Chapter 8

THE SUMMING UP

An important objective of the growth strategy in India is the balanced regional development. It is realised that unless all the constituent regions of the country are imbued to participate in the growth process, the attainable growth will probably remain sub-optimal. Moreover, with the growing sub-nationalist feeling, it is no more possible (neither perhaps desirable) to imolate the cause of any region under the pretext of overall growth. Thus, a need to incorporate explicitly the spatial dimension in the planning approach, accounting for sectoral as well as regional balances, can hardly be over-emphasised. Further, since the industrialisation is thought to be a sine qua non for economic development, a more serious thrust has to be given to the spatial dimension of development strategy. This calls for a clear understanding of the regional economies. The present study was, therefore, undertaken to understand the dynamics of regional industrialisation in India. We highlight the major findings subsequently.

The colonial structure of the national economy determined the main contours of the location dynamics of productive forces. On the eve of independence about two-thirds of the total industrial activity was concentrated
in and around the three Presidency towns, viz. Bombay, Calcutta and Madras. India's strive for industrial growth was conditioned by the inherited colonial structure. The balanced regional development was not an easy task. The planners and policy makers during the second and the third Five Year Plan laid emphasis on the objective of achieving balanced regional industrial development. Consequently, substantial public sector investment was made in some of the industrially backward states like Bihar, Madhya Pradesh and Orissa. However this initial push was, to an extent, short lived due to the shift in the priorities in favour of the high-tech sectors like petrochemicals and electronics. The implicit assumption of percolation effect of growth, without explicit policy of balanced regional development, at least up to the late sixties, acted probably as a stumbling block for the balanced regional industrialisation.

At the advent of the planning era the industrial base was relatively narrow and confined to the traditional industries oriented to consumer demand and some rudimentary basic industries, since then performance of the industrial sector has been quite impressive in terms of quantity as well as quality, so has been the performance of the various regional economies. However, all the regions did not perform alike, despite the fact that the less developed states, grew at a higher than the national rate between 1961 and
1978, position of the dominant states did not alter significantly. However a decline was observed in the inter-regional industrial inequality during this period. There was, however, no significant relationship between the large scale and the unorganised sector. The latter was found to be more evenly spread over space.

We tried to unravel the forces responsible for reduction in the inter-regional inequalities. Initially, we tried to explain the phenomenon in terms of industrial structure. For, the states having a favourable share of fast growing industries (favourable industry mix) were expected to grow at a faster rate and vice versa. Thus, if backward states were shifting towards a more dynamic industrial structure than the developed ones, the reduction in the inequalities will be the logical outcome. Using shift-share technique, the analysis observed that the regional industrial composition per se explained very small proportion of the growth performance of the respective states, differential shift component (a sort of residual) emerged more important in offering the explanation. We thought that perhaps inter-industry linkages formed a significant part of the unexplained residual. It was assumed that the favourable linkage-industry mix would be crucial in explaining the inter-regional industrialisation. The empirical results did not vindicate the linkage hypothesis.
No, therefore, shifted our focus on demand side and supply side forces, which probably stimulated the attractiveness of a region for industrialisation.

First, we regressed dependent variables on demand side factors. The results indicated that in 1961 the model explained approximately 69 per cent of the total variations in which approximately 54 per cent of the total variation was explained by the purchasing power. The inclusion of inter-industry demand improved the model's explanatory power. No other variable was found significant. In 1969, explanatory power of the model increased to approximately 79 per cent and level of agricultural mechanisation also emerged as an important variable. However, the sign of the agricultural mechanisation was observed to be opposite to the postulated one. Albeit it is not altogether surprising. This was the period when the Green Revolution was swinging across most of the states. Consequently agriculture sector might have started vying for power and thereby adversely affecting industrial growth. Influence of the other two variables was found to be more pronounced in 1969 than in 1961. The same trend was observed even in 1976 except that the explanatory power of the model declined to 63 per cent. The pooled data for the various points of time also did not alter the pattern of results.

In the next stage the supply side variables were taken into account. In the year 1961, indirect government
participation emerged as the most important factor explaining about 79 per cent of the total variations, whereas the model explained approximately 92 per cent of the variations. Other important variables were agglomeration economies, infrastructure and efficiency wages. In 1969, a shift in the composition of explanatory variables was observed in favour of labour militancy and against infrastructure and efficiency wages. Overall the influence of agglomeration economies was quite significant along with the indirect government participation, only sign which was unusual is that of labour militancy.

By the year 1978, the role of agglomeration economies, infrastructure, indirect government participation became more important and the impact of labour militancy was also according to the theoretical postulates. Raw material availability also assumed importance. Probably by this time some of the backward states started using their natural resources rather than exporting them to the other parts of the world. Here the model explained approximately 75 per cent of the total variation. Overall (pooled) results revealed that the agglomeration economies, infrastructure and indirect government participation were the three important variables which explained the regional variations.

The inclusive analysis (demand and supply) showed that in the early phase, the supply side variables played
a more important role in offering explanation for the interregional variations, but subsequently demand side variables emerged more important. Out of all the variables, inter-industry demand and agglomeration economies were important in all the years. Infrastructure lost its importance in 1969, but emerged again in 1978 as an important variable. Indirect government participation and efficiency wages were observed to be important in the early phases only. Among the components of infrastructure and agglomeration economies, power availability from infrastructure and urbanisation index from the agglomeration emerged as significant. Rest of the components viz., transport and banking in infrastructural components; and inter-urban distances and regional density of the cities from agglomeration economies did not seem to be crucial. Interestingly enough, between 1961 and 1978 the availability of power became important and the reverse was true of the urbanisation index.

The behavioural model helped us in understanding the spatial spread of industrialisation. It, however, does not explain the reduction in the regional inequalities. In a separate exercise, we tried to seek some explanations for the reduction in the inequalities. The results revealed that region specific raw material availability and direct government participation had contributed a good deal to the process. Surprisingly, indirect government participation had played only a negative role.
It appears that over time the process of industrialisation had become self-sustaining and the public policies had insignificant impact. Negative association between agriculture and industry leads one to speculate that their relationship may not always be complimentary, if there are competing demands for economic infrastructure. This, also provides some clue to the fact that the unorganised sector tends to grow unrelated to the large scale sector. Probably the small scale enterprises grow with the growth in agriculture. The states like Punjab and Haryana could be cited as examples in this regard. This implies that planning models will have to work out the infrastructure needs so that the balances between agriculture and industry are not distorted.

A distinct shift from supply to demand side variables was observed in 1969 which was further reinforced over time. This means that the overall industrial policy could no longer be viewed as management of supply side. Demand factors would have to figure crucially in future calculations both at the national and the regional level. Thus the problem of correcting imbalances may not be amenable to solution through the location of large scale public sector projects, which in any case did not seem to be having linkages with the regional economies. The solution may lie in creating industrial environment where demand side factors are given due importance.
The above discussion has to be viewed in the perspective that recently (since the mid-seventies) the government seems to have given priority to the relatively modern sectors. Incidentally, this investment tends to favour some of the developed states. The outcome of the recent policy shift would perhaps be realised by the late eighties. This shift might deter the declining trend in the regional inequalities. Thus some measures safeguarding against such a possibility appear to be imperative. Our results indicate that while planning for a proper spatial spread of industries, the emphasis will have to be given on the aspect relating to inter-industry demand, generation of incomes (which are not concentrated in a few pockets), availability of power and agglomeration economies, which are spread over a fairly large number of existing and emerging urban centres.