

CHAPTER 2

STATE DOMESTIC PRODUCT

2.1 Data

Estimates of SDP i.e. income originating within the boundaries of the States are prepared at current and constant prices by the SSBs on a regular basis. However, these estimates are not strictly comparable between States as the procedures adopted by them are dependent on the status of data availability at the time of preparation of the estimates. These are likely to vary widely as the information system and their status vary very widely between States. Besides, qualitative differences also exist between the estimates for different States and for some of the States in particular, the results can not be accepted without further examination and possibly revisions (e.g. mining in the case of Assam or electricity in the case of J & K). The revised estimates with 1980-81 as base are again not available for all the States even for the more recent period i.e. from 1980-81 onwards and as a result, inter-State comparability cannot be assured if the State estimates are used for inter-State disparity study. In view of this, the CSO, at the instance of the Planning Commission and the successive Finance Commissions, have been preparing comparable estimates of SDP for different periods at different points of time. The first set of such estimates covering the period 1962-63 to 1964-66 were prepared in October 1968. Subsequently such estimates have become available for the period 1967-68 to 1985-86 in groups of three to four years each time as and when the request has been made either by the Planning Commission or by the different Finance Commissions for estimates of SDP.

These estimates prepared by CSO follow uniform procedure for all States and adopt uniform concepts and definitions as well as classifications as followed at the national level. Comparability between States is also ensured through the use of results of studies and surveys which are part of the national scheme such as the National Sample Surveys for deriving estimates for bench-mark years. These SDP estimates are conceptually comparable among States as also with the national estimates. By and large, the methodology and source material used for preparation of these estimates at the State level as well as at the national level are the same. These estimates of SDP are prepared by CSO at current prices only and do not include activities like Defence, Border Security Force, other paramilitary forces, Indian Embassies and High Commissions and other offices abroad because of their special characteristics. As a result, the totals of comparable estimates of SDP for different States either for any of

the sectors or for all sectors do not aggregate to the corresponding national totals of net domestic product. This however, in no way affects the comparability between States of the estimates.

Using these comparable estimates of SDP for the period of nearly twenty years (1967-68 to 1985-86), an attempt has been made to study the differential patterns of growth and development between States and identify the States which have recorded substantial variations in economic behaviour as compared to the rest of the States or the overall economy. Analysis at individual State level is also attempted.

Before going into the details of the results, two aspects of the data need to be highlighted. Firstly, though the comparable series of SDP are available since 1962-63, the detailed industrywise data are not available for the first three years beginning 1962-63. The current analysis is, therefore, confined to the period 1967-68 to 1985-86. Even within this period, the estimates refer to New Series for the period 1980-81 to 1985-86 and the data for this period therefore are not strictly comparable with the data for the earlier period (1967-68 to 1979-80). It is thus not possible to use the 19 years' data as a single series and undertake the analysis. The results of the analysis are therefore presented for two separate sub-periods (1967-68 to 1979-80 and 1980-81 to 1985-86). Secondly, comparable series of SDP are prepared at current prices only which are not suitable for the study of growth rates of the States. It is essential that the effect of changes in prices over time is eliminated from the series of SDP and volume measures are obtained prior to any time trend studies. Since inter-State behaviour of prices are likely to be different, it is essential that relevant price series for each individual State and for each economic activity are used to deflate the SDP series at industry level. In the absence of any other meaningful price data, the implicit price indices at the sectoral level separately for each of the States have been worked out from the State series of SDP at current and constant prices. These price indices are then used for deflating the comparable series of SDP at current prices and obtaining the corresponding constant price figures. However, for the State series of SDP prepared by the SSBs only the New Series beginning 1980-81 are at constant prices of 1980-81 while for the earlier period the old series has not been revised and are at 1970-71 prices only (except for West Bengal where the complete series beginning 1947-48¹ has been

1. However, the New Series of SDP issued by Directorate of Economics and Statistics suffers from serious limitations because of the price indices used for deriving the past series (from 1947-48 onwards) at 1980-81 prices. Not only are the prices shown to be much higher for periods prior to 1980-81 but the indices are shown to be constant. Thus for the period 1967-68 to 1979-80, Mining and Quarrying has a constant implicit price index of 104.17 (1980-81=100), Manufacturing (Registered) 124.84, Manufacturing (Unregistered) 100.37, Construction 92.35, Transportation

revised). The old series of SDP are generally available upto 1984-85 and it is possible to convert the implicit price indices derived therefrom to 1980-81 base (which will, of course, have 1970-71 weights). Such a price series has been used for deflating the comparable series of SDP for the period 1967-68 to 1979-80. Thus using this price series along with those derivable from the New Series of SDP at 1980-81 prices for the period 1980-81 to 1985-86, the comparable series of SDP at constant (1980-81) prices at the industry level have been obtained. While Appendix A.1 and A.2 present the aggregate estimates at current and constant prices, Appendix B.1 and B.2 give the corresponding per capita figures and Appendix C, the population. The industrywise data for the complete period at current and constant prices along with the percentage distribution are at Appendix D.

2.2 Inter-State Disparity

These estimates have been used to study the comparative performance and growth of different States for selected industry groups. The picture emerging at the overall level has also been examined. The ranking of the States in terms of per capita income, growth rates against the all-India rates gives the overall picture of the performance of individual States as well as their economic status, while the industrial breakdown and the percentage distribution by economic activities present the variations in industrial structure between States. Over the period of nearly two decades, the details of structural change, within each State also become apparent from these results.

Tables 1 and 2 rank the States by per capita income at current and constant prices. Considering the results at current prices first, it is seen very clearly that except for a set of three or four States, the inter-se position of the States in terms of their per capita income being higher/lower than the all-India level remains unchanged. Thus Punjab, Haryana, Gujarat and Maharashtra have per capita income higher than all-India over the complete period of study with Punjab remaining No. 1 all through. Similarly Uttar Pradesh, Madhya Pradesh, Orissa and Bihar have remained economically less developed with per capita incomes lower than all-India throughout the period, though except for Bihar their inter-se ranking amongst States has not remained unchanged over the period Bihar has remained at the bottom all through. West Bengal and Assam changed for the worst over the period of study. Assam which was just below all-India level in 1968-69 (no estimate available for 1967-68) has come down substantially to be ranked seventeen in 1980-81 with marginal improvement to twelve in 1984-85 and

between 103.11 and 130.51, Banking and Insurance 135.87 and Real Estate, Ownership of Dwellings 134.81.

again thirteen in 1985-86. West Bengal changes from just above India in 1967-68 to just below all-India in the last year of the study. The States of Karnataka, Tamil Nadu and J&K have gone up in ranking, the improvement in the case of J&K being substantial, shifting from the bottom most (last but one) position in 1967-68 to just above all-India level taking the seventh position in 1985-86. The upward shift in these cases have been more or less gradual moving up in the list systematically every year. This change can therefore be assumed to be the consequence of steady development registered by these States over the period. The State of Kerala has also recorded improvement over the two decades though not enough to reach a very much better ranking by 1985-86. The ranking of Andhra Pradesh and Rajasthan remain unchanged holding about a middle position amongst the States with per capita income below the all-India average throughout.

Considering the series at constant prices, it is possible to say more firmly that the States of Karnataka and Tamil Nadu have registered substantial growth to be ranked above all-India in the late eighties. Because of substantial variation in price behaviour between States, the levels of per capita income of the States get affected by some what larger extent as a result of adjustment for price changes. More prominent of such States is West Bengal² which not only has a much lower level of per capita income at 1980-81 prices (throughout the period) but continues to go down in ranking. This shift is substantial and West Bengal has, at constant prices, a rank just above Bihar and below all other States. However, over the period West Bengal improves its position to some extent, and is ranked just below all-India in 1985-86. The rest of the States have behaved more or less similarly both at current and constant prices suggesting no out of the ordinary price behaviour.

An examination of the overall price indices (Appendix E) shows that the rate of inflation has not been uniform between States being of the order of 5 p.c. per annum for the State of West Bengal over the period 1967-68 to 1979-80 against a little over 8 per cent per annum for the States of Kerala and Madhya Pradesh with a CV of nearly 30 p.c. for these two States against 18.7 p.c. for West Bengal. During the eighties the fluctuations in prices have been much wider with 1983-84 and 1984-85 as the two years of high inflation. During 1985-86, on the other hand, the price change has been widely different between States, the inflation being as much as 20.77 p.c. in the case of J&K against less than 1 per cent for West Bengal.

2. In the case of West Bengal, such a shift in inter-State ranking upto 1979-80 could be partly due to the limitations of the constant price estimates as already detailed.

Such differences in price behaviour suggest that the gap between the highest and the lowest per capita income or the relative range is likely to have changed over the period of study. The relative range in per capita income defined as the difference between the maximum and the minimum as a ratio of the all-India level shows that the ratio has increased continuously over the period. At current prices the change is from 0.41 in 1967-68 to 0.69 in 1979-80 with a slight fall thereafter to reach 0.53 in 1985-86. At constant prices, the ratio behaves similarly with the distance in per capita income between the high per capita income States and low per capita income States wider with the ratio consistently carrying a higher value than at current prices. In the above exercise, to avoid a comparison between only the two States at the extreme ends (Punjab and Bihar) and to give the ratio a wider meaning, the maximum and the minimum (for purposes of measuring the range) have been defined as the average of the top six per capita income States (generally above all-India) and vice-versa. An exercise covering only the highest and the lowest per capita States gives similar results.

An alternative measure of inequality in State per capita income in terms of Gini Coefficient shows that the ratio does rise both at current and constant prices upto 1979-80 and declines somewhat thereafter though the absolute value of the coefficient in 1985-86 is higher than in 1967-68. The change in Gini Coefficient however is not as large as in the disparity ratio which suggests that the per capita incomes of middle level States are also rising, reducing the overall disparity in the levels of incomes between the States. The summary statements (Tables 3 and 4) give the results for three points of time with the identification of the six top-most States and six bottom-most States and their per capita incomes at current and constant prices.

2.3 Growth rates

The growth rates of per capita income and of selected sectors viz., agriculture, manufacturing and transportation are studied next to establish a link, if possible, between their levels of per capita income and performance over the period of study (Tables 5 and 6). Similar to the levels of per capita income, the rates of growth also vary widely between States and even within each State over time. The States with high levels of per capita income are not necessarily those recording above average rates of growth. Also, the growth rates differ very much between different periods even for the same State. In terms of the averages, the average rate of growth over the period 1968-69 to 1979-80, varies between 3.46 p.c. in the case of Karnataka to (-) 1.57 p.c. in the case of Madhya Pradesh with CV values as widely different as 191.38 for Karnataka and -4382.92 for Bihar (Table 5). Over the subsequent six years ending 1985-86, the variation in growth rates is equally wide: 5.66 p.c. for Assam to -1.81 for

J&K. Within the States, variation is also large as is obvious from the values of CV and the range of growth rate (highest and lowest) presented at the bottom of the table. In summary thus, one may conclude that no overall pattern of growth emerges either between States or at the level of the individual States to enable one to draw conclusions linking the growth rates with the levels of development. It is possible that one has to go back much further into the past to establish a link, if at all, between the present level of economic development and the rates of growth. Since the potentials of development and natural endowments vary widely between States, it is possible that the factors of production viz., capital and labour to begin with, contributed to the high levels of production in some of the States. It is, however, also necessary to study the influence of other social factors like population pressure, literacy rates, health standards and the like before drawing any definite conclusion. Nevertheless, an examination of the sectoral rates of growth makes it very clear that except for the States of Tamil Nadu and West Bengal during 1980-81 to 1985-86, the rates of growth of manufacturing and transportation have always been higher than that of agriculture. Over the whole period, transportation has registered substantial growth in all the States - often much higher than that of manufacturing. Table 6 gives the summary statement for six States at the top and six States at the bottom while Appendix F and G give the details.

2.4 Structural Changes

Before concluding the analysis of the behaviour of SDP over time, it might be worthwhile to examine the extent to which (i) the high levels of per capita income in particular States can be linked with industrialisation and (ii) growth and development of individual States have led to structural shifts and changes in the patterns of production. A broad examination of industrial breakdown of SDP of individual States indicates that the States with per capita incomes above all-India are not necessarily the highly industrialised ones in the sense of the share of manufacturing being reasonably large. The results show that Punjab and Haryana -- the two topmost States in terms of per capita income -- are primarily agricultural with production from agricultural crops accounting for more than half of the total SDP in each of these States. Also, these two States along with Tamil Nadu (which records substantial growth in SDP over the period of study) hardly show any structural shifts in the patterns of production. In the case of other States there is a definite tendency of the economy moving away from agriculture with much larger growth of manufacturing and transportation resulting in increase in the share of these two sectors in the total SDP. In the case of other developed States (Gujarat and Maharashtra) as well as West Bengal, the share of manufacturing is not only high in the base year but rises consistently so that this sector accounts for 30 p.c. of the total production in 1985-86 for each of these States. This characteristic is

apparent in the case of all other States as well (Tables 7 & 8). The details are at Appendix D. In other words, it can be concluded that over the last two decades, a strong tendency towards creation of an industrial base with simultaneous development of the infrastructure can be noticed in the case of all the States. Thus going a step further one may conclude that the industrialisation of the country and development of infrastructure over the last two decades have not been limited to particular areas within the country but has been sufficiently widespread to cover all the major States.