CHAPTER 6

SUMMERY AND IMPLICATIONS OF THE STUDY

6.1 Introduction

The previous chapters have dealt with the detailed analysis of the Indian states' Revenue Receipts; which includes estimation of the rate of growth of Revenue Receipts and its various components, analysis of structure of the revenue receipts and Tax & Non-Tax Revenue and examining the determinants of Revenue Receipts. The effort is made to examine the growth pattern of Revenue Receipts of each state over a period of 17 years, from 1985-86 to 2003-04. Annual compound growth rate is calculated; moreover, we also derive buoyancy coefficients for Tax Revenue and Own Tax Revenue with respect to real and nominal GSDP. The structural pattern of Revenue Receipts, Tax Revenue and Non-Tax Revenue is also analysed for the selected 16 states during 1985-86 to 2002-03. Thirdly, an econometric model of determinants of Revenue Receipts of Indian states and its sources has been developed. Economic growth represented by the sectoral per capita GSDP at constant prices and the urbanization level are examined as the determining factors for Revenue Receipts, Tax Revenue, Own Tax Revenue and Own Non-Tax Revenue. With the use of Panel Data model, variations in the economic and revenue performance of the states have been taken into consideration. Thus, the study has used the
econometric techniques of Panel Data to explain the impact of growth variables on the revenue performance of the states.

**Summery**

After studying the various dimensions of revenue performance in view of economic performance of Indian states it gets apparent that diversity in socio-economic-geographic and political milieu of the states do shape their revenue raising capacity. Broad conclusions of each section of the present study are discussed below.

**6.2 Growth of states’ Revenue**

As we have discussed earlier the rate of growth of Revenue Receipts and its various sources viz; Tax and Non-Tax Revenue differ between the high-income states and low-income states in India. An average annual growth rate of Revenue Receipts during 1985-86 to 2002-03 was observed to be low in states like Bihar (12.27 %), Assam (12.53 %), and West Bengal (11.99 %). While high-income states have seemed to perform better, Maharashtra (13.02 %), Tamil Nadu (13.46 %), Haryana (13.96 %) and Kerala (13.68 %).

For Tax Revenue and Own Tax Revenue also, Himachal Pradesh has achieved the highest growth rate at 34.75 %, next is Gujarat having growth rate at 17.21 % and 17.65 % respectively.

In case of the Non-Tax Revenue and Own Non-Tax Revenue, the picture is more perceptible as Bihar could achieve only 8.12 % and 4.87 %
respectively. This is much lower as compared to 18.82 % & 21.59 % in Punjab and 16.98 % & 21.32 % in Himachal Pradesh.

Thus, it can be derived that states that have achieved higher growth in per capita GSDP, greater industrialisation and have attracted more investments could achieve higher growth in their Revenue Receipts, Tax & Own Tax Revenue and Non-Tax & Own Non-Tax Revenue rather than the states having poor economic performance.

While making a comparative study of the growth rate of Tax and Non-Tax Revenue for all 16 states, it is found that the average growth rate of Tax Revenue is higher than that of Non Tax-Revenue. This reflects the fact that the Non Tax-Revenue does not get as much importance as Tax Revenue. Except Punjab for all the states, Tax Revenue has accelerated at a greater rate than Non Tax-Revenue.

Contrary to the compound growth rate, the estimates of buoyancy coefficients of Tax Revenue and Own Tax Revenue with respect to real and nominal GSDP, of backward states found to be more buoyant. We have obtained higher magnitudes of the buoyancy coefficients for backward states as compared to advanced states. About the buoyancy of Tax Revenue with respect of real GSDP, states like Bihar (4.05 %), Assam (3.93 %) and Orissa (3.65) obtained higher values of the buoyancy coefficients in comparison to Maharashtra (1.91 %), Tamil Nadu (2.24 %) and Punjab (2.62 %) which are high-income states. This in fact shows the possibility for the poor states to augment their Tax Revenue if states can improve upon their economic performance.
The other important observation is the differences in the comparative performance of advanced states and poor states in their own efforts to raise Tax and Non-Tax Revenue. The average annual compound growth of both Own Tax Revenue and Own Non-Tax Revenue for advanced states is higher than that of poor states. The first eight states generating higher income have obtained around more than 17% growth in Own Tax Revenue and 14% growth in Own Non-Tax Revenue per annum while the bottom eight states having lower income achieved only an average 13.75% growth in Own Tax Revenue and 10% growth in Own Non-Tax Revenue per annum. Thus, advanced states have performed better to generate their revenue and meet their revenue expenditure requirements from their own efforts.

Thus developed states achieved relatively high growth in both Tax and Own Tax Revenue. This can be possible by exploiting the potential base for levying taxes, efficient tax system and rational tax rates. After achieving certain level of growth in the Tax Revenue, further growth will be very difficult. While backward states, which enjoy greater buoyancy have achieved relatively slow growth both in the Tax and in Own Tax Revenue. They still have unexploited or untapped tax base and can improve their Tax Revenue if there will be an increase in the state income. However, comparing the buoyancy coefficients of both Tax and Own Tax Revenue with respect to real and nominal GSDP for all the states, the value of coefficients with respect to real GSDP is higher than that of nominal GSDP. Thus, the tax structure has failed to capture the price movements that are included in the nominal GSDP. This represents the inefficiency of tax administration.
6.3 Structure of states’ revenue

An attempt to derive the compositional structure of Revenue Receipts, Tax Revenue and Non-Tax Revenue help to understand the relative role of various revenue sources in generating states’ revenue. The share of Tax Revenue as compared to Non-Tax Revenue in all the states remained high. Even though there are four states which improved upon assigning greater role to the Non Tax-Revenue, except Assam the share of Tax Revenue in all the states remained high ranging from around 50 % in Punjab to 85 % in Tamil Nadu during last five years. Assam, who is obtaining around 50 % of its total Revenue Receipts from Non-Tax Revenue, is mainly gained in the form of grants from the centre (81.83 %). Lesser proportion of Non-Tax Revenue implies inability to recover the cost of the state’s activities. This means the existence of implicit subsidy and more government intervention. Hence as mentioned before, the argument given by Prof Scally, greater intervention of government in the economic activities would reduce the economic growth rate. Having almost 85 % of the total Revenue Receipts from Tax Revenue would imply regressive tax structure as in Indian federal system taxes levied by states are indirect taxes.

All the advanced states have considerably high share of Own Tax Revenue compared to that of low-income states. Haryana have been generating between 80 to 90 per cent of the Tax Revenue from the Own Tax sources. Contrary to this states like Assam, Uttar Pradesh, Orissa and Bihar earned almost 50 per cent of their revenue from the central taxes. Backward states have benefited more by obtaining greater share in Finance Commission devolution. As many researchers have marked this, the egalitarian nature of central tax devolution to the states is quite evident in these findings.
Looking at the composition of Own Tax Revenue, sales tax is an important source of revenue for all the states. Kerala earns 74% of owned revenue from sales tax, followed by Himachal Pradesh (68%), Gujarat (65%). This indicates a greater reliance on the purchase and sale of output, and in turn on the industrial sector for generating higher revenue. After sales tax, it is the excise duty, which plays significant role in non-prohibited states. Punjab used to collect one third of its Own Tax Revenue from excise before 2000-01. Entertainment tax has very much insignificant share in the Own Tax Revenue in almost all the states despite the fact that entertainment industry is growing in most the cities due to opening up of theatres, multiplexes, games and sports parlours and so on. There are two contrary arguments for this; 1. mainly due to the tax holidays given to multiplexes to attract investments for setting up entertainment zones, and 2. as mentioned in the previous chapter, it is also possible that the entertainment tax rate imposed on theatres, cables operators are too high to generate larger revenue. We cannot rule out the high incidence of tax avoidance and tax evasion. One needs to look at the tax structure of the Indian states. Having very insignificant share from the agricultural income tax and profession tax, the regressive approach of tax structure is apparent.

Looking at the share of own efforts in Non-Tax Revenue poor states rely heavily on the central aid and failed to exploit their own revenue sources, which in turn also indicates that there is greater relative burden on the citizens of the advanced states who pay high taxes and user charges compared to that of low income states. In contrast to the poor states, advanced states are collecting almost 70% of their Non-Tax Revenue from their own sources. Assam has been obtaining highest share from the centre’s grants ranging from 60% in 1986-87 to 83.16% in 1996-97. After 1993-94, the share of grants remained almost around eighty per cent. Uttar
Pradesh, Orissa and Bihar who raised more than 70% of their Non Tax-Revenue from centre's grants have followed Assam. Observing the sources of Own Non-Tax Revenue, we find wide variations among states. There is no single pattern of Own Non-Tax Revenue composition that emerges among states over the period of time; except that profits from State Owned Enterprise have been highly insignificant sources of revenue in all the states, which is as low as less than one percent.

Thus, we can derive from the findings that there is a clear demarcation in the share of the various sources of Revenue Receipts among the advanced and backward states. Backward states rely more on the centre while advance states have tried to exploit the economic growth and urbanisation-modernisation to obtain Own Tax and Own Non-Tax Revenue. It is very clear from the findings that along with the differences in the income level of states their sources of revenue also differ and thus in turn influence the composition of state's revenue.

6.4 Determinants of states' revenue

From the analysis of states' revenue by estimating growth rate and relative share of revenue sources, we can draw a conclusion that growth of the state economy is an important factor influencing revenue performance of the states. Hence, we also obtained the functional relationship between the economic growth of the states and the states' revenue. We have found how the sector wise economic performance of the 16 selected states has influenced their revenue raising capacity. Four dependent variables are selected; Revenue Receipts, Tax Revenue, Own Tax Revenue and Own

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Non-Tax Revenue. The explanatory variables for these dependent variables are per capita real GSDP from agriculture, per capita real GSDP from industry, per capita GSDP from service (all at factor cost) and percentage of urban population. Thus, four regression equations are specified and for all the four regressions, Fixed Effect Model is used.

The proposed model has helped us derive the functional relationship between economic performance and revenue performance of Indian states. We could find that agricultural output does not have statistically significant relationship with all the four revenue components. This is obvious as we also observed in chapter 4 that relative share of agricultural taxes are highly insignificant – hardly reaching to 1%. Agricultural sector not influencing Own Non-Tax Revenue also implies that states have failed to collect the income and user charges from the primary sector activities such as irrigation, animal husbandry, dairy, fisheries, forest and royalties from mines and other minerals.

However, as we found the industrial output and service sector output influence the revenue sources to a great extent. The value of regression coefficient of per capita real GSDP from industrial sector was observed to be 0.95 for Revenue Receipts, 1.04 for Tax Revenue, this further increased to 2.23 for Own Tax Revenue and 1.43 for Own Non-Tax Revenue. This means that with one rupee increase in the income from industrial sector it will contribute 0.95 rupees to Revenue Receipts, 1.04 rupees to Tax Revenue, 2.23 rupees to Own Tax Revenue and 1.43 rupees to Own Non-Tax Revenue. This is much significant. The regression coefficient of per capita real GSDP from service sector obtained the values 1.24 for Revenue Receipts, 1.39 for Tax Revenue; it reduces to 0.46 for Own Tax Revenue and 0.44 for Own Non-Tax Revenue. This shows that only those states can
augment their Tax and Non-Tax Revenue who can invest more in industrial sector and can increase their production from industrial and sector.

It is being observed that the regression coefficients for urbanisation level are statistically insignificant in case of Tax Revenue and Own Tax Revenue. Nevertheless, this variable does determine Revenue Receipts and Own Non-Tax Revenue. This shows the inability of the state governments to rationalize the entertainment tax, vehicle tax, stamp duty that are levied on the activities that would expand with the process of urbanisation and modernization. States who have reached at the saturation level in the growth of industrial sector and are now focusing more investment in human and social development would find it difficult to augment their revenue further.

The scenario that emerges from these findings is that agricultural sector has remained unexploited for tax collection and it is the industrial and service sector growth, which are major determinants of states’ revenue.

The econometric models derived are of the good fit as for all the models, R square is very high. Varying from 94 % in Revenue Receipts model to 86 % in own Non Tax-Revenue model.

In the LSDV; fixed effect models, the intercepts vary for individual states. For all the regressions, the state specific intercepts are significant at 1 per cent. This indicates existence of the differences in the revenue generating capacity based on the individual characteristics of the state. Thus the specific features of the state regarding the natural resources endowments, cultural and social environment, geographical conditions, political ethos which inturn influence the economic growth and development have created the disparities in revenue augmentation capacity among the states.
Though a noteworthy diversity in sources of economic growth can be observed, the tax structure and user charges structure more or less is the same across all the states. The bases for levying taxes are almost same in all the states. In addition to the common tax structure, states have the tendency to compete with each other to attract more investment and for that the tool used by them is the reduction in tax rate, tax holidays, and various tax exemptions rather than providing better infrastructure facilities.

Thus it seems that the tax base, tax rates and user charges are not based on the comparative advantage, are not linked with the thrust area of the economic activities and are also not linked with the productivity which infact will yield greater revenue.

Thus, from this study the following broad conclusions can be derived.

➔ Rate of growth of Revenue Receipts, Tax and Non-Tax Revenue, Own Tax and Non-Tax Revenue is higher in industrialised states as compared to backward states.

➔ For all the states, Tax Revenue increased at a greater rate in contrast to Non-Tax Revenue.

➔ Buoyancy estimates of Tax and Own Tax Revenue with respect to real and nominal GSDP terms are higher in low income states.

➔ The share of Tax Revenue in the total revenue of the state is higher in Industrial states as much as 85 to 75 %.
The relative share of Non-Tax Revenue has declined particularly after economic reforms in almost all the states.

Among various sources of Own Tax Revenue, sales tax has a significant role to play in all the states irrespective of their economic performance. This is followed by excise duty in non-prohibited states.

For Non-Tax Revenue, poor states rely greatly on the centre’s grant varying from 80 to 70%. Advanced states collect Non-Tax Revenue from own efforts which is around 70% and above.

The poor performance of states enterprises gets reflected in the insignificant share from their profit which is not even 1% in almost all the states.

Agricultural sector does not influence the states’ revenue.

Industrial and service sector performance determines to a great extent the revenue generation capacity of the states for both Own Tax and Own Non-Tax Revenue.

With every one rupee increase in the GSDP from industrial sector would contribute more than one rupee to the Tax Revenue and Non-Tax Revenue of the states.

Urbanisation of the states has failed to affect Tax Revenue but it significantly influences the Non-Tax Revenue.
Each individual state has different intercept for all the sources of revenue viz; Revenue Receipts, Tax Revenue, Own Tax Revenue and Own Non-Tax Revenue.

Thus, the specific different socio-economic-political and geographical factors determine the revenue raising capacity of the states.

6.5 **Policy Implications**

As we have tried to look into the pattern of revenue generation with respect to their economic performance and tried to estimate its impact on the revenue raising capacity, we make a broad observation that there truly exists a disparity in states’ revenue generation. Revenue differences can either be due to differences in fiscal capacity or in effort that encompasses populist tax concessions and inefficient tax administration (Mukhopadhyay, and Das, 2000).

Throughout the present research the key objective has been to examine the revenue performance of Indian states and analyse variations in states’ revenue with respect to growth performance of the 16 states.

As is evident from Table 4.1 the significance of Tax Revenue is much higher than the Non-Tax Revenue. We also discussed that this implies an existence of implicit subsidy; it will on one side hamper the economic growth and on the other side will create distortionary effect. The importance of the Non-Tax Revenue needs to be understood by the states.
During the period under consideration as per Table 3.2 and 3.3 the growth rate of Non-Tax Revenue was lower as compared to Tax Revenue in almost all the states.

The user charges and tariffs of the various general, social and economic services provided by states should be revised. Fees and user charges should be linked to the cost of production and the ability to pay principle. This will in turn reduce the implicit subsidy.

States should be given the authority to revise royalties and it should be on the ad-valorem basis. Performance of the State Owned enterprises must be improved as we found in Table 4.5 that the share of PSUs’ profit in the total Own Non-Tax Revenue is highly insignificant.

As we know some states though could not do well in industrial sector but are doing well in the tertiary sector. As estimated in the Panel Data model the income originated from the service sector influence the Own Tax Revenue and Own Non-Tax Revenue to a great extent as the regression coefficients have obtained the value of 0.465 for Own Tax Revenue and 0.448 for Own Non-Tax Revenue (Table 5.3 – A & 5.4 – A). Hence, Rajasthan, Haryana and Kerala and other states that are not performing well at industrial front can focus on the service industry such as tourism which is the main source of livelihood for many people in these states, can obtain revenue by introducing tourist charges in addition to levying high tax rate on hotels, restaurants, private travellers during the peak seasons.

Considering the issue of states’ taxes; as we have estimated (Table 4.3) profession tax, vehicle tax, entertainment tax; they grew at lower rates as compared to sales tax and have remained highly insignificant between 2 %
to even less than 1%. The administrative cost of collecting taxes should not be burdensome. We propose to revised tax rates and rationalised the entire tax structure. This will reduce the greater reliance on the industrialisation and will exploit the other productive activities of the states where industrial growth is low. The elasticity and buoyancy for each Tax Revenue can be calculated.

Thus, there should be a shift from sales tax to the agricultural tax, profession tax, entertainment tax to achieve higher growth in them and also collect significant share from the sources other than sales tax.

As seen in chapter 3 Tax Revenue has been observed to be more buoyant in poor states. State like Assam, Orissa, Uttar Pradesh and Bihar have buoyancy coefficient of Tax and Own Tax Revenue with respect to real and nominal GSDP grater than 1 (Table 3.4 & 3.5); this signifies that there are still unexploited socio-economic activities that need to be considered to collect Tax Revenue. However after the introduction of VAT states might be able to achieve higher growth rate in Tax Revenue.

Poor states must emphasis on raising their Tax and Non-Tax Revenue from their own efforts. As presented in Table 4.2 and 4.4, Bihar, Orissa, Assam and other backward states are collecting more less than 40% of Tax Revenue and 15% Non-Tax Revenue from their own sources and heavily relied on the central transfer. In the long term it is advantageous for the state to meet their rising revenue expenditure requirements from their own sources. Greater reliance on the central transfer in terms of tax devolution and grants-in-aid is not favourable as the grants from the Union keeps on changing year to year with the changes in the approach of respective Finance Commissions and Planning Commissions. While knowing the
buoyancy and elasticity of the taxes and user charges for the states it would be possible to augment their revenue sources as per their requirements and policy decisions.

However, Finance Commission should also adopt the approach of rewarding the states that have been showing better fiscal performance. Rather than assigning the weight the need based criteria more weight should be assigned to the tax effort criteria. This will enforce the backward states to look for augmenting their own sources of revenue.

As our major findings from the Panel Data model reveal that income originated from agricultural sector does not significantly affect the states revenue (Chapter 5). There is a need to restructure revenue pattern obtained from this sector. Irrigation, electricity subsidy can be removed on the contrary. Agricultural tax such as land revenue and agricultural income tax should be on the ad-valorem basis and linked to the agricultural productivity and inflationary effect rather than imposing the tax on the size of the farms. This will make revenue more buoyant.

Rather than having a common tax structure, states should be encouraged and given the freedom to find its own strengths and thrust areas for imposing taxes and user charges. Tax structure and the user charges should be revised and rationalised to keep pace with socio-economic structure of the state economy. This will enhance the revenue generating capability of each state and the disparities will be reduced to the extent it is accepted. Thus, at the end we try to emphasis the fact that rather than relying only on the one part of the productive activities to obtain revenue, states should find its own thrust areas and comparative advantage to meet their expenditure requirements from their own efforts.