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**SALES TAX INCENTIVES FOR INDUSTRIAL DISPERSAL
MAHARASHTRA 1979-1995**

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FOREWORD

The use of fiscal incentives as an industrial dispersal measure has been a worldwide phenomenon. We have evidence from countries as different from each other as the USA, the UK and Spain on how tax incentives and subsidies enabled the local governments to attract industries to specific regions. As the history relating to the dispersal of industries reveals, given a reasonably similar existence of most of the basic infra-structural facilities and markets, the regions offering maximum fiscal incentives attracted maximum investments. Even when the regions suffered from various bottlenecks, a larger quantum of incentives given to industrial units set up in such regions often helped the units to make good the losses they would have incurred due to those bottlenecks.

In post-independence India, the policy of using fiscal incentives for industrial dispersal started as early as in the 1950s; but it took a more concrete shape during 1960s with the Central Government scheme for selected backward districts. However, the dispersal mechanisms at regional levels in India had already assumed seriousness when many state governments initiated and intensified the industrial dispersal efforts through the Package Scheme of Incentives. And, among the states, it is to the credit of Maharashtra to have introduced a dispersal package at such an early date as in 1964.

The industrial dispersal package of Maharashtra evolved over the years since 1964. Initially, the thrust was on a range of incentives including, among other things, sales tax refund by a small proportion, free water, concessional electricity, preference in government purchases, etc. However, the emphasis gradually shifted to sales tax based incentives although most other non-tax components continued to be available. Further, the quantum of sales tax incentives offered to the more backward regions began to rise. One major focal point at the beginning had been the shifting of industrial units out of the already congested Metro regions and the Bombay-Thane-Pune belt. Later, the package experienced a major revamp in 1979 after which the scaling of sales tax incentives across regions according to their development status became clearly distinct, and most favourable to the most backward regions. Further, industrial units could now choose between sales tax exemption and deferral. The scheme was continuously improved upon or modified after 1979 too, with some of the important modifications introduced in 1983, 1988 and 1993. The present study focuses on the incidence of sales tax incentives and the growth of large and medium industrial units across backward regions of Maharashtra during the period from 1979 to 1995.

One major observation of this study relates to the highly skewed distribution of sales tax incentives in favour of the advanced districts and talukas. As a consequence, there emerged a grossly insufficient dissipation of industrial activities toward the most deprived regions despite the large rate of sales tax incentives offered for units locating in those regions. This is a disturbing truth indeed. In future, when the state governments face growing fiscal troubles, their ability to provide fiscal incentives will be greatly hampered. If the backward regions were incapable of attracting industries on a large scale when the state strongly supported them, it is unrealistic to expect this to happen when the state government has very little room to make fiscal concessions. The situation may get worse in future with the diminished government control over private industrial activities and the rising competition among the states (to provide the best

facilities, but possibly at selected places) to attract investors. The investors in future will look for states providing the best incentives and infrastructure. Since the state of backward regions in Maharashtra in terms of infrastructure and market potentials is very unsatisfactory, there is very little scope for backward regions to attract substantial industrial activities in the coming days. So, the study provides a warning signal, and underscores the need to think afresh about the industrial dispersal strategy in Maharashtra as elsewhere.

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PREFACE

The inspiration to write the monograph came from a proposal of the Sales Tax Department of Maharashtra, Mumbai to the Gokhale Institute of Politics and Economics, Pune. The department had proposed in early 1995 that an evaluation study could be carried out on the impact of the sales tax incentives provided in Maharashtra especially since late 1970s to disperse the industrial units towards the backward regions of the State. Although the proposal did not come through, our curiosity about the state of industrial dispersal in the State failed to subside. The persistence of our interest was mainly in view of the strengthening of the provisions of the sales tax incentives in 1979 and later whereby the regions classified under different grades of backwardness received substantially differing incentive levels with the most backward areas getting the maximum incentives. The impact of a new provision that enabled the industrial units to avail either exemption or deferral of the tax incentives was another issue that we thought could be examined.

Fortunately, the Sales Tax Department had already made available to us a huge amount of data on the new industrial units set up under the incentive schemes in various districts and talukas since 1979. Those data included the details of the location of the units, the level of investment, type of products, and a whole lot of related information. Despite the fact that the available secondary data would provide only partial information and that we would not be able to substantiate our analysis with field data on individual units in the absence of funding, we decided to evaluate the data realising the richness in information. We used other sources of secondary data on Maharashtra and India to supplement the sales tax data wherever we felt its need so as to understand the current state of industrial dispersal in Maharashtra in a better way. At the end we could come out with what is contained in this manuscript.

We admit that this study has several limitations. The readers may be able to identify them as they go through the analysis. Most of the limitations were a result of the non-availability of data from secondary sources and our inability to collect primary data due to financial constraints. Within the constraints under which we worked on this manuscript, we have tried to make it as analytical and informative as possible. Still, there is substantial scope for improvement in the coverage and depth. We only hope some of the future studies will address to the limitations of this study and come out with a more exhaustive analysis of the issues raised in this work, based on primary field data. The author welcomes the readers' comments and inquiries on any of the issues raised in this study.

I have received immense help and support from various sources while carrying out this work. It was by using the support and facilities of the Gokhale Institute of Politics and Economics, Pune, that I completed this work.

Professor V. S. Chitre was highly supportive with his insightful comments and suggestions throughout the study. Professor A. M. Nadkarni helped me through his enriching discussions on the sales tax scheme and analysis of this work. The useful comments of the anonymous referee enabled me in rectifying the flaws that existed earlier in the manuscript. Mr. Pradeep Apte was useful at the early stage of the work in interfacing with the Sales Tax Department office at Bombay. The excellent academic environment and computer facilities of the Indian Institute of Management,

Lucknow, made my task of revising the manuscript easy and simple. Finally, my family, and friends at Pune, provided me sufficient moral and physical support while conducting the analysis and preparing the manuscript.

I acknowledge all this support with an overwhelmed heart.

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CHAPTER 1

INTRODUCTION

1.1 Prelude

The New Industrial Policy of Maharashtra of 1993 outlines one of its basic objectives as a balanced regional development and rapid growth with dispersal accompanied by employment generation. It underscores the significance of industrial dispersal as a problem having a bearing on Government policy formulation. Industrial disparities across regions have been a cause of serious worldwide concern for a long time now (Lee, 1970; Wheat, 1986; Hansen, 1990; Castro, 1993). Disparities exist, on the one hand, across nations and, on the other, among various regions within the nations. While the severity of the inter-regional disparities happened to have been significantly moderate in advanced nations on account of their high development standards, the problem has truly taken grave proportions in the Third World economies in general and the most backward among them in particular. Unfortunately, India has been destined to have a representative position in this respect, thanks to her vastness and diversity as well as to various historical and economic factors. Several writers have focused their attention in the past on the regional disparities prevalent in several parts of the country (Dholakia, 1989; Aggarwal and Sondhi, 1991; Mukhopadhyay, 1991; Kumar, 1993). Most of these studies have noticed no significant improvement in regional industrial inequalities in India in the respective areas and periods these studies focused. Aggarwal and Sondhi are among the few who suggest some major gains accruing from the Central and State tax incentives to certain backward areas. There is also a mention by International Monetary Fund (referred to in the Economic Times, 14.3.96) about improvements in the development status of several backward regions of India although this result is not specifically attributed to Government incentives.

In India, as elsewhere, the inter-regional industrial imbalances assume mainly two dimensions: (i) inter-state disparities and (ii) inter-district disparities within each State. There also exist intra-district inequalities, i.e., across different Talukas or blocks within a district. As observations reveal, such inequalities emerge especially if a district is very large and/or has distinct geographical or other features across talukas or blocks. It is the first two types of inequalities that attracted the Central Government attention in India while several state Governments have attempted to address the intra-district inequalities, as well as, the inter-district ones.

The Central and the State Governments have formulated various policies and programmes for tackling the regional imbalances since independence. While the Central Government had been laying its faith for a long time on the 'trickle down theory' or the 'percolation effect' as a means of correcting aspects like income imbalances, in respect of regional disparities, it came out with specific policies only at the close of 1960s. In 1969, the Central Government constituted two working groups under B.D.Pandey and N.N.Wanchoo respectively for identifying the backward districts and for devising proper incentives for their industrialisation. It is partly on account of their recommendations that the Government introduced various incentive schemes for backward area industrialisation.

At the same time, states like Maharashtra viewed disparities with some seriousness even earlier. Consequently, the state of Maharashtra, along with a couple of

other states, introduced in 1964 a 'package scheme of incentives' for industries being set up in areas deemed to be backward. The scheme has subsequently been revised several times with a thorough revision being effected in 1979 in order to make the package more attractive in favour of the most un-developed regions.

1.2 Three Pronged Approach

In general, the Government actions at the central and state levels aiming at industrial dispersal have taken three major forms (Rameshan, 1995). These are:

(1) Setting up of public sector units having large backward and forward linkages in the under-developed and un-developed regions; (2) Providing of direct incentives to prospective industrial units being located in the backward areas and (3) Developing of basic industrial infra-structural facilities in the backward areas thereby encouraging prospective units to select those areas as their location. The first of these measures has not been adequate in ensuring a balanced industrial development in the country because of the large size of the backward areas and the resource constraints of the Government. In this respect, the other two measures have been considered relatively more desirable in terms of both cost and effectiveness, as it would involve also the private sector possibly on a significant scale

1.3 Central Incentives

Criteria of Backwardness

The Central Government had initially identified the backward districts on the basis of several considerations such as: (1) Per capita production of the major crops (food/commercial) cultivated in the district; (2) Proportion of agricultural workers to population; (3) Per capita gross industrial output; (4) Number of factory workers or, alternatively, of non-agricultural workers, per lakh of population; (5) Per capita consumption of electricity; and (6) Availability of surfaced road or rail facilities in relation to population. There had been subsequent modifications to the selection criteria. That rendered several other less developed districts eligible for Central Government support in industrialisation. There was also improvement in the quantum of incentives offered to industrial units.

In Maharashtra, three districts, viz., Aurangabad, Chandrapur and Ratnagiri, had been classified at the beginning as centrally backward and the central backward area incentives were made available to industrial units being set up in them. Subsequently more districts have come under the incentive scheme. Sometimes the increase in the number of districts eligible for central assistance was owing to bifurcation of the existing districts.

Incentives

The Central Government incentives available in August 1971 to the industrial units newly established in the backward districts included: (1) A capital grant or subsidy of 10 per cent of the fixed capital investment for all units with fixed capital below Rs.50 lakhs, (2) A transport subsidy of 50 per cent of the transport cost of raw-materials and finished products, (3) A 20 per cent deduction of taxable profit income of units while calculating income tax, (4) Preferential allocation of imported raw-materials, machinery and components and priority supply of machines on hire-purchase terms; and also selective relaxation in allotment of free foreign exchange and licences, and (5) Loans through various promotional institutions at concessional rates of interest.

The proportion of capital subsidy granted was raised to 15 per cent in March, 1973, and the investment limit and the subsidy incentive were further extended to envelope units having a fixed capital investment of Rs. one crore. Even larger units (above Rs. one crore of investment) could avail of the subsidy in selected cases subject to a ceiling of Rs. 15 lakhs. There were further improvements in the later years in the provisions of the scheme that made the central incentives more appealing to the industrial entrepreneurs. The centrally backward districts of Maharashtra have also been eligible for the central incentives except the transport subsidy, which was given mainly to the North-Eastern States and the Jammu & Kashmir. As already indicated, the Central Government had further modified the incentives for backward areas, in 1983, and more districts were brought under the incentive package.

Central Disbursements to Maharashtra

Between 1972-73 and 1989-90, the Central Government had distributed a total of Rs. 1031 crores as capital and transport subsidies in the country as a whole. Most of the disbursements came since 1980-81 wherefrom the amount of disbursements aggregated to Rs. 961 crores. Table 1.1 provides a break up of disbursements under the heads of capital and transport subsidies and also the dues received by Maharashtra (i.e., by the three eligible districts). It may be noted that, during the second period, just 3.3 per cent of the subsidies flowed into the industrial units located in the state as against 11 per cent till 1979-80. The relative slowing down of new industrial activities in the three centrally backward districts of the State may be the root cause of this falling subsidy proportion.

Table 1.1 : Central Capital and Transport Subsidies to Industry : Backward Areas
(Rs. Crores)

Period	Capital Subsidy		Transport Subsidy	
	Maharashtra	India	Maharashtra	India
Till 1979-80	7.6 (11.0)	69	-	0.1
1980-81 to 1989-90	30.2 (3.3)	908.8	-	53.1

Note: Figures in brackets are percentages to India total.

Source: Handbook of Industrial Statistics India, Various years.

1.4 Attitude of Maharashtra to Dispersion

As mentioned, while the Central Government waited till 1969 in order to offer some solid industrial dispersal package, the Maharashtra State Government took an early start in initiating its active policy intervention for attaining a balanced industrial growth. It understood the need for taking the industrial activities in the state out of the Bombay and Pune metropolitan regions and into the less-developed regions. It is this attitude which prompted it to announce in 1964 the various monetary and other incentives, together called as the package scheme, aimed at attracting the industrial units into the backward areas. In addition, it had also placed various restrictions on the further industrialisation of the already congested metropolitan regions. Unlike in the central scheme, the State did not restrict the dispersal programmes to Aurangabad, Chandrapur and Ratnagiri, but extended it to the entire state by classifying the talukas

into different developmental grades and then by offering different quantum of incentives to different talukas according to their developmental status. Thus, while the most backward talukas received higher incentives, even those less developed talukas lying within a largely developed district carried some incentives.

Incentives Offered in Maharashtra

The incentive package for industrial dispersal as provided in Maharashtra from time to time included the components like:

(1) Providing of developed land at concessional or zero rates of rent; (2) Supply of water at concessional rates; (3) Seventyfive per cent contribution toward the cost of feasibility study; (4) Supply of electricity at concessional rates; (5) Sales tax refund upto seven per cent of the fixed assets of the units; (6) Exemption of new units in backward areas from octroi; (7) Provision of training to labour; (8) Industrial housing grant from Government of 10 per cent out of the 25 per cent contribution made by the unit toward housing scheme; (9) Preferential treatment in purchase of stores and (10) Exemption from water royalties and non-agricultural assessments.

The responsibility of developing the lands for renting to the prospective units lay with the Maharashtra Industrial Development Corporation (MIDC), whereas, the responsibility of administering the incentives (3) to (10) listed above rested with the State Industrial Investment Corporation of Maharashtra (SICOM).

Contribution of Various State Agencies

A number of other agencies such as the Maharashtra State Financing Corporation (MSFC), Maharashtra State Small Industries Development Corporation (MSSIDC) and the Maharashtra State Khadi and Village Industries Board (MSKVIB) have also been extensively involved in the state's industrial dispersal programmes. Each of these agencies has been expected to perform specific functions assigned to them. A rough idea about the magnitude of their activities may be obtained if we take a look at the level of monetary resources involved in their operations. Table 1.2 may be helpful in this respect.

Table 1.2 presents the quantum of funds involved in the activities of the different industrial development agencies of Maharashtra since 1980-81. (For a detailed discussion on the role and the level of participation of MIDC, SICOM and MSFC during the seventies and the early years of eighties, see the Report of the Fact Finding Committee on the Regional Imbalance, GOM, 1984, Ch.13). In the case of SICOM, the total cost of the projects (already in production and under construction) it covered has been generally increasing since 1981-82 (implying a corresponding expansion in the scope of its operations) with only occasional reversals, such as in 1987-88. On a cumulative basis, the total funds related to SICOM come to Rs.11,662 crores since 1981-82. The total investment incurred under the auspices of MIDC, at the same time, exhibited some cyclical pattern, with a disproportionate peak investment suddenly appearing in 1991-92. Its total investment since 1981-82 amounts to Rs.7,347 crores. A gradual rise in the disbursements of loans is visible in respect of MSFC, which caters to the medium and small enterprises. During 1981-82 to 1991-92, it distributed a total loan of Rs.654 crores. The main function of MSSIDC is to help the small-scale units to market their products. This function it seems to be performing with a growing interest as obvious from its steadily increasing market turnover (it is not clear whether the abnormally large figure of 1989-90 appearing in the relevant Government publication

owes its origin to any tabulation error). The amount of disbursement of loans and grants made by MSKVIB to the village industries and rural artisans also ultimately registered a big growth though at times the sanctions plunged to lower levels.

Table 1.2: Financial Resources Involved in the operation of Various Industrial Promotion Agencies: Maharashtra

Year	(Rs. Crores)				
	SICOM Project Cost ^a	MIDC Total Investment	MSFC Disburse- ments	DSSIDC Market Turnover	DSKVIB Disburse- ment
1980-81	1078 ¹	1203 ¹	173 ¹	51	1.38
1981-82	117	172	28	52	1.99
1982-83	436	244	30	60	3.15
1983-84	758	242	38	83	3.46
1984-85	671	153	34	100	4.99
1985-86	1251	421	41	104	4.09 ²
1986-87	1417	538	54	125	7.91 ²
1987-88	1197	546	52	90	5.74 ²
1988-89	1339	374	52	152 ³	3.99 ²
1989-90	1274	157	68	377 ⁴	7.61
1990-91	1542	200	99	184	12.18
1991-92	1660	4300 ⁵	158	187	14.20

Notes: @ Project Cost of Units already in production and under construction

(1) Till 31st March, 1981; (2) Loans and grants sanctioned; (3) As per 1989-90 Economic Survey of Maharashtra; (4) As per 1990-91 Economic Survey of Maharashtra; (5) As per 1991-92 Economic Survey of Maharashtra. It is doubtful if the actual figure is just '430'.

Source: Economic Survey of Maharashtra, Various Years.

Modification of the Package

The package scheme of incentives introduced in the State since 1964 has been periodically revised with a view to making it more attractive and, hence, more result-oriented. It was the thorough revision of 1979 that turned the scheme wider in scope and coverage, more comprehensive in spelling out the developmental zones and incentives and more attractive in terms of the options it provided. While it categorised the talukas into four zones according to their industrial status, the industrial units choosing the backward areas for location or expansion got the option of availing of either sales tax exemption or deferral at specified rates. The scheme has subsequently been revised again and again, in the process of which the rates of incentives along with the developmental classification of some of the talukas have been altered, thereby, rendering the incentives further lucrative for an entrepreneur considering it as a factor.

1.5 Purpose of this Study

Between 1979 and March 1995, the state had granted to the large and medium industrial units a sales tax exemption ceiling of Rs.3590 crores and deferral ceiling of Rs.3484 crores, thus, the two together accounting for Rs.7074 crores. It is indeed a massive amount that works out, on an average, to be about Rs.442 crores per annum. In addition to this, a total amount of Rs.62 crores was granted as exemption and deferral ceilings to 164 large and medium hotels and catering units across districts

during the same period (see Table 1.3 for details). The large ceilings granted seem to imply a correspondingly large increase in the industrial activities in the state during this

Table 1.3: Hotels and Catering Units Drawing Sales Tax Benefits: 1979 to 31.3.1995

Sr. No.	Districts: Partly Developed/Developing	Hotels & Other Catering Units: Number & Amount of Ceiling					
		Exemption		Deferral		Total	
		Number	Amount	Number	Amount	Number	Amount
A	Fully Developed	-	-	-	-	-	-
	Greater Bombay	-	-	-	-	-	-
B	Some Parts Fully Developed	16	6.61	2	0.44	18	7.05
	Thane	3	0.72	-	-	3	0.72
	Raigad	3	1.27	1	0.15	4	1.42
	Pune	10	4.62	1	0.29	11	4.91
C	Some Areas Partly Developed	36	9.69	3	1.04	39	10.73
	Nashik	11	3.66	3	1.04	14	4.7
	Ahmednagar	25	6.03	-	-	25	6.03
D	Adjoining Metros, But No Developed Areas	18	10.89	1	0.06	19	10.95
	Satara	14	10.06	1	0.06	15	10.12
	Solapur	4	0.83	-	-	4	0.83
E	Partly Developing, Partly Least/Un-Developed	47	24.3	4	1.68	51	25.98
	Ratnagiri	4	2.72	-	-	4	2.72
	Sangli	5	1.09	-	-	5	1.09
	Kolhapur	17	6.14	2	1.21	19	7.35
	Aurangabad	7	2.43	2	0.47	9	2.9
	Amravati	2	0.45	-	-	2	0.45
	Nagpur	12	11.47	-	-	12	11.47
	Sub-Total (B to E)	117	51.49	10	3.22	127	54.71
F	Mostly/Fully/Least Developed	16	4.67	-	-	16	4.67
	Sindhudurg	2	0.53	-	-	2	0.53
	Jalgaon	1	0.29	-	-	1	0.29
	Parbhani	2	0.35	-	-	2	0.35
	Omanabad	2	0.11	-	-	2	0.11
	Buldhana	2	0.25	-	-	2	0.25
	Akola	1	0.31	-	-	1	0.31
	Yavatmal	-	-	-	-	-	-
	Wardha	1	0.05	-	-	1	0.05
	Bhandara	-	-	-	-	-	-
	Chandrapur	5	2.78	-	-	5	2.78
G	Partly Least and Partly UN-Developed	19	2.61	-	-	19	2.61
	Dhule	1	0.38	-	-	1	0.38
	Beed	10	1.03	-	-	10	1.03
	Nanded	4	0.49	-	-	4	0.49
	Latur	4	0.71	-	-	4	0.71
H	Mostly/Fully Least Undeveloped	2	0.37	-	-	2	0.37
	Jalna	2	0.37	-	-	2	0.37
	Gadchiroli	-	-	-	-	-	-
	Sub-Total (F to H)	37	7.65	-	-	37	7.65
	Grand Total (B to H)	154	59.14	10	3.22	164	62.36

Source: Compiled from records of the Sales Tax Department, Mumbai, Maharashtra.

period. One may also recall in this context the level of financial resources offered to the state by the Financial Institutions (FIs). Between 1982-83 and 1989-90, the FIs disbursed an amount of Rs.16172.4 crores in Maharashtra of which about 21.7 per cent moved into the backward areas (Table 1.4). In the same period, the percentage disbursements of FIs going into backward areas in India as a whole was higher at 38.8 per cent of a total disbursement of Rs.85,229.9 crores. It should be remembered, however, that the credit disbursements in Maharashtra came around 10.6 per cent of all-India disbursements in respect of backward areas and 19.0 per cent of the total amount disbursed in India in respect of all regions taken together. These indeed form sizeable proportions and the industrial status of Maharashtra in the Indian Union justified it.

Table 1.4: Disbursements of All Financial Institutions: Maharashtra and India

Period	Maharashtra		India	
	Backward Areas	Total	Backward Areas	Total
Till 1981-82 (End-March)	427 (19.3)	2209.3	4328.7 (41.6)	10414
1982-83 to 1989-90	3511.6 (21.7)	16172.4	33078.2 (38.8)	85229.9

Note: 1. Figures in brackets are percentages to total.

2. Disbursements in backward areas of Maharashtra as % of disbursements in backward areas of India as a whole are 9.86 till 1981-82 end and 10.62 during 1982-83 to 1989-90.

Source: Compiled from 'Handbook of Industrial Statistics India', various years.

However, there arise a few pertinent questions: did the new industrial activities really percolated into the industrially depressed areas of yesteryears? The sales tax incentive package was supported by the activities of different industrial promotion agencies of the state and, to a lesser extent, by the central incentives. Given this, to what extent it helped backward districts and talukas in getting industrialised at a faster rate than the forward districts and talukas? Alternatively, did the backward areas grow faster and the forward areas grow slower after 1979 when the incentive scheme was strengthened? Or, what is the level of reduction in the inter-district disparities since 1979 when the sales tax incentives were made more comprehensive? Further, in the mean time, what was the overall improvement in the industrial scenario of the districts taking into account the contribution of also the informal or non-factory sector that is more of an unorganised nature? It is very crucial to examine these questions in some detail in order to judge the efficacy of the State's backward area industrialisation programmes and to decide upon the future course of actions to be recommended.

In this work, therefore, an attempt has been made to focus on the following objectives. (1) To evaluate the inter-regional distribution of the sales tax exemption and deferral benefits in Maharashtra since 1979 in the light of its main objective of the backward area industrialisation. (2) To assess the changes in the overall improvement in the industrial scenario across districts with reference to certain selected industrial indicators, which have been named in Chapter 7. And (3) to test the association between the level of sales tax incentives received by different districts and the growth of their selected industrial dispersal parameters.

1.6 Methodology

1.6.1 Type and Source of Data

The data used in this study are of secondary nature. The information on the sales tax exemption and deferral incentives was made available to us by the Department of Sales Tax, Government of Maharashtra. The duration for which data availability exists in terms of sales tax incentives is for the period 1979-1995 (March). The original data obtained from the above source are enterprise-wise. Classification and tabulation of those data have been done according to our requirement, i.e., district-wise, developmental zone-wise, division-wise, exemption and deferral-wise and so on. Here, developmental zones are defined by Government agencies with the talukas as reference units. That is, talukas are assigned grades like A, B, C etc., on the basis of their state of development and we refer to them as A-zone, B-zone and so on. Since a district consists of several talukas, a district may contain at the same time different zones like A-zone, B-zone etc. A division is a cluster of adjacent districts, defined by the state Government for its administrative convenience. The relationship between districts, development zones and divisions would be clearer when we discuss Tables 2.1 and 2.2. And, the details of the way we used the sales tax incentives' data are provided in respective chapters or sections.

For analysing the overall industrial dispersal across districts in Maharashtra, secondary information on specific parameters has been gathered from different Government publications. These include the Statistical Abstract of Maharashtra State, Handbook of Basic Statistics of Maharashtra state, Census of Maharashtra, Handbook of Industrial Statistics India, Economic Survey of Maharashtra and the Economic Survey India, pertaining to different years as per requirement. The type of information that was extracted from these sources and the main purpose that they serve are outlined in the respective sections of our analysis where these data appear.

1.6.2 Techniques

This study is based mostly on simple statistical tools such as percentages, ratios and coefficient of variation. While evaluating the relationship between the distribution of the sales tax incentives and the inter-regional disparities in Maharashtra, we make use of some other important techniques, viz., the frequency analysis, Pearson's chi-square test and the Spearman's rank correlation analysis. All monetary values appearing in this analysis are expressed in current prices. In order to highlight certain aspects with more clarity, sometimes we plot the changes in the parameters with non-linear trend lines. The software package used for this purpose is the 'Harward Graphics'. Below we explain the major techniques employed in our analysis.

Frequency Analysis

For assessing the relationship between the inter-district distribution of sales tax incentives and the values of different parameters used in gauging the inter-district dispersal of industrial activities, we shall involve the mechanism of frequency analysis suggested by Nijkamp and Blaas (1995).

We adapted their method in the following way. We consider the total sales tax incentives granted during 1979-March 31, 1992, on an average per district on the one hand, as the impacting variable. And, on the other, we take as the impacted variable the percentage change in the values of our selected parameters between 1981 and 1991 (or,

alternatively, 1981-82 and 1991-92, as the case may be) in each district. Then, (1) We construct for each parameter (across rows) and the sales tax incentives (across columns) a 2x2 frequency table whose main diagonal shows the number of districts whose observed values of the parameter and sales tax incentives are either above (cell 1,1) or below (cell 2,2) their respective state or all-district averages; (2) We find out the sum of the main diagonal frequencies ((cell 1,1) plus (cell 2,2)) for each parameter and then get the corresponding percentage to total districts and (3) We verify if it exceeds fifty percent for each parameter and draw the conclusions accordingly.

Pearson's Chi-square Test Statistic

We have applied the Pearson's chi-square test to the four-fold frequency table obtained as above. The following is the formula for estimating the chi-square statistic, χ^2 , in this case.

$$\chi^2 = N(ad-bc)^2 / ((a+b)(c+d)(a+c)(b+d))$$

Where, a, b, c, d = four frequencies (a and b in the first row and c and d in the last row); and N = the sum of the four frequencies. The testing of the statistic is done at (R-1)(C-1) degrees of freedom where R = number of rows of the frequency table, which, here, is 2, and C = number of columns of the frequency table, which also, here, is 2. The test criterion is to reject the null hypothesis

Ho: No association

This is when the estimated chi-square exceeds the tabulated values at given degrees of freedom and at an assumed level of significance.

Spearman's Rank Correlation Analysis

In order to cross-check the results of the frequency analysis and the Pearson's chi-square test, we also propose to estimate the Spearman's rank correlation coefficient, ρ , between the percentage district-wise distribution of the total sales tax ceilings and the percentage district-wise growth of each of the selected indicators of industrial dispersal. The formula used for this purpose, as usual, is

$$\rho = 1 - ((6\sum d^2) / (n(n^2-1)))$$

Where, d = the difference between the ranks of the districts in respect of the percentage of the sales tax incentive receipts and the growth of selected indicators when the former is arranged in ascending order, and n = number of districts, which, in our case, is 29. The rank correlation coefficients are tested for statistical significance by using the formula suggested in Kendall and Stuart (1967).

1.6.3 Organisation of the Work

The present work has been organised into nine chapters. This first chapter outlines the problem and briefly touches upon the various industrial dispersal measures implemented by the Central Government and the state of Maharashtra. It also spells out the main objectives of the study. We emphasise in Chapter 2 the need for ensuring industrial dispersal in general and in Maharashtra in particular.

In Chapter 3, there is a brief discussion of the major factors considered in choosing industrial location. Chapter 4 explains the various industrial dispersal measures including the sales tax incentives, adopted especially since 1979, in Maharashtra, i.e.,

those aimed at influencing the location decisions of the entrepreneurs. The role of tax incentives as a locational factor is the main subject matter of Chapter 5. This chapter also analyses how the sales tax incentives of exemption and deferral offered to the industrial units in Maharashtra benefit those units and, therefore, act as a locational factor.

The next chapter deals with the distribution of the sales tax benefits across districts during 1979-1995. The chapter examines the distribution of the incentive ceilings granted as well as of the number of units - under both exemption and deferral schemes and under the heads "benefit period completed" and "in progress" after classifying the districts according to their degree of industrial development. The evaluation is repeated in respect of the different developmental zones as well, in order to gauge the incidence of dispersal of benefits into the truly backward areas.

The over-all industrial dispersal occurred in Maharashtra during 1981-1991, as measured in terms of the variation in a few selected indicators, whom the sales tax incentives provided over the decade might have impacted, form the essence of Chapter 7. The parameters chosen for the purpose include the rate of urbanisation, the ratios of non-agricultural, industrial and factory sector employment to the population, and the per capita electricity consumption in industry across districts.

The results of the statistical testing of the relationship between the sales tax incentives' distribution across districts and the growth of the selected dispersal indicators are presented in Chapter 8. The testing, as may be recalled, has been done with the help of the tools of frequency analysis, the Pearson's chi-square statistic and the Spearman's rank correlation coefficient.

In the last chapter, viz., Chapter 9, the main findings of the study are succinctly summarised. At each place, the policy implications are highlighted and suggestions are made on the possible and desirable future course of actions that may make the dispersal measures more result-oriented in future.

1.6.4 Limitations of the Study

The study has a few important limitations. In the first place, it does not consider, while analysing the impact of State Government incentives on the backward areas, the simultaneous effects of Central Government incentives provided to the backward districts. Some of the central incentives could be complementary while others substitutes. Their net effect on the regions could not be ascertained in this study because of paucity of information in this respect as well as due to the limited focus of this study. Secondly, the direct focus of the study is on the incentives granted to the large and medium units. It does not cover the smaller units on account of data problems. This, however, may not belittle the conclusions of the study because the smaller units account for only a small fraction of the incentives sanctioned. Besides, there is a modest indirect attempt in Chapters 7 and 8 to evaluate the impact of smaller and informal units on the industrialisation of backward regions. Incidentally, while analysing various indicators of regional development in Chapter 7, the district or taluka level income variable could not be used because the State Government agencies do not provide such data for the period focused in this study.

CHAPTER 2

NEED FOR INDUSTRIAL DISPERSAL

2.1 Why Dispersion

The pace and level of industrialisation is considered to be one important determinant of the overall economic development of a region. A growing industrial output leads to a growing per capita income, which, on the other hand, decides the level of standard of living. Per capita income, however, is only an average measure of the economic well-being and does not reflect the actual welfare or incomes of the individuals. The actual accrual of incomes to various individuals is dependent on the factor incomes or transfer payments each one of them receives while contributing to the output. Thus, even when the industrial or other output rises in the economy as a whole, it is hardly essential that every one should get a proportionate share of it. This is because every one may not get opportunities to participate in the increasing production activities and, therefore, to claim a part of the benefits.

We know that the physical output to be consumed comes from either the industrial and allied activities or the agricultural and related activities. It has been historically proved that the agricultural sector normally grows at relatively lower and more or less constant rates. Such growth rate is also not found much different from the population growth rates in countries like India. Therefore, the agricultural output may not be expected to contribute significantly toward the growth of per capita national output, after giving due provision for population growth. Hence, it rests upon the industrial sector, which is generally found to have a potential to grow at significantly high rates, to give a big push to the per capita output growth in the commodity sector as a whole. In other words, a fast industrialisation coupled with a rapid growth of the related services may be the strongest weapon in achieving a desirable growth of per capita output.

However, the growth, even at high rates, has another dimmer side. This can be understood in the following way. The aggregate industrial output originates at different spatial points in the economy where the industrial activities are located. Suppose, the economy has N geographical divisions such as districts, or talukas, then, a total industrial output, Q , can be decomposed as

$$Q = q_1 + q_2 + q_3 + \dots + q_N$$

Or,

$$Q = \sum_{i=1}^N q(i)$$

Where, $i = 1, 2, \dots, N$ and q_1, q_2, \dots, q_N are the industrial outputs accruing in the N regions. The per capita industrial output, Y , for the whole economy is, as one can guess,

$$Y = Q/P$$

Where, P = population of the country.

Now, on using Y for drawing inferences simply conceals how much each region has contributed. Or, in other words, Y does not reflect the actual per capita industrial income of each of the N regions worked out on the basis of its industrial output and population. It is possible that such per capita values are considerably different across

geographical units. If it is so, it may signify the following: (a) The cake (i.e., the income to be distributed) is smaller in size in some regions while it is large in others; (b) Fewer people get opportunities to participate in making the cake in the poor region on account of limited industrial activities being carried out there; and (c) The cake being small and the participants being a few, only a limited number of people in the backward region shall be actually getting a share of the cake. Plainly put, the smaller scale of industrial activities in some regions fails to absorb the unemployed labour force completely and to utilise its resources fully, thereby, leading to similarly smaller accrual of income to the people. What results from such lack of adequate industrial activities shall, therefore, be unemployment, low levels of income and standard of living of the people and a prolonged backwardness of the region coupled with the wastage of its natural resources. On the other hand, the area having heavy industrial concentration may experience, for obvious reasons, a high level of employment, higher income levels and a fast development of the region. Thus, different groups of individuals residing in different regions of the same nation, state or district get discriminated through uneven distribution of industries with some pushed to the brink of hardships for no mistakes of their own while others enjoying the comforts of life.

No civilised society can remain comfortable with such differential fortunes of its own members. So, it is necessary to ensure a reasonable level of evenness in the industrial activities across regions. This also ensures the productive utilisation of the society's precious economic resources. In order to do this, there is need for developing an effective dispersal programme that enables attracting of industries into the depressed areas. Such programme should also check further congestion of the already congested areas. For this, the programme should provide enough incentives to the new units being set up in the backward areas while removing the bottlenecks of such regions. In other words, the dispersal package should effectively influence the location decisions of the entrepreneurs in favour of the backward regions. This, however, is possible only by studying the factors which influence the location decisions of the firms and, then, by creating a conducive environment in the backward areas by addressing to such location factors. A brief discussion of some of the location factors is done in Chapter 3.

2.2 Why Dispersal Policies in Maharashtra

We have already learned about the industrial disparities prevailing in Maharashtra across districts and talukas. Had the problem been a mild one, such massive state participation in regional development would not have been thought of. But in Maharashtra, the magnitude of industrial disparities appeared really quite large. In fact, apart from the district of Greater Bombay, largely, only a few localities lying in the Konkan and Pune regions and, to some extent, some pockets of Nashik, Aurangabad and Nagpur witnessed the existence of industrial activities. Rest of the state either had no industrial entrepreneurial activities to boast of or had a very few of them. Obviously, when the talukas were graded as different zones by Government of Maharashtra, on the basis of their developmental status, most of them fell into the industrially least or totally un-developed categories. This is apparent from Table 2.1 and Table 2.2 that show the division-wise and district-wise distribution of talukas across zones A, B, C, D and D+. The classification reveals the situation existed when the Maharashtra Government declared the 1993 edition of the package scheme of incentives. The situation was far worse earlier particularly during the sixties and seventies.

Table 2.1: Division-wise Distribution of Talukas According to Developmental Status

Sr. No.	Divisions	Number of Talukas Zone-wise					Total
		Zone-A	Zone-B	Zone-C	Zone-D	Zone-D+	
1	Konkan	12S	3	8	10	10	43
2	Nashik	-	7	6	21	17	51
3	Pune	5s	2	17	22	11	57
4	Aurangabad	-	-	1	26	24	51
5	Amravati	-	-	1	45	10	56
6	Nagpur	-	-	1	35	17	53
Total		17	12	34	159	89	311

S - Some talukas above parts under A-Zone and parts under B or C zone

Source: Classified with the help of the Census of Maharashtra 1991 and the relevant Resolution of the Government of Maharashtra related to the 1993 Package Scheme of Incentives.

Developmental Status of Talukas

Table 2.1 suggests that out of the 311 talukas of Maharashtra (excluding Greater Bombay), just 17, lying fully in the Konkan and Pune divisions, are graded A, meaning fully or mostly developed. While another 12 talukas, largely from Nashik and the rest from Konkan and Pune, appear as B graded or partly developed. With only 34 talukas, mostly in the above three divisions, classified as zone C or having the status of "developing ones", as many as 159 and 89 talukas respectively, are the least developed or zone D ones and undeveloped or D+ graded ones. Notably, even the Konkan and Pune divisions contain a large number of D or D+ graded talukas.

Table 2.2 provides more specific information since the classification is done district-wise. As seen there, the three districts of Thane, Raigad (both in Konkan division) and Pune cover all zone A talukas outside Greater Bombay. In other words, only these districts have fully developed and highly industrialised areas. Similarly, all partly developed and significantly industrialised talukas with grade B are located in the districts of Nashik and Ahmednagar, in addition to Thane, Raigad and Pune. Thus, just five districts share among themselves all the fully or partly developed talukas, which are not many in number, while the State has a total number of 29 districts (other than Greater Bombay). Even among the 34 developing talukas (i.e., with developmental grade C) that are slowly getting industrialised, the majority is a part of the five partly developed districts listed above (with Pune having the highest number of six). Only 15 are spread among the eight secondary level districts that either are adjoining Pune district or have at least one emerging growth point in them.

Sixteen districts are least (zone D) or totally undeveloped (zone D+) with only nominal or no industrial activities in them. They consist of as many as 100 talukas under zone D and 51 talukas under zone D+ (out of a total of 311 talukas in the whole State), thus, pointing at the utter backwardness to which a major part of the State has been subjected. Surprisingly, even the five partly developed districts envelope 7 D graded and 14 D+ graded talukas, with another 52 zone D talukas and 24 D+ talukas being a part of the eight partly developing districts. On the whole, of the 311 talukas of Maharashtra, as many as 248 talukas or approximately 80 per cent (or, four-fifth) are

the most backward ones. It was, therefore, imperative for the Government to formulate specific policies aimed at carrying the industrialisation from the 20 per cent of the areas to a large majority of the 80 per cent of the regions that were hitherto deprived of development.

Table 2.2 District-wise Distribution of Talukas according to Developmental Status

Sr. No.	Divisions	Number of Talukas Zone-wise					
		A	B	C	D	D+	Total
1	Fully Developed						
	Greater Bombay	Whole	-	-	-	-	-
2	Some Parts Fully Developed	17	5	13	1	5	41
	Thane	5	2	2	-	4	13
	Raigad	7*	1	5	1	-	14
	Pune	5*	2	6	-	1	14
3	Some Areas Partly Developed	-	7	6	6	9	28
	Nashik	-	3	4	2	6	15
	Ahmednagar	-	4	2	4	3	13
	Satara	-	-	5	4	2	11
	Solapur	-	-	2	5	4	11
4	Adjoining Pune, But No Developed Areas	-	-	7	9	6	22
	Satara	-	-	5	4	2	11
	Solapur	-	-	2	5	4	11
5	Partly Developing, Partly Least/Undeveloped	-	-	8	43	18	69
	Ratnagiri	-	-	2	6	1	9
	Kolhapur	-	-	2	7	3	12
	Aurangabad	-	-	1	5	3	9
	Amravati	-	-	1	12	3	16
	Nagpur	-	-	1	10	3	14
6	Mostly/Fully Least Developed	-	-	-	83	21	104
	Sindhudurg	-	-	-	6	1	7
	Jalgaon	-	-	-	9	4	13
	Parbhani	-	-	-	6	1	7
	Osmanabad	-	-	-	4	2	6
	Buldhana	-	-	-	11	2	13
	Akola	-	-	-	11	2	13
	Yavatmal	-	-	-	11	3	14
	Wardha	-	-	-	7	1	8
	Bhandara	-	-	-	11	2	13
	Chandrapur	-	-	-	7	3	10
7	Partly Least and Partly Un-developed	-	-	-	16	15	31
	Dhule	-	-	-	6	4	10
	Beed	-	-	-	4	3	7
	Nanded	-	-	-	4	5	9
	Latur	-	-	-	2	3	5
8	Mostly/Fully Un-developed	-	-	-	1	15	16
	Jalna	-	-	-	1	7	8
	Gadchiroli	-	-	-	-	8	8
	Total (A-H)	17	12	34	159	89	311

Notes: * Some of the talukas lie partly under A-Zone and partly under B or C Zones.

Source: As in Table 2.1

CHAPTER 3

FACTORS OF INDUSTRIAL LOCATION

3.1 Location Decision

Industrial dispersal or concentration is a consequence of the location decisions of industrial firms. Depending on whether the new firms tend to locate themselves at an already industrialised area or at new and less congested areas, the level of industrial concentration is likely to vary. For a judicious dispersal of industrial activities, it is quite necessary for the new firms to choose less concentrated areas and thereby to spread themselves all around the region in question.

The location decisions of the business enterprises, on the other hand, are not a result of a complete chance factor. Rather, it forms part of a well-conceived strategy. As Klassen (1967) remarks, "an entrepreneur's choice of a location for his firm is probably one of the most important he ever will make" (p.32). While choosing a certain location, what weighs most in the minds of the entrepreneurs are the success and profitability of the unit they plan to set up. Therefore, the entrepreneurs are tempted to go into locations that are expected to provide them the maximum advantage with respect to the various determining factors that influence profitability or success.

3.2 Location Factors

Several factors have been suggested to influence the location decisions of an enterprise. The most prominent among them comprise of the following: (a) The technique of production (see Smith, 1971); (b) The planned scale of operations (Smith, 1971); (c) The transportation costs; (d) The nearness of market (Schmenner, 1978); (e) The nearness of raw-material sources; (f) Availability of good ports, roads and rail facilities, and an efficient communication network; (g) Availability of cheap labour; (h) Availability of cheap capital resources and of developed capital markets; (i) Abundant water supply and efficient effluence disposal facilities; (j) Un-disrupted supply of electricity and other energy materials; (k) Availability of developed land at reasonable prices; (l) Tax incentives and subsidies; (m) Government policy framework; (n) A healthy industrial relations climate; (o) The expectations about future; (p) Personal preferences and (q) The random elements. Some of these factors that may be relevant for discussion in subsequent chapters of this study are briefly examined below.

Transportation Costs

Chinitz and Vernon underscored the importance of transportation costs in their 1960 study that traced the influence of the rail and road systems in the Northeast-Great Lake manufacturing belt in the USA on the location decisions of manufacturing enterprises (1960). In India, the central Government had acknowledged the role of transport costs in industrial location. It has been offering for a long time now under the backward area industrialisation programmes a good amount of transport subsidies to several firms that based their activities in the remote north-eastern and Jammu & Kashmir regions, in order to help them in minimising their losses due to heavy transportation costs.

The choice of a location closer to the sources of raw materials may be prompted not only by transportation costs. The firm can do so also when the market is spread all over the state/country and if it does not pay going closer to any particular market.

Further, when the transport and communication network is efficient, it may not be unwise to go near raw-materials whenever it is needed in large chunks even if it does not add much to cost saving. This is particularly true in the case of the material intensive industries.

Footlooseness

Some firms choose locations that are closer to neither market nor raw-material sources either because the industrial activities these firms carry out are not material-oriented or specific-market oriented or because the transport and communication facilities of the region are efficient. Therefore, the transportation cost does not play a major role for them. Lee (1974) reports in this respect the findings of a study that states that "of the twenty most highly localised industries in Britain, only three industries (tin, iron and steel, fish-curing) were material-orientated and none of the industries was particularly market-orientated. The same was found true in the United States" (p.7). Such industries are called 'footloose industries' since they tend to remain away from both of the transport cost determinants.

Infra-structure

Wheat commented (1973, 1986) on the role of developmental thresholds as a factor responsible for the poor industrial growth of some of the US states. These states could not industrially benefit from their market potentials as they lacked in several basic requirements. Unless some other compulsions or inducements exist, it is un-wise, on cost considerations, as well as, on the consideration of the smooth flow of operations, for a firm to set up its business at a place where the social and economic infra-structure is at a rudimentary stage. This may explain why the Jharkhand region of Bihar is still industrially backward despite its rich natural resources or, in Maharashtra, the districts of Chandrapur, Bhandara, Sindhudurg etc are still industrially under-developed despite their rich mineral deposits.

Cheap Labour

See Wheat for some evidence on the role of wage bill in the American context (1986). Firms in labour-intensive industries like textiles may be induced to take a location that provides a cheap required labour force. However, if the difference in wage rate is offset by the poor quality of labour available, it is not necessary for the firm to get attracted to such a region.

Capital Availability

Availability of capital is an important location factor even though the rate of interest may be more or less uniform across regions within an economy. Availability does matter more for smaller firms that may face difficulties in raising capital from institutional sources other than under Government incentive programmes. Such units may tend to choose certain familiar localities where the local contact etc can help them in procuring loans or equity. The capital may play a vital role for locating large units as well if some regions offer, under Government policies, certain benefits like soft-loans, interest-free loans, institutional or Government participation in equity etc while the other regions offer none of them. Thus, a backward area can be the location for a new firm, in spite of the region's disadvantages, if it assures the firm a large pool of capital resources from various sources and also if it lessens the interest and other debt service obligations. Thus, a study conducted in 1980 by the Bombay Chamber of Commerce

and Industry (BCCI) found the availability of concessional finance as one of the three most important factors influencing the location choice of nearly 27.3 per cent of their sample firms.

Public Utilities

There are several industries like those producing chemicals that require plenty of water and also which release large quantities of toxic as well as non-toxic wastes. While there is need for locating the units in such industries in proximity to large water reserves, there arises further a necessity for safe and smooth disposal of such effluence. Thus, among other things, the large and cheap availability of the water as also an easy effluence disposal facility influences the location choices. This is the fundamental reason why the industrial estates supported by MIDC in Maharashtra have attempted to ensure the availability of water at concessional rates or at very low royalty along with a well-developed waste-disposal system. This acts as an added attraction to the prospective entrepreneurs. The public transport and communication networks too exert a similar influence.

Energy Factor

Energy is a crucial ingredient of manufacturing. The major source of industrial energy is electricity. While an undisrupted supply of electricity enables a smooth production flow, a lower price of electricity substantially reduces the energy costs and enhances the profitability of the firm. It is, therefore, in the interest of the firm to see before taking the location decisions the availability and cost of electricity at various places. If under any circumstances a certain place offers plenty of power at lower tariffs, then, the firm has every right to choose that location if other hurdles are not too heavy. Obviously, in its backward area industrialisation incentives, the Maharashtra Government has also included a provision for concessional power tariffs. As a matter of fact, the BCCI study had also revealed that, for at least around 15 per cent of their sample units, the availability of power and other public utilities was one of the three major reasons for choosing the present location.

Price of Land

The prohibitive prices of land in some regions discourage firms from installing their factory there even if those regions have other attractions. Consequently, firms may have to opt for other locations at which large plots can be procured at reasonable prices. At the same time, even cheap land may not be conducive if the land is totally undeveloped or provides little room for improvement in the effluence-disposal systems. The importance of land has been duly acknowledged in the backward area industrialisation programmes of Maharashtra. That is why the state's incentive packages include *inter alia* provision for the supply of developed land at concessional rates to the new units planning to establish their base in backward regions. In this respect, we may mention again the BCCI study which discovered that about 32 firms, amounting to 22.4 per cent of the sample, had selected the present factory site due to the allotment of land at a concessional rate combined with a couple of other reasons.

Tax Incentives and Subsidies

Tax incentives or disincentives become operative in respect of location decisions if other considerations weigh almost equally on two different locations and if the tax consideration can make all the difference. Similarly, even when one location is

disadvantageous on other considerations, the tax incentives can more than offset those disadvantages and still turn the new enterprise more competitive and/or profitable to the extent of the tax concession. In the same way, a subsidy on the capital or other input acts as a cost-reducing factor as well as a means of an additional working capital amounting to the sum released from the payments on inputs. For instance, the central capital subsidy provides to the industrial units set up in backward areas an additional capital resource of a certain per cent of its capital investment that is received as subsidy from the central Government as a special incentive. Likewise, the sales tax exemption benefits that are granted by the state of Maharashtra to the firms established in under- or un-developed regions enable the enterprise in reducing the price. Thereupon, the enterprise becomes more competitive. Alternatively, the benefits enable the enterprise to retain a large sum payable as tax, thereby, adding to its profit and working capital position. Thus, about 13.3 per cent of the enterprises covered in the BCCI study gave one of the first three ranks to lower taxes as a location factor.

Other Government Policies

In addition to the influences through taxes and subsidies, the Government can influence the location pattern through some other push and pull policy instruments as well (Luttrell, 1962). First, it places various restrictions on further industrialisation of an already advanced and congested region. This can be termed the push policy. The restrictions can range from outright denial of permission for a new unit planning to come to that region to denial to such units of the various incentives granted to units set up elsewhere. For instance, in Maharashtra, the Government placed various restrictions on the industries for preventing them from further crowding the Bombay-Thane-Pune belt. At the same time, the pull policy embodies itself in the various measures taken to attract the units into the hitherto less-industrialised areas. The package scheme of incentives in vogue since 1960s in some states including Maharashtra can be taken as an example of such a policy. The Government policies have definitely influenced the industrialisation pattern in several states although the objectives of the policies have not been satisfactorily realised as we shall see later in the context of Maharashtra.

Industrial Climate

A healthy industrial climate is an additional advantage that a prospective entrepreneur will observe in a region. With such healthy climate and a positive attitude of the workers, he is certain about smoothly carrying out his production operations. Fortunately, Maharashtra has a very good record in industrial relations and public attitude, notwithstanding the recent attitudinal misgivings especially vis-a-vis the foreign companies emanating from the political opportunism of the Government. On the other hand, a hostile public or a militant workforce can be a strong dampener of the enthusiasm of the entrepreneur for choosing a certain location even if that location has several other inherent strengths. This factor has often been used to explain the industrial stagnation of the state of Kerala. In Kerala, the militant trade unions caused so much damage to its industrial future that for a long time now the entrepreneurs would fear to tread into Kerala in spite of its highly developed social and economic infra-structure, large consumer base and a vast trained manpower.

Role of Expectations

Sometimes expectations play a role in location decisions. If a region is expected to have some fast development and to yield large external economics in future, a firm

aiming at long term operations may choose that region even if it has several disadvantages at present. The expectation in this case may be that the future gains from the rapid growth of the region could be much greater than the potential present losses the firm has to incur due to the current bottlenecks. For instance, most parts of the Ratnagiri district of Maharashtra may currently throw several problems to a new firm entering there. Nonetheless, the new firm may perceive that the large power projects proposed to be set up there and in its surrounding regions may change the entire scenario in a couple of years. Further, there may arise in future several advantages in terms of better power supply, development of infra-structure, growth of local markets and so on. Therefore, the firm may choose a location there rather than deciding to go elsewhere.

CHAPTER 4

DISPERSAL MEASURES IN MAHARASHTRA 1964-1993

4.1 Incentives of 1964

In view of the objective of dispersing industries into the undeveloped and under-developed regions of the State, Maharashtra had introduced in 1964 a number of incentives in the state. Those incentives aimed at reducing the location drawbacks of the backward regions and, thereby, influencing the location pattern of the new enterprises proposed to come up. Such incentives came to be known as the package scheme of incentives and its implementation was made the responsibility of the SICOM. A summary list of the incentives is given below:

(a) A rebate on the electricity tariff for all new firms being set up in areas outside the Bombay-Thane-Pune belt so as to bring in a parity between the tariffs paid by these units and by those in the developed regions; (b) A sales tax refund of a maximum of 8 per cent of the equity capital, on the raw-materials purchased and on finished products, to the new units established in the undeveloped areas; (c) Exemption of new units from octroi duty charged on raw materials, capital equipment and building materials. The State Government would reimburse the equivalent amount to the local authority, which had foregone the octroi; (d) Exemption of new units from the royalties on water taken from public sources; (e) Exemption of the proposed units from non-agricultural assessment on the land occupied by them; (f) Exemption of the new units set up in backward regions from the mining royalties on all local minerals mined and used; (g) A State Government guarantee against loans raised by the new enterprises coming up in the under/un-developed locations; (h) A 75 per cent contribution toward the feasibility study on the units proposed in the backward districts and on implementation of the project, the contribution would be converted into Government's equity participation; (i) A 10 per cent Government contribution to be made towards the 25 per cent contribution to be made by the enterprise to the Housing Board under the industrial housing scheme. At the same time, the units to be newly set up in the metro areas should have contributed 25 per cent toward the housing scheme as against no such obligations in the past; (j) An advance supply of building materials to the new units proposed in the backward regions on loan basis for the expeditious completion of their construction programme. The materials are to be replaced by the units in the Revolving Fund created for this purpose as and when the unit's stock arrives in normal course; (k) A 33 per cent reservation in Government purchase programmes for the products of the new firms set up in the backward regions on the basis of lowest price quoted in the open market; (l) The Government assistance in technical training of personnel required for the new units through supporting the local training schools or the enterprise's own training centres.

In addition to the above incentives, the State Government would also help the entrepreneurs in easily getting licenses from the licensing authorities under the Industrial Development and Regulation Act of 1951. The Industrial units being shifted out of the Bombay-Thane-Pune belt were also eligible for the concessions. To all units, the concession period was 13 years except for item (a) and (c) listed above.

4.2 Subsequent Modifications

Modifications of 1969

In 1969, there effected a modification whereby: (a) The provision for outright refund of sales tax was changed into a provision for unsecured interest-free loan for a period of 18 years; (b) The period of incentives was reduced from 13 years to just 6 years; and (c) A maximum of 25 per cent of the fixed assets was offered as an interest-free sales tax loan repayable in 18 years to the existing units with a sales tax liability of Rs.9 lakhs in three previous years in the developed regions and Rs.3 lakhs for three previous years in the developing regions.

Changes of 1973

As per the changes of 1973, the entire state was divided into four developmental zones. The four zones were defined as: (1) Zone A: developed areas like Bombay and Pune metros where the new units set up would receive no concessions under the package scheme; (2) Zone B: fairly developed regions; (3) Zone C: less developed regions; and (4) Zone D: least developed regions.

The zones B, C and D were to receive progressively higher incentives, with the industrial enterprises set up in zone D receiving the maximum amount of incentives. In addition, some other modifications were also made whereby the package included the following provisions: (a) The sales tax exemptions ranging between 3 and 9 years; (b) An unsecured interest-free loan, as a special capital incentive, from 12th to 18th year at a rate of 10-15 per cent of the fixed assets of the new units, with an upper loan limit of Rs.15 lakhs; (c) An unsecured interest-free loan up to 5 per cent of fixed assets, with a ceiling of Rs.5 lakhs, to units being set up in the MIDC areas or Co-operative Estates; (d) A special capital incentive of Rs.40 lakhs to pioneer units in lieu of the incentive; (b) given to other new units; (e) An unsecured interest-free loan from previous sales tax payments at the rate of 25-35 per cent of fixed assets to the new units set up in developing areas by the existing units; (f) An unsecured interest-free loan up to 40 per cent of fixed assets from last 6 years' sales tax payments to pioneer units established by the existing units; (g) A refund of octroi for 3 to 9 years; (h) An industrial housing subsidy up to Rs.5 per square feet or up to one per cent of total project cost, whichever is less; (i) A 75 per cent contribution, as in earlier packages, toward the cost of feasibility study on the proposed project; (j) The subscription of equity and under-writing support from the SICOM and term loans from the SICOM and MSFC; (k) The provision of developed land, with roads, water, power etc, by the MIDC at subsidised rates; (l) A lower power tariff in the developing areas as compared to developed regions; (m) Power sanctions to industrial units moving into specified backward areas; (n) The exemption of enterprises in backward areas from power cut.

Benefits of 1975

The State Government announced an interest subsidy scheme in 1975 under which the backward and developing regions could receive industrial loans from commercial banks up to Rs.50,000 at a lower rate of interest. The State was to compensate the banks for the difference between such lower rates and their normal lending rates by way of an interest subsidy while granting re-finance facilities.

De-congestion Measures

Over and above these positive measures, the Government adopted in 1977 certain steps to curtail further crowding of the Bombay Metropolitan Region (BMR) and to push even the existing units to the peripheries or elsewhere (Government of Maharashtra, 1977). Accordingly, BMR was divided into four zones and the setting up of new non-textile, manufacturing units in large, medium or small sector or the expansion of such existing units in the large or medium sector was prohibited in zones I and II. Further, even in some parts (viz., Kalyan Complex) of zone IV, no permission was to be given for setting up new units in large or medium scale sector.

4.3 Changes Since 1979

Revision of 1979 and 1982 Modifications

The 1979 revision of the package scheme together with the subsequent modification of 1982 resulted in giving the new units set up in the developing or backward zones of B, C and D an optional incentive. That is, to choose between a sales tax exemption and a deferral, in addition to retaining those carrots contained in the previous packages. For sales tax deferral, as well as, exemption, the eligibility period and the incentive ceiling granted were almost the same. These were dependent on the size or pioneering nature of the unit and on the developmental status (such as zone B, C, D) of the region in which the unit was being set up. Besides, the ceiling was fixed in proportion to the fixed capital invested by the new unit or under expansion. The areas falling under the different zones were also re-specified in the revised scheme.

Package of 1983

The package scheme of incentives was extended in 1983 for Five more years with further modification whereby the percentage of fixed capital to be fixed as sales tax incentive ceiling was raised further in the case of pioneer units which would opt for incentives under part-I of the Scheme. A special capital incentive was also introduced in favour of all types of newly established enterprises drawing incentives under part-I of the sales tax incentive scheme, including the pioneer units. One feature of the 1983 scheme was the non-eligibility of the edible oil industry to claim any of the incentives. The eligibility period for the octroi incentive was specified with an added condition that the octroi incentive could be availed by the unit only after commencement of commercial production. (For a further discussion on the package schemes up to 1983, see Government of Maharashtra, Planning Department, 1984, Ch.13).

Extension Provisions of 1988

The sales tax benefits of exemption or deferral were more liberalised as per the revision and extension of the package scheme in 1988. Consequently, the benefits could be availed by (1) The units shifted from the zone I or II of BMR to any of the developmental zones B, C or D; and (2) The units created through the acquisition of existing/defunct/closed/sick units subject to certain guidelines.

The period of eligibility was modified as a result of which the incentives could be enjoyed in some cases for as long as 14 years depending on the nature of units and their location. However, the total availing of incentives was not to exceed 110 per cent of the annual installed capacity of the eligible unit. The scheme in respect of the Small-Scale Industrial (SSI) units was to have been implemented by the four respective

Regional Developmental Corporations. The eligible units were also free to opt for the Maharashtra Incentive Scheme for Electronic Industry 1987 in lieu of the 1988 package scheme. Moreover, there included a provision for giving sales tax exemption or deferral benefits up to 100 per cent of the fixed capital of the eligible units in 'no-industry districts'. The units availing of deferral could, in all cases, also switch over to an interest-free loan scheme from the deferral scheme.

Deviations of the 1993 Scheme

The latest modification and extension in the package scheme of incentives have been done in 1993 in order to be effective till 1998. The new scheme represented a deviation from the earlier schemes in several respects. For example, it defined a new developmental zone to be called D+, which would cover the mostly undeveloped regions of the state having no infra-structural facilities. In addition, (1) It treated henceforth the non-refundable deposits or capital contribution made by enterprises to MIDC or MSEB as infra-structural input as a part of fixed capital for purpose of calculating the ceiling of sales tax incentives; (2) It shifted the implementing and monitoring points from divisional to district levels, the latter being under the District Industries Centre; (3) It made the edible and non-edible oil enterprises eligible for sales tax incentives; (4) It introduced the concept of Prestigious Units, i.e., units with an investment above Rs.100 crores and set up in the most backward districts like Gadchiroli, which were to be offered very high levels of incentives for up to 20 years; (5) It raised the rate of incentives provided to various units set up in different zones; (6) It provided for refunding the electricity duty for 5 years to units coming up in D and D+ zones; and (7) It clearly defined the pioneer status of units across different developmental zones on the basis of capital investment limit varying from zone to zone. The lowest investment limit in this respect was in zone D+.

Other incentives offered in the earlier packages, including the interest-free unsecured loan given to non-manufacturing units in lieu of sales tax exemption/deferral benefits, were to continue. However, the special capital incentives at specified rates across zones were to be restricted to the SSI units alone and not to be extended to the large and medium units as done under the earlier schemes. The rate and ceilings of the special capital incentives given across zones to the large/medium and small units under different package schemes are shown in Table 4.1.

It can be easily seen from the table that the special capital incentives have been provided to the small-scale units at a higher rate under all schemes since it was introduced. However, their ceiling in absolute terms works out to be smaller on account of their lower fixed capital investment, with reference to which the ceiling would be calculated. As the table indicates, and as stated earlier, the 1993 scheme of incentives envisages special capital incentives only to the small scale units, that too at a reduced rate and quantum.

Table 4.1: Special Capital Incentives under Various Schemes

Zone	Rate of incentives (% of Fixed Capital Investment)									Ceilings (Rs. Lakhs)						
	Large and Medium Units					Small Scale Units				Large and Medium Units				Small Scale Units		
	1983 Scheme	1988 Scheme		1993 Scheme	1983 Scheme	1988 Scheme		1993 Scheme	1983 Scheme	1988 Scheme		1993 Scheme	1983 Scheme	1988 Scheme		1993 Scheme
		New Units	Expn./ Divers			New Units	Expn./ Divers			New Units	Expn./ Divers			New Units	Expn./ Divers	
B	15	20	15	-	20	25	20	15	15.0	20.0	20.0	-	7.5	10.0	20.0	7.0
C	20	25	20	-	25	30	25	20	20.0	25.0	25.0	-	7.5	15.0	20.0	10.0
D	20	30	25	-	25	35	35	25	20.0	30.0	25.0	-	7.5	20.0	20.0	15.0
D+	-	-	-	-	-	-	-	30	-	30.0	25.0	-	-	-	-	20.0
Pioneer Units	25	30	25	-	-	-	-	-	25.0	-	-	-	-	-	-	-
No Industry Dist.	-	30	25	-	-	35	35	-	-	30.0	25.0	-	-	20.0	20.0	-

Source: Relevant 'Resolutions' of Government of Maharashtra, Industries, Energy and Labour Department.

CHAPTER 5

SALES TAX INCENTIVES: FEATURES & OPERATION

5.1 Tax Incentives: General View

Tax incentives have been extensively used even in developed economies as a means to attract industries into specific areas. For instance, in USA, different states have competed among themselves in attracting industrial activities into their territories by charging lower corporate income tax or lower ad valorem taxes on output, sales etc. Some studies have noted the impact such tax differentials make on the location decisions of firms, provided that other considerations including cost differentials on labour and other inputs do not weigh too heavily against the low-tax regions (Due, 1969; Bridges, Jr, 1969). However, such evidences also imply that tax considerations are only secondary, i.e., subject to the fulfillment of other important requirements such as in respect of material and labour costs, transport costs, infra-structural facilities etc. This conclusion seemed to emerge probably because the focus in those studies was largely on corporate income tax differentials. As one may agree, such tax obligations amount, unlike other input costs, to only a smaller fraction of the total costs of an enterprise and, therefore, it should have been expected to exert a correspondingly inferior influence on the location decisions of enterprises.

5.2 Tax Incentives in Maharashtra

Unlike what appears in those studies mentioned above, the ad valorem taxes which are calculated as fractions of the unit value of the product add up to a significant volume in absolute terms. Thus, the concessions on ad valorem taxes as in the case of the sales tax incentives implemented in Maharashtra seems indeed as important a location factor as factors like transport or labour costs. Because, the ad valorem nature of the sales tax renders its impact felt on every unit of output. That makes the tax cost in this case certainly a significant proportion of the sales revenue. Also, the tax saving due to the incentives provides two alternative advantages. First, it becomes an attractive addition to the surplus of the firm if the firm is totally exempted from paying the tax. Secondly, it represents a precious augmentation to the working capital resources without any extra pressure of interest payments if the firm only defers the tax payments to a future date. It is not, therefore, very surprising to see around 13.3 per cent of the firms surveyed in the BCCI study considering lower taxes as one of the three most important factors influencing their location choice (1981). As the same study reveals, there are at least a couple of firms that accorded the tax factor the top rank as the location determinant. Thus, properly conceived tax incentives can turn itself into a primary factor in location decisions and may not, forever, remain as one of secondary importance. Significantly, since the publication of the study mentioned above, the Maharashtra government has done several modifications to the sales tax incentive scheme in order to make it more effective and result-oriented. It may be reasonable to expect, therefore, that more entrepreneurs might have seen the tax incentives as a prime factor in recent years.

5.3 Features of the Sales Tax Incentives

What makes the sales tax incentives in Maharashtra an important consideration of entrepreneurs in choosing a location for their factories is the very nature of the incentives, as well as, their volume with variation across regions. As regards the nature

of incentives, (a) There is a provision for an option between tax exemption and tax deferral; (b) There is variation in their quantum across regions according to the developmental status of the regions; (c) The level of incentives vary according to the scale of operations of the enterprise and (d) The period for which incentives are available is dependent on the developmental status of the firm's location. The volume of incentives available to firms of different scales of operations and firms located in different zones has been subject to periodic progressive modification. The details of the revisions in the volume and period of the incentives beginning with the 1979 scheme can be read from Table 5.1, Table 5.2 and Table 5.3.

5.3.1 Two Parts of the Incentives

The sales tax benefits of exemption or deferral have been available under two heads, viz., part-I and part-II. Under part-I, the benefits could be availed by the entirely new units of pioneer or non-pioneer nature under 1979 scheme and also by units that are expanding or diversifying under the subsequent modified schemes. But under the 1983 scheme, the benefits for expansion or diversification included only sales tax deferral to the tune of the un-disbursed part of the interest-free loans taken by the units under the earlier schemes. Similarly, as per the 1988 and 1993 schemes, those units producing items that do not fall under the "manufacturing activities" according to the Sales Tax Law were to receive neither exemption nor deferral benefits. Instead, such units received only an unsecured interest-free loan connected to their equity, to be repaid after 10 years in five equal installments.

Under part-II, a unit may be eligible for sales tax incentives if it is a new unit set up by an existing unit or it represents an expansion or diversification of an existing unit. Such diversification should involve an additional investment of at least five times the initial investment as per earlier scheme. As per the 1983 scheme, the additional investment should exceed Rs.15 crores. Eligibility limit for an expanding or diversifying unit to claim the incentives under part-II has been brought down in 1988 scheme to more than just Re.one crore for large and medium units and to above Rs.25 lakhs for small units. In this case, however, the gross fixed capital addition should be at least 25 per cent of the initial gross fixed capital. Besides, there should be an additional capacity creation to the tune of 25 per cent and employment growth of at least 10 per cent with a minimum 80 per cent of this additional employment coming from the local population. As a matter of fact, the 1993 scheme carries no specific mention of part-II of sales tax incentives; but refers to a single incentive scheme covering all types of firms. The 1993 scheme omitted this provision probably because of its objective of offering a simplified but broad-based and more attractive package with minimum implementation complications.

A unit may be 'eligible' simultaneously for incentives under part-I or part-II, but can claim only one. An enterprise can also choose either the exemption or the deferral scheme. The enterprise has to decide among the options at the time of filling the Eligibility Certificate. But once decided, it will be final, with no scope for subsequent changes.

5.3.2 Period and Quantum of Incentives

Large and Medium Units

Table 5.1 presents information on the level of incentives available under part-I of the schemes along with the duration of its availability to various types of large and medium enterprises established across zones under different schemes. The ceilings of the sales tax exemption or deferral benefits are expressed as proportions of the fixed capital investment of the concerned unit. As one can see, the most backward areas, denoted as zone D under the 1979, 1983 and 1988 schemes and zone D+ under the 1993 scheme, carry the maximum proportion as ceilings. While, the pioneer units and units set up in no-industry districts defined under some of the earlier schemes are offered ceilings in still higher proportions. The 1988 scheme announced different rates of incentives for setting up new units and for expansion or diversification, with the latter being gifted with relatively lower rates. Whereas, the 1993 scheme distinguishes between the non-pioneer and pioneer units in each zone in order to provide different rates of incentives accordingly. Not only that the incentives were offered at the highest rate under the 1993 scheme, but also that the difference between the proportions of fixed capital fixed as ceiling in respect of the non-pioneer and pioneer units amounted to nearly 20 percentage points in each of the zones. There existed also a corresponding variation in period of incentives available under each of the schemes in each of the zones to the large and medium units.

Small Scale Units

In respect of the small-scale sector, the incentives are still better. As Table 5.2 discloses, under each scheme and in each of the zones, the proportion of fixed capital to be fixed as ceilings was significantly higher for small units than that given to the large and medium sector. Even the pioneer units have not been mostly treated on par with or better than the small units in this respect. However, in the case of number of years during which the sales tax concessions can be drawn, the treatment of small units is on parity with that of others except under the 1993 scheme where they were positioned above the large and medium non-pioneer units, but below the pioneer units.

5.3.3 Incentives under Part-II

Under part-II of the sales tax incentive scheme that was in operation till 1993 scheme was announced, the percentage of fixed capital, or of the sales tax paid by existing units during periods specified for each zone, that was counted for fixing the incentive ceiling was rather small. The ratio was also the same under both 1983 and 1988 schemes in each zone. The largest proportion, viz, 40 per cent, was fixed for the pioneer units and for units set up in no-industry districts. Moreover, the ceiling in absolute terms placed on drawing the incentives was also not changed between the 1983 and 1988 schemes in any zone. Accordingly, the B zone units enjoyed a ceiling of Rs.50 lakhs under both the schemes while the D zone units could claim up to Rs.100 lakhs. Here again, the highest ceilings, of Rs.150 lakhs, went to the pioneer and no-industry district units.

Table 5.1: Sales Tax Incentive (Part-I)[@] : Large and Medium Scale Units

Zone	Sales Tax Incentive Ceiling (% of Fixed Capital Investment)						Period of Incentive (Number of Years)					
	1979 Scheme	1983 Scheme	1988 Scheme		1993 Scheme		1979 Scheme	1983 Scheme	1988 Scheme		1993 Scheme	
			New Units	Expn./ Divers	New Pioneer	Pioneer			New Units	Expn./ Divers	New Pioneer	Pioneer
B ^s	75	75	60	50	60	80	3	3	5	4	5	7
C	80	80	75	60	75	95	5	5	7	6	7	9
D	85	85	90	70	90	110	7	7	9	8	9	11
D+	-	-	-	-	125	130	-	-	-	-	12	15
Pioneer Units	90	97	95	80	-	-	9	9	10	9	-	-
No Industry Dist.	-	-	100	85	-	-	-	-	10	9	-	-

Notes: @ Both exemption and deferral

\$ Applicable to resource-based units as well.

Source: Relevant 'Resolutions' of the Government of Maharashtra, Industries, Energy and Labour Department.

Table 5.2: Sales Tax Incentive (Part-I)[@] : Small Scale Units

Zone	Sales Tax Incentive Ceiling (% of Fixed Capital Investment)				Period of Incentive (Number of Years)					
	1979	1983	1988 Scheme		1993	1979	1983	1988 Scheme		1993
	Schem e	Schem e	New Units	Expn/ Divers	Schem e	Schem e	Schem e	New Units	Expn/ Divers	Schem e
B ^s	100	100	100	85	100	5	3	5	4	6
C	100	100	100	85	110	7	5	7	6	8
D	100	100	100	85	120	9	7	9	8	10
D+	-	-	-	-	130	-	-	-	-	12
No Industry Dist.	-	-	100	90	-	-	-	10	9	-

Notes: @ Both exemption and deferral

§ Applicable to resource-based units as well.

Source: As in Table 5.1.

Table 5.3: Sales Tax Incentives: (Part II)[@]

Zone	Rate of Sales Tax Incentive [#]				Ceiling (Rs. Lakhs)			
	1979 Scheme	1983 Scheme	1988 Scheme	1993 Scheme	1979 Scheme	1983 Scheme	1988 Scheme	1993 Scheme
B ^s	-	25	25	-	-	50.0	50.0	-
C	-	30	30	-	-	75.0	75.0	-
D	-	35	35	-	-	100.0	100.0	-
D+	-	-	-	-	-	-	-	-
Pioneer Units	-	40	40	-	-	150.0	150.0	-
No Industry Dist.	-	-	40	-	-	-	150.0	-

Notes: @ Both exemption and deferral. Only to large and medium units.

As % of either fixed capital investment or of sales tax paid for respectively 3,4,5 and 6 years according to zone.

§ Applicable to resource-based and export-oriented units as well.

Source: As in Table 5.1.

5.4 Operation of Sales Tax Incentives

5.4.1 Sales Tax Exemption: Profit, Price, and Cost Advantages

Impact on Profitability

The sales tax as levied in Maharashtra can be considered an ad valorem tax and we have mostly a situation of price being marked inclusive of all taxes. When an ad valorem tax is levied on a product, X, and when the price is inclusive of taxes, the net revenue, R, of the producer from that product is given as

$$R = S/(1+t)$$

Where, t = the tax component in percentage and
 S = the gross value of sales including tax.

If the gross value of sales is Rs.200 crores per year and the tax (here the sales tax) component of it is 8 per cent, then, the net revenue accruing to the firm can be obtained as

$$\begin{aligned} R &= 200/(1+0.08) \\ &= 200/1.08 \\ &= \text{Rs.185.2 crores} \end{aligned}$$

And, the quantum of tax is

$$\begin{aligned} T &= S-R \\ &= 200-185.2 \\ &= \text{Rs.14.8 crores.} \end{aligned}$$

We know that the profit, P, of the entrepreneur is the difference between the net revenue and the costs, C. That is,

$$P = R-C.$$

Assuming the cost as 85 per cent of the net revenue,

$$\begin{aligned} P &= 185.2-(185.2 \times 0.85) \\ &= 185.2-157.4 \\ &= \text{Rs.27.8 crores.} \end{aligned}$$

Now, assume that the enterprise in question is set up in a backward region which has some inherent drawbacks in terms of infra-structural bottlenecks, high transportation costs, strains on the scale economies due to limited market size and production losses due to interruptions in energy or water supplies. Obviously, the cost of production of that firm could be significantly higher as compared to its competitors operating probably from fairly developed locations.

Suppose, the total production cost of the new firm is 92 per cent of its net revenue while its competitors having the same gross revenue could produce at a cost of just 85 per cent of their net revenue. As apparent, the profit margin of our firm is only 8 per cent of R while it is 15 per cent to its rivals. Correspondingly, the amount of profit of the new firm, Rs.14.8 crores, compares poorly with that of the existing firm, which is Rs.27.8 crores. It means a large disadvantage to the former and, hence, no new firm may have an inclination to choose a backward area.

However, suppose, again, that the unit set up in the backward region is offered a sales tax exemption, i.e., to the tune of 8 per cent of the net sales. This adds another Rs.14.8 crores to the profit of the first firm, thus, raising its total profits to $(14.8+14.8)=\text{Rs.29.6 crores}$ while its competitor enjoys only Rs.27.8 crores as profit.

Price Advantages

If the backward area firm does not aim at maximising its profit directly by charging the entire sales tax, it has another option to raise its revenue and perhaps profit by slightly lowering its price and thereby attracting more demand (assuming that the product is price elastic). Consider that the price elasticity of revenue of the firm's product is 1.5. That is, a percentage reduction in the price per unit raises the revenue by 1.5 per cent. Thus, if the firm decides to forego the sales tax gain of 8 percentage points, the price will come down by 7.4 per cent, thereby, raising the revenue by $(7.4 \times 1.5) = 11.1$ per cent, the impact of which will be on the gross revenue. The new gross revenue, RR, will be

$$\begin{aligned} RR &= 200 + (200 \times 0.111) \\ &= 200 + 22.2 \\ &= \text{Rs. } 222.2 \text{ crores} \end{aligned}$$

This, as a whole, is now the net revenue as there is no tax content remaining. Accordingly, the profit goes up to PP where

$$\begin{aligned} PP &= RR - CC \\ &= RR - (RR \times 0.92) \\ &= 222.2 - (222.2 \times 0.92) \\ &= 222.2 - 204.4 \\ &= \text{Rs. } 17.8 \text{ crores} \end{aligned}$$

Where, CC is the new level of cost. That is, the profit goes up by Rs.3 crores or 22.5 per cent although the sales tax collection is no more available to it. The profit growth may be even larger if the price elasticity is still greater. For instance, if elasticity is 2.5 instead of 1.5, then, the new level of profit can be obtained as

$$\begin{aligned} RR &= 200 + (200 \times (0.074 \times 2.5)) \\ &= 200 + (200 \times 0.185) \\ &= 200 + 37.0 \\ &= \text{Rs. } 237 \text{ crores} \end{aligned}$$

And,

$$\begin{aligned} PP &= 237 - (237 \times 0.92) \\ &= 237 - 218.0 \\ &= \text{Rs. } 19 \text{ crores.} \end{aligned}$$

As a result, profit registers a growth of 28.4 per cent.

The enterprise can also decide to reduce price by a lower percentage instead of reducing it to the full extent of the sales tax margin. In this case, the profit will directly increase by a smaller percentage on account of the expansion of sales revenue plus there will be a sales tax saving to the tune of the retained part of the sales tax. To illustrate, suppose the price elasticity is 1.5; the firm reduces price by 5 percentage points of sales tax rate; and collects remaining 3 percentage points of sales tax. Then, the price falls by 4.63 per cent while revenue, S, goes up at the rate of $(0.0463 \times 1.5) = 6.9$ per cent. Thus,

$$\begin{aligned} S &= 200 + (200 \times 0.069) \\ &= 200 + 13.8 \\ &= \text{Rs. } 213.8 \text{ crores} \\ R &= 213.8 / (1 + 0.03) \\ &= 213.8 / 1.03 \\ &= \text{Rs. } 207.7 \text{ crores} \\ T &= 213.8 - 207.7 \\ &= \text{Rs. } 6.1 \text{ crores} \end{aligned}$$

$$\begin{aligned}
C &= 207.7 \times 0.92 \\
&= \text{Rs. } 191.1 \text{ crores} \\
P &= 207.7 - 191.1 \\
&= \text{Rs. } 16.6 \text{ crores} \\
P+T &= 16.6 + 6.1 \\
&= \text{Rs. } 22.7 \text{ crores.}
\end{aligned}$$

That is, the additional profit and the realised part of sales tax receivables together make the total surplus significantly large. In each of these cases, the new firm can largely cover up its disadvantages vis-a-vis its rivals in terms of net surplus and sales turnover.

In another case, if the competitor is already charging, on account of its lower cost, a lower price than the backward area firm, the sales tax concession enables it to cushion the price difference effect. Because, the tax concession provides the backward area firm an ability to reduce the price if necessary or to realise a reasonable profit even on the face of a revenue loss due to its higher price.

Cost Saving

There may arise another kind of advantage to the new firms availing of the sales tax incentives. This is from the cost saving on the inputs due to the exemption of such units from paying purchase taxes on inputs. For example, re-consider our initial case of the firm with $S=200$ and $t=8\%$. For this firm, if the purchase tax is at a rate of 4 per cent and if we assume it is applicable to all inputs, with a cost component of 92 per cent of net sales revenue, the purchase tax exemption reduces the cost by

$$dC\% = C\% - (C\% / (1+t))$$

Where, dC = change in costs and
 t = rate of purchase tax.

$$\begin{aligned}
\text{That is, } dC &= 0.92 - (0.92 / (1+0.04)) \\
&= 0.92 - (0.92 / 1.04) \\
&= 0.92 - 0.885 \\
&= 0.035 \text{ or } 3.5\%
\end{aligned}$$

The proportion of cost now is 88.5 per cent rather than 92 per cent. Obviously, the profit soars in the following way.

$$\begin{aligned}
\text{Initial cost @ } 92\% \text{ of } R &= 185.2 \times 0.92 \\
&= \text{Rs. } 170.4 \text{ crores} \\
\text{New cost @ } 88.5\% \text{ of } R &= 185.2 \times 0.885 \\
&= \text{Rs. } 163.9 \text{ crores}
\end{aligned}$$

The cost difference or cost saving, therefore, is

$$\begin{aligned}
(\text{Initial } C) - (\text{New } C) &= 170.4 - 163.9 \\
&= \text{Rs. } 6.5 \text{ crores}
\end{aligned}$$

It means an additional profit accrual of Rs.6.5 crores. Adding this to the original profit and sales tax saving, the aggregate net operational surplus, PPP, becomes

$$\begin{aligned}
PPP &= 14.8 + 14.8 + 6.5 \\
&= \text{Rs. } 36.1 \text{ crores}
\end{aligned}$$

It is considerably greater than the profit of the new firm's comparable established rivals located in a developed region even though the latter still enjoys a cost advantage over the former. Thus, a new firm acquires a competitive strength through the sales tax exemption benefits even if it is located in a backward region having several strategic disadvantages.

5.4.2 Sales Tax Deferral: Benefits of Working Capital, Interest Savings and Changes in Money Value

Working Capital Advantage

The sales tax deferral benefits help mainly those firms whose struggle for raising enough working capital is more intensive than their struggle in selling the products. In this case, the firm choosing the deferral scheme do not have to cough up a large amount as tax payments every year, but it only collects it from its customers and retains it for repayment to the government at a future date. The tax collections so retained can be used as working capital during the specified retention period within which the firm is expected to acquire an inherent strength to pay off not only the new sales tax obligations but also the old ones. In addition, since the amount of sales tax deferred carries no interest burden, there arises a saving on the interest front that gives an extra component of working capital. Had the enterprise been paying sales tax as usual, it should have gone for working capital loans to the tune of tax payments from various sources for meeting the tax obligations (when a large part of sales is on credit basis) and other likely expenditures. Such loans often carry exorbitant rates of interest.

Interest Savings: During Benefit Period

Consider once again the case of the new firm located in the backward region. To recapitulate, the firm earns gross revenue of Rs.200 crores out of which Rs.14.8 crores form the sales tax dues leaving a net sales turnover of Rs.185.2 crores. Suppose, the firm has to take a working capital loan of Rs.20 crores, in order to meet some of its current obligations, at an interest rate of 18 per cent per annum. Then, the total annual payment obligations increase by the volume of interest charges, I, where

$$\begin{aligned} I &= 20 \times 0.18 \\ &= \text{Rs.}3.6 \text{ crores.} \end{aligned}$$

Thus, the total obligations, D, by the end of the period amount to

$$\begin{aligned} D &= 20 + 3.6 \\ &= \text{Rs.}23.6 \text{ crores.} \end{aligned}$$

Now, if the firm opts for the sales tax deferral scheme, which is equivalent to an interest-free loan, its need for current loans come down by the sales tax dues. That is, the loan component, L, is only

$$\begin{aligned} L &= 20 - 14.8 \\ &= \text{Rs.}5.2 \text{ crores.} \end{aligned}$$

This reduces also the interest burden to

$$\begin{aligned} I &= 5.2 \times 0.18 \\ &= \text{Rs.}0.94 \text{ crores} \end{aligned}$$

It signifies an interest saving of Rs.2.66 crores. Such interest saving is equivalent to an implicit addition to the profit while the deferral benefits itself enhance the liquidity of the enterprise, even without any costly loans, at its infancy stage.

The saving of interest payments calculated as above is for a single year. However, the firm retains the sales tax collected till its eligibility period is completed. So, during that period, there is interest saving on that amount every year. Thus, a new firm set up in zone B having an incentive period of 5 years earns a total saving as worked out in Table 5.4 (sales tax obligations=Rs.14.8 crores every year for 5 years).

**Table 5.4: Sales Tax Deferral: Working Capital Availability and Interest Saving :
Hypothetical Example**

(Rs. Crores)

Year of Tax Due	Tax Dues Retained Year-wise				
	Year 1	Year 2	Year 3	Year 4	Year 5
Year 1	14.8	14.8	14.8	14.8	14.8
Year 2	-	14.8	14.8	14.8	14.8
Year 3	-	-	14.8	14.8	14.8
Year 4	-	-	-	14.8	14.8
Year 5	-	-	-	-	14.8
Availability of Working Capital	14.8	29.6	44.4	59.2	74.0
Implicit Interest Saving @ 18% p.a.	2.66	5.33	7.99	10.65	13.31

Source: Own calculations.

As per the table, the total saving of interest payments at the rate of 18 per cent per annum during the 5-year period comes to nearly Rs.40 crores (without treating for present value considerations). While, the total additional working capital availability by the 5th year rises to as much as Rs.74 crores. If the enterprise is set up, on the other hand, in C, D, or D+ zone, or under the pioneer status, the interest savings and working capital augmentation become yet larger for the enterprise. This provides an added attraction to the progressively more backward areas of the state.

Interest Savings: During Repayment Period

The gains, however, do not exhaust during the period of deferral. After the expiry of the incentive period, the past sales tax obligations are not paid off at one go. Rather, they are paid over years in equal installments along with the new obligations. Suppose the firm chooses to repay the deferred dues in five equal installments beginning from the immediate year succeeding the benefit period. Then, for next five years it keeps paying per year one-fifth of the total dues. In other words, at the end of first year of repayment, the firm in our example pays one-fifth (Rs.14.8 crores) and retains four-fifth (Rs.59.2 crores). At the end of second year it pays another one-fifth and retains three-fifth (Rs.44.4 crores). And, at the end of third year it repays a third one-fifth and keeps two-fifth (Rs.29.6 crores). In this way, at the close of fourth year, the firm retains one-fifth, which it repays by the end of the fifth year. Thus, the firm enjoys additional working capital at varying rates in all the five years of repayment as well, thus, yielding further interest savings at the following rates.

Year of Repayment: (Repaid at Year-end)	Year 1	Year 2	Year 3	Year 4	Year 5
Dues Retained (Rs. Crore):	74.00	59.20	44.40	29.60	14.80
Interest Saving (Rs. Crore):	13.31	10.65	7.99	5.33	2.66

The total interest saving in this case too is to the tune of nearly Rs.40 crores. Therefore, in the total 10 years, i.e., five years during the benefits and five years of repayments, the gross implicit interest savings of our hypothetical firm with Rs.200 crores gross sales and established in zone B total to Rs.80 crores from the sales tax deferment alone. This is before adjusting the gains for the present value and on the assumption of 8 per cent sales tax. The implicit interest saving in actuality may be much greater than as described above because the actual repayment of the dues deferred under the schemes commences, as per the provisions of the package scheme, only after the lapse of several years after completing the drawal of benefits.

Gains from Changes in the Value of Money

The advantages of deferral can be viewed from an angle other than the interest saving - from the angle of changing money value. To explain it, the firms retain the sales tax amount received in the 'present' for repayment in the 'future'. Since the value of money received today is greater than the same quantity of money to be repaid in future, in effect, the firms repay a 'smaller' or less-valued sum as against the receipt of a more 'precious' or higher-valued sum. And, such value difference can be considerably high if the loss of value of money is greater in the years following the deferment on account of high inflation in the economy. To be honest, there must be some caution in considering this gain. Because, when we calculate the interest saving from the tax deferrals, the benefit from change in money value is automatically accounted to the extent the prevailing interest rate covers provision for inflation. However, in a regulated economy like that of India where the interest rates were not allowed to adjust freely to the market conditions, the interest rate might not fully move according to movements in inflation. In this case, the enterprises would definitely enjoy some benefits out of changes in the money value of the incentives they received.

As noted in a previous section, the benefits of exemption and deferral are available up to a certain ceiling and for a specified period. The expectation is that by the time the ceiling or the time period, whichever comes earlier, is exhausted, the new firm can attain an inherent strength to survive on itself without any further assistance from the government. It is also presumed, the firm would be subject to a prudent management that takes and does implement sufficiently efficient and rational decisions and plans and that would strengthen the competitive potentials of the enterprise for its long-run existence. If these presumptions do not come true, the withdrawal of the incentives especially in respect of deferral, may only weaken the enterprise's ability to survive, thus, ultimately leading to its sickness and perhaps death particularly if it is a small scale one.

CHAPTER 6

DISTRIBUTION OF SALES TAX INCENTIVES: MAHARASHTRA 1979-1995

6.1 Introductory Note

We have discussed in the preceding sections the features, like the nature, quantum and the duration, of the sales tax incentives offered to the potential entrepreneurs in locating their enterprises in backward areas. We have also examined the ways the sales tax exemption or deferral incentives are intended to benefit the enterprises. Let us now take a look at the magnitude of the resources spent on the incentive schemes beginning with the major shake up in 1979. We shall view the disbursement of incentives with particular reference to the inter-district and inter-zonal distribution of the new or expanding large and medium units and to the monetary resources disbursed among them. We shall use for this purpose Table 6.1 through Table 6.11. Our main objective shall be to verify if industrial dispersal in favour of backward regions truly occurred in Maharashtra since 1979. This may be indicated by the inter-district, inter-zonal distribution of the eligible new/expanding units and of the monetary benefits accrued to them by way of the exemption/ deferral ceilings granted.

The disbursements covered in this study are up to March 31st, 1995. Till this date, the drawing of incentives by the eligible units have been done only under the 1979, 1983 and 1988 schemes and the operation of the 1993 scheme was yet to be started. As regards the 1979 scheme, the scheme became operative, as reflected in the commencement of sanctioning of benefits, only since 1981. Therefore, the analysis would reveal the dispersal process since 1981 under the three earlier schemes alone. One more point needs to be mentioned here. That is, the classification of D+ talukas and the offer of incentives to them began only under the 1993 scheme, which has not been covered in the sales tax incentive data of this study since the scheme was not operative till March 1995. So, it may be argued that the D+ classification followed throughout in our tables is a little misplaced. But this need not be the case. Because, zone D+ stands for the talukas having absolutely very little industrial activity. Such talukas existed earlier also whether or not they were classified as the most backward till 1993. It is useful for us to see the level of industrial activities that came up in those localities under the incentive schemes so as to assess how much entrepreneurial attention they received as being the most eligible regions to receive the industrial focus. The absence of any such benefits accruing to those utterly backward areas may underscore the severity of intra-taluka disparities that arguably existed among the parent talukas of these new D+ areas.

6.2 Sales Tax Benefits: An Aggregate Picture

Table 6.1 provides the aggregate data on the sales tax exemption and deferral benefits granted to the large and medium and small-scale units up to March 31st, 1994. As evident from the table, a total of 11459 new or expanding/diversifying units have been availing of the benefits in both small scale and large and medium sectors (including hotels and catering units). While, the total amount involved was as much as Rs.6720 crores during the 15 years period. Interestingly, more than 90 per cent of the units enjoying either of the two incentives are from the small sector, but the per cent of incentives going to them is just 12.5. That is, a mere 10 per cent of the large and

medium units claimed almost seven-eighth (87.5 per cent) of the incentives.

Table 6.1: Distribution of Sales Tax Exemption and Deferral Benefit according to Type of Industrial Units (Till 31.3.1994)

Sr. No.	Nature of Units	Exemption Benefits [@]		Deferral Benefits [@]		Total Benefits [@]	
		No. of Units	Amount [§]	No. of Units	Amount [§]	No. of Units	Amount [§]
1	Large and Medium	682 (7.23)	3376.0 (85.46)	440 (21.77)	2504.2 (90.42)	1122 (9.79)	5880.2 (87.50)
2	Small Scale	8756 (92.77)	574.5 (14.54)	1581 (78.23)	265.4 (9.58)	10337 (90.21)	839.9 (12.50)
3	Total	9438 (100.00)	3950 (100.00)	2021 (100.00)	2769.6 (100.00)	11459 (100.00)	6720.1 (100.00)

Note: @ Figures in brackets are percentages to total

§ Amount in Rs. Crores

* Includes 120 hotels and catering units

Source: Department of Sales Tax, Government of Maharashtra, Bombay

The same trend emerges if one considers the exemption and deferral benefits separately. Under exemption, out of the 9438 units availing the benefits, nearly 93 per cent belonged to small scale sector, but only 14.5 per cent of the monetary resources went to that sector. At the same time, the large and medium units opting for deferral scheme came to just 21.8 per cent in number while they claimed as much as 90.4 per cent of the ceilings granted. In other words, a very small proportion of the sales tax benefits has been spread among a very large number of small units. This makes the average burden per a small-scale unit on the economy during the entire stretch of analysis a few lakhs of rupees (i.e., nearly Rs.8 lakhs). At the same time, the average burden on a large and medium sector unit is more than Rs.5 crores with which, on an average, more than 60 small units could have been supported. Obviously, with such a large claim on the economy's precious resources, the large and medium sectors would be expected to make greater contribution toward the welfare of that part of the economy, viz., the backward regions, which they are thought to serve. In rest of this chapter and work, therefore, we shall be concentrating only on the large and medium units (excluding hotels & catering units that account for only a very small amount of incentives) drawing the lion-share of the sales tax benefits. This choice is also based on consideration of availability of data. There are no secondary data available on the small-scale units opting for the sales tax incentives. However, in chapter 7, we will attempt to understand the important contribution of the small scale and informal sectors in an indirect way when we examine the relative changes in the proportions of total non-agricultural, industrial or factory sector employment across regions in Maharashtra since 1981.

6.3 Exemption Benefits: Number of Units

Division-wise

Let us now attempt at a little more detailed evaluation of the sales tax benefits. To begin with, the division-wise distribution of the number of large and medium

industrial units availing the sales tax exemption benefits during 1979-March 31,1995 is given in Table 6.2. By 'benefit period completed' we mean either the exhaustion of the benefit ceilings granted or the completion of the number of years for which the benefits have been approved.

Table 6.2: Division-wise Number of Industrial Units (Large and Medium) Availing Sales Tax Exemption Benefits Up to 31.03.1995

Sr. No.	Number of Units	Divisions						Total
		Konkan	Nashik	Pune	Auranga -bad	Amra -vati	Nagpur	
1	Benefit Period Completed							
	Number	84	22	33	30	7	25	201
	As % of Total	41.79	10.95	16.42	14.92	3.48	12.44	100.00
2	Benefit Period in Progress (As on 31.3.95)							
	Number	139	43	77	50	12	40	361
	As % of Total	38.51	11.91	21.33	13.85	3.32	11.08	100.0
3	Total							
	Number	223	65	110	80	19	65	562
	As % of Total	39.68	11.57	19.57	14.23	3.38	11.57	100.0

Source: Classified on the basis of the source given in Table 6.1

The table shows that nearly two-fifth of the total large and medium units, which have either drawn or are drawing the sales tax exemption benefits, are located in the Konkan region comprising of the districts of Thane, Raigad, Ratnagiri and Sindhudurg. While, nearly a third of the units are located in Pune region covering Pune, Satara, Sangli, Solapur and Kolhapur districts. As a matter of fact, the Konkan and Pune regions house a large part of the metropolitan regions of Maharashtra as well as have some of the regions in close proximity to the Bombay metropolis. The other four regions, viz., Nashik, Aurangabad, Amravati and Nagpur, consisting of 20 odd districts, could attract only remaining 41 per cent of the new or expanding industrial entities drawing the exemption benefits. If we see the inter-divisional distribution of the number in respect of the units with 'benefit period completed' and 'in progress' separately, there appears no substantial difference from the above picture. Thus, tentatively, industrial distribution is appearing skewed in favour of some regions in the state.

District-wise

The inter-district distribution of the number of large and medium units availing of sales tax exemption benefits is exhibited in Table 6.3. In the table, the districts under the category 'some parts fully developed' are having at least some talukas or areas falling under zone-A. While, those under 'some areas partly developed' have some parts under zone-B. 'Partly developing' denotes the presence of at least some zone-C areas whereas, 'partly least developed' refers to the existence of some zone D areas. The category 'partly undeveloped' signifies the occurrence of zone-D+ areas. The districts classified as 'adjoining Pune, but no developed regions' are also a part of the 'partly developing' regions.

**Table 6.3: Number of Industrial (Large and medium) Units Availing Sales Tax Exemption Benefit: Zone and District-wise
Upto March 31, 1995**

Sr. No.	Districts: Partly Developed/Developing	Benefit Period Completed					Benefit Period in Progress (As on 31.3.95)				
		Zone-B	Zone-C	Zone-D	Zone-D+	Total	Zone-B	Zone-C	Zone-D	Zone-D+	Total
A	Fully Developed	-	-	-	-	-	-	-	-	-	-
	Greater Bombay	-	-	-	-	-	-	-	-	-	
B	Some Parts Fully Developed	67	22	-	2	91	95	41	-	15	151
	Thane	42	13	-	2	57	60	7	-	15	82
	Raigad	17	5	-	-	22	20	15	-	-	35
	Pune	8	4	-	-	12	15	19	-	-	34
C	Some Areas Partly Developed	11	-	1	4	16	9	7	3	1	20
	Nashik	10	-	1	4	15	6	6	3	1	16
	Ahmednagar	1	-	-	-	1	3	1	-	-	4
D	Adjoining Pune, But No Developed Areas	-	8	1	1	10	-	10	5	2	17
	Satara	-	3	1	-	4	-	3	1	-	4
	Solapur	-	5	-	1	6	-	7	4	2	13
E	Partly Developing, Partly Least/Un-developed	-	11	25	9	45	-	27	55	25	107
	Ratnagiri	-	-	2	2	4	-	4	1	14	19
	Sangli	-	5	2	-	7	-	6	4	-	10
	Kolhapur	-	2	2	-	4	-	9	7	-	16
	Aurangabad	-	4	4	5	13	-	5	23	10	38
	Amravati	-	-	2	-	2	-	-	2	-	2
	Nagpur	-	-	13	2	15	-	3	18	1	22

(Continued)

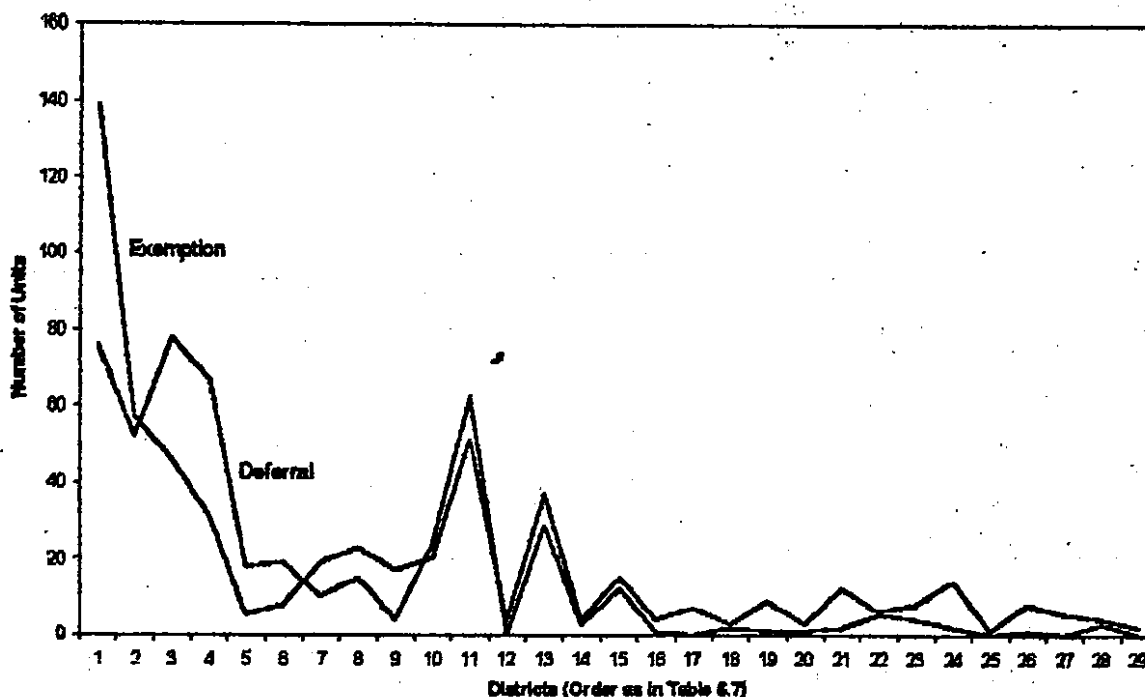
Table 6.3 : (Continued)

Sr. No.	Districts: Partly Developed/Developing	Benefit Period Completed					Benefit Period in Progress (As on 31.3.95)				
		Zone-B	Zone-C	Zone-D	Zone-D+	Total	Zone-B	Zone-C	Zone-D	Zone-D+	Total
F	Mostly/Fully										
	Least Developed	-	-	21	6	27	-	-	36	8	44
	Sindhudurg	-	-	1	-	1	-	-	2	1	3
	Jalgaon	-	-	4	-	4	-	-	11	-	11
	Parbhani	-	-	4	-	4	-	-	-	-	-
	Osmanabad	-	-	-	3	3	-	-	-	4	4
	Buldhana	-	-	-	-	-	-	-	3	-	3
	Akola	-	-	5	-	5	-	-	4	-	4
	Yavatmal	-	-	-	-	-	-	-	2	1	3
	Wardha	-	-	2	-	2	-	-	9	1	10
	Bhandara	-	-	3	-	3	-	-	3	-	3
	Chandrapur	-	-	2	3	5	-	-	2	1	3
G	Partly Least and Partly										
	Un-Developed	-	-	7	1	8	-	-	20	-	20
	Dhule	-	-	2	-	2	-	-	12	-	12
	Beed	-	-	-	-	-	-	-	1	-	1
	Nanded	-	-	3	1	4	-	-	4	-	4
	Latur	-	-	2	-	2	-	-	3	-	3
H	Mostly/Fully										
	Un-Developed	-	-	3	1	4	-	-	-	2	2
	Jalna	-	-	3	1	4	-	-	-	-	-
	Gadchiroli	-	-	-	-	-	-	-	-	2	2
Total (A-H)		78	41	58	24	201	104	85	119	53	361

Source: As in Table 6.2

As on March 31, 1995, 201 large and medium units completely availed of the exemption benefits in all the districts taken together while 361 large and medium units were currently availing the same, thus, making a total of 562. Of these, 43 per cent have their location in the three "parts fully developed" districts of Thane, Raigad and Pune alone. Thane and Raigad in particular have been fortunate in this respect probably because they lie at the door of the fully developed Bombay Metropolitan Region (BMR). Nashik and Ahmednagar showed their capability by attracting about 6.4 per cent of units. This takes the number of units set up in just those five districts having partly or fully developed areas or lying very close to BMR to almost half of the total units set up under the exemption scheme. For a graphical view of the district-wise

Figure 6.1
Units Under Sales Tax Incentives:
District-wise Numbers



distribution of the exemption and deferral units, one may refer to Figure 6.1.

Strikingly, even within the five partly developed districts, units have been concentrated largely in zone B and to some extent in zone C. Relevant ratios work out to be 58.3 per cent and 22.7 per cent respectively, with their sum being 81 per cent. Thus, not the most developed districts as a whole got benefited, but only some relatively developed regions in them were favoured much more than the backward areas in them.

Out of the remaining half of the total exemption units, around 31.9 per cent took the destination of the partly developing districts. These districts have some zone C areas and some of them are either divisional headquarters or adjoining the largely developed Pune district. Only remaining 18.7 per cent of the units have been spread over the 16 most backward districts having all zone D or zone D+ talukas. Interestingly, many of these most backward districts possess huge mineral wealth. But these districts also happened to have poor industrial infra-structural facilities that seemingly hindered their ability to attract industrial units in large scale.

6.4 Deferral Benefits: Number of Units

Division-wise

We turn now to the distribution of the units availing deferral benefits. Table 6.4 provides the inter-divisional distribution of those units. As we can see, 57.2 per cent of the units availing deferral benefits are located in the Konkan and Pune divisions, which, as mentioned earlier, contain fairly advanced regions within them. The percentages in terms of 'benefit period completed' and 'in progress' also do not vary much from the above trend. At the same time, the next highest concentration is seen in Nashik division most of whose districts are either proximate to Bombay-Thane-Pune regions or having a fine transport and communication network. Amravati division, as in the case of exemption units, and other divisions, especially Nagpur, which like Amravati lies far away from the metro regions, failed to attract many deferral units.

Table 6.4: Division-wise Number of Industrial Units (Large and Medium) Availing Sales Tax Deferral Benefits Up to 31.03.1995.

Sr. No.	Number of Units	Divisions					Total	
		Konkan	Nashik	Pune	Auranga -bad	Amravati I		Nagpu
1	Benefit Period Completed							
	Number	51	35	50	15	-	21	172
	As % of Total	29.65	20.35	29.07	8.72	-	12.21	100.00
2	Benefit Period in Progress (As on 31.3.95)							
	Number	95	64	85	52	4	19	319
	As % of Total	29.78	20.06	26.65	16.30	1.25	5.96	100.00
3	Total							
	Number	146	99	135	67	4	40	491
	As % of Total	29.74	20.16	27.49	13.85	0.81	8.15	100.00

Source: As in Table 6.2

District-wise

On looking at the district-wise break-up, we find once again the attraction of Thane, Raigad and Pune districts, which received nearly 42 per cent of the new/expanding units. Some success went to the other two partly developed districts of Nashik and Ahmednagar, which claimed 17.3 per cent of the units (Table 6.5). Thus, only 5 districts provided location to three-fifth of the units. With the eight partly developing districts that have some C zone areas attracting 33.2 per cent of the deferral units, just 7.5 per cent of the units were left to be accounted for by the entire 16 least/un developed districts (See also Figure 6.1).

Zone-wise

A zone-wise analysis may provide a more specific picture. The zone B areas in the five partly developed districts accounted for about 17 per cent of the deferral units while the zone C areas of the 13 districts in total attracted an additional 42 per cent of the units. This means, just 31 per cent of the deferral units were left to be located in the entire D and D+ areas of not only the 16 most backward districts but also the 13 partly advanced or advancing districts. Under exemption too, the zone B and zone C talukas had claimed 54.8 of the benefiting units leaving a smaller share of 45.2 per cent to all remaining D and D+ talukas.

Table 6.5 : Number of Industrial Units (Large and Medium) Availing Sales Tax Deferral Benefit : Zone and District wise Upto 31.03.1995

Sr. No.	Districts: Partly	Benefit Period Completed				Benefit Period in Progress					
		Zone- B	Zone- C	Zone- D	Zone- D+	Total	Zone- B	Zone- C	Zone- D	Zone- D+	Total
A	Fully Developed	-	-	-	-	-	-	-	-	-	-
	Greater Bombay	-	-	-	-	-	-	-	-	-	
B	Some Parts Fully Developed	57	19	-	-	76	81	43	-	6	130
	Thane	24	6	-	-	30	27	13	-	6	46
	Raigad	16	2	-	-	18	19	15	-	-	34
	Pune	17	11	-	-	28	35	15	-	-	50
C	Some Areas Partly Developed	27	1	1	-	29	38	11	4	3	56
	Nashik	25	1	1	-	27	24	11	4	1	40
	Ahmednagar	2	-	-	-	2	14	-	-	2	16
D	Adjoining Pune, But No Developed Area	-	8	5	1	14	-	11	4	-	15
	Satara	-	8	3	-	11	-	6	2	-	8
	Solapur	-	-	2	1	3	-	5	2	-	7
E	Partly Developing, Partly Least/Un Developed	-	15	16	4	35	-	28	57	14	99
	Ratnagiri	-	-	-	1	1	-	2	3	9	14
	Sangli	-	1	1	-	2	-	1	1	-	2
	Kolhapur	-	2	4	-	6	-	7	11	-	18
	Aurangabad	-	6	5	2	13	-	11	33	5	49
	Amravati	-	-	-	-	-	-	-	-	-	-
	Nagpur	-	6	6	1	13	-	7	9	-	16
F	Mostly/Fully Least Developed	-	-	13	3	16	-	-	12	3	15
	Sindhudurg	-	-	1	1	2	-	-	1	-	1
	Jalgaon	-	-	5	-	5	-	-	5	2	7
	Parbhani	-	-	1	-	1	-	-	-	-	-
	Osmanabad	-	-	-	-	-	-	-	-	-	-
	Buldhana	-	-	-	-	-	-	-	2	-	2
	Akola	-	-	-	-	-	-	-	1	-	1
	Yavatmal	-	-	-	-	-	-	-	1	-	1
	Wardha	-	-	1	-	1	-	-	1	-	1
	Bhandara	-	-	4	-	4	-	-	1	-	1
	Chandrapur	-	-	1	2	3	-	-	-	1	1
G	Partly Least and Partly Undeveloped	-	-	1	-	1	-	-	2	-	2
	Dhule	-	-	1	-	1	-	-	1	-	1
	Beed	-	-	-	-	-	-	-	-	-	-
	Nanded	-	-	-	-	-	-	-	1	-	1
	Latur	-	-	-	-	-	-	-	-	-	-
H	Mostly/Fully Un-Developed	-	-	1	-	1	-	-	2	-	2
	Jalna	-	-	1	-	1	-	-	2	-	2
	Gadchiroli	-	-	-	-	-	-	-	-	-	-
	Total (A to H)	84	43	37	8	172	119	93	81	26	319

Source : As in Table 6.2

To understand the full impact of this skewed nature of the industrial location pattern created under the package scheme and the sales tax incentives, we may go back to the Table 2.2. The table showed that only 53 talukas (i.e., 17.0 per cent) out of the 311 talukas of Maharashtra (except Greater Bombay) are classified as falling under B and C zones. This is inclusive of the 7 talukas (out of the 17 zone-A talukas) lying partly under zone A and partly under B or C zone). Against this, 248 talukas (79.7 or approximately 80 per cent) fall in the D and D+ zones. This means, as much as 55 per cent of exemption units and 69 per cent of deferral units were located in as little as 17 per cent of the talukas. At the same time, only 45 per cent and 31 per cent of respectively the exemption and deferral units chose to locate themselves in the backward talukas that approximate to 80 per cent in number.

6.5 Exemption Benefits: Ceilings Granted

Division-wise

Let us now move from the numbers to the monetary ceilings granted to the concerned enterprises. Division-wise, the Konkan region is again in the lead with a more than one-third share in the ceilings granted under exemption including 'benefit period completed' and 'in progress' (Table 6.6). With one-fourth share in the total ceilings, the Aurangabad division came second. The Pune division is placed only at the third position. The claim of Aurangabad division is as high as one-third in respect of the ceilings granted to units whose benefit period has been completed. This edge of Aurangabad division in terms of the ceilings arises from the fact that several bigger units decided to choose their location in Aurangabad district taking advantage of its position as a growth centre.

District-wise

Among the districts, Thane, Raigad and Pune are once again ahead with above 26 per cent of the ceiling granted being availed by units operating in them (Table 6.7). The share of the eight partly developing districts including Satara and Solapur was more than 50 per cent, with Aurangabad (20.5 per cent) and Ratnagiri (12.6 per cent) leading the list. As a matter of fact, the shares of Aurangabad and Ratnagiri are significantly greater than even Thane, Raigad or Pune. This, in contrast to the advantage the latter have in terms of the number of units, indicates the likely presence of very large industrial units in those two districts under the exemption scheme. Particularly, the fact that the percentage of total ceilings granted in Aurangabad is far greater than the percentage number of exemption units in Aurangabad stems directly from the very large investment size of some of the units set up there. This implies possibly the sales tax claim of most of individual units and certainly the aggregate claim for the whole district as more than proportionate to the number of units set up there. What is more significant, however, is the failure of the 16 most backward districts in cornering a reasonable proportion of the exemption incentives indicating that neither number nor size of the units turned favourable to them. They together received only 19.9 per cent of ceilings though this percentage is slightly higher than the corresponding percentage of the number of units (18.67 per cent). The amounts of total sales tax ceilings granted to industrial units across districts are graphically presented in Figure 6.2.

**Table 6.6: Division-wise Ceilings Granted under Sales Tax Exemption Benefits
(Ceilings in Rs. Crores) Up to 31.03.1995**

Sr. No.	Ceilings Granted: Particulars	Divisions and Ceilings						
		Konkan	Nashik	Pune	Aurangabad	Amravati	Nagpur	Total
1	Benefit Period Completed							
	Amount	120.77	42.41	81.08	224.23	79.14	120.72	668.35
	As % of Total	18.07	6.35	12.13	33.55	1.84	18.06	100.00
2	Benefit Period in Progress (As on 31.3.95)							
	Amount	1146.02	186.97	521.55	689.53	104.96	273.43	2921.46
	As % of Total	39.23	6.40	17.85	23.57	3.59	9.36	100.00
3	Total							
	Amount	1266.79	229.38	602.63	912.76	184.10	394.15	3589.81
	As % of Total	35.29	6.39	16.79	25.42	5.13	10.98	100.00

Source: As in Table 6.2

Table 6.7: Sales Tax Exemption Benefits: District-wise Number of Units and Ceilings Granted Ceilings in Rs. Crores) Upto 31.03.1995

Sr. No.	Districts: Partly Devaloped/Developing	Benefit Period Completed		Benefit Period in Progress		Total			
		No.	Ceilings	No.	Ceilings	No.	As % of Grand Total	Ceilings	As % of Grand Total
A	Fully Developed Greater Bombay	-	-	-	-	-	-	-	-
B	Some Parts Fully Developed Thane	91	146.32	151	790.15	242	43.06	936.47	26.09
	Raigad	57	85.76	82	272.92	139	24.73	358.68	9.99
	Pune	22	30.79	35	312.08	57	10.14	342.87	9.55
		12	29.77	34	205.15	46	8.18	234.92	6.54
C	Some Areas Partly Developed Nashik	16	22.00	20	106.53	36	6.41	128.53	3.58
	Ahmednagar	15	16.20	16	80.09	31	5.52	96.29	2.68
		1	5.80	4	26.44	5	0.89	32.24	0.90
D	Adjoining Pune. But No Developed Area Satara	10	15.17	17	108.66	27	4.80	123.83	3.45
	Solepur	4	4.55	4	3.78	8	1.42	8.23	0.23
		6	10.62	13	104.88	19	3.38	115.40	3.22

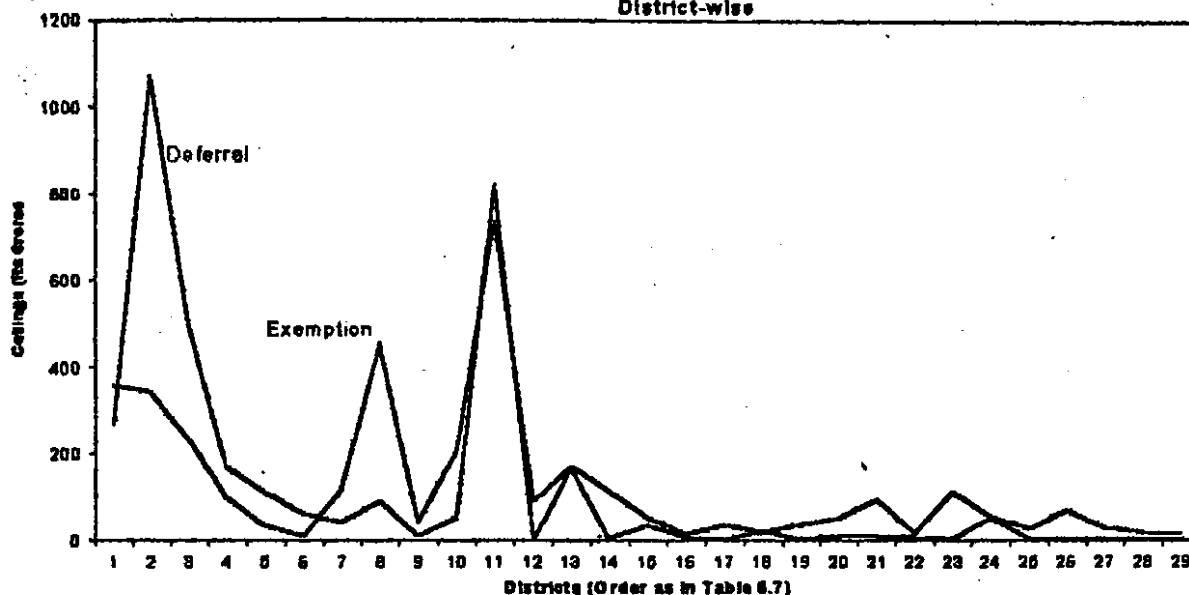
(Continued)

Table 6.7 : (Continued)

Sr. No.	Districts: Partly Developed/Developing	Benefit Period Completed		Benefit Period in Progress		Total			
		No.	Ceilings	No.	Ceilings	No.	As % of Grand Total	Ceilings	As % of Grand Total
E	Partly Developing.	45	301.04	107	1385.40	152	27.05	1686.44	46.98
	Partly Least/Undeveloped								
	Ratnagiri	4	3.26	19	449.00	23	4.09	452.26	12.60
	Sangli	7	16.28	10	24.17	17	3.02	40.45	1.13
	Kolhapur	4	19.86	16	183.57	20	3.56	203.43	5.67
	Aurangabad	13	153.40	38	581.06	51	9.07	734.46	20.46
	Amravati	2	68.72	2	19.38	4	0.71	88.10	2.45
	Nagpur	15	39.52	22	128.22	37	6.58	167.74	4.67
F	Mostly/ Fully Least Developed	27	127.16	44	388.25	71	12.63	515.41	14.36
	Sindhudurg	1	0.96	3	112.02	4	0.71	112.98	3.15
	Jalgaon	4	9.09	11	42.24	15	2.67	51.33	1.43
	Parbhani	4	10.67	-	-	4	0.71	10.67	0.30
	Osmanabad	3	14.82	4	17.91	7	1.25	32.73	0.91
	Buldhana	-	-	3	17.07	3	0.53	17.07	0.48
	Akola	5	10.42	4	21.28	9	1.60	31.70	0.88
	Yavatmal	-	-	3	47.23	3	0.53	47.23	1.32
	Wardha	2	3.34	10	87.10	12	2.14	90.44	2.52
	Bhandara	3	8.73	3	3.13	6	1.07	11.86	0.33
	Chandrapur	5	69.13	3	40.27	8	1.42	109.40	3.05
G	Partly Least and Partly Un-developed	8	39.53	20	127.76	28	4.98	167.29	4.66
	Dhule	2	11.32	12	38.20	14	2.49	49.52	1.38
	Beed	-	-	1	24.31	1	0.18	24.31	0.68
	Nanded	4	14.59	4	52.30	8	1.42	66.89	1.86
	Latur	2	13.62	3	12.95	5	0.89	26.57	0.74
H	Mostly/ Fully Un-developed	4	17.13	2	14.71	6	1.07	31.84	0.88
	Jalna	4	17.13	-	-	4	0.71	17.13	0.48
	Gadchiroli	-	-	2	14.71	2	0.36	14.71	0.41
	Total (A-H)	201	668.35	361	2921.46	562	100.00	3589.81	100.00

Source: As in Table 6.2

Figure 6.2
Sales Tax Incentive Ceilings
District-wise



6.6 Deferral Benefits: Ceilings Granted

Division-wise

With respect to deferral benefits, the persisting trend across divisions are the same as in exemption benefits. In addition, the units based in the Konkan division were granted ceilings of 41 per cent of the total for all divisions (Table 6.8). For Aurangabad, the units whose benefit period was completed enjoyed 40 per cent of benefits in that category while those whose benefits are currently in progress received a total ceiling of roughly 21 per cent. In Konkan region, the two corresponding proportions appear in the reverse order in an almost identical fashion. Here too, the Amravati division has been the most neglected one followed by Nagpur.

Table 6.8: Division-wise Ceilings Granted under Sales Tax Deferral Benefits (Ceilings in Rs. Crores) Up to 31.03.1995

Sr. No.	Ceilings	Divisions and Ceilings						Total
		Konkan	Nashik	Pune	Auranga -bad	Amra -vati	Nagpur	
1	Benefit Period Completed							
	Amount	106.97	52.88	120.39	211.09	-	32.38	523.71
	As % of Total	20.42	10.10	22.99	40.31	-	6.1	100.00
2	Benefit Period in Progress (as on 31.3.95)							
	Amount	1322.41	304.59	536.22	616.05	30.23	150.73	2960.23
	As % of Total	44.68	10.29	18.11	20.81	1.02	5.09	100.00
3	Total							
	Amount	1429.38	357.47	656.61	827.14	30.23	183.11	3483.94
	As % of Grand Total	41.03	10.26	18.85	23.74	0.87	5.25	100.00

Source: As in Table 6.2

District-wise

The total monetary ceilings granted to the units in the three advanced districts of Thane, Raigad and Pune are worth about 52.7 per cent of the total for all districts

(Table 6.9). Nashik and Ahmednagar took away another 7.87 per cent, thus, the 5-district total being more than 60 per cent. Aurangabad units shared among them 23.45 per cent of the ceilings granted and a further 11.83 per cent went into the 7 other partly developing districts. Thus, the total deferral ceilings that was granted to the 13 partly developed and developing districts exceeded 95.8 per cent of the aggregate deferral ceilings granted to all 29 districts. Pathetically, a mere 4.2 per cent of the ceilings has

Table 6.9: Sales Tax Benefits: District-wise Number of Units And Ceilings Granted (Ceilings in Rs. Crores) Up to 31.03.1995

Sr. No.	Districts:Partly Developed/Deve Loping	Benefit Period Completed		Benefit Period in Progress		Total			
		No.	Ceilings	No.	Ceilings	No.	As % of Grand Total	Ceilings	As % of Grand Total
A	Fully Developed	-	-	-	-	-	-	-	-
	Greater Bombay	-	-	-	-	-	-	-	-
B	Some Parts Fully Developed	76	156.35	130	1679.51	206	41.26	1835.86	52.69
	Thane	30	39.80	46	230.18	76	15.24	269.98	7.75
	Raigad	18	64.11	34	1002.68	52	10.57	1066.79	30.62
	Pune	28	52.44	50	446.65	78	15.45	499.09	14.33
C	Some Areas Partly Developed	29	44.63	56	229.61	85	17.68	274.24	7.87
	Nashik	27	41.28	40	124.70	67	13.21	165.98	4.76
	Ahmednagar	2	3.35	16	104.91	18	4.47	108.26	3.11
D	Adjoining Pune. But No Developed Area	14	52.04	15	47.26	29	6.30	99.30	2.85
	Satara	11	37.08	8	21.13	19	4.27	58.21	1.67
	Solapur	3	14.96	7	26.13	10	2.03	41.09	1.18
E	Partly developing. Partly Least/Undeveloped	35	242.52	99	887.38	134	27.44	1129.90	32.43
	Ratnagiri	1	0.40	14	87.90	15	3.05	88.30	2.53
	Sangli	2	7.66	2	1.81	4	0.81	9.47	0.27
	Kolhapur	6	8.25	18	40.50	24	4.88	48.75	1.40
	Aurangabad	13	204.76	49	612.24	62	12.80	817.00	23.45
	Amravati	-	-	-	-	-	-	-	-
	Nagpur	13	21.45	16	144.93	29	5.89	166.38	4.78
F	Mostly/Fully Least Developed	16	24.56	15	64.92	31	6.1	89.48	2.57
	Sindhudurg	2	2.66	1	1.65	3	0.61	4.31	0.12
	Jalgaon	5	5.29	7	27.24	12	2.24	32.53	0.93
	Parbhani	1	5.68	-	-	1	0.20	5.68	0.16
	Osmanabad	-	-	-	-	-	-	-	-
	Buldhana	-	-	2	21.46	2	0.41	21.46	0.62
	Akola	-	-	1	1.16	1	0.20	1.16	0.03
	Yavatmal	-	-	1	7.61	1	0.20	7.61	0.22
	Wardha	1	5.49	1	3.94	2	0.41	9.43	0.27
	Bhandara	4	3.94	1	1.61	5	1.02	5.55	0.16
	Chandrapur	3	1.50	1	0.25	4	0.81	1.75	0.05

(Continued)

Table 6.9 : (Continued)

Sr. No.	Districts:Partly Developed/Developing	Benefit Period Completed		Benefit Period in Progress		Total			
		No.	Ceilings	No.	Ceilings	No.	As % of Grand Total	Ceilings	As % of Grand Total
G	Partly Least and Partly Un-developed	1	2.96	2	49.51	3	0.61	52.47	1.51
	Dhule	1	2.96	1	47.74	2	0.41	50.70	1.46
	Beed	-	-	-	-	-	-	-	-
	Nanded	-	-	1	1.77	1	0.20	1.77	0.05
	Latur	-	-	-	-	-	-	-	-
H	Mostly/Fully Un-developed	1	0.65	2	2.04	3	0.61	2.69	0.08
	Jalna	1	0.65	2	2.04	3	0.61	2.69	0.08
	Gadchiroli	-	-	-	-	-	-	-	-
	Total (A-H)	172	523.71	319	2960.23	491	100.00	3483.94	

Source: As in Table 6.2

been granted to the enterprises set up in the 16 least/un developed districts spanning mostly among the divisions of Aurangabad, Amravati and Nagpur. (See also Figure 6.2).

6.7 Skewed Distribution of Sales Tax Benefits

Number of Units

In order to evaluate the skewed distribution of the sales tax exemption and deferral benefits, we analyse their incidence across zones. We shall do this with Table 6.10 and Table 6.11. From Tables 6.3 and 6.5 it follows that the total number of units availing sales tax incentives till March 31, 1995, is 1053. Of these, a little more than 54 per cent are concentrated in the five partly developed districts of Thane, Raigad, Pune, Nashik and Ahmednagar alone. This reveals the excessive attractiveness of the relatively progressed areas that could offer several advantages to new enterprises. Such advantages include the nearness of developed metropolitan markets, availability of better transport, communication and other infra-structural facilities and efficient public utilities etc. If we add to the above the figures for the partly developing districts which engulf some newly emerging growth points in them, the total percentage comes to 86.5. This implies a very small proportion, viz., 13.5 per cent, of new/expanding enterprises as going into the most deprived regions that form the major portion of the state.

Among zones, the maximum concentration of firms under the package schemes is observed, as stated earlier, in the zone B with 36.56 per cent followed by the zone C with 24.89 per cent. In other words, the fairly developed or developing zones of the various districts, altogether 13 in number, grew richer in industrial activities to the extent of 61.5 per cent of the additional units. Whereas, the totally backward talukas forming about 80 per cent was endowed with the presence of only 38.5 per cent of the newly created industrial activities.

Ceilings Granted

Comparing in a similar way the ceilings of sales tax incentives granted reveals the picture as even worse between the partly developed/developing and least/un

developed districts though the situation is slightly better between the zones. The five partly developed districts received a share of about 45 per cent of the ceilings granted. The partly developing districts covered another 43 per cent. The benefits left in favour of the 16 highly backward districts amounted to just 12.15 per cent, thus, signifying their neglect by larger number of prospective entrepreneurs in general and by entrepreneurs contemplating to establish units of bigger size in particular.

Table 6.10: Skewed Distribution of Sales Tax Benefits: Number of Industrial Units

Sr. No.	Category of Districts	% of Industrial Units				
		Zone-B	Zone-C	Zone-D	Zone-D+	Total
A	Partly Developed Districts *					
	i) Exemption	32.38	12.46	0.72	3.91	49.47
	ii) Deferral	41.35	15.07	1.02	1.83	59.27
	iii) Total@	36.56	13.68	0.85	2.94	54.03
B	Partly Developed Districts **					
	i) Exemption	-	9.97	15.30	6.58	31.85
	ii) Deferral	-	12.63	16.70	3.87	33.20
	iii) Total@	-	11.21	15.95	5.32	32.48
C	Total A & B					
	i) Exemption	32.28	22.43	16.02	10.49	81.32
	ii) Deferral	41.34	27.70	17.72	5.70	92.47
	iii) Total@	36.56	24.89	16.80	8.26	86.51
D	Other (Totally Least/ Un-developed) Districts ***					
	i) Exemption	-	-	15.48	3.20	18.68
	ii) Deferral	-	-	6.31	1.22	7.53
	iii) Total@	-	-	11.21	2.28	13.49

Notes: * Thane, Raigad, Pune, Nashik, Ahmednagar

** Satara, Solapur, Ratnagiri, Sangli, Kolhapur, Aurangabad, Amravati, Nagpur

*** Other sixteen districts

As % of the total for all districts under exemption/deferral

§ Benefit period completed and in progress

@ As % of the total of exemption and deferral units

Source: Compiled from the previous tables.

As a matter of fact, as against a 38.5 per cent of total units set up in the zone D and zone D+ areas which are the most backward, the amount of ceilings granted to them was a little larger at about 44 per cent. This, however, should not be misconceived as favouring the backward regions. Because the major part of the above 44 per cent, i.e., around 32 percentage points, was constituted by the ceilings granted to firms set up in the backward talukas of the partly developed/developing districts. In this too, a major part went, as noted elsewhere, into the zone D of the partly developing districts.

Using the sales tax ceilings granted to various zones and the proportion of incentives (percentage of fixed assets) permissible to them, we have made a rough estimate of the total investment occurring under the sales tax schemes across zones. Table 6.11a presents these estimates. The estimates confirm the fascination of entrepreneurs for the developed regions. As apparent, only 11 per cent of the investment are observed to be in the D and D+ zones of the 16 most backward districts. While, more than one-third of the

investment had gone to the B-zone areas covering just 17 of the more than 310 talukas of the state.

Table 6.11: Skewed Distribution of Sales Tax Benefits: Ceilings Created

No.	Category of Districts	% of Industrial Units				
		Zone-B	Zone-C	Zone-D	Zone-D+	Total
A	Partly Developed Districts*					
	i) Exemption	13.96	13.92	0.43	1.36	29.67
	ii) Deferral	47.62	10.24	0.24	2.46	60.57
	iii) Total [@]	30.54	12.10	0.34	1.90	44.89
B	Partly Developed Districts**					
	i) Exemption	-	22.70	16.06	11.67	50.43
	ii) Deferral	-	3.61	27.78	3.89	35.28
	iii) Total [@]	-	13.30	21.83	7.84	42.97
C	Total A & B					
	i) Exemption	13.96	36.61	16.49	13.03	80.10
	ii) Deferral	47.62	13.85	28.02	6.35	95.85
	iii) Total [@]	30.54	25.40	22.17	9.74	87.85
D	Other (Totally Least/ Un-Developed) Districts***					
	i) Exemption	-	-	14.42	5.48	19.90
	ii) Deferral	-	-	3.97	0.18	4.15
	iii) Total [@]	-	-	9.27	2.87	12.15

Notes: * Thane, Raigad, Pune, Nashik, Ahmednagar

** Satara, Solapur, Ratnagiri, Sangli, Kolhapur, Aurangabad, Amravati, Nagpur

*** Other sixteen districts

As % of the total for all districts under exemption/deferral

\$ Benefit period completed and in progress

@ As % of the total of exemption and deferral units

Source: As in Table 6.10

On the whole, the sales tax exemption and deferral incentives in operation side by side in Maharashtra since 1979 seem to have induced the entrepreneurs to locate their enterprises more in the relatively developed districts and in particular in the relatively advanced talukas of the partly developed or developing districts. As a matter of fact, as if a consequence of such fondness of entrepreneurs for the relatively developed regions, the few talukas that have improved their developmental status between 1979 and 1993 by moving from a lower-graded zone to a higher-graded one belonged entirely to the partly developed/developing districts. All These districts lie in particular in the Konkan, Nashik and Pune divisions. This is obvious from Table 6.12. At the same time, close to three-

fifth of the talukas that have been graded lower by 1993 as a result of the re-classification of the talukas based on the alterations in development criteria belonged to the least or undeveloped districts lying mostly in the Vidarbha and Marathwada regions. Table 6.13 reveals these facts.

Table 6.11(a): Total Industrial Investment Estimated Across Zones Based on Rates of Sales Tax Ceilings and Actual Benefits Created (1979-1995)

Zone	B	C	D and D+	
			Developed/ Developing Districts	Least/ Un- developed Districts
Sales Tax Ceilings Granted (% of Total) [@]	30.5	25.5	32.0	12.0
Average Rates of Sales Tax Ceilings (%) ^{#1}	65.0	75.0	80.0	80.0
Sales Tax Ceilings Granted - Amount ^{\$} (Rs. Crores)	2145.0	1794.0	2251.0	844.0
Estimated Investment in Industrial Units (Amount of Ceilings/Rates of Ceilings) (Rs. Crores) [*]	3300.0 (34.5)	2392.0 (25.0)	2814.0 (29.5)	1055.0 (11.0)

Notes: @ Rounded-off to next higher digit.

* Ceilings available across zones as % of fixed capital.

\$ Total Ceilings granted come to Rs. 7034 crore

Figures in parantheses are % of total investment estimated for all zones.

1 Arithmetic average of ceilings under 1979, 1983 and 1988 schemes (approximated).

According to the changes in the criteria of classification as used above, a new zone, D+, has been created as mentioned in a previous chapter. However, the details of the changes in the criteria adopted for re-classification are not available to us. It is also not clear whether the recommendation of the Fact-finding Committee on Regional Imbalance (1984) that the distance of talukas from metro regions should also be considered for the zonal classification of talukas was accepted by the government or not.

One important reason for the skewed distribution of incremental industrial activities may be that the prospective entrepreneurs consider, as relevant current world literature postulates, some other location factors ahead of the tax incentives and, then, the tax incentives are counted as a supportive factor. Obviously, if those primary factors totally lack in such regions, even the tax incentive may not be a sufficient factor of attraction in location decisions.

6.8 Determinants of the Skewed Distribution

What are the other crucial primary determinants of location whose absence led to the deprivation of industrial concentration in the under-developed regions? In Chapter 3, we have touched upon the major location factors. The most prominent of the location factors are nearness of market and raw-material sources and the related

industrial infra-structure including transport and communication facilities, in addition to the government tax and non-tax incentives and policies. We briefly discuss below the relevance of a few major factors to the industrial status of different districts of Maharashtra.

Table 6.12 :Number of Talukas Showing Improvement in Developmental Status Between 1979 and 1993 – District-wise

Sr. Districts:Partly No. Developed/Developing	Level of Movement and Number of Moving Talukas							
	D to C	C to B	B to A	D to B	C to AB	AD to AC	AC to AB	AC to A
A Fully Developed Greater Bombay								
B Some Parts Fully Developed	11	4	1	1	1	1	3	1
Thane	2	2	-	-	-	-	-	1
Raigad	5	1	1	-	1	-	-	-
Pune	4	1	-	1	-	1	3	-
C Some Areas Partly Developed	4	5	-	-	-	-	-	-
Nashik	3	1	-	-	-	-	-	-
Ahmednagar	1	4	-	-	-	-	-	-
D Adjoining Pune, But No Developed Areas	3	-	-	-	-	-	-	-
Satara	3	-	-	-	-	-	-	-
Solapur	-	-	-	-	-	-	-	-
E Partly Developing, Partly Least/Un- Developed	2	-	-	-	-	-	-	-
Ratnagiri	1	-	-	-	-	-	-	-
Sangli	1	-	-	-	-	-	-	-
Kolhapur	-	-	-	-	-	-	-	-
Aurangabad	-	-	-	-	-	-	-	-
Amravati	-	-	-	-	-	-	-	-
Nagpur	-	-	-	-	-	-	-	-
TOTAL	20	9	1	1	1	1	3	1

6.8.1 Market Factor

On nearness to market, districts of Thane, Raigad and Pune have maximum advantage with vast metropolitan areas within them or closer to them. Some fringe benefits went also to some of the talukas of Nashik, Ahmednagar and, to some extent, to Satara. We have already seen that the first three districts, with slight exception of their remote segments, have attracted the highest number of enterprises. Some peripheral benefits accrued to parts of other two districts facing the metro districts.

Apart from the above market locations, a second level of markets could be found in the divisional headquarters of Aurangabad and Nagpur. While Aurangabad is an emerging growth centre receiving focus even under the central government schemes, its distance from the developed areas of the state is also not that great as compared to the other regions in the Amravati or Nagpur divisions or even the other segments of the Aurangabad division. So, it is quite natural that its performance is much better than most of the other emerging industrial centres of Maharashtra. Nagpur has been traditionally a flourishing city in the central India and the third biggest city in Maharashtra. The Nagpur district has a very high rate of urbanisation and the city is an

important link in the railway network of the country. With such strategic location and with the advantage of being close to several metallic and non-metallic mineral sources, it is not surprising to see Nagpur moving ahead of some of the emerging growth centres of the state in respect of new industrial activities. However, other smaller urban centres having smaller markets, without the exception of Amravati, which is also a divisional headquarters, did not have much to offer to the industrialists and, hence, most of them possibly shunned these centres from their industrial calculations.

Table 6.13: Number of Talukas Showing Deterioration in Developmental Status Between 1979 and 1993- District-wise

Sr. No.	Districts:Partly Developed/Developing	Level of Movement & Number of Moving Talukas					
		A to AB	A to B	B to C	C to D	C to D+	D to D+
A	Fully Developed						
	Greater Bombay						
B	Some Parts Fully Developed	2	-	2	-	1	4
	Thane	-	-	-	-	1	3
	Raigad	2	-	2	-	-	-
	Pune	-	-	-	-	-	1
C	Some Areas Partly Developed	-	-	-	1	1	7
	Nashik	-	-	-	-	-	5
	Ahmednagar	-	-	-	1	1	2
D	Adjoining Pune, But No Developed Areas	-	-	-	1	-	6
	Satara	-	-	-	-	-	2
	Solapur	-	-	-	1	-	4
E	Partly Developing						
	Partly Least/Undeveloped	-	-	2	1	-	18
	Ratnagiri	-	-	-	-	-	5
	Sangli	-	-	-	-	-	1
	Kolhapur	-	-	1	1	-	3
	Aurangabad	-	-	1	-	-	3
	Amravati	-	-	-	-	-	3
	Nagpur	-	-	-	-	-	3
	Sub-Total (B-E)	2	-	4	3	2	35
F	Mostly/Fully Least developed	-	-	-	8	2	20
	Sindhudurg	-	-	-	-	-	1
	Jalgaon	-	-	-	3	2	2
	Parbhani	-	-	-	3	-	2
	Osmanabad	-	-	-	-	-	2
	Buldhana	-	-	-	-	-	2
	Akola	-	-	-	1	-	2
	Yavatmal	-	-	-	-	-	3
	Wardha	-	-	-	-	-	1
	Bhandara	-	-	-	-	-	2
	Chandrapur	-	-	-	1	-	3

(Continued)

Table 6.13 : (Concluded)

Sr. No.	Districts: Least/Undeveloped	Level of Movement & Number of Moving Talukas					
		A to AB	A to B	B to C	C to D	C to D+	D to D+
G	Partly Least and Partly Undeveloped	-	-	-	1	-	15
	Dhule	-	-	-	-	-	4
	Beed	-	-	-	-	-	3
	Nanded	-	-	-	1	-	5
	Latur	-	-	-	-	-	3
H	Mostly/Fully Undeveloped	-	-	-	-	-	-
	Jalna	-	-	-	1	-	7
	Gadchiroli	-	-	-	-	-	8
Sub-Total (F-H)		-	-	-	10	2	50
Grand Total (B-H)		2	-	4	13	4	85

6.8.2 Failure of Resource Factor

At least the resource availability in abundance of many of the backward regions should have induced several firms to locate their units in those regions. One may expect at least many resource-based units to come up closer to the material bases. However, some of the most backward districts that are rich, as shown in Table 6.14, in mineral resources failed to arouse much interest in entrepreneurs. Accordingly, the number of mineral-based units set up in the mineral rich but most undeveloped districts of Sindhudurg, Yavatmal, Bhandara, Chandrapur and Gadchiroli was very small (see Table 6.15 and Table 6.16). This underscores the fragility of the importance of the raw-material sources as a prime industrial location factor in the context of Maharashtra, or, even of the whole India. If we ask why so, we may stumble upon the infra-structural bottlenecks of the backward regions.

Table 6.14 : Location of Mineral Resources

Sr. No.	District	Mineral Items	No. of Mines
1	Kolhapur	Bauxite, Iron Ore, Silica	5
2	Raigad	Bauxite	1
3	Chandrapur	Iron Ore, Barytes, Fire Clay, Kaolin, Lime Stone, Non-silica Sands	20
4	Gadchiroli	Iron Ore	1
5	Sindhudurg	Iron Ore, Silica	21
6	Bhandara	Manganese, Corundrum, Kyanite, Sillimanite, Pyrophyllite, Quartz	14
7	Nagpur	Manganese, Dolomite, Kaolin, Ochre, Quartz, Non-silica Sands	23
8	Amravati	Fire Clay	1
9	Yavatmal	Lime Stone	12
10	Ratnagiri	Silica	7

Source: Statistical Abstract of Maharashtra 1988-89.

Table 6.15 : Broad Industry-wise Classification of Units Drawing Sales Tax Benefits Across Districts

Sr. Districts:Partly No. Developed/Developing	Food and Agro. Related	Metal Based	Chemical and Related	Non-Metalic mineral based	Textiles and Related	Electrical and Electronics	Paper and Related	Transport Equipments	Non-Transport Engineering	Others	Total
A Fully Developed Greater Bombay											
B Some Parts Fully Developed	27	59	72	2	102	21	15	5	41	104	448
Thane	7	27	21	1	85	6	6	1	11	50	215
Raigad	7	13	43	-	11	4	4	-	3	24	109
Pune	13	19	8	1	6	11	5	4	27	30	124
C Some Areas Partly Developed	16	18	5	6	1	9	3	3	22	38	121
Nashik	9	12	3	6	1	8	3	3	19	34	98
Ahmednagar	7	6	2	-	-	1	-	-	3	4	23
D Adjoining Pune, But No Developed Areas	10	4	4	2	16	1	5	1	3	10	56
Satara	4	3	2	2	1	1	3	1	3	7	27
Solapur	6	1	2	-	15	-	2	-	-	3	29
E Partly Developing, Partly Least/Un- Developed	25	38	44	13	39	13	11	9	31	63	286
Ratnagiri	1	-	21	3	4	-	-	-	1	8	38
Sangli	9	1	1	1	5	1	-	-	2	1	21
Kolhapur	6	7	1	2	15	-	-	2	9	2	44
Aurangabad	4	15	16	2	3	11	4	6	12	40	113
Amravati	1	-	-	-	2	-	-	-	-	1	4
Nagpur	4	15	5	5	10	1	7	1	7	11	66
Sub-Total (B to E)	78	119	125	23	158	44	34	18	97	215	911

(Continued)

Table 6.15: (Continued)

Sr. No.	Districts/Least/Undeveloped	Food and Agro. Related	Metal Based	Chemical and Related	Non-Metallic Mineral Based	Textiles and Related	Electrical and Electronics	Paper and Related	Transport Equipments	Non-Transport Engineering	Others	Total
F	Mostly/Fully Least Developed	18	5	13	8	25	4	6	1	5	17	102
	Sindhudurg	-	1	-	2	1	2	-	-	-	1	7
	Jalgaon	2	2	3	-	4	-	4	-	3	9	27
	Parbhani	3	-	-	-	1	-	-	-	-	1	5
	Osmanabad	1	-	1	-	5	-	-	-	-	-	7
	Buldhana	1	-	-	-	3	-	-	-	-	1	5
	Akola	1	-	3	-	3	-	-	-	1	2	10
	Yavatmal	2	-	-	1	1	-	-	-	-	-	4
	Wardha	3	-	4	-	7	-	-	-	-	-	14
	Bhandara	5	2	-	2	-	-	-	1	-	1	11
	Chandrapur	-	-	2	3	-	2	2	-	1	2	12
G	Partly Least and Partly Un Developed	10	3	4	2	7	-	2	-	-	3	31
	Dhule	4	1	-	-	7	-	2	-	-	2	16
	Beed	1	-	-	-	-	-	-	-	-	-	1
	Nanded	2	2	3	1	-	-	-	-	-	1	9
	Latur	3	-	1	1	-	-	-	-	-	-	5
H	Mostly/Fully Un-Developed	2	1	-	-	-	-	2	-	-	4	9
	Jalna	2	1	-	-	-	-	-	-	-	4	7
	Gadchiroli	-	-	-	-	-	-	2	-	-	-	2
	Sub-Total (F to H)	30	9	17	10	32	4	10	1	5	24	142
	Grand Total (B to H)	108	128	142	33	190	48	44	19	102	239	1053
	% of Sub-Total(F to H) to Grand Total	27.8	7.0	12.0	30.3	16.8	8.3	22.7	5.3	4.9	10.0	13.5

Source: As in Table 6.2

Table 6.16: Mineral-based Units Availing Sales Tax Benefits[@] in Least/Un-Developed Districts

Sr.No	Districts	Number of Units		
		Mineral-based	Other	Total
1	Sindhudurg	3	4	7
2	Yavatmal	1	3	4
3	Bhandara	4	7	11
4	Chandrapur	3	9	12
5	Gadchiroli	-	2	2

Note: @ Since 1979

Source : As in Table 6.2

6.8.3 Road and Rail Facilities

Roads Across Divisions

Table 6.17 and 6.18 show the level of road and rail facilities available in 1981-82 and 1991-92 across divisions and districts respectively along with the

Table 6.17 : Selected Infrastructure and Other Indicators: Division-wise and for Maharashtra State

Sr. Indicators and Their Change No.	Divisions					Maharashtra	
	Konkan [§]	Nashik	Pune	Aurang a-bad	Amra -vati		Nagpur
1 Road Per 100 sq.km. of Geographical Area (Km.)							
1981-82	41.3	37.6	42.4	34.40	24.8	16.6	33.0
1991-92	58.4	65.0	75.5	53.90	37.5	46.4	57.0
% Change	41.4	72.9	78.1	56.70	51.2	179.8	72.7
2 Rail Per 100 Sq.Km. of Geographical Area (Km.)							
1981-82	0.9	1.7	1.9	1.10	1.4	2.2	1.7
1991-92	1.6	2.0	1.9	1.25	1.7	2.3	1.8
% Change	79.1	17.8	-	13.30	21.4	4.5	5.9
3 Godown Capacity('000MTs)							
1982-83	77.4	106.5	134.0	140.20	65.0	132.8	743.6
1988-89	62.5	107.0	127.8	128.60	73.1	106.4	714.5
% Change	-19.3	0.5	-4.6	-8.30	12.5	-19.9	-3.9
4 Outstanding Bank Credit to Industry (Rs.Crores)@							
1986-87	600.9	129.2	523.2	72.40	35.4	145.2	4760.6
1988-89	887.2	248.5	926.7	113.20	49.8	330.7	10168.7
% Change	47.6	92.3	77.1	56.40	40.7	127.8	113.6

Note: § Konkan excludes Greater Bombay

@ From Scheduled Commercial Banks

Source: 1) Statistical Abstract of Maharashtra, various years.

2) Handbook of Statistics, Maharashtra, 1993.

division-wise availability of warehousing facility in 1982-83 and 1988-89. As can be observed, the availability of road per 100 square kilometer of area is lower than the state average in both the years in Amravati and Nagpur and in the latter year in Aurangabad, notwithstanding the very large growth of road kilometerage between the two periods in Nagpur division.

Table 6.18 : Road and Rail Facilities Across Districts

Sr.No.	Districts:Partly developed/ Developing	Road per 100 Sq. Km. Of Geographical Area (Km.)			Rail per 100 Sq. Km of Geographical Area (Km.)		
		1981-82	1991-92	% change	1981-82	1991-92	% change
A	Fully Developed						
	Greater Bombay	8.9	8.0	-10.1	34.0	36.4	7.1
B	Some Parts Fully Developed						
	Thane	35.8	56.0	56.4	1.3	3.0	130.8
	Raigad	46.0	56.0	21.7	2.0	2.7	35.0
	Pune	40.7	70.0	72	2.0	2.0	-
C	Some Areas Partly Developed						
	Nashik	40.2	67.0	66.7	1.7	1.7	-
	Ahmednagar	37.8	70.0	85.2	1.1	1.2	9.1
D	Adjoining Pune, But No Developed Areas						
	Satara	39.6	83.0	109.6	1.3	1.3	-
	Solapur	40.2	67.0	66.7	3.0	3.0	-
E	Partly Developing, Partly Least/Undeveloped						
	Ratnagiri	43.3	61.0	40.9	-	-	-
	Sangli	44.3	92.0	107.7	2.0	2.0	-
	Kolhapur	51.6	75.0	45.3	0.5	0.5	-
	Aurangabad	37.6	57.0	51.6	0.7	1.0	42.9
	Amravati	19.7	37.0	87.8	1.4	1.6	14.3
	Nagpur	18.1	46.0	154.1	3.8	3.9	2.6
F	Mostly/Fully Least Developed						
	Sindhudurg	42.0	62.0	47.6	N.A.	N.A.	-
	Jalgaon	29.8	63.0	111.4	4.3	4.4	2.3
	Parbhani	36.3	56.0	54.3	2.1	2.6	23.8
	Osmanabad	33.7	55.0	63.2	0.9	0.9	-
	Buldhana	28.1	38.0	35.2	0.9	0.9	-
	Akola	25.7	41.5	59.5	3.1	3.4	9.7
	Yavatmal	26.5	35.0	32.1	0.5	1.0	100.0
	Wardha	23.7	41.0	73.0	2.4	2.4	-
	Bhandara	21.1	61.0	189.1	3.1	3.1	-
	Chandrapur	12.6	59.0	368.3	1.2	2.6	116.7
G	Partly Least and Partly Undeveloped						
	Dhule	41.4	58.0	40.1	0.2	1.3	550.0
	Beed	34.1	51.0	49.6	0.1	0.4	300.0
	Nanded	40.1	69.0	72.1	2.1	2.2	4.8
	Latur	33.7 [@]	55.0	63.2	0.9 [@]	0.8	-11.1
H	Mostly/Fully Undeveloped						
	Jalna	26.5	37.0	39.6	N.A.	1.1	-
	Gadchiroli	12.6 [§]	31.0	146.0	1.2 [§]	0.1	-91.7

[@] Combined figure for Latur and Osmanabad.

[§] Combined figure for Gadchiroli and Chandr

Source: As in Table 6.2

Roads Across Districts

Looking across districts, in 1981-82 every district in the Konkan, Nashik, Pune

and Aurangabad divisions except Jalgaon and Jalna exceeded the state average in terms of roads per 100 square kilometer of geographical area. Whereas in 1991-92, some of the districts, viz., Thane and Raigad in Konkan and Parbhani, Osmanabad, Beed, Latur and Jalna in Aurangabad, went below the state average since other districts developed roads relatively faster than these districts did. Incidentally, these districts of Aurangabad division are also the least industrialised among the backward districts of Maharashtra under the sales tax schemes since 1979. In contrast, all districts of the Amravati and Nagpur divisions had road lengths below the state average in 1981-82 and this trend could be reversed only in Bhandara and Chandrapur by 1991-92. To recall, these regions are also among those that are industrially backward.

Rail Length: Across Divisions and Districts

In the case of rail, Amravati and Aurangabad divisions together with Konkan were moving behind the state average while Nagpur was better placed alongside Pune and Nashik. However, rail facility in the state as a whole does not seem to be showing the same trend as roads. Because, some of the backward districts like Jalgaon, Parbhani, Akola, Wardha, Bhandara, Nanded and Chandrapur along with urban centres like Thane, Raigad, Solapur and Nagpur had better rail-length in 1991-92 than most others though in many in the former group the rail-length has not grown much over 1981-82. It may be useful to mention here that the industrially relatively better-off districts among the most backward ones under the sales tax schemes are some of those referred to above, viz., Jalgaon, Wardha, and Chandrapur. However, it is also true that the districts having poor rail network also include most of the partly developing districts, in addition to many undeveloped ones. In this respect, there is no unambiguous relationship emerging in respect of the districts of Maharashtra between rail network and industrial progress.

6.8.4 Warehousing Facility

Table 6.17 also discloses that the warehousing facility in almost all divisions has been declining between 1982-83 and 1988-89. This may suggest, on the one hand, that the increasing transport and communication facilities rendered the resort to storage and warehousing less essential. It implies, on the other hand, that the poor facilities may hinder the growth of activities by creating shortage of warehousing facilities for raw materials increasingly brought in for expanding industrial production. It may be noted, however, that the warehousing facilities are more relevant for the farmers, who have to store their agricultural produce after harvest, and not to the industrial sector. But, then, since the warehousing facility can affect the income received by the farmers, it can also affect industrial activity through changes in purchasing power and demand. Moreover, the small-scale entrepreneurs may be hit more by the deficiency in warehousing since most of them may not be able to afford to construct own warehouses.

6.8.5 Air and Sea Ports

Most of the backward districts of Maharashtra are land-locked and, hence, do not have benefit of seaports. They do not even have good airports. This coupled with the long hours taken to reach nearest international airport or seaport or big markets made these districts unattractive despite their natural resources and their larger sales tax incentives.

Thus, in Maharashtra, sales tax incentives were useful as industrial dispersal measure only to the extent the localities and their surrounding regions were urbanised

and the entrepreneurs perceived the infra-structural facilities of the region as satisfactory. In this respect, sales tax incentives were with lesser teeth without the adequate backing of infra-structural and market developments notwithstanding the efforts of MIDC and SICOM in creating centre-specific infra-structure that could be described as sporadic considering the size of the state. Still, it should not be forgotten that the incentives helped in causing some industrial activities in each of the districts. As the dictum goes, something is better than nothing. Besides, the backward and forward linkages of new activities might have induced other related activities, including tiny sector production and commerce, to come up, whereby the industrial scenario may have got brightened up more than due to the pure impact of the sales tax incentives. To this extent, the industrial activities generated by the sales tax incentive packages might have led to providing a new phase to the problem of inter-regional disparities on various counts at least to a limited extent.

We, therefore, examine in the next chapter a few selected industrial indicators with a view to evaluating the variations in the inter-district imbalances between 1981 and 1991, which represents a decade of the operation of the revamped package of sales tax incentives. We shall also try to see the degree of relationship between the decadal changes in those indicators and the level of tax incentives granted across districts during the roughly corresponding period. For this we may employ the frequency analysis technique suggested by Nijkamp and Blaas (1995), the Pearson's chi-square statistic and the Spearman's rank correlation coefficient.

Chapter 7

Industrial Dissipation in Maharashtra 1981-1992

7.1 Introduction

Since 1979 the emphasis in Maharashtra on the sales tax incentive schemes as an industrial dispersal measure became more vigorous. Accordingly, the schemes have been expected to promote new industrial activities or to provide for expansion or diversification of existing activities across districts more intensively than ever before. Alongside these additional activities supposed to be directly rooted in the sales tax incentives, many other related activities might have come up on account of the linkages with new units or in order to reap the fringe benefits arising from growing industrial income. Thus, business and commerce together with the small, tiny, household and other informal sector production activities might have mushroomed in different regions leading to transformation of the economic scenario of the districts. In this sense, mere evaluation of units directly set up under sales tax schemes may not reveal the complete impact of sales tax incentive package on industrial dispersal and inter-regional industrial disparities. Rather, one should take a broader view that covers also other relevant selected industrial variables in respect of districts.

In this chapter, therefore, some selected industrial indicators are being evaluated in respect of districts in order to assess the overall improvement in inter-district industrial disparities between 1981 and 1991 (for census related variables; and for other variables the time points are 1981-82 and 1991-92). The study considers 1991 as the second reference period, instead of 1994 or 1995 up to which the details of sales tax incentives are available, mainly because of data considerations. So, a word of caution may be in order here. That is, since the sales tax incentives granted closer to 1991 would provide benefits to the units and their surrounding regions much beyond 1991, the results based on the indicators for 1991 may leave out some parts of the impact of incentives on overall industrial position of different regions. This should be factored in while using the conclusions of this study.

7.2 Industrial Growth: Maharashtra vis-a-vis India

To begin with, consider Table 7.1, which presents some simple indexes of industrial growth for India and Maharashtra enabling a comparison between the national and state industrial economies. Between 1981-81 and 1991-92, the growth of

Table 7.1: Industrial Growth During 1981-82 - 1991-92: A Comparison Between Maharashtra and India (Index Numbers[§])

Sr. No.	Industrial Category	India			Maharashtra		
		1981-82	1991-92	% Change	1981-82	1991-92	% Change
1	General	100.0	194.0	94.4	100.0	186.2	86.2
(a)	Manufacturing	100.0	189.6	89.6	100.0	179.5	79.5
(b)	Electricity	100.0	233.2	133.2	100.0	202.1	102.1
(c)	Mining and Quarrying	100.0	188.2	88.2	100.0	198.1	98.1
(d)	Construction	100.0	148.7	48.7	100.0	142.4	42.4

Notes: § Constant prices

Based on net NDP/SDP at 1980-81 prices

Source: Economic Survey of India and of Maharashtra - various years

production of each of the industrial components looked impressive for Maharashtra as also for India. However, except for sub-group of mining and quarrying, the growth in Maharashtra trailed behind that in India as a whole. Thus, at the first instance, this seems to sound a warning that Maharashtra's general performance in the decade in focus does not look too appealing keeping in mind that the state had always in the past been considered the front-ranking industrial state in India.

7.3 Selected Industrial Indicators: Maharashtra vis-a-vis India

Table 7.2 indicates a significantly higher rate of urbanisation and its slightly faster growth between 1981 and 1991 in Maharashtra than in India as a whole. The proportion of net domestic product originating in industry is also higher in the state in both 1981-82 and 1991-92 than in the entire economy. But, this share has grown at a lower rate between the two time points (at 10.2 per cent) than in India taken together (15.6 per cent). This forms another point of concern even though per capita net domestic product has been noticeably higher in either period and has grown slightly faster between the two periods in Maharashtra than in the entire nation. Significantly, factory sector employment per lakh population declined more rapidly in Maharashtra between the two time points than in the whole economy notwithstanding that the absolute figure in this respect remains considerably greater at 1484 in the former. On the other hand, per capita industrial consumption of electricity appeared higher as well as growing faster in Maharashtra implying the industrial production in the state as turning increasingly energy-intensive. On combining with the evidence on factory sector employment, this may also be interpreted to be implying a decreasingly labour-intensive production over the decade.

Table 7.2: Selected Industrial Indicators : A Comparison between Maharashtra and India

Sr. No.	Selected Indicators	India			Maharashtra		
		1981-82	1991-92	% Change	1981-82	1991-92	% Change
1	Urban Population (%)*	23.34	25.72	10.2	35.0	38.73	10.6
2	Proportion of SDP (Net) from Industry (%)**	22.32	25.81	15.6	33.08	36.47	10.2
3	Percapita SDP (Net) from Industry (Rs.)**	399	579	45.1	815	1210	48.5
4	Employment in Factory Sector Per Lakh Population (Nos.)	1137	971	-14.6	1623	1484	-21.0
5	Percapita Industrial Consumption of Electricity (Kwh.)	77.6	103.8	33.8	135.4	186.1	37.4
6	Annual Plan Outlay (%)						
	i. Industry	15.3	11.9	-22.2	2.9	4.3	48.3
	ii. Industry and Energy	43.1	41.4	-3.9	32.7	32.3	-1.2
7	Installed Capacity of Electricity (Per Capita KW)	0.052	0.093	78.8	0.065	0.118	81.9

Notes: * The respective periods are 1981 and 1991

** In 1980-81 prices

Source: As in Table 7.1

Notably, the Maharashtra State allocated only a very small percentage of the annual plan outlay for industry as such. That is, 2.9 per cent and 4.3 per cent respectively for the two periods as against 15.3 per cent and 11.9 per cent respectively at the national level. However, the proportion grew very convincingly, by almost half, during 1981-82 - 1991-92 as compared to a more than one-fifth decline in the industrial outlay of the national annual plan. Maharashtra looks slightly favourably positioned in the expansion of installed capacity of electricity per capita, echoing the degree of importance the state placed on energy in relation to its industrial and economic growth.

7.4 Selected Indicators: Inter-divisional Comparison

Table 7.3 provides the division-wise figures on a few selected developmental and industrial indicators. The following variables have been chosen, for their closer relation with the level of industrial activities, for the evaluation of industrial inequalities across divisions and, subsequently, across districts: (1) Proportion of urban population to total population; (2) Population employed in non-agricultural sector as a proportion of total population; (3) Population employed in industry sector as a proportion of total population; (4) Number of factory workers per lakh of population; and (5) Per capita electricity consumption in industry.

Table 7.3: Selected Industrial Indicators: Division-wise and for Maharashtra State

Sr. No.	Indicators and Their Change	Divisions						Maharashtra
		Konkan [§]	Nashik	Pune	Auranga-bad	Amra-vati	Nagpur	
1	Proportion of Urban Population (%)							
	1981	26.87	22.54	30.57	18.31	22.21	29.77	35.03
	1991	41.53	25.47	32.59	21.90	25.17	35.02	38.73
	%Change	54.60	13.00	6.60	19.60	13.30	17.60	10.60
2	Population Employed in Non-Agri. Sector (%)							
	1981	16.20	10.40	13.70	8.80	8.30	13.70	14.80
	1991	19.60	11.20	15.20	8.90	9.20	14.90	15.80
	%Change	21.00	7.70	10.90	1.10	10.80	8.80	6.80
3	Population Employed in Industry Sector (%)							
	1981	6.30	3.70	4.90	2.30	2.10	4.80	5.40
	1991	7.70	3.50	5.20	2.10	1.80	4.30	5.20
	%Change	22.20	-5.40	6.10	-8.70	-14.30	-10.40	-3.70
4	Factory Workers Per Lakh Population (Nos.)							
	1981-82	2122	899	1586	423	487	818	1878
	1990-91	1726	904	1591	536	418	869	1484
	% Change	-18.70	0.60	0.30	26.70	-14.20	6.20	-21.00
5	Per Capita Electricity Consumption in Industry (Kwh)							
	1981-82	366.40	34.80	97.50	21.50	20.90	127.00	135.40
	1991-92	413.60	70.60	165.80	47.50	28.00	289.60	183.50
	% Change	10.10	95.70	29.40	77.20	25.80	59.90	28.00

Note: § Konkan excludes in all cases the district of greater Bombay

Source: Compiled from (1) Census Reports (2) Statistical Abstracts and (3) Handbooks of Statistics

We have also considered at one place (see Tables 7.5 and 7.8) the level of outstanding scheduled bank credit to industry across districts; but since relevant data are available only for a short period no emphasis was laid on this parameter. We also could not use the important variable 'income' due to the paucity of the required district-wise data.

Urbanisation

Rate of urbanisation is often regarded as one measure of intensity of industrial and other related activities carried out in a region. As evident from Table 7.3, rate of urbanisation was not at all uniform across the six divisions in either of the years. While none of the divisions attained in 1981 a rate of urbanisation equal to the state average (which was jacked up by the 100 per cent urbanisation of Greater Bombay), only Konkan region surpassed the state average in 1991. While Aurangabad attained the lowest urbanisation rate followed by Amravati and Nashik, the growth in the level of urbanisation between 1981 and 1991 was above the corresponding state figure in all these divisions. The relevant coefficients of variation given in Table 7.4 suggests that urbanisation process was relatively more uniform in 1991 than in 1981 partly due to the highly non-uniform growth of urbanisation during 1981-1991 favouring the erstwhile low-urbanised divisions apart from Konkan.

Table 7.4: Industrial Indicators Division-wise: Mean and Coefficient of Variation (%)

Variables	1981*		1991*		% Change	
	Mean@	Coeff of Variation	Mean@	Coeff of Variation	Mean@	Coeff of Variation
% of Urban Population	35.03	34.1	38.73	30.6	10.6	193.1
% of Non-agricultural Employment	14.80	30.5	15.80	31.2	6.8	108.4
% of Industrial Employment	5.40	41.3	5.20	48.0	-3.7	372.9
No. of Factory Workers (Per lakh Population)	1878	59.7	1484	50.6	-21.0	134.5
Per Capita Industrial Consumption of Electricity (Kwh)	135.40	99.7	183.50	84.4	-28.0	145.9

Notes: * For number of factory workers, 1981-82 and 1990-91 and for per Capita industrial consumption of electricity, 1981-82 and 1991-92 respectively.

@ Corresponding figures of Maharashtra

Source: Computed from Table 7.3

Non-agricultural Employment

The proportion of population employed in non-agricultural activities may suggest the orientation of a region toward industrial and related activities including the provision of various social and economic services that support the industrial progress. In Maharashtra, the observed proportion varied from just 8.3 per cent of Amravati division to 16.2 per cent of Konkan division during 1981 and from 8.9 per cent in Aurangabad division to 19.6 per cent in Konkan division during 1991. In both the years, only in Konkan division the proportion exceeded the relevant state average. The lower proportion of non-agricultural employment in either year in the divisions of Aurangabad and Amravati implies their continuing dependence on agriculture for employment and, hence, on their persistent backwardness. To our dismay, the proportion of non-agricultural employment in population grew only negligibly in

Aurangabad division. This forces us to think that in spite of Aurangabad district's significant backward area benefits obtained through the sales tax incentives and central subsidies, in most parts of this division, the gain on the employment front was negligible from the direct or related activities. Encouragingly, in other divisions covering the backward areas, the relevant decadal progress has not been that unsatisfactory. However, to cause worry, the inter-divisional figures show a higher variation (in terms of coefficient of variation) in 1991 meaning a slight worsening of the inter-divisional inequalities in respect of non-agricultural employment in that year. A major reason for this may be the non-uniform growth of the non-agricultural employment proportion between the two periods across divisions, with the Konkan region, that attracted large investments and a large number of units under the sales tax incentive scheme, experiencing the highest growth.

Industry Sector Employment

The industrial employment expressed as percentage of population may be a rough measure, in relation to the proportion of non-agricultural employment, of the comparative role of industry in non-agricultural activities. In the developmental divisions of Maharashtra, industrial employment expressed as a percentage of population seems to reflect some very interesting facts. First, the percentages of Konkan and Pune divisions that contain metro or developed regions are considerably larger than most other divisions in both 1981 and 1991. Second, only in these two divisions percentage of industrial employment showed positive growth between 1981 and 1991 (with Konkan showing a more than 22 per cent growth). While in all other divisions it showed large declines with Amravati and Nagpur, the two remotest regions of the state, being the worst hit. Thus, the package scheme of incentives including the sales tax benefits did not act as a major determinant in generating adequate industrial activities in the backward divisions that could have raised the industrial employment levels sufficient enough to outweigh the effect of population growth. It seems to be the inherent strength of Pune and Konkan regions that helped them in raising their industrial employment faster. Obviously, the unequal performance of various divisions resulted in higher coefficients of variation, with the 1991 coefficient being larger indicating a worsening of disparity in that year.

Factory Sector Employment

The factory sector employment per lakh of population in comparison with the percentage of industrial employment in total reveals the relative role of non-factory sector vis-a-vis factory sector. In Konkan and Pune divisions, the ratio appeared higher as compared to other divisions. However, it declined in Konkan in 1990-91 over 1981-82, by as much as 18.7 per cent, while Aurangabad division experienced the largest growth of 26.7 per cent. Unfortunately, Amravati division suffered a further blow in having registered a big decline in factory sector employment (per lakh of population). This is perhaps a consequence of the low number of firms choosing it for factory location, as we have seen under the sales tax schemes, while its population continued to grow. The large declines are not a welcome development. Nonetheless, one important positive outcome of the profoundly dissimilar changes in factory sector employment across divisions between 1981-82 and 1990-91 is that the degree of inequality among divisions in the latter year became a little lower than in the earlier year of reference. This fact is proved by the 9 percent point decline in the coefficient of variation by 1990-91.

Now, serially interpreting the per cent changes in the five variables, a non-agricultural employment growth lower than urbanisation growth (assuming that urban areas have very little or no agricultural population) might be because of any of the following factors. (a) The larger urbanisation resulted partly from the re-specification of the urban area limits. (b) The growth of non-working population in urban areas was more than proportionate. and (c) in the rural areas, either non-agricultural activity did not pick up at a significant speed or there was a fall back to agricultural activities. Similarly, an industrial employment growth lower than the non-agricultural employment growth refers to a faster absorption of workers by non-industrial, non-agricultural sectors, mostly comprising of services. Finally, a slower growth of factory sector workers as compared to growth of industrial employment suggests that the unregistered sector that generally receives relatively limited attention of the Government contributed more than the factory sector.

Electricity Consumption

Another factor that can be used to judge the increasing industrial activities among regions is the per capita electricity consumption in industry. A higher per capita consumption may imply either that a larger number of production units are in operation in the region in relation to its population or that a larger volume of industrial production is realised on an average per person in that region. In our case, Konkan region has the highest per capita consumption of electricity in industry in both 1981-82 and 1991-92 and these higher figures are almost incomparably greater than in any other divisions. Surprisingly, it is not the Pune division that comes second in either year, but Nagpur, only whose per capita consumption in 1991-92 is somewhat comparable to that of Konkan. Again, maximum growth in per capita industrial consumption of electricity between the two periods has been achieved not in Konkan or Pune. But it is in Nashik, Aurangabad and Nagpur divisions respectively. This may be interpreted as a more rapid growth of industrial production in these divisions between 1981-82 and 1991-92 although this production increase has been of an energy intensive nature rather than being one giving a boost to employment growth, as seen in the previous sections. The above also signifies that per capita industrial production growth between the two periods could be higher in those regions than in Konkan or Pune though the absolute figures of the former might still remain far below that of Konkan or Pune. The better incremental performance of the three divisions in this respect seems to have stood instrumental also in the reduction of the coefficient of variation by an impressive 15 percentage points by 1991-92 so as to bring it down to 84.4 per cent. This stands as a partial correction of the relevant inequality.

7.5 Inter-district Evaluation of the Indicators

7.5.1 Urbanisation and Non-agricultural Employment

To make the analysis more area-specific, we may evaluate the performance of various industrial indicators district-wise. Table 7.5 provides a basis for this. As per this table, only in three districts other than Greater Bombay rate of urbanisation as well as the percentage of non-agricultural employment exceeds the respective state averages (see Table 7.3). These indeed include two partly metro districts of Thane and Pune, with the third being Nagpur. To our dismay, the partly developed district of Raigad that lies close to the Bombay region has one of the lowest rates of urbanisation. One possible explanation for this may be the large scale shifting of population from urban

areas of this district to the Bombay region. Alternatively, the district may be experiencing significant urbanisation only in those areas that are proximate to the Bombay region. Other regions may be continuing to be predominantly rural and may be dominating the total district population.

In terms of growth in the two variables between the two study periods, many backward districts along with some partly developed/developing districts stay above the state averages. In some districts, viz., Pune, Ratnagiri, Sangli and Kolhapur among the partly developed/developing districts and Yavatmal, Wardha and Dhule among the backward ones, the 1981-91 growth of non-agricultural employment was higher than growth of urbanisation. This may be taken as implying the following. (1) The employment in non-agricultural activities, most of which are concentrated in urban areas, improved in these districts faster than their increase in urban population. And/or, (2) non-agricultural activities had expanded during this period more than proportionately in the rural areas of these districts.

It is a point of concern that level of urbanisation moved backward during the study period in the districts of Satara and Solapur while the proportion of non-agricultural employment declined significantly in Parbhani, to a good extent in Nanded and marginally in Solapur, Bhandara and Beed. The fall in urbanisation rates in Satara and Solapur resulted not from the fall in the absolute number of urban population.

Table 7.5: Selected Industrial Indicators - District-wise

Sr. No.	Districts:Partly Developed/Developing	Proportion of Urban Population(%)			Population Employed in Non-Agril. Sector (%)		
		1981	1991	% Change	1981	1991	% Change
A	Fully Developed						
	Greater Bombay	100.00	100.00	-	34.6	34.6	-
B	Some Parts Fully Developed						
	Thane	44.33	64.74	46.0	22.3	25.8	15.7
	Raigad	14.13	17.85	26.3	12.7	14.7	15.7
	Pune	47.33	50.75	7.2	18.3	20.2	10.4
C	Some Areas Partly Developed						
	Nashik	31.02	35.53	14.5	12.7	13.4	5.5
	Ahmednagar	12.96	15.85	22.3	10.0	11.0	10.0
D	Adjoining Pune, But No Developed Areas						
	Satara	13.05	12.92	-1.0	9.6	10.4	8.3
	Solapur	29.39	28.82	-1.9	13.6	13.4	-1.5
E	Partly Developing, Partly Least/Undeveloped						
	Ratnagiri	8.70	8.97	3.1	8.7	9.8	12.6
	Sangli	21.52	22.84	6.1	10.2	11.6	13.7
	Kolhapur	24.82	26.40	6.4	11.9	14.3	20.2
	Aurangabad	24.98	32.78	31.2	10.4	12.2	17.3
	Amravati	29.23	33.00	12.9	9.3	10.5	12.9
	Nagpur	56.74	61.83	9.0	18.8	20.4	8.5

(Continued)

Table 7.5: (Continued)

Sr. No.	Districts:Least/Undeveloped	Proportion of Urban Population(%)			Population Employed in Non-Agril. Sector (%)		
		1981	1991	% Change	1981	1991	% Change
F	Mostly/Fully Least Developed						
	Sindhudurg	6.83	7.58	11.0	9.4	10.1	7.4
	Jalgaon	25.13	27.42	9.1	9.5	10.3	8.4
	Parbhani	19.91	22.51	13.1	9.3	8.2	-11.8
	Osmanabad	12.76	15.25	19.5	7.0	7.4	5.7
	Buldhana	18.49	20.63	11.6	7.6	7.8	2.6
	Akola	24.90	28.67	15.1	8.7	9.5	9.2
	Yavatmal	15.08	17.21	14.1	7.5	8.6	14.7
	Wardha	25.03	26.64	6.4	9.8	11.0	12.2
	Bhandara	13.11	13.17	0.5	12.6	12.4	-1.6
	Chandrapur	17.42	28.04	61.0	11.5	13.4	16.5
G	Partly Least and Partly Undeveloped						
	Dhule	19.51	20.52	5.2	8.3	9.0	8.4
	Beed	15.48	17.99	16.2	8.5	8.4	-1.2
	Nanded	18.75	21.71	15.8	9.3	8.7	-6.5
	Latur	17.54	20.44	16.5	8.1	8.3	2.5
H	Mostly/Fully Undeveloped						
	Jalna	15.30	16.95	10.8	7.5	7.7	2.7
	Gadchiroli	2.51	8.65	244.6	6.3	6.9	9.5

Table 7.5: (Continued)

Sr. No.	Districts:Partly Developed/Developing	Population Employed in Industry Sector (%)			Factory Workers per Lakh Population (Nos.)		
		1981	1991	% Change	1981-82	1990-91	% Change
A	Fully Developed						
	Greater Bombay	14.4	12.8	-11.1	7221	4516	-37.5
B	Some Parts Fully Developed						
	Thane	10.3	11.2	8.7	3797	2397	-36.9
	Raigad	3.6	5.1	41.7	944	1453	53.9
	Pune	6.6	6.6	-	3067	2759	-10.1
C	Some Areas Partly Developed						
	Nashik	5.2	4.9	-5.8	1392	1442	3.6
	Ahmednagar	3.8	3.8	-	724	765	5.7
D	Adjoining Pune, But No Developed Areas						
	Satara	1.7	3.1	82.4	520	710	36.5
	Solapur	5.7	4.9	-14.0	1119	921	-17.7
E	Partly Developing, Partly Least/Undeveloped						
	Ratnagiri	1.7	2.0	17.6	293	523	78.5
	Sangli	3.3	3.4	3.0	645	874	35.5
	Kolhapur	5.2	5.7	9.6	1165	1406	20.7
	Aurangabad	2.7	3.6	33.3	1014	1645	62.2
	Amravati	2.3	1.9	-17.4	511	392	-23.3
	Nagpur	5.8	5.2	-10.3	1514	1508	-0.4

(Continued)

Table 7.5 : (Continued)

Sr. No.	Districts: Least/Undeveloped	Population Employed in Industry Sector (%)			Factory Workers per Lakh Population (Nos.)		
		1981	1991	% Change	1981-82	1990-91	% Change
F	Mostly/Fully Least Developed						
	Sindhudurg	1.7 [§]	1.9	11.8	293 [§]	334	14
	Jalgaon	2.8	2.5	-10.7	912	751	-17.7
	Parbhani	2.2	1.8	-18.2	191	249	30.4
	Osmanabad	2	1.7	-15	40	271	577.5
	Buldhana	2	1.6	-20	422	287	-32
	Akola	2.2	1.9	-13.6	596	593	-0.5
	Yavatmal	2	1.8	-10	405	376	-7.2
	Wardha	3	2.6	-13.3	833	866	4
	Bhandara	6.6	5.7	-13.6	201	345	71.6
	Chandrapur	2.7	3.1	14.8	487	663	36.1
G	Partly Least and Partly Undeveloped						
	Dhule	2.4	2.2	-8.3	396	465	17.4
	Beed	2	1.8	-10	209	283	35.4
	Nanded	2.5	2.1	-16	424	307	-27.6
	Latur	2.0 [§]	1.7	-15	40 [§]	265	562.5
H	Mostly/Fully Undeveloped						
	Jalna	2.7 [§]	1.9	-29.6	1014 [§]	492	-51.5
	Gadchiroli	2.7 [§]	1.4	-48.1	487 [§]	66	-86.4

Note: § Figures before bifurcation from respectively Ratnagiri, Osmanabad, Aurangabad and Chandrapur

Table 7.5: (Continued)

Sr. No.	Districts: Partly Developed/Developing	Per Capita Electricity Consumption in Industry Sector (Kwh.)			Outstanding Bank Credit to Industry (Rs. Crores) ^a		
		1981-82	1991-92	% Change	1986-87	1988-89	% Change
A	Fully Developed						
	Greater Bombay	365.3	413.9	13.3	3254.3	7612.6	133.9
B	Some Parts Fully Developed						
	Thane	619.2	518.4	-16.3	525.9	712.2	35.4
	Raigad	297.7	552.8	85.7	54.4	138.4	154.4
	Pune	166.1	269.5	62.3	397.9	692.3	74.0
C	Some Areas Partly Developed						
	Nashik	60.6	110.9	83.0	56.4	113.1	100.5
	Ahmednagar	28.6	63.4	121.7	31.2	66.6	113.5
D	Adjoining Pune, But No Developed Areas						
	Satara	20.8	45.9	120.7	22.8	41.1	80.3
	Solapur	55.9	74.4	33.1	33.5	66.9	99.7
E	Partly Developing, Partly Least/Un Developed						
	Ratnagiri	12.2	75.8	521.3	14.2	22.8	60.6
	Sangli	46.6	64.6	38.6	26.8	44.1	64.4
	Kolhapur	126.5	246.0	94.5	42.2	82.3	95.0
	Aurangabad	67.2	176.1	162.1	45.9	71.0	54.7
	Amravati	21.7	25.4	17.1	10.8	14.3	32.4
	Nagpur	128.6	187.0	45.4	115.7	248.2	114.5

(Continued)

Table 7.5: (Concluded)

Sr. No.	Districts:Least/Undeveloped	Per Capita Electricity Consumption in Industry Sector (Kwh.)			Outstanding Bank Credit to Industry (Rs. Crores)*		
		1981-82	1991-92	% Change	1986-87	1988-89	% Change
F Mostly/Fully Least Developed							
	Sindhudurg	15.1	75.8 [@]	402.0	6.4	13.8	115.6
	Jalgaon	21.1	70.3	133.2	30.5	53.1	74.1
	Parbhani	8.8	14.1	60.2	3.8	5.9	55.3
	Osmanabad	15.0	19.2	28.0	3.8	6.3	65.8
	Buldhana	16.0	29.2	82.5	3.8	7.3	92.1
	Akola	29.0	31.5	8.6	13.5	19.1	41.5
	Yavatmal	15.6	26.1	67.3	7.3	9.1	24.7
	Wardha	42.5	96.3	126.6	6.4	14.5	126.6
	Bhandara	103.3	207.3	100.7	8.2	34.5	320.7
	Chandrapur	184.3	569.7	209.1	14.5	32.4	123.4
G Partly Least and Partly Undeveloped							
	Dhule	17.9	19.1	6.7	11.1	15.7	41.4
	Beed	7.0	12.5	78.6	3.3	4.1	24.2
	Nanded	17.8	28.8	61.8	9.5	9.6	1.1
	Latur	15.0*	18.8	25.3	2.2	5.0	127.3
H Mostly/Fully Undeveloped							
	Jalna	13.4	31.5	135.1	3.9	11.3	189.7
	Gadchiroli	N.A.	N.A.	N.A.	0.4	1.1	175.0

Notes: @ Combined figure for Ratnagiri and Sindh.

* Combined figure with Osmanabad

N.A Not available separately (combined with Chandrapur)

Outstanding industrial credit of Scheduled commercial banks

Source: As in Table 7.3

This may be obvious from Table 7.6. Rather, the fall was due to the event of annual compound growth of urban population lagging behind the annual compound growth of total population during the decade (Table 7.7). Since the difference between the two annual compound growth rates appeared larger for Solapur, the decrease in the rate of urbanisation was also sharper in that district. As we know, urbanisation is one very useful measure of development; as such, the above observation shows a weakness of the developmental process of these districts. Reading between lines, it may also reflect an adverse impact of the closeness of the Pune metro region on these districts whereby the focus of activities and, thereby, of urbanisation might have shifted to the former. We have already seen under the sales tax incentives that only a small percentage of the units and ceilings have gone into the two districts as compared to a large share of Pune.

Table 7.6: Change in Urban Population (Nos.) and Non-Workers' Ratio: Districts with Declining Urban Population Ratio and Non-Agricultural Employment Ratio

Sr. No.	Districts	Urban Population (Lakh Nos.)			Ratio of Non-workers to Population(%)		
		1981	1991	% Change	1981	1991	% Change
1	Satara	2.66	3.16	18.8	-	-	-
2	Solapur	7.67	9.29	21.1	58.4	57.1	-2.2
3	Parbhani	-	-	-	56.4	54.4	-3.5
4	Beed	-	-	-	54	53.1	-1.7
5	Nanded	-	-	-	50.7	55.4	9.3
6	Bhandara	-	-	-	49.5	50.0	1.0

Source: Computed from Census Reports (Maharashtra), 1981 and 1991

Table 7.7: Population and Urbanisation Growth Differences: Districts with Declining Rate of Urbanisation

Sr.No.	Districts	Annual Compound Growth Rate: 1981-1991(%)		
		Population	Urbanisation	Difference
1	Satara	1.83	1.74	0.09
2	Solapur	2.14	1.94	0.20

Source: As in Table 7.6

As regards the shrinkage in non-agricultural employment proportion, the responsibility does not seem to lie on the growth of non-workers in population at least in the districts of Solapur, Parbhani and Beed. In these three districts, the proportion of non-workers has, in fact, declined during 1981-1991 (Table 7.6). Thus, the possible reason for the falling non-agricultural employment ratio may partly be the low pace of generation of employment in non-agricultural sectors (as compared to the population growth). And, partly it may be due to an increased dependence on agricultural sector for employment. These imply an agricultural orientation of the local economy. At the same time, in Nanded and Bhandara, the non-workers' proportion had been greater in 1991 which, along with the slow growth of non-agricultural activities, might have led to decline of non-agricultural employment proportion in these two districts.

The non-uniform performance across districts revealed in Table 7.5 is certain to generate a sizeable coefficient of variation in respect of the two variables. Accordingly, the coefficients are around 50 per cent in the case of urbanisation and between 30 and 40 per cent in respect of non-agricultural employment. The variation of both the parameters in both the years among the partly developed/developing districts was smaller than when all districts are taken together. The variation within the former was higher for both urbanisation and non-agricultural employment (though only marginally for the latter) in 1991. But, on considering all districts, urbanisation rates varied more in 1981 than in 1991 whereas non-agricultural employment rates exhibited larger inequalities in 1991. The implication of this finding is that while inequalities existed in respect of both the indicators and more in respect of urbanisation, urbanisation rates were slightly less unequal between the backward and other districts in 1991. At the same time, non-agricultural employment grew between the two groups of districts relatively more non-uniformly in 1991, thus, suggesting a deterioration in the inter-district disparities by that year (Table 7.8).

7.5.2 Variations in Industrial Employment

The proportion of population employed in industry appears very small in most of the districts. It was more than 5 per cent only in a few districts like Thane, Pune and Nashik among the partly developed ones; Solapur, Kolhapur and Nagpur among the partly developing districts; and, to our astonishment, Bhandara among the backward districts, in 1981. In 1991, Raigad appeared in place of Nashik; Solapur went below the 5 per cent mark; and no other district so improved its position as to cross the 5 per cent level. Further, the ratio grew between 1981 and 1991 very rapidly in the partly developed district of Raigad and the partly developing districts of Satara and Aurangabad and, to some extent, in Ratnagiri and Chandrapur. Some noticeable growth occurred also in a few other districts like Thane, Sangli, Kolhapur and Sindhudurg. In Pune and Ahmednagar the ratio remained the same in both the years which suggests that the over 10 per cent growth registered in the non-agricultural employment

proportion in these districts emanated essentially from the growth of employment in the tertiary sector and almost bypassed the industry sector.

Table 7.8: Industrial Indicators District-wise: Coefficient of Variation from State Averages (%)

Variables	Partly Developed/ Developing Districts		All Districts	
	1981*	1991*	1981*	1991*
Proportion of Urban Population	47.2	49.7	51.8	51.0
Percentage of Population Employed in Non-Agricultural Sector	31.5	31.8	37.8	38.6
Percentage of Population Employed in Industry Sector	47.9	47.0	52.6	54.9
Number of Factory Workers (Per Lakh Population)	63.8	49.3	72.5	64.2
Per capita Electricity Consumption in Industry	124.1	94.5	102.7	93.8
Outstanding Bank Credit to Industry	107.9	86.5	100.8	91.8

Note: * 1981-82 and 1990-91 for factory workers per lakh population; 1981-82 and 1991-92 for Per Capita electricity consumption; and 1986-87 and 1988-89 for outstanding bank credit to industry

Source: Computed from Table 7.5

To our concern, in all the remaining 18 districts, of which 14 are the most backward and three of them partly developing, industrial employment ratio fell significantly between 1981 and 1991. This might have happened because industrial activities expanded at a poor rate in these districts during the decade resulting in an equally poor rate of employment generation. It may be true in particular with regard to the backward districts despite large growth of non-agricultural employment proportion during this period in most of these districts. Most of the employment generated in them might have been a contribution of informal or unregistered sector and the small-scale units. Because, we have seen under the sales tax incentive evaluation a lack of interest among the large and medium enterprises in these districts, most of which attracted very few such units under the sales tax scheme.

As a matter of fact, the Greater Bombay district had also registered a one-ninth of part decline in industrial employment ratio, but this can be attributed to de-congestion measures implemented there.

In Raigad, Satara and Aurangabad districts, the large percentage change in industrial employment occurred because most of the additional employment generation in non-agricultural activities was a contribution of the industrial sector. For instance, out of the 2 percentage point increase in non-agricultural employment in Raigad between 1981 and 1991, one and a half percentage point was captured by industry. Similarly, in Aurangabad, in the 1.8 percentage point growth in non-agricultural employment ratio during 1981-91, 0.9 percentage point or half was due to industrial sector. In the same way, in Satara, non-agricultural employment ratio grew by only 0.8 percentage points while industrial employment ratio moved up by 1.4 percentage points which means that, during the study period, the tertiary sector employment proportion declined by 0.6 percentage points. Such performance of the industrial sector is justified at least in Raigad and Aurangabad. Because, a sizeable proportion of sales tax incentives flowed into these districts since 1979 indicating the presence of many large and medium units.

Along with them, many small scale and unregistered units might have come up. To recapitulate, Aurangabad is also one of the three districts benefiting from the central backward area incentives.

The inter-district disparities measured by the coefficient of variation in respect of the proportion of industrial employment assumed a value higher in 1991, as compared to 1981, by 2.3 percentage points for all districts and a value lower by 0.9 percentage points for the partly developed/ developing districts. This vindicates our unstated suspicion that the fast fall in the relevant proportion among backward districts between the two periods might have turned the problem worse for them. In other words, the disparities among backward districts worsened even as the condition of the partly developed/ developing districts marginally improved.

7.5.3 Variation in Factory Sector Employment

The number of factory workers per lakh of population shows a decline during 1981-82 - 1990-91 in several districts. To mention them, two partly metro districts of Thane and Pune, partly developing districts of Solapur, Amravati and Nagpur and some of the least/un developed districts including Jalgaon, Buldhana, Akola, Yavatmal and Nanded. The negative growth of proportion of factory sector employment in Thane and Pune is associated with a respectively positive and zero growth of industrial employment ratio. This can be construed as an evidence of a disproportionately slow growth of factory sector employment coupled with a disproportionately large growth of non-factory sector industrial employment. Thus, even in these advanced districts, the tiny and unregistered sectors played a vital role. Interpreted in the same way, the rate of decline in factory workers' proportion exceeded that of the rate of decline in industrial employment ratio in Solapur and Amravati districts. This is possibly because the pace of growth of factory sector employment in these districts trailed much behind the same in non-factory sector. In Nagpur, however, the opposite process seemed to have occurred. Thereby a faster growth (but slightly less than proportionate to population growth) of factory sector employment was accompanied by a very slow growth (i.e., much slower than the population growth) in the non-factory, informal sector employment. This forced industry sector employment proportion as a whole to decline more steeply. (This also points to a significantly lower peripheral or inducement effects of the larger units set up under the sales tax incentives or the absence of such effects on the related industrial activities in the informal sector). Thus, in Nagpur, with its larger urban base, the package scheme of incentives seems to have worked more favourably for the factory sector.

In many districts such as Raigad, Ahmednagar, Ratnagiri, Sangli, Aurangabad, Kolhapur, Sindhudurg and Chandrapur where both factory sector employment and industry sector employment as a whole grew positively between the two study periods, the relevant growth rates of the former appeared larger. This also is a pointer to the quicker growth of employment in factory sector than in non-factory or unregistered sector. Whether or not this is solely due to sales tax and other central and state incentives, it is certain that, given their industrial potentials and resources, the government industrial policies have helped these districts. Among other districts, in Nashik and in some of the backward districts such as Parbhani, Osmanabad, Bhandara, Beed and Latur, where proportion of total industrial sector employment declined during the decade, factory sector employment per lakh population showed large positive growth. It is pertinent that most of such backward districts are from Aurangabad

division. At the same time, above behaviour itself is quite interesting as it tells us a tale of factory sector employment growing at a high rate in comparison with population growth while the non-factory sector employment moving very much in disparity with population growth. The above success of the factory sector is likely to have part of its roots in the package scheme of incentives. However, the sales tax exemption and deferral data on the large and medium units analysed in the previous chapter does not show any significant benefits as going into most of these districts. So, it may be the small-scale sector that might have been instrumental in employment generation under factory sector. The small-scale sector has also been supported by the package scheme and sales tax incentives. Some of such units might lie within the factory sector as classified in the Annual Survey of Industries. But these have been excluded from the sales tax incentive analysis of this study due, as mentioned earlier, to data problems. Therefore, it is not possible here to prove directly the role of small-scale units in such behaviour of factory sector employment.

Let us now see how pronounced the degree of inter-district disparity in factory sector employment is - individually and in comparison with that of the other parameters of our analysis. Table 7.8 discloses that coefficients of variation of factory sector employment per lakh population in 1981-82 across the partly developed/developing districts and across all districts are respectively 63.8 and 72.5 per cent. The values declined by 1990-91, but remained as high as 49.3 and 64.2 per cent respectively. In absolute terms, these values really indicate a good amount of inter-district inequalities. But the declines in factory sector employment ratios between the two periods in some districts having previously higher ratios and the sharp rise in some others earlier having lower ratios culminated in lower inter-district disparities both among the partly developed/developing and among all districts taken together. However, the lack of balance between the partly developed/developing districts and the backward districts seems to have become relatively more apparent. The coefficient of variation declined for all districts by only 8.3 percentage points while the fall was to the tune of 14.5 percentage points for the partly developed/developing districts alone. In other words, disparities in factory employment decreased at a faster rate, though it was partly through a negative movement in factory employment across several districts. Further, by a similar logic, disparities in respect of factory sector employment appear higher than the inequalities with respect to the industry sector employment in both the years. Apparently, factory sector was unable to lend adequate support to the least/un-developed districts in catching up with its industrially well doing counterparts. The factory sector employment may be inferred to be confined largely to specific areas having good infra-structural facilities, advanced markets or emerging growth centres, thus, implying the attractiveness of such regions as better industrial location for larger units.

7.5.4 Variations In Industrial Consumption of Electricity

Industrial consumption of electricity in a district can be considered a proxy for the level of industrial production realised in that district. On per capita terms, it may be a good index of per capita industrial output; as such, its growth over a period or its deviation across districts may be used to gauge the inter-temporal or inter-district variations in industrial production and, therefore, in industrial activities.

In Maharashtra, the annual per capita industrial consumption of electricity across districts in 1981-82 ranged from the highest 619.2 kwh in Thane district to the

lowest 7.0 kwh in Beed. The range, however, narrowed down by 1991-92 to between 569.7 kwh in Chandrapur and 12.5 kwh again in Beed. This is, of course, an encouraging sign. Table 7.5 also says, Thane happened to be the only district experiencing a negative growth, by a one-sixth part, in per capita electricity consumption in industry between the two periods. This, as our hunch tells us, is likely to have brought down the share of Thane in the industrial output of Maharashtra. We have already seen, the ratio of factory sector employment had also come down in Thane by more than a third in the same period. At the same time, among other districts the relevant growth rate was in single digit only in two districts of Akola and Dhule. In these districts factory employment was growing much faster than non-factory sector employment, while in all others the growth rate ran in double digits (15 districts) or triple digits (ten districts). The highest growth in per capita consumption of electricity in industry was seen in Ratnagiri, where factory sector employment ratio had also grown by about 78 per cent during the decade. Six of the triple digit growth districts were among the most backward ones, with Chandrapur and Sindhudurg, in both of which ratio of industrial employment in general and factory sector employment in particular registered increments, experiencing a spectacular growth of 209.1 and 402.0 per cent respectively. Incidentally, Ratnagiri and Chandrapur have also qualified along with Aurangabad for the central assistance available to the backward districts.

Among the districts registering per capita electricity consumption growth in double digits, the growth during the decade exceeded 50 per cent in 5 of the least/un-developed districts but only in 4 of the partly developed/developing districts. However, in absolute terms, only in one most backward district (Chandrapur) in 1981-82 and in two of such districts (Bhandara and Chandrapur) in 1991-92 the per capita industrial consumption of electricity crossed the state average. Against this, three and six districts respectively from partly developed/developing districts in the two years had their per capita consumption above state average. These together may be taken to mean that the level of industrial activity or industrial production was high in some of the partly developed/developing districts in 1981-82 and in many of them in 1991-92. But, the same remained relatively very low in most of the extremely backward districts in both years. However, between the two periods, the activities and, therefore, production expanded more rapidly in many of the most backward districts than in partly developed/developing districts.

Our earlier analysis showed the role of non-factory sector as active in some of these districts whereby either of two results emerged. One, the positive growth of proportion of industrial employment in these districts during the period exceeded significantly the growth in the ratio of factory sector employment. Two, the negative growth in the former appeared weaker than that in the latter. As such, the growth in industrial consumption of electricity in these districts may be attributed, to a good measure, to the expansion of non-factory sector activities. At the same time, the role of factory sector cannot be ignored in districts like Thane and Pune in spite of its failure to generate employment commensurate with population expansion, and in districts like Raigad and Aurangabad. Because, all these districts have been the destination of many large and medium enterprises set up or expanded under sales tax incentive schemes and under its accompanying packages.

The low level of per capita industrial electricity consumption in many of the backward districts in both the years is not very surprising. The reason is that there is, as

we have already seen, poor preference of entrepreneurs under the sales tax schemes for these districts as their industrial locations on account of their inherent weaknesses. Therefore, these districts can hardly be expected to become centres of brisk industrial activities, big consumers of electricity and major sources of industrial production of the state. Nonetheless, the above fact in conjunction with the fact of seven most backward districts showing a more than proportionate growth in factory sector employment and very little growth in non-factory sector employment may be conceived as an evidence of the vitality of the registered small-scale units (coming in factory sector). The small-scale units referred to here might have been set up in large numbers under sales tax incentives in these districts but could not be covered in this study due to paucity of data.

The coefficient of variation given in Table 7.8 brings to light the extent of inter-district disparities in industrial electricity consumption across districts. As obvious, the inter-district disparities in 1981-82 was too substantial across all districts and somewhat higher among the partly developed/ developing districts. The difference between the two was on account of lower inequalities among the most backward districts, i.e., due to the relatively more equally lower consumption of electricity by industry in those districts. Although the variation declined by 1991-92 by about 30 percentage points among partly developed/ developing districts, the reduction was rather small (by about 9 percentage points) for all districts taken together, thus, making the coefficients almost equal. This happened because disparities among the most backward 16 districts on per capita industrial electricity consumption, in fact, worsened, as compared to 1981-82, to a considerable extent. This is due to the profoundly unequal rates of change in electricity consumption among these districts or, in other words, due to the unequal pattern in the spread of industrial production facilities in them.

7.5.5 Commercial Bank Credit to Industry

The data on the outstanding bank credit of scheduled commercial banks to industry are available for a short period, i.e., for the years 1986-87 and 1988-89. The values are in current prices. Since bank credits tend to increase with a rise in the number and scale of industrial operations, it is another rough measure of the level of industrial activities newly coming up in a district. A district receiving a higher amount of credit during successive time periods can be guessed to be a point of attraction for industrialists especially larger ones. On the other hand, in case of a district's inability to provide a good location to entrepreneurs, it may be receiving very limited industrial loans from banks, as there may be a very few firms to receive finance.

In 1986-87, three districts of Maharashtra received industrial loans from scheduled commercial banks of an amount exceeding Rs.100 crores. These were Thane (Rs.525.9 crores), Pune (Rs.397.9 crores) and Nagpur (Rs.115.7 crores). While the big sum is not surprising for Thane and Pune, given their clout as advanced districts, the case of Nagpur, though far behind Pune and Thane, should be viewed against its position as one of the few emerging growth centres outside the Konkan-Pune region. Among the remaining districts, all partly developed/developing districts received loans in double digit figures, with Raigad and Nashik fetching more than Rs.50 crores, although the amounts appeared the lowest for Ratnagiri and Amravati. However, of the 16 least/un developed districts, only four districts, viz., Jalgaon, Akola, Chandrapur and Dhule, received in 1986-87 industrial credit in double-digit figures. In 1988-89, while Thane, Pune and Nagpur continued to lead the tally, two more districts, Raigad and Nashik, were sanctioned loans worth over Rs.100 crores. Interestingly, four of the

partly developing districts were given an amount of industrial credit by scheduled commercial banks which was less in both periods than that sanctioned for the backward district of Sindhudurg.

The amount received was more than doubled during the three year period in four of the partly developed/developing districts (Raigad, Nashik, Ahmednagar and Nagpur) and in as many as seven of the most backward districts. Of these backward districts, Chandrapur, a natural resource rich and a central-cum-state assisted district, the advancements more than quadrupled. Still, in most of the least/un -developed districts, the figures hardly crossed single digit level implying a continued lack of interest of entrepreneurs and/or banks in these districts. The industrial credit data of districts like Thane, Pune, Raigad, Nashik and Nagpur are almost tallying with the large proportion of sales tax incentives these districts received. In case of backward districts, the credit performance adds credibility to the argument of an absolutely low (though gradually expanding) level of industrial activities. The above argument has been put forth when we evaluated other parameters of this analysis including disbursement of sales tax incentives.

One more point in this respect relates to the inter-district variation in credit disbursement as captured by coefficient of variation. The coefficients show the variation as indeed large in both years but declining toward 1988-89. Significantly, the variation was relatively less among the 16 most backward states in 1986-87 suggesting the relatively uniformly smaller credit receipts of those districts, and it remained more or less stable in 1988-89. This probably forced the 29-district variation in 1988-89 to go higher than the variation among only the partly developed/developing districts in spite of a substantial decline in the latter.

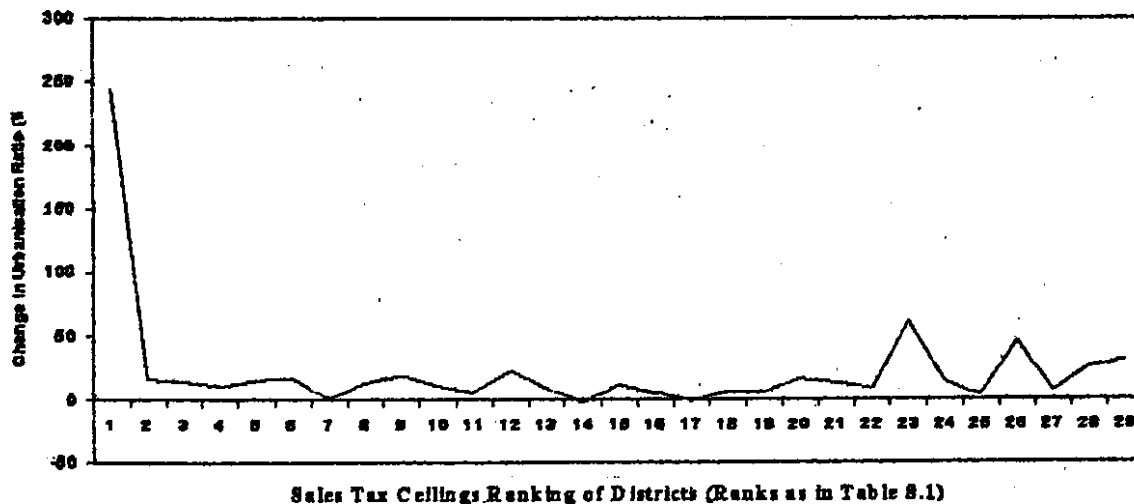
CHAPTER 8

SALES TAX INCENTIVES AND DISPERSAL: ASSOCIATION

8.1 Statistical Analysis

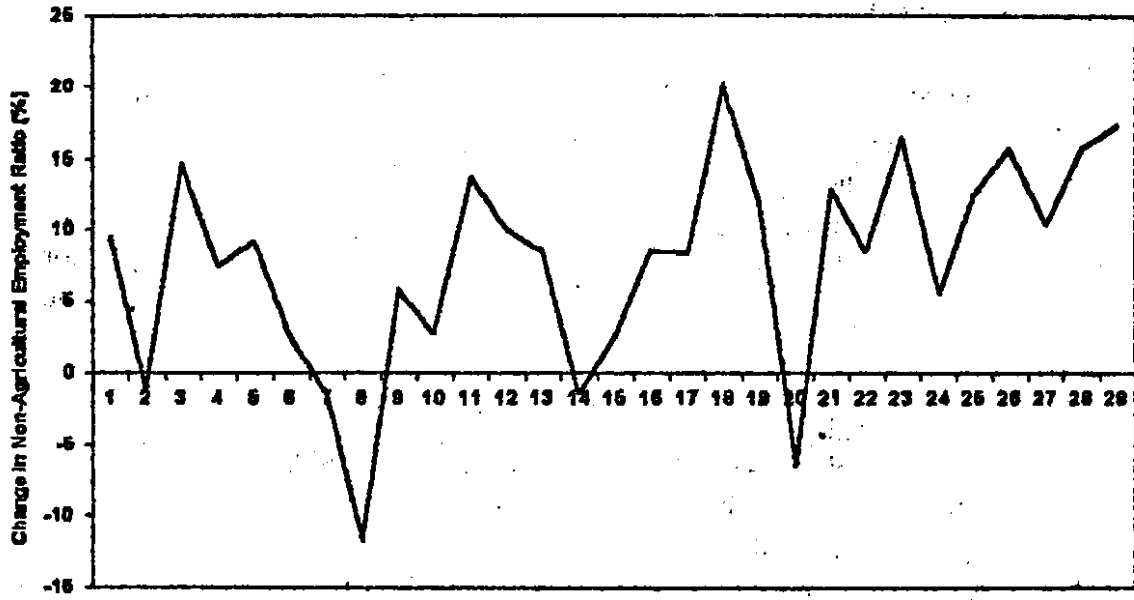
We have examined in the previous chapter, in some detail, the spread of industrial activities across districts of Maharashtra, in terms of a few selected indicators. It has been seen that some districts having both several natural and developed advantages produced a better industrial profile as compared to others that suffer from one disadvantage or the other. As explained above, both the factory-sector and the non-factory sector played, alternatively or together, a role in different districts in their dissimilar industrial performance. While some of the non-factory sector activities might have come up independently, the linkage or inducement effect of the large and medium sector in this respect could be significant. As may be evident from Chapter 6, the development of the large and medium sectors in Maharashtra during the 1980s had, on the other hand, been intertwined with the progress of the sales tax incentives along with the other provisions of the package scheme. As a matter of fact, the figures 8.1 through 8.5 produced below broadly suggest some positive association particularly of the

Figure 8.1
Sales Tax Ceilings & Changes in Indicators:
Association (Ratio of Urbanisation)



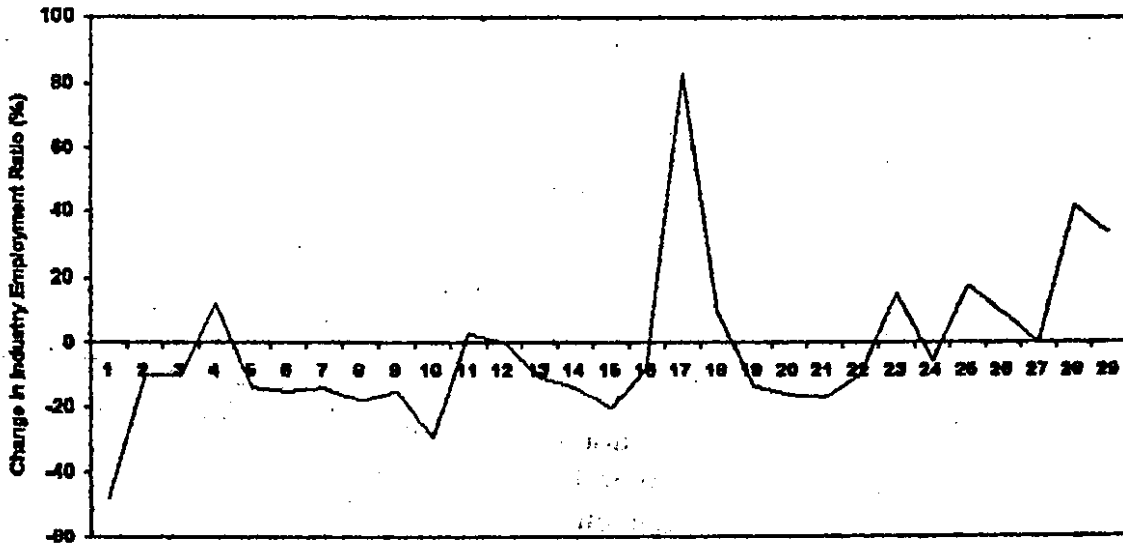
decadal growth of non-agricultural and industrial employment proportions with the sales tax incentive ceilings granted across districts under the 1979, 1983 and 1988 schemes. It is, therefore, only natural to verify if the varying degrees of correlation between sales tax incentives and decadal changes in our different parameters of inter-district industrial profile, as echoed in Figure 8.1 to Figure 8.5, are as apparent as to be illustrated with the help of some statistical techniques. We have done this evaluation below by considering the sales tax incentives granted during 1981-1992 so as to make it roughly correspond to the period for which data have been available on the six selected industrial parameters. The evaluation shall be based, as explained in an earlier chapter, on the results of the frequency and rank correlation (based on Table 8.1) analyses.

Figure 8.2
Sales Tax Ceilings & Changes in Indicators:
Association (Non-Agricultural Employment)



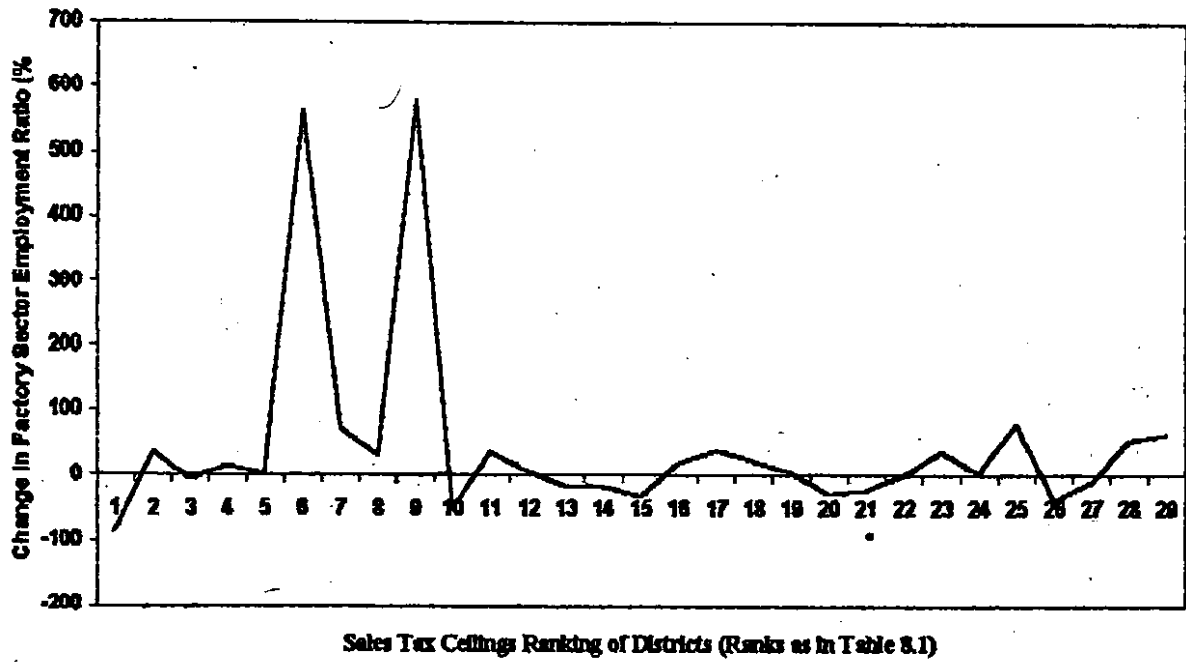
Sales Tax Ceilings Ranking of Districts (Ranks as in Table 8.1)

Figure 8.3
Sales Tax Ceilings & Changes in Indicators:
Association (Industry Employment)



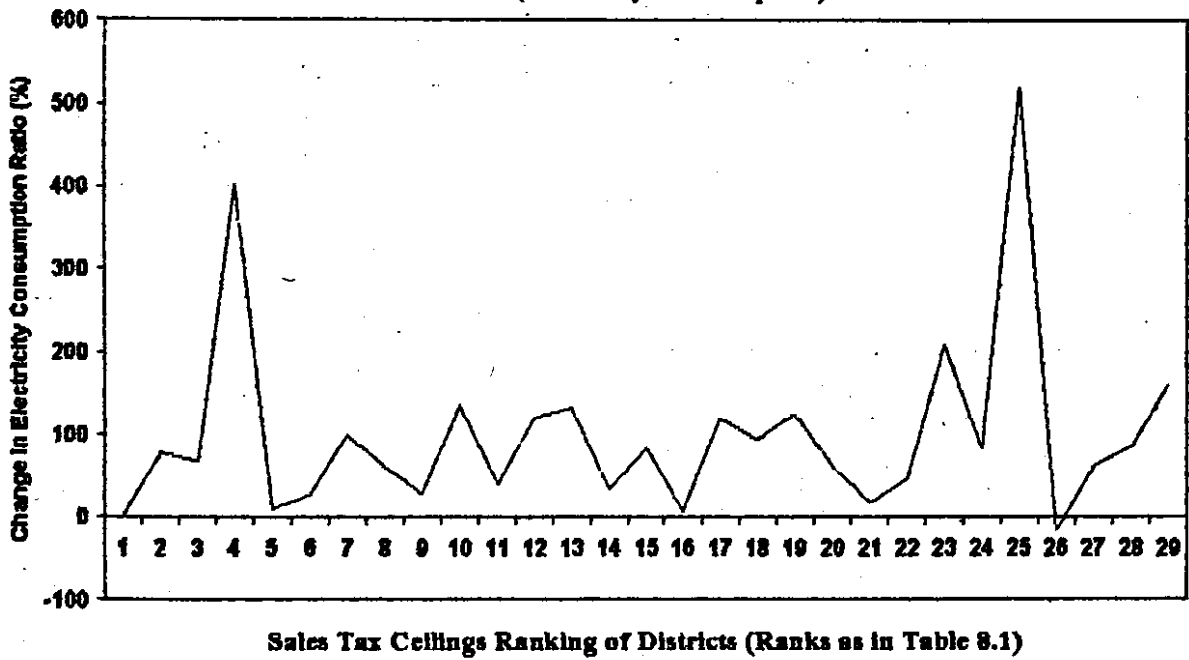
Sales Tax Ceilings Ranking of Districts (Ranks as in Table 8.1)

Figure 8.4
Sales Tax Ceilings & Changes in Indicators:
Association (Factory Sector Employment)



Sales Tax Ceilings Ranking of Districts (Ranks as in Table 8.1)

Figure 8.5
Sales Tax Ceilings & Changes in Indicators:
Association (Electricity Consumption)



Sales Tax Ceilings Ranking of Districts (Ranks as in Table 8.1)

Table 8.1: Ranking of Districts - Sales Tax Ceilings (1979 to 31.3.1992) and Selected Indicators (Decadal Growth Rates)[@]

District	Sales Tax Ceilings		Ranking [§]				
	Amount (Rs.Crore)	Rank	PUP	PNAEP	PIEP	FSELP	PICE*
Gadchiroli	0.00	1	28	16	1	1	-
Beed	0.00	1	20	5	13	19	14
Yavatmal	6.69	2	16	23	13	9	13
Sindhudurg	8.69	3	12	11	20	15	27
Akola	12.79	4	18	15	9	10	3
Latur	13.62	5	21	6	7	27	5
Bhandara	15.52	6	3	3	9	25	19
Parbhani	16.35	7	15	1	4	18	10
Osmanabad	18.95	8	22	10	7	28	6
Jalna	19.82	9	11	8	2	2	24
Sangli	30.04	10	6	22	17	20	8
Ahmednagar	30.78	11	23	17	16	14	21
Jalgaon	31.59	12	10	13	11	7	23
Solapur	36.49	13	1	4	8	7	7
Buldhana	38.53	14	13	7	3	4	15
Dhule	39.61	15	5	13	14	16	2
Satara	43.70	16	2	12	25	22	20
Kolhapur	44.24	17	7	27	19	17	18
Wardha	55.03	18	7	19	10	13	22
Nanded	64.69	19	19	2	6	5	11
Amravati	69.79	20	14	21	5	6	4
Nagpur	87.95	21	9	14	12	11	9
Chandrapur	110.42	22	27	25	21	21	26
Nashik	161.13	23	17	9	15	12	16
Thane	315.65	24	26	24	18	3	1
Ratnagari	341.80	25	4	20	22	26	28
Pune	343.65	26	8	18	16	8	12
Raigad	1120.72	27	24	24	24	23	17
Aurangabad	1142.24	28	25	26	23	24	25

Notes: @ Rankings in ascending order of Sales Tax Ceilings totally granted across districts during 1979-31.3.1992

§ See Table 8.2 for explanation of the notations

* Figures for Gadchiroli are available only combined with Chandrapur

Source: Own calculations

8.2 Frequency Analysis Results

Table 8.2 presents the frequency analysis results. The table reveals that the number of districts showing a correlation between the sales tax incentives and the percentage decadal change in the rate of urbanisation is thirteen. That is, in thirteen districts, both the decadal percentage change in the rate of urbanisation and the actual drawal of sales tax incentives are simultaneously either above the respective state averages or below it. But 13 districts form only 44.8 per cent of the 29 districts. The corresponding proportion is below the 50 per cent mark. So, the correlation between

the two does not appear to be very strong.

Table 8.2: Association Between Sales Tax Incentives and Selected Industrial Indicators[@]: Frequency Analysis

Observed Values Versus Mean	Number of Districts		Sum of Main Diagonal Elements [§]
	STB > STB*	STB < STB*	
PUP > PUP*	4	14	13
PUP < PUP*	2	9	(44.8)
PNAEP > PNAEP*	5	14	14
PNAEP < PNAEP*	1	9	(48.3)
PIEP > PIEP*	5	6	22
PIEP < PIEP*	1	17	(75.9)
FSELP > FSELP*	5	18	10
FSELP < FSELP*	1	5	(34.5)
PICE > PICE*	6	22	6
PICE < PICE*	0	0	(21.4)**

Note : @ Decadal Growth rates of Indicators.

§ Figures in parantheses are percentages

PUP = decadal change in percentage of urban population

PNAEP = decadal change in proportion of non-Agricultural employment to population

PIEP = decadal change in proportion of industrial employment to population

FSELP = decadal change in factory sector employment per lakh of population

PICE = decadal change in percapita industrial consumption of electricity

STB = Sales tax exemption and deferral ceilings granted during 1979 - 31.3.1992

* Denotes state average

** Out of 28 districts, with Gadchiroli and Chandrapur combined

Source: Computed from Table 7.4, 7.5 and column (2) of 8.1

In the case of the proportion of non-agricultural employment, the decadal change is positively associated with the amount of sales tax exemption and deferral incentives in 14 districts that form a 48.3 per cent of the 29 districts. This also does not exceed 50 per cent although it is very close to that. Hence, at this stage it is difficult to suggest any significantly positive relationship as existing between the sales tax incentives and the growth of non-agricultural employment proportion.

The level of association is very strong between the growth in the proportion of industry sector employment and the quantum of sales tax ceilings granted since the number of districts supporting this proposition are as many as 22 or 75.9 per cent. It can be interpreted like this: more sales tax benefits imply more industrial activities in terms of either number of units or size of plants. The first level industrial activities induce the other small and tiny entrepreneurs to come forward and reap the fringe or peripheral benefits by undertaking related operations. These operations may either depend partly or fully on the first level enterprises as ancillaries or may be forward or backward linked units. Such units may even eye at the incomes generated in the first round of industrial activities. Comparing this result with the one on the non-agricultural employment, we may infer that the inducement given by the sales tax incentive-supported activities to non-industrial business and commercial activities is weaker than

the inducements it accorded to the expansion of related formal or informal sector industrial activities.

Interestingly, the growth of factory sector employment during 1981-1991 has exhibited a poorer association with the sales tax benefits accrual. That is, only for 10 districts, forming 34.5 per cent, the positive correlation got materialised. This percentage is lower than in the case of the growth of the proportion of not only industrial employment, but, even non-agricultural employment. The low association in this case can be viewed as an evidence of the highly capital intensive nature and, hence, of the poor employment generation of many of the large and medium enterprises set up under the sales tax schemes in several districts. The higher capital intensity, on the other hand, could be ascribed partly to the linking of sales tax ceilings to the fixed capital investment whereby the entrepreneurs are tempted to choose a higher capital component which provides for a higher incentive ceiling. Its other ramification is that the strong positive association of industrial employment growth with the sales tax incentives owes its origin largely to the non-factory sector activities set up subsequently to or simultaneously with the establishment of the sales tax related enterprises. It means further that the sales tax benefits also influenced the tertiary sector employment more favourably than it influenced the factory sector employment. It may be noted here that the association in respect of the factory sector employment would, as we feel, not have probably improved even on the inclusion of the sales tax benefits drawn by the small scale units (which stand, at present, excluded) into the sales tax variable. Because, as we have seen in Chapter 6, the drawals by these units formed only a small fraction of the aggregate benefits granted.

The growth in the per capita industrial consumption of electricity shows a similarly low positive association with the level of sales tax benefits. One possible explanation of this is that the units set up during 1981-1992 period are not all energy intensive; some of them might be so; others may be less energy-consuming. Or, it could be interpreted as the consequence of the larger growth of the non-factory sector that uses very low or no power but is most likely highly labour-intensive. This conclusion very well augurs with the point that the industry sector employment proportion grew close in tandem with the sales tax benefits while factory sector employment growth was rather weakly linked to the sales tax factor.

8.2.1 Pearson's Chi-square Test

In order to test, statistically, the association of the decadal changes in the selected district-wise indicators with the sales tax benefits granted across districts, we have used the Pearson's chi-square test statistic designed for the four-fold frequencies. The null hypothesis, H_0 , here, states the 'no association' between the two. The alternative hypothesis aims at rejecting H_0 and accepting a strong association between them at an assumed level of significance, which, here, is 5 per cent. The results are furnished in Table 8.3.

It is obvious that the association is statistically significant at 5 per cent level only between the decadal change of industrial employment and the sales tax incentives granted. All other hypothesised associations are rejected even at very high levels of probabilities. This confirms our two earlier propositions. First, the factory sector employment did not gain any reasonable growth due to the sales tax incentives (excluding those given to the small-scale units) perhaps on account of the capital-intensive nature of many of the sales tax scheme related investments. Second, the

industrial employment might have grown positively with the sales tax benefits because of the non-factory sector. This sector might have gained weight due to the direct and inducement effects of the sales tax assisted large and medium enterprises and due to its independent progress. The statistically insignificant association of the electricity consumption parameter with the sales tax variable can also be similarly attributed to the randomly energy-intensive nature of the large and medium units set up across districts under the scheme. That is, some districts showed greater growth in energy consumption not because many units were set up to consume energy proportionate to the sales tax benefits drawn. It was rather because some of the units that were set up consumed much more energy than the other units, thus, inflating the district-level energy growth figures in some cases without much justification from the angle of sales tax incentives received. Incidentally, the growth in the non-agricultural employment is observed to be statistically associated with the sales tax scheme at a better, though not reasonably acceptable, level of significance. This may imply that the impact of sales tax incentives or of the industrial enterprises receiving it has been less weak on the non-industrial business, commercial and service activities than on the directly targeted factory sector itself.

Table 8.3: Association of Sales Tax Benefits and Selected Industrial Indicators (Decadal Growth Rates): Pearson's Chi-square Test

Variable Combination	Chi ² Value	Status of Ho at 5% Probability
PUP & STB	0.07	Accepted
PNAEP & STB	1.06	Accepted
PIEP & STB	6.62	Rejected
FSELP & STB	0.07	Accepted

Note: 1) Ho: No association between STB and Selected Indicator
 2) Abbreviations of variables as in Table 8.2
 3) Chi² values based on Table 8.2

8.3 Spearman's Rank Correlation Results

We may cross check the results of frequency analysis with the Spearman's rank correlation coefficients presented in Table 8.4. We find, though without much amazement, all our previous positions in regard to the connection of industry and factory sector activities with the sales tax benefits across districts as vindicated. In addition we find that the impact of the incentives during the study period on the non-industry commercial and service activities was indeed significant. Accordingly, the rank correlation shows the role of the sales tax exemption and deferral benefits on the growth of industry sector employment (and, hence, on the growth of industrial activities) as statistically highly acceptable while no such relationship was indicated in respect of the factory sector employment. This leads to the same interpretation as in the frequency analysis.

The somewhat weak association of the growth of non-agricultural employment with the sales tax incentives emerged in the frequency analysis has been replaced in the rank correlation results by a statistically strong connection. This further justifies the continuation of the sales tax incentives at least for the development of non-factory sector industrial and other commercial and service activities that are found to develop along with the sales tax incentives partly due probably to the latter's indirect and linkage effects. The contribution of such indirect and linkage effects seems to provide the only bright ray of hope to the backward regions in their attempt at least at not moving further

backwards. In all other respects, the rank correlation analysis endorses the outcome of the frequency analysis.

Table 8.4: Rank Correlation Between Sales Tax Incentives and Decadal Growth of Selected Indicators Across Districts

Variable Combination	$\hat{\rho}$ Rho	\hat{T} T
PUP & STB	0.0283	0.15
PNAEP & STB	0.5084**	3.07
PIEP & STB	0.5712**	4.41
FSELP & STB	0.0985	0.52
PICE & STB	0.1489	0.78

** Significant at 1% level

Source: Calculated from Table 8.1

8.4 Concluding Remarks

In general, the sales tax benefits and the growth of industrial activities (represented by proxies of employment) have exhibited in terms of Pearson's chi-square test as well as the Spearman's rank correlation coefficient a strong positive correlation. So, it seems to be possible to improve the industrial profile of districts through the provision of the sales tax schemes since its indirect and linkage effects have a stronger impact on the local economy. This is despite that its direct effect through its major beneficiary, viz., the large and medium sector, does not appear that encouraging. Its favourable effect on the trade, commerce and services, whose mostly small size and the unregistered or informal nature can be effective in regional development, is also proved as substantial in respect of the rank correlation coefficient. This justifies the continuation of the sales tax incentive package along with the other offerings.

However, there exists a fact that the positive association of industrial employment growth and the sales tax benefits proved in our frequency analysis are largely due to those districts where both the sales tax ceiling accrual and the industrial employment proportion growth are below the respective state averages. This means that many districts receive very little of the benefits and, therefore, or thus, have very little industrial activities. The above disadvantage is crippling in several ways because unless the first level activities come up, there develops very little motivation for the induced and related activities to take root. However, the evidence in our study shows the role assumed by the small, tiny and the household sectors as substantive and given the problems of a backward region. So, what may be more productive in industrialising the currently deprived areas may be to persuade vigorously and with material support the local entrepreneurs to come forward to take up industrial activities in the respective regions. This could be preferred to trying to lure an outsider entrepreneur who may have practically little motivation to choose a location that is known, a priori, for its weaknesses than for its strengths. What is, therefore, to be done immediately is to promote the local entrepreneurship in the backward districts while continuing to offer the sales tax and other benefits as progressively as at present or more and to provide adequate investment funds to the new smaller entrepreneurs at reasonable rates of interest. These should, of course, accompany an adequate effort at the necessary infra-structural development of each region.

CHAPTER 9

POLICY IMPLICATIONS

The main objectives of this study have been the following. First, to evaluate the distribution of sales tax exemption and deferral benefits derived by the large and medium enterprises across districts and across developmental zones of Maharashtra. The purpose was to judge the degree of industrial dispersal achieved in the state as represented in or inspired by such distribution of the sales tax incentives. Second, to examine the level of industrial dispersal achieved in its broader sense across districts in reference of a few selected industrial indicators. The selected indicators cover effects of the unorganised sector, which hardly benefited from the sales tax incentives, and of the small, medium and the large enterprises that drew the sales tax benefits, as well as, other government incentives contained in the package scheme. And, third, to assess the relationship between the sales tax incentives provided across districts and the selected district-wise indicators of the overall industrial dispersal, as viewed in the second objective stated above, with the help of statistical techniques such as frequency analysis. The policy implications of the findings of this study could be related to the above objectives in such a way as to suggest the following. (i) The extent of failures, if any, of the incentive schemes; (ii) the degree of decadal changes in the level of inter-regional industrial disparities; and (iii) the possible new policy options or inputs required for offering a better policy framework in future. Accordingly, we summarise here, though sometimes at the risk of repetition, the major conclusions of the study while, at each point, we seek to explore its policy ramifications. We intend to offer our opinion keeping in mind its use in the policy formulation in future. It is, however, to be remembered that, since the study uses no firm-level response data, the present findings should be accepted with a little bit of caution and may have to be subsequently consolidated with micro or enterprise level studies.

To begin with, the industrial development of a region is, as experience reveals, the main vehicle for its overall development. A region's industrial backwardness results in wide spread unemployment of its workforce, under-utilisation of its natural resources, low level of income generation and standard of living and, further, in the perpetuation of backwardness as other regions grow. Therefore, industrial disparities across regions (districts or talukas) are to be tackled at the earliest.

The inter-regional industrial disparities in Maharashtra are still rampant. Even by 1993, 80 per cent of the talukas was remaining most backward (classed as D or D+ zones). Some of these talukas are in the partly developed districts. This means even the industrially forward districts could not achieve a balanced industrial growth. At the same time, sixteen of the 30 districts are reeling under the lack of industrial activities and these districts constitute 48.5 per cent of all the talukas of the State. This underscores the need for taking immediate measures to sharpen the attacking power of the industrial dispersal policy framework of the State.

Most of the incentives declared under the package scheme since 1964 in Maharashtra start benefiting the enterprises only when they begin production. But for the entrepreneurs, the pre-establishment calculations in terms of market size, ease of transportation, distance from big urban centres etc weigh more than the post-establishment concessions. Besides, the incentives are largely in the form of tax and duty exemptions or reductions. Many studies abroad have already revealed the tax

considerations as of only secondary importance in choosing a location, i.e., it operates when all other main factors are favourable. So, it is worthwhile to use the economic resources on a long-term plan under which the objective shall be to render a region inherently attractive through developing its road, rail and communication network and the public utility services and by promoting its market potential.

As for the structure of the sales tax incentives, it was appropriate to offer an option between exemption and deferral to the units and to increase successively the rate of tax incentives available for units set up in more backward regions. But the rate of increase from zone B to zone D appears at a constant rate rather than at a progressive rate, which alone may be more productive in making successive zones more attractive. It may be more effective if the rates of tax incentives available are significantly different between zone-B and zone-C and between zone-C and zone-D. Such big difference would raise further the temptation of those entrepreneurs whose location decisions are greater influenced by the tax differentials to choose locations carrying larger concessions. Moreover, such large deviations alone help the entrepreneurs get a feeling of offsetting to a greater extent the inherent limitations of the backward regions.

For a firm availing sales tax exemption, the benefits do not stop at the amount of retention. It also strengthens the competitive position of the enterprise in the market. Further, when the enterprise levies the full amount of sales tax from the consumer, the funds so generated from the exemption benefits serve as working capital etc, thus, facilitating implicit interest savings. Therefore, the total rise in profit due to the incentives includes the profit gains from price adjustment and the taxes retained as well as the implicit interest savings. Similarly, in sales tax deferral too, there is interest saving not only for the period in which the incentives are drawn but also after that, during the period of repayment. Alternatively, there is the benefit of paying a less-valued future sum in lieu of a more precious current sum. When the Government attempts to evaluate post-incentive scenario in respect of the enterprise concerned vis-a-vis the local economy to which the unit caters, all such additional costs (to the society) and benefits (to the enterprise) are to be considered. If the post-incentive financial strength of the unit is not commensurate with the total explicit and implicit cost the society incurred, the whole effort is unjustifiable even on the industrial dispersal ground.

Ninety per cent of the units set up in Maharashtra between 1979 and March 1994 under the sales tax incentives are in the small-scale sector implying their massive presence. While, only 12.5 per cent of the ceilings granted accrued to them, thus, reflecting the smaller burden they exert on the society.

About one-half and three-fifth of the large and medium units established during 1979-March 1995 under the sales tax exemption and deferral schemes respectively have been located in the five partly developed districts of Thane, Pune, Raigad, Nashik and Ahmednagar. At the same time, the 16 most backward districts received only 18.7 per cent and 7.5 per cent of the large and medium units under the exemption and deferral schemes respectively. In a similar way, the five districts captured three-tenth and three-fifth respectively of the monetary ceilings granted under exemption and deferral schemes while just about 20 per cent and a meager 4.2 per cent respectively going into the 16 most backward districts. Clearly, a vast stretch of the State did not directly benefit much from a programme that was touted as industrial dispersal policy aimed at backward area industrialisation.

A little more than 61 per cent of the total units and 56 per cent of the total ceilings granted under the sales tax exemption and deferral schemes (combined) between 1979 and March 1995 had their destination to either zone-B, which is partly developed, or zone-C, which is developing. Now, consider the 39 per cent of total units and 44 per cent of total ceilings granted claimed by zone-D and zone-D+, which are the most backward and which form 80 per cent of all talukas. Of these, the D and D+ zones of the 13 partly developed or partly developing districts captured respectively 25 and 32 percent points. Thus, in every respect, the sales tax benefits exhibited extreme skew-ness in distribution disfavoured the industrially most deprived areas. In other words, the sales tax incentive scheme was a failure as a measure meant for directly and substantially enriching the hitherto un-industrialised districts and talukas.

Eight partly developing districts, which have at least some advantage over the most backward districts, like the relative closeness to metro regions, existence of at least one emerging growth point within and a fairly developed rail-road facilities, appeared more successful than the most backward districts in attracting new entrepreneurs. Accordingly, their share of approximately 32 per cent in the total number of exemption and deferral units and 43 per cent of the corresponding ceilings granted compare reasonably with the shares of the five partly advanced districts. It is obvious, from the above and the previous paragraphs, therefore, that the entrepreneurs accord greater weightage to other location factors and the tax considerations are indeed a secondary one.

In the decade of 1981-1991 the State Government was making an all-out effort at rapidly industrialising Maharashtra and its various un-industrialised regions through the package scheme of incentives. During this period, the growth of production in the industrial sub-groups of manufacturing, construction and electricity was, surprisingly, lower than for India as a whole. A similar case arises in respect of the growth in the share of industry in domestic product. Obviously, the industrial boom of 1980s affected Maharashtra less intensively, in spite of its revamped package scheme, than the other Indian states in general. This shows the inadequacy of sharpness in the state's industrial policy.

In some partly developed (Raigad) or developing (Satara and Solapur) districts lying at the periphery of metro districts, the rate of urbanisation either declined between 1981 and 1991 or remained the lowest. The reason may be that the rural population moving into the urban areas within these districts might not have been large enough; rather, many of them might have moved towards the nearby metro districts for a more prospective life.

The non-agricultural employment proportion showing declines in some partly developing (Solapur) and backward (Parbhani, Beed, Nanded and Bhandara) districts during 1981-1991 may be attributed to the relatively slower growth of non-agricultural activities in the rural areas and, perhaps, in the urban areas. There was also a rise in the proportion of non-workers in a few of the districts.

In most of the partly developed and developing districts and in the two most backward districts into which there flowed major part of the sales tax incentives, the industrial employment grew during the decade more than or equally proportionally with population (thus, implying a correspondingly favourable growth of industrial activities). In a large majority of the extremely backward districts that received very little of sales

tax incentives, the industrial employment increased much less than proportionate to the rise in population, thus, echoing the poor progress of industrial activities including those in the small scale, non-factory or informal sectors. It does underline the fact that the industrial policies of Maharashtra during 1979-1991 did not prove itself conducive for the backward districts to maintain at least the industrial status quo, leave alone enabling them to catch up with the high performing districts. There is, therefore, a need for formulating a separate strategy for the most backward districts without which their industrial condition may get even worsened in the years ahead.

The negative growth between 1981 and 1991 in the ratio of factory workers to population in the partly developed districts of Thane and Pune that greatly benefited from the sales tax incentives was associated with respectively a largely positive and a zero growth in the proportion of industrial employment. This can be construed as an evidence of a disproportionately large growth of the non-factory and unorganised sectors. Thus, in these advanced districts, the tiny and unregistered units, perhaps along with the registered small units, rather than the 'package' backed large and medium units, played the crucial role in employment generation. This potential of the former should be effectively exploited in the context of the backward districts.

In many backward districts where industrial employment proportion fell, the ratio of factory sector employment moved up during 1981-1991. It means that the employment in factory sector grew much more than proportionate to the growth of employment in non-factory sector. But, these districts did not receive between 1979 and March 1995 any significant investment in large and medium units under the sales tax incentives. So, it seems that the employment growth in factory sector was due to the smaller units which are part of factory sector, but whose sales tax incentive data were not available for this study. Taken in this sense, in this case too, the smaller units acquire prominence.

Per capita industrial consumption of electricity remained very low in most of the heavily backward districts in both 1981-82 and 1991-92 because industrial activities and production in these districts were at very low levels (as suggested earlier by the sales tax incentive and employment data). However, there occurred in many of these districts a large growth in the consumption of electricity during this period. As per our analysis a very few large and medium firms selected these districts as location under the tax incentive scheme. Also, the growth of industrial employment has exceeded that of factory sector employment in some of these districts. Therefore, the electricity consumption growth seems by implication to be a contribution, to a large measure, of the non-factory sector as well, perhaps, as the few energy intensive units newly set up in the large and medium sectors. This again is a tribute to the non-factory sector, including the unorganised sector.

Among the most backward districts, Chandrapur and Sindhudurg are relatively better off than the others. This may be attributed to some of the advantages of these districts over others. Such advantages include the possession of huge natural resources, better railway facilities, status of a centrally backward district and central assistance in the case of Chandrapur. The advantages for Sindhudurg are the coastal location, better road facilities, mineral wealth and the peripheral position vis-a-vis Goa and the Pune and Kolhapur districts of Maharashtra. This adds further emphasis to our contention that in order for a district to captivate the attention of industrialists, it should offer much more to the entrepreneurs than mere tax exemptions and deferrals.

Significant inter-district industrial disparities existed in Maharashtra in 1981 in terms of the variations in different parameters. The parameters considered here are (a) the degree of urbanisation, (b) the percentage of population employed in non-agricultural activities, (c) the proportion of industrial employees in population, (d) the number of factory workers per lakh of population, and (e) the per capita industrial consumption of electricity. While the variation was the lowest in respect of non-agricultural employment, implying the 'relatively' uniform proportionality among all types of districts, it is the highest in respect of electricity consumption, meaning that it was largely conditioned by the existence of district-specific characteristics favouring industrial activities. The proportion of factory employment varied across districts more than the proportion of total industrial employment. This suggests that the level of factory sector employment was more correlated to the conducive environment existing in districts for supporting larger units while the non-factory sector helped many districts to lower, to some extent, the industrial inequalities vis-a-vis districts possessing a strong factory sector.

In respect of all parameters except electricity consumption, the partly developed/developing districts exhibit more uniformity than the least/un developed districts. This higher dissimilarity in performance among backward districts stems from their varying features with regard to availability of natural resources, development of rail-road network, location in relation to other relatively advanced districts and so on.

Inter-district disparities in factory sector activities (as represented by the factory sector employment) came down between 1981 and 1991 - the decline was more rapid among the partly developed/developing districts than among the most backward ones. The latter fact signifies the larger benefit accrued during 1981-1991 to the relatively worse-off districts among the partly developed/developing districts from the advancement of factory sector during this period while, the most worse-off among the most backward districts received very little. The electricity consumption also behaved in an identical way during this period, thus, reinforcing our conclusion on the behaviour of factory sector employment across districts.

The inequalities across districts in total industrial and non-agricultural activities slightly worsened by 1991 because such inequalities increased among the 16 backward districts. The partly developed/developing districts experienced a marginal decline in imbalances among them in industrial employment while remaining at the same position in non-agricultural employment. Combining this inference with the preceding paragraph, it may be concluded that the non-factory employment grew between the two time points more non-uniformly across the most backward districts, while the implicit variation in the service sector employment across districts did not at least come down.

On the whole, even though there appeared a slight improvement in the inter-district disparities in terms of factory sector activities in Maharashtra during 1981-1991, the overall industrial unevenness only worsened, though slightly, during this period. We are not sure what would have happened in respect of the industrial disparities after 1991. As a matter of fact, in the total investment commitments proposed at all-India level in recent years, Maharashtra is trailing behind Gujarat, Karnataka and Orissa. Again, even within Maharashtra, a large chunk of proposed investments are destined to go to the coastal districts of Raigad and Ratnagiri in the Konkan division (Economic Times, 27.3.1996). Given these points, the relative industrial profile of other districts, especially the backward ones, is certain to deteriorate in coming years.

The inter-district distribution of sales tax incentives and the decadal change of selected industrial indicators across districts are found correlated differently. For instance, the correlation of the former with the change in the urbanisation rate, with the change in factory sector employment and with the change in the per capita industrial consumption of electricity is found to be very weak and statistically insignificant. Whereas, the sales tax incentives are positively associated with the decadal change in non-agricultural employment proportion and this association has statistical significance at a very reasonable level of probability as per the rank correlation analysis. At the same time, the growth of industrial sector employment ratio exhibits a strong positive and statistically significant association with the sales tax exemption and deferral benefits granted during the relevant period in terms of both the statistical techniques, viz., Pearson's chi-square and Spearman's rank correlation. In other words, many of those districts that received sales tax incentives above the 29-district average were also districts having industrial employment proportion growth above the state average during the decade. While, several districts having sales tax benefit receipts below the 29-district average also experienced a growth of industrial employment proportion below the state average. Or, alternatively, the districts receiving lower percentages of sales tax benefits were also districts having, on an average, a lower growth in the proportion of industrial employment. This together with the relevant weak association of the growth of factory sector employment ratio implies that the factory sector employment did not grow, during the decade, proportionate to the sales tax incentives. Rather, it is the non-factory sector employment that grew more than proportionately in tune with the tax benefits.

The above findings in combination could be interpreted as suggesting the significance of the indirect and linkage effects of the package scheme of incentives on industrial activities, as well as, its direct effect through the non-factory sector small scale units set up under the scheme. Further, the fact is that the association between the growth in non-agricultural employment proportion and the sales tax variable is stronger than in the case of factory sector employment. This suggests that, in terms of employment growth, the non-agricultural non-industrial activities (in trade, commerce and services) responded to the incentive schemes (i.e., due to the direct linkage and indirect inducements) in a better way than the directly targeted factory sector did.

One possible reason for the poor association between sales tax incentives and factory sector employment could be the linking of the calculation of permissible incentive ceiling to the fixed capital investment of the enterprise seeking the incentives. The enterprise may be tempted to choose a relatively capital intensive technique so that it has a larger fixed capital investment that would facilitate a higher exemption or deferral ceiling. In this light, it may be useful, in order to increase utilisation of the local labour resources, to include the employment factor as an additional criteria in calculating the ceilings. For example, the enterprises providing larger employment opportunities may be permitted to avail of some additional percentage of their fixed capital as ceilings.

In the light of the positive association between the sales tax incentives and the industrial activities as described in the preceding paragraphs, the continuation of the sales tax incentives in the state is fully justified. However, it is not the direct effect of the incentives with respect to the large and medium units that make the incentives valuable for inter-regional balancing. Instead, it is its indirect and linkage effects not only on the non-factory and informal sector industrial activities but also on other

commercial and service sector operations. This also calls for giving more emphasis in the most backward districts on the employment-oriented and more localised smaller enterprises including the unregistered ones.

The package scheme should be suitably revised for the above purpose. The Government should also encourage private sector in developing in the under-developed regions various producer services such as financing, insurance, real estate, legal services, advertising and marketing, research and development, and data processing and other consulting services. Such services, as some studies (e.g., Hansen, 1990) find, have a profound impact on industrial growth of regions in which they exist.

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