RESEARCH ARTICLE

A STUDY ON FINANCIAL RATIO ANALYSIS OF SRI VENKATESWARA CO-OPERATIVE SUGAR LTD., RENIGUNTA, CHITTOOR DISTRICT.

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Abstract: Sugarcane is an important commercial crop cultivated in about 120 countries in the world. Sugarcane is cultivated in an area of 42.40million hectares in the world. The total area under sugarcane cultivation is highest in Brazil (6.20 million hectares) followed by India (5.01million hectare). Brazil is the biggest producer of sugar accounting for 41.4 per cent of the world sugarcane production followed by India (17.7 per cent).The secondary data was collected fromthe sugar factory records in the study area for the year of 2009-10 to 2013-14. The performance of sugar industry was examined by the financial indicators. The results revealed that, ratios for period of five years were found to be positive and some years are shown negative performance.The financial leverage of the factory over the study period reveals that financial risk of the firm showed an increasing trend. An interest and principal repayment component was taken and analysis was made from 2009-10 to 2013-14. For a rupee of capital employed in fixed assets and current assets by the company, the sales revenue generated by the company was highly fluctuating.

Keywords: Sugar factory, Financial indicators, Ratio analysis

INTRODUCTION

Sugarcane is an important commercial crop cultivated in about 120 countries in the world. Analysis of financial indicators are the Current ratio, current liabilities , Quick ratio, Debt ratio, Debt Equity Ratio, Interest Coverage Ratio, Fixed charges coverage ratio, Inventory Turnover ratio, Days of Inventory Holding, Fixed Assets Turnover Ratio Current Assets Turnover Ratio, Net Profit Margin, Gross Profit Margin, Operating Expenses Ratio, Cost of Goods Sold Ratio. Other Operating Expenses, Ratio, Return on Total Assets, Return on Net Assets, Return on Equity, fixed assets, current assets. Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationships between the items of balance sheet and profit and loss account. A more rigorous analysis of financial position of the factory was attempted by considering selected financial ratios and examining their trend over the selected years (2009-10 to 2013-14). For this purpose solvency, liquidity, profitability and turn over aspects of the factory were examined.

Objective of the study: To evaluate the growth and performance in terms of ratio analysis.

METHODOLOGY

The data used for the study, it was based on the secondary sources. The data on current liabilities, and total assets of sugar industry were collected fromSri Venkateswara co-operative sugar ltd, Gajulamandyam, Renigunta, Chittoor District, Andhra Pradeshfor the year 2009-10 to 2013-14.

Analytical tools
Financial indicators

To analysis of financial indicators are the current assets, current liabilities, fixed assets, current assets were employed.

RESULTS AND DISCUSSION

In this chapter an attempt is made to discuss the results obtain from the study. The important findings of this study are presented under following financial indicators. Table 1 represents the liabilities of the sugar factory in Sri Venkateswara co-operative sugar Ltd, Gajulamandyam, Renigunta.The balance sheet of the sugar factory for a period of five years that is from 2009-10 to 2013-14 was analyzed. Various parameters in the balance sheet were taken and ratio analysis was made for the same period and results were drawn.Current ratio and quick ratios of the sugar factory from 2009-10 to 2013-14 was calculated taking various parameters listed in the balance sheet.From the Table 1, it is inferred that the current ratios of the factory for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were 0.83, 0.73, 0.86, 0.84 and 0.73 respectively. This infers that the current obligations were higher compared to the current assets maintained by the company. From the Table 1, it is inferred that the quick ratio of the factory for the years 2009-10, 2010-11,2011-12,2012-13 and 2013-14 were 0.16 ,0.09,0.13,0.12 and 0.07 respectively.The quick ratios figures revealed that current assets other than inventory maintained by the company in the form of levy sugar, free sugarand molasses were quite negligible. Due to more payables and poor receivables inventory was lying ideal for more time. Hence the liquidity of

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the company was so not impressive from 2009-10 to 2013-14. Debt ratio and debt equity ratios of the sugar factory from 2009-10 to 2013-14 was calculated taking various parameters listed in the balance sheet. Form the Table 2, it is inferred that the debt ratio of the company for five years i.e. for 2009-10, 2010-11, 2011-12,2012-13 and 2013-14 were Rs. 0.44, Rs. 0.51, Rs. 0.57, Rs. 0.52 and Rs.0.59 respectively. The lenders contribution over the assets maintained by the company was increased from 2009-10 to 2011-12 and then decreased in the year 2012-13 and again increased in the year 2013-14.The debt ratio reveals that the lenders contribution has been on an increasing trend from 2009-10 to 2011-12 there by decreased marginally in 2012-13 and again shown an increasing trend in the year 2013-14. From the Table 2, it is inferred that the debt equity ratios for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were Rs. 0.81, 1.03, 1.37, 1.08, and 1.44 respectively. The debt equity ratio of the factory from 2009-10 to 2013-14 revealed that lenders contribution were more (or) less equal to owner's contribution. From the Table 3 it is inferred that the interest coverage ratios for the years 2009-10 and 2012-13 were 0.74 and 4.43 respectively.

From the Table 3, it is inferred that the Fixed charges coverage ratio for the year 2009-10 and 2012-13 were 0.05 and 0.19 respectively. For the remaining years i.e. for 2010-11, 2011-12 and 2013-14 the above two ratios were not calculated as there were no earnings available with the company in order to pay the interest principle.Inventory turnover ratio, Days of inventory holding, Fixed assets turnover ratio and current assets turnover ratio of the sugar factory from 2009-10 to 2013-14 was calculated taking various parameters listed in the balance sheet.

From the Table 3, it is inferred that the inventory turnover ratios of the factory for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were 3.04, 0.62, 1.10, 1.49 and 0.89 respectively. The days of inventory holding by the factory for the study period were 120, 575, 326, 241 and 404 respectively.From the Table 4, it is inferred that the inventory holding figures of the factory ranged from 120 to 575 days. This implied that factory did sales as per government regulations and open market price of sugar. Till that period the stock was stored in Godowns by the factory.From the Table 4, it is inferred that the fixed assets ratios and current assets ratios of the company for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14. Similarly current asset ratio of the company for the year 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14. From the Table 5, gross profit margin, net profit margin, cost of goods sold ratio, other operating expenses, operating expenses and return on equity of the sugar factory from 2009-10 to 2013-14 was calculated taking various parameters listed in the balance sheet.From the table 4.10, it is inferred that the gross profit margins of the company for the year 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were (0.092),(0.189), (0.0546), (0.772), and (0.044).

From the Table 5, it is inferred that the net profit margins of the company for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were 0.811, 2.311, 1.388, 1.0209, and 2.123. From the Table 5, it is inferred that the cost of goods sold ratio of the company for the years 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 were 0.907, 1.187, 1.054, 0.9025 and 1.046. From the Table 5, it is inferred that the other operating expenses ratio of the company for the year 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 was (0.049),(0.093),(0.040), (0.065),and (0.0571).

It is inferred from the profitability ratio that the factory was incurring losses over the study period i.e. from 2009-10 to 2013-14. The operating expenses of the company were also kept on the higher side. From the Table 5, it is inferred that the return on equity of the factory from 2009-10, 2010-11, 2011-12, 2012-13 and 2013-14 was (1.111), (1.32), (1.465), (1.307) and (1.729). The return on equity figures of the company reveals that there was no increase in the shareholders wealth from 2009-10 to 2013-14.

Table 1. Analysis of Liquidity Ratios

Financial Year	Current ratio	Quick ratio
2009-10	0.835	0.161
2010-11	0.732	0.093
2011-12	0.864	0.131
2012-13	0.841	0.126
2013-14	0.735	0.078

Table 2. Analysis of leverage ratios:

Year	Debt ratio	Debt equity ratio
2009-10	0.44	0.813
2010-11	0.51	1.036
2011-12	0.57	1.37
2012-13	0.52	1.086

2013-14	0.59	1.4402

The results of the same are presented below.

Table 3. Analysis of interest coverage ratio and fixed charge coverage ratios:

Years	Interest coverage ratio	Fixed charges coverage ratio
2009-10	0.74	0.05
2010-11	–	–
2011-12	–	–
2012-13	4.43	0.19
2013-14	–	–

Table 4. Analysis of activity ratio:

Years	Inventory turnover ratio	Days of inventory holding	Fixed assets turnover ratio	Current assets turnover ratio
2009-10	3.043	120	4.778	2.429
2010-11	0.626	575	1.939	0.545
2011-12	1.105	326	3.683	0.895
2012-13	1.496	241	4.479	1.293
2013-14	0.89	404	2.85	0.791

Table 5. Analysis of profitability ratios

Years	Gross profit margin	Net profit margin	Cost of goods sold ratio	Other operating expenses ratio	Operating expenses ratio	Return on equity
2009-10	(0.092)	(0.811)	0.907	0.049	0.957	(1.111)
2010-11	(0.189)	(2.377)	1.187	0.093	1.281	(1.32)
2011-12	(0.0546)	(1.388)	1.054	0.040	1.094	(1.465)
2012-13	(0.772)	(1.0209)	0.9025	0.065	0.967	(1.307)
2013-14	(0.044)	(2.123)	1.046	0.0571	1.103	(1.729)

( ): - Indicates loss

Table 6. Ratio analysis of sugar industry

S.NO	Years	2009-10	2010-11	2011-12	2012-13	2013-14
1	Current ratio	0.835	0.732 (-12.3)	0.864 (18.0)	0.841 (-2.6)	0.735 (-12.6)
2	Quick ratio	0.161	0.093 (-42.2)	0.131 (29.0)	0.126 (-3.9)	0.078 (-38.0)
3	Debt ratio	-2.091	-12.076 (-9.9)	13.55 (12.2)	2.815 (79.2)	5.042 (79.1)

4	Debt Equity Ratio	0.813	1.036	1.37	1.086	1.4402
5	Interest Coverage Ratio	0.723	-2.187 (-402)	-0.782 (-135)	4.41 (463)	-33.56 (-113)
6	Fixed charges coverage ratio	0.051	-0.202 (-496)	-0.054 (-126)	0.195 (261)	-0.656 (-436)
7	Inventory Turnover ratio	0.043	0.626 (13.5)	1.105 (76.5)	1.496 (35.3)	0.89 (-40.5)
8	Days of Inventory Holding	120	574.8 (379)	325.6 (-43.3)	240.55 (-26.1)	404.28 (68.0)
11	Fixed Assets Turnover Ratio	4.778	1.939	3.683	4.479	2.85
12	Current Assets Turnover Ratio	2.429	0.545	0.895	1.293	0.791
13	Gross Profit Margin	0.092	-0.189	-0.0546	0.772	-0.044
14	Net Profit Margin	-0.811	-2.377	-1.388	-1.0209	-2.123
15	Operating Expenses Ratio	0.957	1.281	1.094	0.967	1.103
16	Cost of Goods Sold Ratio	0.907	1.187	1.054	0.9025	1.046
17	Other Operating Expenses Ratio	0.050	0.094	0.04	0.065	0.057
18	Return on Total Assets	0.029	-0.052	0.02	0.119	-0.024
	Return on Net Assets	0.356	1.688	0.608	0.695	0.94
19	Return on Equity	-1.111	-1.32	-1.465	1.307	-1.729

SUMMARY AND CONCLUSION

Sugarcane is an annual crop sown in the month of April to May and crop comes to harvesting between October to February and yields on an average 50 tonnes per hectare which yielded 35mertic tonnes per hectare. This indicates that the raw material supplied to the factory is only for a period of 3 to 4 months and hence the inventory turnover is done only was that period. Due to more payables and poor receivables inventory was lying ideal for more time. Hence the liquidity of the company was so not impressive from 2009-10 to 2013-14. Debt ratio and debt equity ratios of the sugar factory from 2009-10 to 2013-14 was calculated taking various parameters listed in the balance sheet. The financial leverage of the factory over the study period reveals that financial risk of the firm showed an increasing trend.An interest and principal repayment component was taken and analysis was made from 2009-10 to 2013-14. For a rupee of capital employed in fixed assets and current assets by the company, the sales revenue generated by the company was highly fluctuating.

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