



Growth and Performance of Industrial Sector in Gujarat: A Case of Small Scale Industries

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ABSTRACT

The sole purpose of the study is to carve out the growth and performance of the small scale industries of Gujarat in terms of Number of SSI units, per unit employment, per unit investment and District wise growth of SSI units. To calculate CAGR, this study employed the exponential growth formula. Taking district wise data for small scale industries, high industrial concentration is found in Ahmadabad district. Number of units is more or less similar till 2005, but shows a very sharp decline in the year 2006. Same result is also discernible for total investment. As a result, the total employment in the small scale units decreases over the period.

1. Introduction

Topic on business scenario in India is incomplete without mentioning of contributions of Tatas, Birla or Ambanis, but consistently important in stabilizing the economic growth of a country is its Small Scale Industries (SSI). Ever since the inception of planning for economic development in India great emphasis has been laid on the development of small scale industries sector. In fact, the small scale industries sector has been play a crucial role in the industrial development of the country. Indeed the growth of this sector has been a dominant feature of our economic development since independence. The emphasis placed on the small scale industries sector in the industrial development of the country is due to its high employment generating capacity and low investment requirement. Since independence, the small scale industries have rendered a major contribution to the gross domestic product of the country. They play a vital role in changing the industrial scenario and strengthening the industrial sector tremendously.

They assist the utilization of assets for productive purposes with minimal initial resources. SSIs have contributed greatly in nurturing private enterprise and in hastening the economic development by generating employment, exports, and reducing local unevenness. This sector estimated to possess a huge potential in the growth of trade with the array of products it offers. The industries are characterized by the wise utilization of labor for the commodity production and the advantage lies in the fact that is consumption of ample laborers who are not qualified to work for the large scale industries and thus reducing unemployment and poverty in the country as well. Small Scale Industries help the financial system in promoting evenhanded development of industries across all the regions of the economy and also in the efficient distribution of money. With 40 percent share in total industrial output and 35 percent share in exports, small scale industries significantly contribute to the fiscal intensification of the country. The SSI units are functioning in all states in India. Gujarat came into existence as an independent state on 1st May, 1960. Before this day, it was a part of the bilingual Bombay state. Gujarat is one of the states of Western India. The study has been presented in four sections. The first section presents the above introduction. The second section deals with the previous studies related to different aspects of small scale industries at state, national and International level, section three presents' objectives, hypothesis of study, Sources of data and Methodology. Section third provides empirical results and the final section fourth gives the conclusion of the study.

2. Review of literature

Following numerous studies has examined different aspect of small scale industry at state, national and International level using different data and techniques:

Sidhu (1997) examined the inter-industry wages differentials in rural, urban and metropolitan areas and factor affecting wage structure in the small scale industries sector in Gujarat. The result of this study shows that the

specialisation of skill, size of enterprise and labour productivity play dominating role in the determination of wage structure. This study also revealed that the average wage rates in this sector are higher as compared to the national average.

Gupta and Rathi (1996) conducted a study on structure, conduct and performance of small scale chemical industry in Gujarat. This study was based on the primary data from a sample of 208 small scale chemical units in Gujarat for the year 1986 to 1990. The results found that the no unique relationship among structure, conduct and performance. The result shows that the firms located in Baroda and Ahmadabad districts attained the maximum capital and labour productivities, those in Baroda the maximum turnover, and those located in Kheda, the maximum capacity utilisation.

Tambunan(1994) examined the long term development of small scale industries in relation to economic development. This study concludes that no matter how far a country has developed, but as long as domestic problems of high rates of unemployment, mass poverty, unequal distribution of income exists, small scale industries will play continue to play an important role a last resort for the poor of the country.

Mukherjee, Das and Bhattacharya (1999) examined the growth performance of Small scale Industries in west Bengal for the period 1971-97. The analysis was based on data published in the economic review of the government of west Bengal. The growth rates were obtained by fitting trend curves as well as averaging year to year growth rates. Considerable inter-district variables in growth rates was observed.

Shaw (1990) attempted to analyse the interactions and linkages between the large scale, small scale and informal sectors in an important industrial region in India with a view the highlights there complex inter dependencies between them. The sample study of 8 large scale units, eight small scale units and twenty informal sector units revealed that large scale petrochemical industries have weak linkages with small scale sector but strong linkages with other large plants in the local areas, large scale chemical industries especially pharmaceuticals have some links with the small scale industries sector. Large scale engineering units have much closer link with small scale units.

Shinoda(2000)examined the mode and process of entrepreneurial development in Gujarat particularly among the entrepreneurs in small scale industries. This study also deals with the industrial development of the modern sector, with special reference to small scale industries.

Moreover, a lot of studies have been done on the different aspect of smalls scale industry at state , national and international level. But this empirical work is different from the previous empirical studies because this work examines the growth and performance of small scale industries in Gujarat. Our research study is somewhat unique in the sense that so far, no study has been covered during the period 1980 to 2006 at state level on this aspect small scale sector. There is enough scope of research in this area.

3. Objectives of Study

1. To examine the growth rate of small scale industrial units in Gujarat during 1980-2006.
2. To examine the Area-wise Registration of SSI units in Gujarat (1993-2006)
3. To examine the district-wise Registration of SSI units in Gujarat during2000-2006.
4. To examine the per- unit employment and per-unit investment of SSI in Gujarat During 2000-2006.

4. Hypothesis

There is significant growth of small scale industries in Gujarat during 1980-2006.

5. Methodology and Data Collection

In the present study an attempt has been made to assess the growth pattern and some aspect of small scale industries in Gujarat, during 1980-2006. The time series data have been obtained from various 1980-2006 for number of SSI units, from commissioner of industries and statistical abstract of Gujarat state. Growth rate have been computed for the all over period and sub period by exponential function. Per unit employment and investment have been estimated the following manner:

Per- unit employment = total employment/ Number of Units

Per- unit Investment = total Investment/ Number of Units

Results

Table: 1

Compound Annual Growth Rate of Small Scale Units In Gujarat.

Periods	Small Scale Industry	
	Compound annual growth rate	R- square
I Pre-reform period (1980-1991)	5.9	0.96
II Post- reform Period (1992-2006)	2.3	0.98
III Total – Period (1980-2006)	4.4	0.98

Source: Author own Calculations.

Regression Result Period 1980-2006 SSI units = 5.019 + 0.27 (years)
 Period 1980-1991 SSI units = 4.202 + 0.15 (years)
 Period 1992-2006 SSI units = 5.098 + 0.25 (years)

Further perusal of Table 1 demonstrates that At all India level CAGR in the pre-reform period was 5.9 percent, which decreased to 2.3 percent in liberalization period. For the entire study period i.e 1980-2006, CAGR of 4.4percent was observed for Gujarat. The t-value of all the periods are statistically significant at 5 percent level of significance.

Table: 2

Area-Wise Registration of Ssi Units in Gujarat (1993-2006)

Years	Total no. Of units registered	Units registered in rural area	%share registered units	Units registered in Urban area	%share in total registered units
1993-94	13027	5057	38.81937514	5481	42.07415368
1994-95	13804	5574	40.37960012	5928	42.94407418
1995-96	13911	6290	45.2160161	5434	39.06261232
1996-97	14063	5005	35.58984569	7513	53.42387826
1997-98	14631	5455	37.28384936	8380	57.2756476
1998-99	14761	6155	41.69771696	8150	55.21306145
1999-00	14437	5630	38.99702154	8496	58.8487913
2000-01	13325	4429	33.23827392	8074	60.59287054
2001-02	11316	3605	31.85754684	7491	66.19830329
2002-03	10905	4211	38.61531408	6552	60.08253095
2003-04	10931	4244	38.82535907	6678	61.09230628
2004-05	10336	4959	47.97794118	5369	51.94465944
2005-06	10055	5448	54.18199901	4456	44.31626057
2006-07	2764	1388	50.2170767	1347	48.73371925

Source: Author own Calculation

Area wise registrations in Gujarat have been given in the above table. In 1993-94 rural area has 38.18 shares in total SSI units in Gujarat, whereas urban area has 42.02 percent share. Urban area has maximum percentage share in 2001-02 i.e 66.19, while rural area has lowest in the same year i.e 31.85. Rural area has big percentage share than urban area in year 2005-06 to 2006-07

Table: 3

Percentage Share of District-Wise Number Of Registered Small Scale Industrial Units In Gujarat (2000-06)

State/District	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Ahmedabad	23.2317	22.57432	22.12529	21.71218	21.32694	21.16969	21.02519
Amreli	1.56479	1.578959	1.581758	1.616786	1.58991	1.56891	1.563389
Banaskantha	1.992529	2.018756	2.089933	2.129042	2.160267	2.173516	2.180113
Bharuch	4.330753	4.351867	4.375991	4.449569	4.516952	4.564221	4.580826
Bhavnagar	4.226805	4.196201	4.057379	3.960725	3.875723	3.806017	3.77931
Gandhinagar	1.178073	1.237399	1.329858	1.400842	1.475164	1.509884	1.537173
Jamnagar	4.147152	4.125924	4.198823	4.270664	4.249323	4.25083	4.231701
Junagadh	2.50231	2.457796	2.506243	2.526687	2.557491	2.553433	2.553216
Kheda	4.46696	4.370759	4.343547	4.328669	4.322896	4.304964	4.322819
Kachchh	1.903715	1.926942	1.92443	1.911351	1.929762	1.944261	1.953118
Mehsana	4.898283	4.816978	4.78902	4.745182	4.739357	4.713252	4.668427
Panchmahals	2.183697	2.152886	2.10415	2.11227	2.147442	2.143188	2.143346
Rajkot	11.10129	11.11166	10.80473	10.69623	10.58737	10.44527	10.37815
Sabarkantha	2.587539	2.580214	2.629823	2.697905	2.738385	2.725945	2.749839
Surat	14.36508	14.85219	14.96564	15.03049	14.99126	15.10406	15.1556
Surendranagar	2.705028	2.695452	2.765069	2.750668	2.763359	2.739967	2.752396

Vadodara	5.658972	5.671634	5.706214	5.686182	5.811222	5.8667	5.914023
Valsad	5.498072	5.352744	5.34495	5.239967	5.169656	5.124476	5.104514
Dang	0.009558	0.009068	0.008749	0.018519	0.017887	0.017284	0.016945
Anand	0.33773	0.433373	0.493593	0.599263	0.659791	0.712222	0.734697
Dahod	0.136207	0.20214	0.258827	0.28548	0.308465	0.331001	0.349125
Narmada	0.11948	0.151888	0.174617	0.201967	0.226793	0.243603	0.260885
Navsari	0.458803	0.600753	0.740025	0.856439	0.950031	1.043549	1.073271
Patan	0.291133	0.402391	0.528589	0.586683	0.668903	0.712222	0.727024
Porbandar	0.104346	0.127707	0.152744	0.186243	0.215655	0.231537	0.244899
Gujarat	100	100	100	100	100	100	100

Source: Author own Calculations

The above table shows the district – wise percentage share of SSI units in Gujarat during the period 2000-01 to 2006-07. It is found that Ahmedabad district has top concentration of small scale industrial units in relation to the remaining districts of Gujarat, whereas Rajkot, Surat and Vadodara stood second, third and fourth respectively. These four districts contributed more than fifty percent of the total industrial units operating in Gujarat. The least share was in Dang district, it has only .016 shares of whole small-scale units in Gujarat.

Table: 4

Per Unit Employment and Investment in Small Scale Industry in Gujarat (2000-06)

Year	Per Unit Employment	Per Unit Investment
2000-01	3.28	5.07
2001-02	4.09	5.75
2002-03	2.85	4.17
2003-04	2.74	4.49
2004-05	2.98	5.55
2005-06	3.54	6.96
2006-07	4.66	10.63

Source: Author own Calculations

Table shows that the per unit Investment in the small scale industry was 5.07 in the year 2000-01. In the year 2002-03 to 2003-04 the per unit investment decreased in SS industry as compare to other years. On the other hand, the per unit capital in small scale was highest in year 2006-07. In the year 2001-02 per unit employment and investment both shows increasing trend but both are decline in the next year 2002-03. Per unit employment was highest in the year 2006-07 as compared to previous years.

6. Summary and conclusion

The empirical result highlight that the SSI has emerged over the years as a vibrant and a dynamic sector of Gujarat as reflected by the impressive performance on all fronts (Number of units and per unit employment) of growth of SSI during the entire study period (1980-2006). The CAGR of number of units of SSI of the total study period (1980-2006) was observed higher in pre-reform period (1980 to 1991) rather than post- reform period (1992-2006). Taking district wise data for small scale industries, high industrial concentration is found in Ahmadabad district. Number of units is more or less similar till 2005, but shows a very sharp decline in the year 2006. Same result is also discernible for total investment. This reverse trend may be attributed due to change in definitions of SMEs at different period of time. It was observed that Urban area had maximum percentage share in 2001-02 i.e 66.19, while rural area had lowest in the same year i.e 31.85. Rural area has big percentage share than urban area in year 2005-06 to 2006-07. The above analysis shows that though small scale sector is thought to be the largest employer after agriculture, but in the state Gujarat, the per unit employment of SS sector has declined since 2001 to 2005.

Encouraging the setting up of skill intensive industries like electronics, biotechnology, and computer software along with Agro- based industry in the state where there is high labour absorption is another option for increasing employment potential of small sector in the state.

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