

# Analysis of Financial Performance of Plastic Industry of Gujarat (India) During 2001-2010

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**Abstract:** In this research article author has selected 15 public limited listed companies out of 55 member companies of Gujarat State Plastics Manufacturing Association, Gujarat, India and collected 10 years i.e. (2001-2010) financial data. And found out 14 various composite ratios. Such composite ratios have been worked out using weighted mean. Since the companies included in the sample have variable size in terms of its paid-up capital, it is very important to use 'paid-up' capital of that company as weight and find weighted mean of the ratios to arrive at composite ratio for the industry because in such cases weighted mean provides more efficient estimate than the mean does. To analyse financial performance of plastic industry of Gujarat (India) researcher have used weighted mean as statistical technique and applied one way Analysis of Variance (ANOVA) to test whether there is significant difference in the financial performance of Plastic Industry of Gujarat among the selected years i.e. during study period. Overall picture of the industry in terms of net profit margin ratio during the first half of the decade was steadily improving and was not stable in the second half of the decade as it was moving up and down every alternate year.

**Keywords:** Plastics Industry, Financial Analysis, Composite Ratios, Weighted Mean, Analysis of Variance, Liquidity, Profitability, Activity, Solvency Ratios.

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## I. INTRODUCTION

Over the years, India has made significant progress in the industrial world with healthy economic growth. On purchase power parity basis, it is one of the top five global economies and is expected to be the third largest by the turn of this decade. Plastics are one of the fastest growing industries in India. Indian Plastics Industry is expanding at a phenomenal pace. Major international companies from various sectors such as automobiles, electronics, telecommunications, food processing, packing, healthcare etc. have set-up large manufacturing bases in India. Therefore, demand for plastics is rapidly increasing and soon India will emerge as one of the fastest growing markets in the world. The next two decades are expected to offer unprecedented opportunities for the plastic industry in India. This would necessitate industry initiatives to foster investments, expand the market, upgrade quality standards, enhance global participation, encourage Indian industry, to adopt and adapt to world class technology and manufacturing practices.

## II. GROWTH OF PLASTIC INDUSTRY

### 2.1 Global Scenario

Last few years have been tumultuous for plastics and petrochemical sector due to steep rise in oil prices, which has adversely affected the global economies. However, considering the feed stock advantage and abundance of oil reserves newer petrochemical complexes are being established in Middle-east countries i.e. Oman, Saudi Arabia, UAE, etc. It is projected that, Ethylene capacity in Middle-East would reach to about 35 million tons per annum and Polypropylene (PP) capacity to touch about 7 million tonnes per annum. The US Petrochemical sector may lose Export competitiveness as most of the Ethylene capacities in USA are Ethane based, which are not cost competitive and are capable to produce only Polyethylene (PE). Similarly the revamping of European Petrochemical Complexes would be imperative as they are based

on old and expensive technology and are not cost competitive with the Middle-East companies having the biggest advantage of raw material at their doorstep. China, Middle-East and India would be the major global players, where expansion and augmentation of existing petrochemical capacity would take place in the next 5 years.

Worldwide Plastics Industry witnessed a steady growth in the last decade which is reflected in the increased consumption figures of all types of plastics materials. Asia has been world's largest plastics consumer for several years, accounting for about 30% of the global consumption excluding Japan, which has share of about 6.5%. Next to Asia is North America with 26% share, then Western Europe with 23% share in the global market.

## **2.2 Indian Plastic Industry**

The plastic processing sector in India comprises about 55,000 units employing around 3.6 million people – directly and indirectly; Gujarat contributes about one-fifth of the total number of units in the country. They are involved in producing variety of items through injection moulding, blow moulding, extrusion and calendaring.

The country in general and Gujarat in particular possess necessary technical skills to produce high quality plastic goods, required machinery, efficient moulds and dyes. In view of the versatility of operations and low cost of production, the state has been ideally suited to serve as a sourcing base. Major international companies from various segments of industry including automobiles, electronics and communication, food processing and packaging have set up large manufacturing plants in the country and have helped to develop the market. India is emerging as one of the fastest growing markets and is expected to grow annually by 12 to 15% in the coming years. Indian Plastics Industry gained momentum in early 90's when the economy opened up with liberal industrial policies. Since 2000-01, virgin polymer consumption in the country increased from 3.3 MMT to 7.5 MMT in 2009-10 with annual growth of 9.4%.

Plastics Industries' contribution to India's manufacturing GDP touched around 10% in 2009-10. Polymer demand is expected to touch 16.2 MMT by 2015-16 and 20 MMT by 2020.

## **2.3 Plastic Industry in Gujarat**

The Plastics Industry in Gujarat is one of the oldest in India and among the earliest initiatives towards polymer raw material manufacturing. Majority of India's plastics business revolves around packaging, and as Gujarat contributes 65-70 % to the country's plastics industry, it is home to many small and medium packaging industries. The Plastics Industry in Gujarat contributes 2.17% of India's total exports and is worth \$3513 millions.

Thus, so far as growth of Indian economy is concerned, the plastic industry of Gujarat and therefore that of India is making considerable contribution. Therefore, the present study has got motivation from these aspects.

## **2.4 Some facts about Gujarat**

- Gujarat contributes more than 60% of Indian petrochemical industry.
- 70 % of polymers are produced in Gujarat.
- Contributes one-fifth of the total number of SMEs in the plastic sector in the country.
- Gujarat plastic industry is witnessing an annual growth of more than 15 %.
- Gujarat's share in exports of plastic is around 15 %.
- Gujarat share in the production of plastic products is around 14 %.
- Gujarat has the highest plastic machinery manufacturers.

## **III. LITERATURE REVIEW**

Most of the studies have focused on some aspects of plastic industry like environmental impact of plastic shopping bags, risk faced by plastic industry, adopting new technology in plastic industry, traditional performance index of plastic industry, plastic debris and steps to support and to enable policy makers to develop plastic industry. Very few research works has been done on the field of financial aspect of plastic industry.

Meng-yi Wang (2007) analyzed the issues concerning risk-bearing issue faced by the public listing companies in Taiwan's traditional industries, including the food and plastic industries. The study covered the period from 2001 to 2006, and its results were as follows:

In both the food and plastics industries, if a company had greater operating leverage, it faces greater total risk and specific risk. If the company had greater shareholding ratio of board directors and greater amount of assets, it faces less total risk and specific risk.

Regarding debt ratio of the food industry, if the debt ratio is higher, the total risk and specific risk were higher. The debt ratio had no effect on risk-bearing of the plastics industry. With regards to the shareholding ratio of board directors and quick ratio, the total risk and specific risk were lower in the plastics industry. The shareholding ratio and quick ratio had no effects on the risk-bearing of the food industry.

As for the establishment years of a company, due to the stability and cycle of the products, a food company with longer establishment faces great risks and risk bearing. On the contrary, for a plastics company, the longer it has been established, the lower the risk and risk-bearing it was subjected to. Povl A Hansen, Goran Serin (1993) showed that development of new materials and material shifts play an increasing role in the development of industrial production. The main issue of this paper was the ability of the industry to adapt to new materials. This study showed that it has been difficult for established firms in Denmark, both within the plastics industry and outside, to undertake shifts in technology. The study also showed that firms most open to material adaptation have been firms based on product ideas not on materials. Another finding was that the Danish plastics industry had been characterized by high growth rates despite low R&D figures. The reasons for these were on the one hand the ability of Danish plastics firms to exploit existing know-how and on the other hand the increased specialization of the firms.

Furthermore the study shows that neither institutional R&D nor institutional education had played any noticeable role in the adaptation process of the Danish plastics industry Santanu Mandal (2011) in his study "Porter's Five Forces of Analysis of the Indian Plastic Industry" he has analyzed the plastic industry of India in terms of Michael E. Porter of Harvard Business School in 1979. Porter's five forces are

1. Bargaining power of suppliers
2. Bargaining power of buyers
3. Internal Rivalry
4. Entry
5. Threat of substitutes.

So far as the porter's five forces analysis of this industry is concerned, bargaining powers of suppliers is low while that of buyers is high. Entry is difficult and it entails the incumbent to have significant capital to invest if it wants to enter this industry. On the substitute front, there are lot of researches going on and recent anti plastic campaigns have already given way to many new replacements for plastic as seen above, thereby indicating high threat from substitutes. On the internal rivalry context, the rivalry is high and firms often engage in price wars. It is easy for small firms to change prices and increase market share but the large ones finds difficult to switch quickly. On the whole plastics are essential for today's standard of living and they help in improving the quality of life. It is expected that plastics will continue to grow dynamically.

Hamid Minhas (2006) has drawn overall picture of the growth of Pakistan's economy due to the growth in plastic industry in his study. Pakistan's economy achieved an impressive GDP growth rate of 8.4% in 2004-05, the highest in two decades and the third fastest growing economy in Asia. Powering the economy with its superb performance, the manufacturing sector accounted for 18.3% of GDP while registering a growth of 12.5%. The co-related industries of Plastic, Printing & Packaging have registered a phenomenal growth during the past few years where printing and graphic arts industries were the second largest industries in terms of work force in Pakistan.

Pakistan's plastic industry was thriving at an average annual growth rate of 15% with a total estimated production capacity of 624,200 M/T per annum. The industry attracted investment amounting to more than US\$ 260 billion, almost half of which was foreign direct investment (FDI), all contributing to an exceptional export growth by 35%. Particular growth

was seen in exports of plastic components for the automobile industry. This growth happened, besides entrepreneurial efforts, due to simplified tax policy on local production and reduction in import tariff on plastic raw materials. The industry was contributing more than Rs7.5 billion annually to the national exchequer in shape of custom duty, sales tax and income tax.

Yuan-Tien Su (2003) investigated whether Economic Value Added (EVA), could be applied for the traditional plastic industry in Taiwan stock market and had better Adjusted R<sup>2</sup> with Market Value Added (MVA) than the traditional performance index, and was a better tool in the decision- making of investment by the management and in evaluating the value of an enterprise by the investor.

The following results in this study were obtained:

1. EVA was proved to be highly related and explainable with MVA for the traditional plastic industry in Taiwan.
2. EVA could reflect the operational performance better than RI for the traditional plastic industry in Taiwan.
3. EVA applied for the traditional plastic industry was more appropriate than the traditional performance index in Taiwan.

Povl A Hansen, Goran Serin (1993) showed that development of new materials and material shifts play an increasing role in the development of industrial production. The main issue of this paper was the ability of the industry to adapt to new materials. This study showed that it has been difficult for established firms in Denmark, both within the plastics industry and outside, to undertake shifts in technology. The study also showed that firms most open to material adaptation have been firms based on product ideas not on materials. Another finding was that the Danish plastics industry had been characterized by high growth rates despite low R&D figures. The reasons for these were on the one hand the ability of Danish plastics firms to exploit existing know-how and on the other hand the increased specialization of the firms. Furthermore the study shows that neither institutional R&D nor institutional education had played any noticeable role in the adaptation process of the Danish plastics industry.

### **About The Research Problem**

The present study focuses on financial analysis of plastic industry of Gujarat for the period 2001 to 2010. For carrying out this study, the financial data reported by company have been used and from such data, various ratios have been worked out for the selected units as well as the plastics industry of Gujarat in general. One of the major factors affecting the functioning of an industrial unit is the size of that unit. So far as financial analysis is concerned, one of the most important parameters of judging the size of a industrial unit is the paid –up share capital of that unit. Obviously the paid-up share capital may vary from year to year. Therefore it is bound to lead to variation in the functioning, including the financial performance of that unit. Therefore, when certain ratios are considered for judging the financial performance of the unit such ratios must be used along with the paid-up share capital of that unit at that given point of time, particularly when the financial performance is to be studied over the years together. Considering this aspect, in the present study I have tried to innovate in analyzing the ratios by combining them with the paid-up capital, at respective point of time and working out composite ratios for ten years duration for the companies. Then such composite ratios have been used in carrying out ANOVA test to test the hypothesis.

### **Research Design**

In the present study I have tried to innovate in analyzing the ratios by combining them with the paid-up capital, at respective point of time and working out composite ratios for ten years duration for the companies. Then such composite ratios have been used in carrying out analysis of variance (ANOVA) and comparative analysis through various tests of hypothesis.

### **Objectives of the Study**

The main objectives of the present study are as follows:

- To analyze and evaluate the financial performance of selected companies in particular and the plastic industry in general.
- To study overall financial health of selected plastics manufacturing companies and plastic industry.
- To study the pattern of growth and development of plastic industry in Gujarat.
- To make suggestions/comments about the functioning and development of plastic industry in Gujarat.

## **IV. HYPOTHESIS**

### **4.1 Null Hypothesis:**

H0: There is no significant difference in financial performance of selected companies of Gujarat in study period.

### **4.2 Alternative Hypothesis:**

H1: There is a significant difference in financial performance of selected companies of Gujarat in study period.

## **V. NATURE AND SOURCES OF DATA**

The present study is mainly based on secondary data that have already been published in annual reports of companies. These data has been collected from annual reports of the selected companies. Further information has been collected from CMIE (Centre for Monitoring Indian Economy) sources , annual survey of industries reports of Gujarat State Plastic Manufacturing Association , reports of All India Plastic Manufacturers Association, reports of Indian plastic federation , various magazines, journals, consultants reports and search engines like Money control.com etc.

### **5.1 Period of Study**

The present study covers the period of 10 years spanning from the year 2001 -2010.

### **5.2 Sample design**

A sample design is a definite plan for obtaining a sample from a given population. It refers to the technique or the procedure the researcher would adopt in selecting items for the sample. Sample design is determined before data are collected. There are many sample techniques out of which I have used proportional stratified sample for the present study.

### **5.3 Population**

For the present study all the plastics manufacturing (public limited companies) industrial units of Gujarat region which are listed in the Bombay Stock Exchange, Mumbai, were the members the population. There were total 55 member companies in the GSPMA(Gujarat State Plastic Manufacturing Association).

### **5.4 Sampling units and sample size:**

Out of 55 total numbers of units, researcher have selected 15 units in a sample on the basis of share capital, annual turnover, installed capacity, total number of workers and the date of incorporation of the company and have classified all the units of population on the basis of size of the company, age of the company and area of the company.

### **5.5 Sampling procedure**

The present study covers only those companies which are located in Gujarat and listed on the Bombay Stock Exchange. The selection of the sample of 15 companies out of 55 companies has been on the basis of following criteria and by the proportional stratified sampling method.

1. Whether the sample represent the companies of different sizes i.e. small, medium and large.
2. Whether the sample represents the companies of different age group.
3. Whether the sample represents the different areas of the company.

The total installed capacity of 55 plastic companies, the data of which are available for the study purpose is 8.5 MMT. The total installed capacity of sample units is 1.5MMT. It indicates that the sample represent 17.65 percent of the total capacity of population.

The total paid up capital of the above 55 companies amounted to Rs 3942.48 (Paid-up capital of 20 companies are not available). In comparison to this the total paid up capital of the sample units is estimated about Rs. 222.36 crore which represent about 6 % percent of the total paid up capital. The percentage share installed capacity and paid up capital of sample units justified the selection of sample.

### 5.6 Scope of the study

This study can also be beneficial to the government, Plastics Manufacturing Association of India, Gujarat state plastics manufacturing association of Gujarat, state industrial policy makers, Government decision making authority, aspiring entrepreneurs, students and teachers of management and researchers etc. This study will serve the following objectives.

- One will have an overview of plastic industry of Gujarat state.
- It will throw light on various aspects relating to financial performance of plastic industry of Gujarat.
- It will help in judging the overall financial health of selected plastics manufacturing units and plastic industry.
- It will help in studying the pattern of growth and development of plastic industry in Gujarat.
- It studies the trend of plastic industry in Gujarat.

## VI. LIQUIDITY RATIOS

### 6.1. Composite Current Ratio

ANOVA for Composite Current Ratios of the industry among the years of the decade.

Table No-6.1.1

Composite Current Ratios based on Weighted Mean where weight (wi) are Paid-up capital & Ri are Current Ratios  
 $\sum W_i R_i$

Company	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	$\sum(w_i R_i)$	$\sum w_i$	$w_i \bar{R}$	$\bar{W}$
JBF	13.028	15.820	16.751	61.798	21.404	53.410	50.030	86.263	180.496	160.579	659.579	445.020	1.482	44.502
Sintax	-	17.763	10.629	10.046	14.784	28.609	28.211	58.385	72.981	45.410	286.819	199.980	1.434	22.220
Nilkamal	14.655	24.767	23.396	27.575	21.768	24.167	10.026	9.458	12.013	10.991	178.817	98.330	1.819	9.833
INEOS ABS	16.007	15.127	17.414	17.414	18.118	20.229	20.756	20.404	23.043	20.932	189.444	175.900	1.077	17.590
Essel Propack	101.400	53.664	51.201	55.750	59.195	30.067	30.380	34.139	27.562	75.481	518.838	312.860	1.658	31.286
Plastiblend	-	5.135	4.680	6.630	7.020	7.930	5.330	6.500	9.295	8.060	60.580	65.000	0.932	7.222
Gopala	25.682	3.641	7.314	7.314	10.864	9.244	9.149	8.375	70.308	70.859	222.749	85.270	2.612	8.527
Shaily	-	-	-	-	5.529	5.063	4.714	4.656	4.246	6.076	30.284	37.920	0.799	6.320
Shree Ram	62.275	38.690	20.935	20.670	3.180	4.130	16.509	9.528	11.434	16.515	203.866	286.760	0.711	28.676
Acrysil	1.799	1.799	2.107	2.133	2.133	2.082	2.082	2.187	2.919	3.297	22.538	26.490	0.851	2.649
Jagdamba	-	-	-	-	1.144	1.082	0.774	2.561	1.258	2.402	9.222	5.280	1.747	0.880
Gujarat Craft	2.861	2.799	6.438	5.629	6.811	5.584	15.799	9.392	11.320	10.045	76.678	31.100	2.466	3.110
Polylink	7.936	5.855	6.505	25.890	7.156	10.547	9.151	71.656	44.979	40.016	229.690	142.600	1.611	14.260
Promact	-	4.724	6.027	5.864	16.073	14.552	7.179	22.134	17.642	2.604	96.800	58.620	1.651	6.513
Ashish	12.274	11.696	12.512	11.662	24.752	29.852	27.064	27.880	30.804	25.364	213.860	34.000	6.290	3.400
$\sum W_j R_j$	257.918	201.480	185.909	258.376	219.930	246.548	237.155	373.519	520.299	498.631	2999.764	5999.528	1.809	
$\sum W_j$	160.250	169.990	170.010	170.110	183.730	208.460	218.310	237.990	239.800	239.940				
$w_i \bar{R}$	1.609	1.185	1.094	1.519	1.197	1.183	1.086	1.569	2.170	2.078	1.401			
$\bar{W}$	16.025	13.076	13.078	13.085	12.249	13.897	14.554	15.866	15.987	15.996				

where, weighted  $\bar{R} = \frac{\sum(w_i R_i)}{\sum(w_i)}$

$\bar{W} = \frac{\sum w_i}{n}$

n = no. of years

The summary of ANOVA based on the data given in 15.1.2 is as follows. For this ANOVA the H0 and H1 are as follows.

**H0** = There is no significant difference in Current Ratios of the industry among the years.

**H1** = There is significant difference in Current Ratios of the industry among the years.

Table no-6.1.2

Groups	Count	Sum	Average	S.d.	Variance
2000-01	10	257.92	25.792	31.682	1003.743
2001-02	13	201.48	15.498	15.562	242.165
2002-03	13	185.92	14.302	12.915	166.81
2003-04	13	258.37	19.875	19.058	363.211
2004-05	15	219.91	14.661	14.492	210.022
2005-06	15	246.54	16.436	14.536	211.304
2006-07	15	237.15	15.81	13.451	180.926
2007-08	15	373.52	24.901	26.654	710.413
2008-09	15	520.3	34.687	46.209	2135.247
2009-10	15	498.64	33.243	42.505	1806.649

Table no-6.1.3

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	7781.170631	9	864.5745145	1.214095908	0.291851
Within Groups	91862.68696	129	712.1138524		
Total	99643.85759	138			

Table-15.1.2 shows descriptive statistics related to the ANOVA. Table no. – 15.1.3 gives sum of square, degree of freedom and mean sum of square for between years and within years. For testing the hypothesis by ANOVA procedure, F – test is applied. In the ANOVA table the calculated value of F – test with corresponding p – value is given. F value is 1.2141 and p – value is 0.2918. Here p – value is greater than 0.05. Hence the given hypothesis is not rejected i.e. there is no significant difference in Composite Current Ratios of the industry among the 10 years. As noted in the trend analysis during the first half of the decade it was declining and during the second half it was rising. Thus, the trend analysis and ANOVA are in concurrence with each other.

#### Conclusion:

- It is found that the current ratio for the industry during decade was above 1.4 which is not at an ideal level but was also not poor.
- The current ratios of the companies (during the decade) do not differ significantly. Among the companies selected, 8 companies have current ratios (during the decade) higher than 1.5 and 7 companies have current ratios lower than 1.5.
- Shree Ram Multi-tech, Shaily, Acrysil and Plastiblends could not maintain the level of current ratio, as their current ratios were bellow 1. Out of these Shaily and acrysil belongs small scale group. While Shree Ram belongs to mid size group.
- Overall performance of plastic industry in terms of current ratio was at satisfactory level.

## 6.2 Composite Quick Ratio

Findings based on the analysis of Quick Ratio

- There is no significant difference in Composite Quick Ratios of the industry among the 10 years.
- It is found that the quick ratio of plastic industry of Gujarat during the decade was 2.0 which was almost double the ideal level.
- The quick ratios of the companies during decade differed significantly.
- The quick ratios of the industry remained above 2.0 during first three years, 1.5 to 1.6 during 2003-04 to 2006-07 and again above 2.0 for the last three years.
- The quick ratios of Ashish, Gopala, Promact remained so high i.e. above 3.0, it shows poor management of working capital. These companies need to check the liquidity. All these companies belong to small-cap segment (small in size according paid- up capital).
- Essel Propac , Sintex, Nilkamal, Polylink maintained the quick ratios at above 2.0, it indicate unnecessarily high liquidity.
- JBF, INEOS ABS, Plastiblends, Jagdamba , Gujarat craft maintained their quick ratios at expected level.
- Overall picture of the liquidity of the industry shows that there is need to raise the current assets and to control the quick ratio.

## 6.3 Profitability Ratios

### 6.3.1 Gross Profit Margin

ANOVA for Composite Gross Profit Margin ratios of the industry among the years of the decade.

. Table No-6.3.1.1

Composite Gross Profit Margin ratios based on weighted mean where weights (Wi) are paid up capital and Ri are ratios  
 $\frac{\sum(w_i R_i)}{\sum w_i}$

Company	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	$\sum(w_i R_i)$	$\sum w_i$	wei $\bar{R}$	$\bar{R}$
JBF	4.963	251.262	292.519	419.390	316.404	546.350	565.552	593.294	621.155	473.646	4084.535	445.020	9.178	44.502
Sintex	-	176.467	184.766	192.338	281.450	299.107	395.407	478.161	492.757	397.882	2898.335	185.370	15.635	20.597
Nilkamal	86.643	108.753	93.670	94.441	76.016	63.847	43.279	93.805	79.492	114.764	854.710	98.330	8.692	9.833
Ineos ABS	206.507	277.570	265.083	-	-	-	-	-	-	-	749.160	52.770	14.197	17.590
Essel	1116.024	1052.688	1190.731	1183.583	1139.422	978.750	785.519	713.783	497.988	488.905	9147.392	312.860	29.238	31.286
Plastiblends	-	111.800	117.065	124.215	93.535	88.205	72.280	67.730	55.900	49.595	780.325	58.500	13.339	6.500
Gopala	18.401	22.724	-4.898	3.004	31.830	48.412	4.180	-2.204	-43.088	26.228	104.590	85.270	1.227	8.527
Shaily	-	-	-	-	43.941	63.147	65.533	47.084	16.909	55.412	292.027	37.920	7.701	6.320
ShreeRam	977.320	876.620	-165.625	-1816.310	582.205	481.735	-4102.437	-578.350	-448.451	-1486.637	-5679.929	286.760	-19.807	28.676
Acryul	14.341	26.394	31.328	27.319	26.060	32.202	34.130	44.204	62.090	59.489	357.557	26.490	13.498	2.649
Jagdamba	-	-	-	-	6.846	9.891	12.003	9.073	10.305	8.518	56.637	5.280	10.727	0.880
Guj Craft	12.222	13.218	11.072	8.055	14.928	8.084	9.206	16.296	19.780	17.385	130.244	31.100	4.188	3.110
Polylink	-94.973	-81.573	-2.472	27.321	8.847	92.129	21.714	16.286	-28.228	12.408	-28.541	142.600	-0.200	14.260
Promact	-	21.774	40.399	44.635	42.300	-104.365	-120.370	41.924	-36.131	25.194	-44.639	53.140	-0.840	5.904
Ashish	34.476	34.170	21.624	12.478	15.708	15.764	16.150	9.826	5.406	12.138	177.740	34.000	5.228	3.400
$\sum W_j R_j$	2375.923	2891.868	2075.263	320.469	2679.492	2623.258	-2197.854	1550.912	1305.883	254.928			7.467	
$\sum W_j$	140.250	166.990	170.010	152.520	171.140	190.870	200.720	219.800	222.210	222.350				
wei $\bar{R}$	16.941	17.318	12.207	2.101	15.657	13.744	-10.950	7.056	5.877	1.147	8.110			
$\bar{R}$	14.025	12.845	13.078	12.710	12.224	13.634	14.337	15.700	15.872	15.882				

where, weighted  $\bar{R} = \frac{\sum(w_i R_i)}{\sum(w_i)}$   $\bar{W} = \frac{\sum w_i}{n}$  n = no. of years

The summary of ANOVA based on the data given in 15.3.1.2 is as follows. For this ANOVA the H0 and H1 are as follows.

**H0** = There is no significant difference in Gross profit Margin Ratio of the industry among the years.

**H1** = There is significant difference in Gross profit Ratio of the industry among the years.



Table No-6.3.1.2

Groups	Count	Sum	Average	S.d.	Variance
2000-01	10	2375.92	237.592	434.26	188581.62
2001-02	13	2891.86	222.451	346.248	119887.43
2002-03	13	2075.26	159.635	332.876	110806.24
2003-04	12	320.46	26.705	669.615	448384.73
2004-05	14	2679.51	191.394	319.165	101866.5
2005-06	14	2623.27	187.376	294.235	86574.437
2006-07	14	-2197.86	-156.99	1163.755	1354325.6
2007-08	14	1550.91	110.779	312.905	97909.371
2008-09	14	1305.89	93.278	273.723	74924.095
2009-10	14	254.93	18.209	468.334	219336.93

Table No-6.3.1.3

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1735781.935	9	192864.6595	0.680988993	0.724865
Within Groups	34551936.52	122	283212.5944		
Total	36287718.45	131			

Above table shows descriptive statistics related to the ANOVA. Table no. – 15.3.1.3 gives sum of square, degree of freedom and mean sum of square for between years and within years. For testing the hypothesis by ANOVA procedure, F – test is applied. In the ANOVA table the calculated value of F – test with corresponding p – value is given. F value is 0.6809 and p – value is 0.7248. Here p – value is greater than 0.05. Hence the given hypothesis is not rejected i.e. there is no significant difference in Composite Gross Profit Margin Ratios among the selected 10 years. As noted in the trend analysis, this ratio had declining linear trend and therefore, in this case too, the ANOVA and the trend analysis are in concurrence with each other.

**Conclusion:**

- It is found that the gross profit margin ratio of the industry during the decade was 8.11.
- During the first three years gross profit margin ratios were 16.94, 17.32, and 12.21 in year 2003-04 it was 2.10 which is very low. During 2004-05 it gone up to 15.66 which was very good recovery but in 2006-07 it was negative i.e. - 10.95 and in the preceding years going downward.
- In 2006-07 the companies like Shree Ram, Promact occurred heavy loss, it affected on the gross profit margin ratio to negative.
- Companies like Essel Propack was having highest gross profit margin ratio during the decade i.e. 29.24, Sintex 15.64, INEOS ABS 14.20, Acrysil 13.50, Jagdamba 10.73 , JBF 9.18, Nilkamal 8.7 were comparatively good gross profit margin ratios. These companies gross profit margin ratios were higher than the industry.

- Shree Ram, Polylink, Promact and Gopala performance were very poor in terms of gross profit margin ratio. These companies belongs to mid and small size group, according to paid-up capital.
- While Shree Ram, Promact, Polylink's gross profit margin ratios were lower than the industry and were negative

### **6.3.2 Net Profit Margin**

Findings based on the analysis of Net Profit Margin.

- There is no significant difference in Composite Net Profit Margin Ratios among the selected 10 years.
- The Net Profit Margin ratios of the companies during decade differed significantly when the company Shree Ram Multitech was included in the analysis and they did not differ significantly when this company was excluded from the analysis. The conclusion for the yearly Net Profit Margin ratios of the industry is also the same.
- It is found that the net profit margin ratio of the industry during the decade was negative i.e. -7.65 when the company Shree Ram Multi-tech was included in the analysis and it was 5.3467 when this company was excluded from the analysis.
- For the industry the highest net profit margin ratio during the decade was 6.35 in year 2000-01 and the lowest was -49.25 during 2004-05 when the company Shree Ram Multitech was included in the analysis and they were 8.4843 and 1.6039 when this company was excluded from the analysis.
- Individually Essel Propack's net profit margin ratio was highest during the decade and Shree Ram net profit margin ratio was lowest during the decade.
- Net profit margin ratios of 10 companies were higher than the industry and 2 companies net profit margin ratio were lower than the industry when the company Shree Ram Multitech was included in the analysis and these figures are 9 and 6 respectively when this company was excluded from the analysis.
- The companies among the poorest performance in net profit margin ratio were Shree Ram Multitech, Promact, Polylink and Gopala respectively.

### **6.3.3 Operating Profit Margin**

Findings based on the analysis of Operating Profit Margin Ratio

- There is no significant difference in Composite Operating Profit Margin Ratios among selected 10 years.
- It is found that the Operating Profit Margin ratio of the industry during the decade was 15.63 which is good.
- Operating profit margin ratio was highest during 2001-02 and lowest during 2006-07.
- The Operating profit margin ratios of the companies during decade differed significantly
- Essel Propack was having highest operating profit margin ratio i.e. 31.61 during the decade individually. Sintex, Acrysil and Essel Propack's operating profit ratio was higher than the industry. While 12 companies operating profit margin ratios were lower than the industry.
- Promact's individual operating profit margin ratio was least among all. Polylink, Ashish and Gujarat Craft's operating profit margin ratios were very low and they belong to small size group.
- In terms of operating profit margin ratio, overall performance of the plastic industry of Gujarat during the decade was good.

### **6.3.4 Return on Capital Employed**

Findings based on the analysis of Return on Capital Employed Ratio

- There is no significant difference in Composite Return on Capital Employed among the selected 10 years.

- It is found that return on capital employed ratio of the industry during decade was 9.46%.
- Return on capital employed was highest in 2001-02 and lowest in year 2006- 07.
- The Return on Capital Employed ratios of the companies during decade differed significantly among the companies selected. 9 companies have return on capital employed ratio higher than the industry i.e. 9.46 and 6 companies have return on capital employed ratio lower than 9.46.
- The highest individual performance in return on capital employed ratio was 25.24 of Ineos ABS followed by Plastiblends 23.72, Acrysil 19.27, JBF 14.57 and Jagdamba 12.76.
- The lowest return on capital employed ratio was -2.3 for Shree Ram followed by Gopala 2.40, Ashish 3.11 and Polylink 3.62. Companies among the poor performance in return on capital employed were Shree Ram, Gopala, Ashish, Polylink and Promact comes into small and mid size groups.
- The return on capital ratio during the period was in the range (8, 11). This reflects efficient use of resources.

### **6.3.5 Return on Networth**

Findings based on the analysis of Return on Net worth Ratio

- There is no significant difference in Composite Return on Net worth among the selected 10 years.
- It is found that the return on net worth ratio of the industry during the decade was 50.90 which is good.
- Return on net worth was highest during 2004-05 i.e. 303.7 and the least during 2009-10.
- Return on net worth ratios of the companies during the decade differed significantly. Among the companies selected 3 companies Shree Ram, Polylink and Promact have return on net worth ratio higher than the industry and 12 companies have lower return on net worth ratio than the industry.
- Individually Gopala was having least and negative return on net worth and Promact had highest return on net worth ratio.
- Overall performance of the industry during the decade in terms of return on net worth was good and indicates efficient financial management.

### **6.3.6 Earning Per Share**

Findings based on the analysis of Earning per Share Ratio

- There is no significant difference in Composite Earning per Share Ratio among the selected 10 years.
- It is found that the earning per share ratio for the industry during the decade was 7.14.
- The highest earning per share ratio was in the year 2009-10 and the lowest was in the year 2004-05.
- Earnings per share ratios of the companies during the decade differed significantly. Among the companies selected 8 companies have earning per share ratio higher than 7.14 and 7 companies have earning per share ratio lower than 7.14.
- Individually, Nilkamal at the highest earning per share ratio during the decade and Shree Ram at the lowest earning per share ratio during the decade.

## **6.4 Activity (Turnover) Ratios**

### **6.4.1 Inventory Turnover Ratio**

ANOVA for Composite Inventory Turnover Ratios of the industry among the years of the decade.

Table No-6.4.1.1

Composite Inventory Turnover ratio based on Weighted Mean where weight (Wi) are Paid-up capital and Ri are ratios  
 $\frac{\sum(w_i R_i)}{\sum w_i}$

Company	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	$\sum(w_i R_i)$	$\sum w_i$	$w_i \bar{R}$	$\bar{W}$
JBF	666.620	1177.209	857.703	967.204	1398.071	795.270	10044.096	1621.007	689.619	529.040	18745.839	445.020	42.124	44.502
Sintex	-	88.379	81.099	102.939	115.500	198.681	175.314	319.495	320.576	359.229	1761.212	185.370	9.501	20.597
Nilkamal	75.930	68.474	58.105	60.933	58.876	70.360	62.818	103.262	109.013	103.262	771.034	98.330	7.841	9.833
Ineos ABS	116.974	158.662	156.903	103.781	143.710	158.838	-	-	-	-	838.867	105.540	7.948	17.590
Essel	323.544	278.304	60.216	428.458	237.092	233.334	220.493	227.383	280.940	432.842	2722.607	312.860	8.702	31.286
Plastiblends	-	82.485	58.370	43.095	45.370	45.630	47.125	45.955	49.335	41.535	458.900	58.500	7.844	6.500
Gopala	36.244	121.654	102.913	94.032	136.470	158.865	134.257	149.431	146.015	195.274	1275.155	85.270	14.954	8.527
Shaily	-	-	-	-	62.099	52.031	50.576	61.110	73.639	77.738	377.194	37.920	9.947	6.320
ShreeRam	1191.970	172.780	213.325	189.210	164.035	249.570	283.892	215.650	179.126	191.830	3051.390	286.760	10.641	28.676
Acrysil	14.109	17.502	14.443	9.946	9.817	11.925	12.079	18.063	18.537	16.157	142.578	26.490	5.382	2.649
Jagdamba	-	-	-	-	9.513	10.877	9.064	8.677	10.894	8.782	57.807	5.280	10.948	0.880
Guj Craft	13.175	6.811	9.703	15.395	20.522	36.177	34.814	13.435	20.775	10.823	181.630	31.100	5.840	3.110
Polylink	94.062	117.871	130.100	178.107	168.349	171.696	173.867	184.259	344.942	231.254	1794.507	142.600	12.584	14.260
Promact	-	23.621	29.702	28.833	27.150	111.206	63.603	48.760	41.859	30.076	404.810	53.140	7.618	5.904
Ashish	10.302	10.302	9.248	12.274	13.362	17.238	16.830	14.484	16.456	27.642	148.138	34.000	4.357	3.400
$\sum W_j R_j$	2542.930	2324.053	1781.830	2234.205	2609.938	2321.697	11328.828	3030.972	2301.728	2255.486			11.082	
$\sum W_j$	140.250	169.990	170.010	170.110	183.730	208.460	200.720	220.400	222.210	222.350				
$w_i \bar{R}$	18.131	13.672	10.481	13.134	14.205	11.137	56.441	13.752	10.358	10.144	17.146			
$\bar{W}$	14.025	13.076	13.078	13.085	12.249	13.897	14.337	15.743	15.872	15.882				

where, weighted  $\bar{R} = \frac{\sum(w_i R_i)}{\sum(w_i)}$   $\bar{W} = \frac{\sum w_i}{n}$  n = no. of years

The summary of ANOVA based on the data given in Table no-15.3.1.1 is as follows. For this ANOVA the H0 and H1 are as follows.

**H0** = There is no significant difference in Inventory Turnover Ratio of the industry among the years.

**H1** = There is significant difference in Inventory Turnover Ratio of the industry among the years.

Table No-6.4.1.2

Groups	Count	Sum	Average	S.d.	Variance
2000-01	10	2542.92	254.292	387.771	150366.17
2001-02	13	2324.04	178.772	309.817	95986.554
2002-03	13	1781.82	137.063	224.968	50610.66
2003-04	13	2234.2	171.862	264.528	69975.049
2004-05	15	2609.94	173.996	345.942	119676.09
2005-06	15	2321.71	154.781	195.16	38087.512
2006-07	14	11328.83	809.202	2659.371	7072255.7
2007-08	14	3030.97	216.498	415.814	172901.17
2008-09	14	2301.73	164.409	190.928	36453.556
2009-10	14	2255.48	161.106	171.39	29374.672

Table no-6.4.1.3

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5133089.516	9	570343.2796	0.704450431	0.703855
Within Groups	101203586.2	125	809628.6899		
Total	106336675.7	134			

Above table shows descriptive statistics related to the ANOVA. Table no. - 8.5.1.3 gives sum of square, degree of freedom and mean sum of square for between years and within years. For testing the hypothesis by ANOVA procedure, F – test is applied. In the ANOVA table the calculated value of F – test with corresponding p – value is given. F value is 0.7044 and p – value is 0.7038. Here p – value is greater than 0.05. Hence the given hypothesis is not rejected i.e. there is no significant difference in Composite Inventory Turnover Ratio among the selected 10 years. As noted in the trend analysis there was no definite trend in this ratio. The ratio during the decade fluctuated erratically in the range (10.443, 56.441). Hence the ANOVA and the trend analysis are in concurrence with each other.

#### **Conclusion:**

- It is found that the inventory turnover ratio of the industry during the decade was 17.15.
- The highest inventory turnover ratio was 56.44 in the year 2006-07 and the lowest 10.14 was in the year 2009-10.
- The inventory turnover ratio of the company during the decade differ significantly. Among the company selected only 1 company i.e. JBF had the inventory turnover ratio higher than 17.14 and 14 companies have the inventory turnover ratios lower than 17.14.
- Individually JBF had the highest inventory turnover ratio during the decade i.e. 42.12 and Ashish had the lowest inventory turnover ratio during the decade i.e 4.36.
- Three companies Ashish, Gujarat Craft and Acrysil were having minimum inventory turnover ratio, they need to increase their sales and improvement in the working capital management.

#### **6.4.2 Debtors Turnover Ratio:**

Findings based on the analysis of Debtors turnover ratio

- There is no significant difference in Composite Debtors Turnover Ratio among the selected 10 years.
- It is found that the debtors turnover ratio of the industry during the decade 7.25 which is good.
- Highest debtors turnover ratio was 11.23 in 2000-01 and the lowest was 5.12 in the year 2001-02.
- The debtors turnover ratio of the companies during the decade differed significantly. Among the companies selected 4 companies debtors turnover ratio higher than 7.25 and 11 companies have debtors turnover ratios have lower than 7.25.
- Individually the highest debtors turnover ratio during the decade was 11.04 for the JF industry and followed by Polylink 9.07, Jagdamba 7.96 and Plastiblends 7.26.
- The lowest debtors turnover ratio was 0.055 for Ashish Polyplast followed by Acrysil 2.89, Shaily 3.95, Promact 2.98. Their performance in terms of debtors turnover ratio is very poor and they need to raise debtors turnover ratio to improve the liquidity.

#### **6.4.3 Fixed Assets Turnover Ratio**

Findings based on the analysis of Fixed assets turnover ratio

- There is no significant difference in Composite Fixed Assets Turnover ratio among the selected 10 years.
- Fixed Asset Turnover Ratio of the industry during the decade was 1.94 which is considered low and indicate inefficient use of fixed assets or over investment.
- The highest Fixed Asset Turnover Ratio was 3.36 in the year 2009-10 and the lowest was 1.41 in the year 2001-02.
- The Fixed Asset Turnover Ratios of the companies during the decade differed significantly. Among the companies selected, 8 companies have fixed asset turnover ratio lower than 1.94 and 7 companies have fixed assets turnover ratio higher than 1.94.
- Individually the highest fixed asset turnover ratio was 4.86 for Gujarat Craft followed by Plastiblends 3.85, Gopala 2.8, JBF industry 2.77, Nilkamal 2.72 during the decade.

- Shree Ran Multi-Tech. had the lowest fixed asset turnover ratio during the decade individually, followed by Jagdamba, Promact, Shaily need to improve fixed asset turnover ratio for efficient use of fixed asset.

#### 6.4.4 Investment Turnover Ratio

Findings based on the analysis of Investment turnover ratio

- There is no significant difference in Composite Investment Turnover among the selected 10 years.
- It is found that investment turnover ratio of the industry during the decade was 17.48%.
- Highest investment turnover ratio was 27.70 during the year 2009-10 and the lowest was 10.46% in the year 2008-09.
- The investment turnover ratios of the companies during the decade differed significantly. Among the companies selected 2 companies JBF and Essel Propack have investment turnover ratio higher than 17.48% and 13 companies have investment turnover ratio lower than 17.48%.
- Individually JBF industry with 29.05% was the highest in investment turnover ratio during the decade, followed by Essel Propack with 25.54%.
- In investment turnover ratio Ashish with 3.78% had the lowest individual performance during the decade followed by Acrysil 5.64, Gujarat Craft 5.89.
- Overall performance of the industry in terms of investment turnover ratio during the decade remained by and large in good position.

### 6.5 Solvency Ratios:

#### 6.5.1 Debt-Equity Ratio

ANOVA for Composite Debt-Equity Ratios of the industry among the years of the decade

Table No-6.5.1.1

Composite Debt Equity Ratios based on Weighted Mean where weights (Wi) are paid-up capital and Ri are ratios  
 $WiRi$

Company	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	$\sum(wiRi)$	$\sum w$	$wi \bar{R}$	$\bar{w}$
JBF	39.395	39.395	34.742	26.057	24.506	69.580	72.869	56.475	73.443	70.331	506.794	445.020	1.139	44.502
Sintex	-	10.220	11.066	12.376	12.382	25.649	23.286	28.382	32.166	31.355	186.880	199.980	0.934	22.220
Nilkamal	10.713	8.313	6.428	5.913	5.571	5.142	9.684	19.681	17.253	14.186	102.883	98.330	1.046	9.833
Ineos ABS	8.267	3.518	-	-	-	-	-	-	-	-	11.785	35.180	0.335	17.590
Essel	17.472	8.736	7.493	6.890	5.638	8.456	14.094	21.924	29.754	24.743	145.200	312.860	0.464	14.520
Plastiblends	-	2.080	1.755	1.235	0.975	0.520	1.560	1.820	0.910	3.380	14.235	65.000	0.219	7.222
Gopala	8.069	15.084	23.247	35.784	32.307	29.924	29.195	42.758	94.441	455.236	766.046	85.270	8.984	76.605
Shaily	-	-	-	-	7.450	9.428	11.233	18.449	16.324	16.470	79.354	37.920	2.093	6.320
ShreeRam	16.960	25.175	35.245	51.410	-	-	-	-	-	-	128.790	106.000	1.215	26.500
Acrysil	2.673	3.084	2.673	3.855	4.703	4.266	4.189	3.547	2.377	1.544	32.911	26.490	1.242	2.649
Jagdamba	-	-	-	-	0.616	0.431	0.625	1.074	1.417	1.839	6.002	5.280	1.137	0.880
Guj Craft	4.167	5.598	4.696	3.639	2.301	2.892	3.421	6.562	6.531	6.749	46.557	31.100	1.497	3.110
Polylink	-	-	-	-	235.741	75.068	117.876	111.517	-	-	540.203	59.540	9.073	14.885
Promact	-	14.390	11.186	10.263	10.154	16.399	-	49.671	-	47.783	159.845	58.620	2.727	8.374
Ashish	0.238	0.306	0.136	0.204	0.204	0.170	0.136	0.170	0.102	0.204	1.870	34.000	0.055	0.187
$\sum WiRi$	107.954	135.899	138.666	157.626	342.547	247.927	288.168	362.029	274.718	673.821			2.144	
$\sum Wj$	127.060	156.980	139.410	139.510	139.640	161.370	164.730	188.640	168.430	175.080				
$wi \bar{R}$	0.850	0.866	0.995	1.130	2.453	1.536	1.749	1.919	1.631	3.849	1.698			
$\bar{w}$	12.706	13.082	12.674	12.683	10.742	12.413	13.728	14.511	15.312	14.590				

where, weighted  $\bar{R} = \frac{\sum(wiRi)}{\sum(wi)}$   $\bar{w} = \frac{\sum w}{n}$  n = no. of years

The summary of ANOVA based on the data given in 8.6.1.2 is as follows. For this ANOVA the H0 and H1 are as follows.

**H0** = There is no significant difference in Debt-equity Ratios of the industry among the years.

**H1** = There is significant difference in Debt-equity Ratios of the industry among the years.

**Table No-6.5.1.2**

Groups	Count	Sum	Average	S.d.	Variance
2000-01	9	107.96	11.996	11.848	140.37
2001-02	12	135.91	11.326	11.238	126.284
2002-03	11	138.68	12.607	12.722	161.845
2003-04	11	157.63	14.33	16.475	271.414
2004-05	13	342.55	26.35	63.636	4049.602
2005-06	13	247.93	19.072	25.47	648.712
2006-07	12	288.17	24.014	35.842	1284.642
2007-08	13	362.02	27.848	31.508	992.785
2008-09	11	274.71	24.974	31.602	998.688
2009-10	12	673.81	56.151	127.482	16251.636

**Table no-6.5.1.3**

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18624.19462	9	2069.354958	0.796422469	0.620282
Within Groups	278019.505	107	2598.313131		
<b>Total</b>	<b>296643.6997</b>	<b>116</b>			

Above table shows descriptive statistics related to the ANOVA. Table no. - 8.6.1.3 gives sum of square, degree of freedom and mean sum of square for between companies and within companies. For testing the hypothesis by ANOVA procedure, F-test is applied. In the ANOVA table the calculated value of F-test with corresponding p-value is given. F value is 0.7964 and p-value is 0.6202. Here p-value is greater than 0.05. Hence the given hypothesis is not rejected i.e. there is no significant difference in Composite Debt Equity Ratio among the selected 10 years. As noted in the trend analysis this ratio had rising linear trend and therefore the ANOVA is in concurrence with trend analysis.

**Conclusion:**

- It is found that debt-equity ratio of the industry during the decade was around 1.7.
- The highest debt-equity ratio of the industry was 3.85 during 2009-10 and the lowest was 0.85 during 2000-01.
- The debt-equity ratio of the companies during the decade differ significantly. Among the companies selected 4 companies have debt-equity ratios higher than 1.7 and 11 companies have the debt-equity lower than 1.7.
- Polylink with 9.07 the highest individual debt-equity ratio during the decade, indicate the high level of debt and risk in the company and Ashish was having 0.055 the lowest individual debt-equity ratio, indicate very low level of debt.
- Gopala polyplast was also having 8.98 debt-equity ratio during the decade which indicates high level of debt and risk.
- Overall performance of the industry in terms of debt-equity ratio during the decade was by and large within certain limit.

**6.5.2 Interest Coverage Ratio**

Findings based on the analysis of Interest Coverage

- There is no significant difference in Composite Interest Coverage Ratio among the selected 10 years.

- It is found that the interest coverage ratio of the industry during the decade was 6.559.
- The highest interest coverage ratio of the industry was 5.07 during 2002-03 and the lowest was negative during 2005-06.
- The interest coverage ratios of the companies differed significantly during the decade. Among
- Plastiblend had the highest 15.04 interest coverage ratio indicate high capacity to pay the interest followed by INEOS ABS 13.97 also having very good capacity to pay the interest.
- Shree Ram having -68.33 negative interest coverage ratios was in the worst situation to pay the interest, followed by Promact, Gopala, Polylink were also having poor capacity to pay the interest.
- During the first half of the decade the overall performance of the industry in terms of interest coverage ratio was comparatively good but in the year 2005- 06, 2006-07 and in 2009-10 it was not good to pay the interest.

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