub>28</sub> contributes towards profitability position of the EID Parry (India) Ltd. The variables X<sub>6</sub>, X<sub>7</sub>, X<sub>11</sub>, X<sub>28</sub>, X<sub>32</sub> contributes towards profitability and X<sub>15</sub> reduces the profitability position of the Rajshree Sugars and Chemicals. Variables X<sub>2</sub>, X<sub>6</sub>, X<sub>18</sub>, X<sub>32</sub> contributes towards profitability and X<sub>11</sub>, X<sub>13</sub>, X<sub>24</sub> reduces the profitability position of the Sakthi Sugar Ltd. The variables X<sub>3</sub>, X<sub>10</sub> contributes towards profitability position.

**SUGGESTIONS OF THE STUDY**

The following recommendations are offered to arrest the continuing imbalance between production and demand for sugar and to promote a climate of practicable development of the sugar industry in India in particular Tamil Nadu.

1. Most of the sugar companies were established about 20 to 25 years back. Hence, to increase the sugar recovery rate the companies are eradicate obsolescence machines and installed newest technology equipment
2. The debt equity ratio, inventory to current assets, inventory to total assets, current assets to liquid assets, current assets to sales, current ratio and working capital to sales have negative correlation with profitability in Bannariamman Sugars Ltd. So, the company should take necessary steps to improve the above areas.
3. Three individual variables i.e. inventory turn over, inventory to total assets and net profit to sales are contribute significantly to variations in the ratios in the ratio return on total assets of Bannariamman Sugars Ltd., Other variables are not significant to return on total assets. So the compa-

ny should give attention to the improvement of the other factors.

4. In Dharani Sugars and Chemicals Ltd., only two individual variables i.e. cash to current liabilities and net profit to sales are contribute significantly to the ratio return on total assets. Other variables are not significant to return on total assets. Therefore the company should take necessary steps to maximise the profit.

5. EID Parry (India) Ltd., the four individual variables i.e. return on net worth, net worth to debt, current ratio and working capital turn over ratio are contribute significantly to variations in the ratio of return on total assets. The current ratio of the company is not up to the level, there are immediate actions required for proper utilisation of current assets of the company in order to improve the profitability position of the company.

6. Only six individual variables i.e. current assets turn over ratio, inventory turn over ratio, inventory to working capital, working capital turn over ratio and operating profit to sales are contribute significantly to variations in the ratios in the ratio return on total assets of Rajshree Sugars and Chemicals Ltd. And six individual variables contribute significantly to variations in the ratios in the ratio return on total assets of Sakthi Sugars Ltd. Both companies should pay more attention to control the debt because year after year the debt equity ratio is marginally higher

7. In Thiru Arooran Sugars Ltd., two individual variables debt equity ratio and fixed assets turn over ratio are contribute significantly the ratio of return on total assets. The minimum liquidity ratio shows that the company is not stable and may face difficulty in paying off their debts (short term).so the company should give more care to the liquidity position of the company.

8. Inventory to working capital has reduces the profitability position of the Rajshree Sugars and Chemicals Ltd., so the management should take appropriate measures to maintain the inventory at optimal level.

9. In Sakthi Sugars Ltd., the inventory turnover ratio, inventory to current assets, cash to total assets reduces the profitability position during the study period. There is a need of suitable inventory policy in order to improve the profitability position of the company.

### CONCLUSION

Most of the sugar units do not have byproduct utilisation plants, so the government should take initiative steps to start projects based on bagasses, molasses and ethanol. And also that in future ten to fifteen per cent ethanol may also to be blended with petrol. Hence, the private sector sugar industries must concentrate with these influencing factors and have to formulate a suitable long term policy for the industry for better more of the private sector sugar industries in Tamil Nadu.

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