CHAPTER- 9 CONCLUSION AND SUGGESTIONS:

9.1 CONCLUSION

9.1 Introduction:
In this thesis “Financial performance of Sugar industry of Gujarat State.” the techniques of ratio analysis, trend analysis and the Analysis of Variance are used to derive the conclusion. Summary of this study along with the important findings of the study contained in the chapters VI, VII and VIII of the thesis and some suggestions are presented below.

In order to analyze the financial performance of Sugar industry of Gujarat during the period 2002-03 to 2012-13 on the basis of financial performance of 17 selected Sugar Factory of the industry located in Gujarat, Nine important ratios related to (i) Liquidity (ii) Profitability (iii) Turnover and (IV) Leverage aspects related to financial performance analysis have been obtained from the relevant data reported in the annual reports of the selected companies. Then, using the Net worth of a company as the weight for that company for that year, Nine composite ratios have been obtained for each of the companies for all the years under study i.e. 2002-03 to 2012-13 .Further, on the basis of average Net worth capital was weight of that company for the duration of study, Nine ratios for the industry for the duration of study are obtained as weighted mean ratio of respective composite ratios of the 17 companies. Then, on the basis of Nine ratios for each of the 17 selected companies for the 11 years period and nine ratios of the industry for the 11 years period the Trend analysis and ANOVA have been carried out and presented in various sections of chapter-VI, chapter-VII and chapter-VIII.

The chapter-I is contains Introduction and Growth of Sugar industry, chapter-II Contains Review of literature, Chapter III contains Research Methodology, Chapter IV contain Profile of Selected Sugar units, chapter-V contains Ratio Analysis. Chapter VI and chapter VII deal with the ANOVA of 9 ratios of the selected companies as well as the industry. The chapter VIII deals with the trend analysis of various ratios.
9.2 Important conclusions made from the ANOVA analysis carried out

In the chapter-VI&VII

Company Profile (Company wise)

Liquidity Ratios

9.2.1 Conclusion of current ratio on the basis of ANOVA test

- There is significant difference in composite current ratios of selected Sugar Industry during Study period
- All the Sugar Industry having composite current ratios above 0.5 and below 2 belonged to lower, middle and large size crushing capacity.
- Out of the selected Sugar Industry the composite current ratios of 8 Companies were higher than 1.23 and 9 Sugar Industry were lower than 1.
- It is found that the composite current ratio of the industry was 1.23 during the Period for company wise comparison, which is not near to the ideal level,
- The highest composite current ratio during the decade was 1.95 for the Ganesh and Narmada Sugar Industry followed by Pandvai 1.90 Kodinar 1.66 and Sayan 1.60 which was nearly ideal.
- The lowest composite current ratio during the Period was 0.53 for Maroli Sugar followed by Ukai 0.77, Valsad 0.93, Chalthan 0.99. The current ratios of these companies were below 1 which is considered low and risky in terms of current assets and may create financial crisis for short term expenses.

Profitability ratios

The following profitability ratios have been studied:

Gross Profit Margin Ratio ,Net Profit Margin Ratio, Operating Profit Margin Ratio, Return on Capital Employed Ratio, Expenses to Sales Ratio
9.2.2 Conclusion of Gross Profit Margin Ratio on the basis of ANOVA test

- Out of selected companies the composite gross profit ratio of 4 companies was higher than 0.17 and 13 companies were having lower than 0.17.
- Chaltan Sugar Industry was having lowest gross profit margin ratio suffering from over capitalization.
- It is found that the composite gross profit margin ratio was 0.17 for the industry during the Study period.
- The highest composite gross profit ratio was 0.41 for Talala Sugar Industry and the lowest was 0.057 for Chaltan Sugar Industry.
- 5 Sugar Industry have the gross profit margin ratios in the range of (0.057 to 0.099) and 12 have the ratios in the range of (0.100 to 0.406).
- No one Sugar Falls Under negative Ratio during the Study Period. It has been Good Sign for the Whole Industry.

9.2.3 Conclusion of Net Profit Margin Ratio on the basis of ANOVA test

- Due to huge loss of Maroli Sugar Industry and Ukai Sugar Industry the whole ratio of composite net profit margin of the industry became negative. It shows the poor picture of the industry in terms of performance in net profit margin.
- Individual performance of the selected companies was very poor in terms of net profit margin except Talala Sugar Industry, Kodinar Sugar Industry and Narmada Sugar Industry during the Study period.
- In comparison to operating profit margin ratio, the net profit margin ratio was very poor; it indicates that the operating expenses were rising.
- Composite net profit margin ratio was -0.028 during the Study period for the industry in the company wise comparison which is unhealthy.
- The highest composite net profit margin ratio was 0.043 for Talala Sugar Industry and the lowest was -0.15 for Maroli Sugar Industry.
- Out of selected companies the composite net profit margin ratio of 6 Companies were negative.
From revised table we conclude that

- The composite net profit margin ratio for revised table was 0.00062 during the Study period for the industry. It is indicating very Nominal Composite net profit margin because the main objective of Co operative Sugar Industry is to provide Maximum price to the Farmer and not to make Maximum profit.

- The highest composite net profit margin ratio was 0.043 for Talala Sugar Industry.

- Out of selected companies the composite net profit margin ratio of 7 companies was above 0.00062 which presenting good performance.

9.2.4 Conclusion of Operating Profit Margin Ratio on the basis of ANOVA test

- The highest composite operating profit margin ratio was 0.14 for Talala Sugar Industry, followed by Second Highest Vadodara Sugar Industry 0.11

- The lowest composite operating profit margin ratio among the companies was -0.14 for Maroli Sugar Industry, followed by -0.025 Ukai Sugar Industry.

- Out of the selecte Sugar Industry the composite operating profit margin ratio 8 Sugar Industry were higher than 0.041 and 9 Sugar Industry have less than 0.041.

- The composite operating profit margin ratio was in the range between -0.14 to 0.14.

- It is found that the composite operating profit margin ratio of the industry during the decade was 0.041
9.2.5 Conclusion of Return on Capital Employed Ratio on the basis of ANOVA test

- The lowest composite ratio of return on capital employed was -0.0053 for Maroli sugar Industry followed by Ukai Sugar Industry was 0.0056. It indicating over Capitalising of it.
- The companies among the poor performance in terms of return on capital employed were Vadodara Sugar Industry and Kopar Sugar Industry.
- Out of selected companies the composite ratio of return on capital employed, 11 were higher than 0.14 and 6 were lower than 0.14
- Composite ratios of return on capital employed of selected companies were in the range of -0.0050 to 1.
- It is found that the composite ratio of return on capital employed for the industry during the decade was 0.14
- The highest composite ratio of return on capital employed was Bardoli Sugar Industry was 0.93 followed by chalthan Sugar Industry was 0.79.

9.2.6 Conclusion of Expenses to Sales Ratio on the basis of ANOVA test

- Out of the selected companies composite expenses to sale ratio was 13 Sugar Industry have the ratios lower than 0.16 and 4 of them have the ratios higher than 0.16.
- The range of composite debt-equity ratio was 0.05 to 0.30.

- It is observed that the composite expenses to sale ratio of the industry During the Study period were 0.16. (Expenses include factory expense, Administrative expense and selling expense.) So, it is a Good sign for industry to maintaining expenses to sale ratio at lower level.
- The highest composite expenses to sale ratio was for Vadodara 0.29 Followed by Talala 0.26 and Kodinar also 0.26 higher the Expenses lower the profit. It indicates high level of Expenses in compare to other company in the industry.
The lowest composite expenses to sale ratio was Narmada Sugar Industry 0.057 followed by Gandevi 0.065, Kamarej 0.074, Chalthan 0.083 and Bardoli was 0.086 that mean these Sugar Industry keep expenses at minimum lever.

**Solvency OR Leverage Ratio**

The following solvency ratios have been studied:

### 9.2.7 Conclusion of debt-equity ratio Ratios on the basis of ANOVAs test

- It is observed that the composite debt-equity ratio for the industry was 6 which considered too much higher than Ideal situation 2:1.
- The highest composite debt-equity ratio was 29.87 for Chalthan Sugar Industry followed by Sayan Sugar Industry 29.76. It indicate high level of borrowed capital.
- The lowest composite debt-equity ratio was Ukai 0.99 followed by Koper 1.79, Pandvai 2.77. It indicate the owner capital was more than the borrowed capital of other Sugar Industry and shows less burden of paying interest and there is scope for trading on equity.
- Out of the selected companies 8 Sugar Industry have the ratios lover than 6 and 12 of them Sugar Industry have the ratios higher than 6.
- The range of composite debt-equity ratio was 0.5 to 30.

### 9.2.8 Conclusion of interest coverage ratio Ratios on the basis of ANOVA test

- The range of composite interest coverage ratio was -4.36 to 2.87.
- The lowest composite interest coverage ratio was -4.36 Maroli Sugar Industry followed by -0.75 Ukai Sugar Industry indicate low earning capacity and so inability to pay the burden of interest.
- It is observed that the composite interest coverage ratio of the industry was 0.80 which is very poor.
- The highest composite interest coverage ratio was 2.87 for Narmada Sugar Industry followed by Koper Sugar Industry was 1.79 and Bardoli Sugar Industry.
Industry was 1.74. It indicates less borrowed capital and high interest paying capacity.

- Out of selected companies 15 Sugar Industry have the composite interest coverage ratios higher than 0.80 and 2 of them have composite interest coverage ratio lower than 0.80

**Efficiency Ratio**

**9.2.9 Conclusion of fixed assets turnover ratio on the basis of ANOVA test**

- It is found that the composite fixed assets turnover ratio for the industry was 1.95.
- The highest composite fixed assets turnover ratio was 3.73 for Bardoli Sugar Industry followed by Sayan Sugar Industry 3.27. It indicates efficient use of fixed assets.
- The lowest composite fixed assets turnover ratio was 0.71 Ukai Sugar Industry and for Maroli Sugar Industry 0.86. It indicates inefficient use of fixed assets.
- Out of the selected companies 10 Sugar Industry have the ratios higher than 1.95, and 7 Sugar Industry have lower than 1.95.
- The composite fixed assets turnover ratios of the selected companies were in the range of 0.71 to 3.73.

**9.3 Industry Profile (Year wise)**

**Liquidity ratios**

**9.3.1 Current Ratio**

- Chalthan Sugar Industry Maroli Sugar Industry and Uka Sugar Industry could not maintain the level of current ratio, as their current ratios were below 1. Narmada Sugar Industry and Ganesh Sugar Industry perform at best level.
• Overall performance of Sugar industry in terms of current ratio was at satisfactory level.

• It is found that the current ratio for the industry during decade was above 1.23 which is not at an ideal level but was also not poor.

• Among the Study period of 11 year 4 years composite current Ratio were below the Average of industry 1.23 and 7 years composite current Ratio were Above the Average of industry

• The current ratios of the companies do not differ significantly. Among the companies selected, 8 companies have current ratios higher than 1.23 and 79 companies have current ratios lower than 1.23.

Profitability ratios

The following profitability ratios have been studied:

1. Gross Profit Margin Ratio
2. Net Profit Margin Ratio
3. Operating Profit Margin Ratio
4. Return on Capital Employed Ratio
5. Expenses to Sales Ratio

9.3.2 Gross Profit Margin Ratio

• Among the Study period of 11 year 8 years composite Gross profit Ratio were below the Average of industry 0.17 and 3 years composite current Ratio were Above the Average of industry.

• In the year of 2002-03 industrial composite Gross profit was at lowest level(0.093) In the year of 2010-11 industrial composite Gross profit was at Highest level(0.33)

• It is found that the gross profit margin ratio of the industry during the decade was 0.17.which was very poor.

• There were not a single Sugar Industry in loss in concern to composite Gross profit
The main purpose of Co-operative Sugar Industry is to provide reasonable price to Sugarcane Grower. So composite Gross profit Margin ratio present healthy financial performance of the industry.

9.3.3 Net Profit Margin Ratio

- Individually Narmada Sugar Industry net profit margin ratio was highest during the Study period and Ukai Sugar Industry net profit margin ratio was lowest and negative during the Study period.
- Overall picture the Study period of the industry in terms of net profit margin ratio during the was good because except the Maroli Sugar Industry, and Ukai Sugar Industry All Sugar performance positive.
- It is found that the net profit margin ratio of the industry during the decade was negative i.e. -0.028 which is not good at all.
- The highest net profit margin ratio during the Study period was 0.0094 in year 2003-04 and the lowest was -0.070 during 2009-08. After initial two years net profit margin ratio went down and was negative but it Fluctuating total period.

9.3.4 Operating Profit Margin Ratio

- The Operating profit margin ratio of the industry in 2007-08, 2008-09 and 2009-10 were minus because Maroli Sugar Industry, Vadodara Sugar Industry, and Ukai Sugar Industry made huge loss during these years.
- Negative ratio indicating higher operating Expenses of the industry.
- In terms of operating profit margin ratio, overall performance of the Sugar Industry of Gujarat during the decade was good.
- It is found that the operating profit margin ratio of the industry during the decade was 0.041 which is normal.
- Operating profit margin ratio was highest during 2003-04 and lowest during 2007-08.
9.3.5 Return on Capital Employed Ratio

- The return on capital employed ratio of the companies during Study period no significant difference.
- The highest individual performance in return on capital employed ratio was of Bardoli Sugar Industry(1000.6) and lowest was Vadodara Sugar Industry (-648)
- It is found that return on capital employed ratio of the industry during decade was 0.14.
- Return on capital employed was highest in 2002-03 and lowest in year 2007-08.
- The return on capital ratio during the period was in the range (7, 25). This reflects efficient use of resources

9.3.6 Expenses to Sales Ratio

- Individually Narmada Sugar Industry was having least Expenses to sales Ratio and Vadodara Sugar Industry had highest Expenses to sales Ratio.
- It is found that the Expenses to sales Ratio of the industry during the Study period were 0.16 which is good.
- Expenses to sales Ratio was highest during 2007-08(0.31) and the least during 2012-13 (0.08).
- Expenses to sales Ratio of the companies during the Study period were not differing significantly. 6 year’s Industrial Expenses to sales Ratio were below the Average and 5 year’s Above the Average.
- Minimum the Expenses to sales Ratio its indicating efficient use of resources and wise-verse
- Overall performance of the industry during the Study period in terms of Expenses to sales Ratio was good and indicates efficient financial management.
Solvency OR Leverage Ratio

The following solvency ratios have been studied:
1. Debt-Equity Ratio
2. Interest Coverage Ratio

9.3.7 Debt-Equity Ratio

- The debt-equity ratio of the industry during the Study period not differs significantly. Among the industry 6 year have debt-equity ratios lover than 6 and 5 companies have the debt-equity higher than 6.
- Chalthan Sugar Industry 29.87 the highest individual debt-equity ratio during the Study period, indicate the high level of debt and risk in the company and Ukai Sugar Industry was having 0.99 the lowest individual debt-equity ratio, indicate very low level of debt.
- Sayan Sugar Industry was also having 29.76 debt-equity ratios during the decade which indicates high level of debt and risk.
- It is found that debt-equity ratio of the industry during the decade was around 6 which is so higher.
- The highest debt-equity ratio of the industry was 12.95 during 2002-03 and the lowest was 2.45 during 2005-06.

9.3.8 Interest Coverage Ratio

- Narmada Sugar Industry had the highest (2.87) interest coverage ratio indicate high capacity to pay the interest followed by Maroli Sugar Industry (-4.36) also having very poor capacity to pay the interest.
- Excluding year 2004-05 of the Study period the overall performance of the industry in terms of interest coverage ratio was comparatively good.
- It is found that the interest coverage ratio of the industry during the Study period was 0.80.
- The highest interest coverage ratio of the industry was 1.59 during 2012-13 and the lowest was negative during 2004-05.
• The interest coverage ratio of the companies not differs significantly during the decade. Among the industry 5 year have debt-equity ratios lover than 0.80 and 6 companies have the debt-equity higher than 0.80

Efficiency Ratio

9.3.9 Fixed Assets Turnover Ratio:

• Individually the highest fixed asset turnover ratio was Bardoli Sugar Industry was 3.73 followed by Chalthan Sugar Industry 3.24, Sayan Sugar Industry 3.27 during the study period.

• Fixed Asset Turnover Ratio of the industry during the decade was 1.95 which is considered low and indicates inefficient use of fixed assets or over investment.

• The highest Fixed Asset Turnover Ratio was 2.57 in the year 2009-10 and the lowest was 1.24 in the year 2003-04.

• The Fixed Asset Turnover Ratio of the companies during the study period differs significantly. After 2008-09 fixed assets turnover ratio increase significantly.

• Maroli Sugar Industry had the lowest fixed asset turnover ratio during the study period individually, followed by Ukai Sugar Industry. these two has need to improve fixed asset turnover ratio for efficient use of