CHAPTER VII
SUMMARY AND CONCLUSION

7.1 SUMMARY

As the state governments' own sources of revenue fall short of their expanding responsibilities, a gap arises between the fiscal needs and the revenue resources of the state. In anticipation of these problem, the constitution proposes a transfer of resources from the centre to the state. Also it has provided for an independent statutory body of finance commissions to regulate the transfer of resources. Nine finance commissions have been set up since 1951. These finance commission determines certain criteria for tax devolution and grants-in-aid with main emphasis on collection and population. Actually the state government expenditure is determined by a host of factors such as economic, demographic and political. The present study, at the outset, raises an issue whether the determinants of the finance commission coincide with the actual determinants of expenditure needs of the state governments. Hence the present study leads to the empirical verification of causality between expenditure and tax revenue which is the main component of government finance.
The first chapter gave a brief account of problem-setting, objectives, methodology, review of literature, scope and plan of the study. The role of Finance Commissions in the transfer of resources from the centre to the state governments was analysed in the second chapter. It also pointed out the importance of federal finance in a developing economy like India in maintaining regional fiscal balance among the states. The financial dependence of the state on the Union Government was also discussed in this chapter. Besides, it identified gaps in the federal transfer of resources and their expenditure projection.

The trend and pattern of growth of expenditure in Indian states during the period 1969-70 to 1988-89 was examined in the third chapter. For the analysis of trend and pattern of expenditure, state expenditure was classified as capital and revenue and further as development and non-development expenditure under both accounts. The expenditure on agriculture, industries, health and administrative services under both accounts were also considered.

In the fourth chapter, the causal relation between tax revenue and total expenditure, tax revenue and capital expenditure, and tax revenue and revenue expenditure of Indian states was empirically tested, in terms of actual data and log series. Both Granger and Sims test of
causality were applied to identify the causal relationship between tax revenue and total expenditure and its components such as capital and revenue expenditure. In addition, filtering technique was also employed to overcome the sensitiveness of 'F' test for autocorrelation.

The fifth chapter dealt with the demographic and economic factors determining public expenditure in Indian states. For the purpose of analysis, expenditure was classified into two categories, such as capital and revenue expenditure. Capital expenditure was further classified into development and non-development expenditure. Development expenditure was further classified as expenditure on agriculture, industry and public health while revenue expenditure was classified as development and non-development expenditure. Development revenue expenditure comprises expenditure on agriculture, industry, public health and education while non-development revenue expenditure comprises expenditure on administrative services. This study was a time series analysis covering a period of 20 years from 1969-70 to 1988-89 and covered 22 Indian states. The independent variables selected covered both economic and demographic factors such as i) tax revenue, ii) grants-in-aid, iii) state debt, iv) national income, v) primary sector contribution, vi) literacy rate, vii) percentage of urban in the total population,
viii) percentage of Scheduled caste and Scheduled tribes in the total population, and ix) density of population. The seemingly unrelated Regression Model was used to identify the significant factors influencing each item of expenditure. Further, the sixth chapter made an attempt to examine the influence of economic, demographic and political factors on various items of expenditure across Indian states at three different points of time, such as 1969-70, 1980-81 and 1988-89. While, the seventh chapter sums up the findings and policy implications of the study.

7.2 MAJOR FINDINGS OF THE STUDY

The present study revealed the gap in the federal transfer of resources to states. It was found that the transfer of resources was not favourable for the relatively backward states. The transfers actually widened the range of disparity between the advanced states and the backward ones. The review of finance commissions showed the flaws in forecasting the expenditure needs of the state governments. The finance commissions have considered certain factors with emphasis on population and collection of tax, in order to determine the expenditure needs of the state governments. But in reality, several economic, demographic and political variables determine the fiscal responsibilities of states.
The analysis of the trend and growth of different items of expenditure of Indian states showed that the growth in per capita and constant terms was slower than the growth in absolute and nominal terms. This may be related to the spiraling prices and rise in population. The revenue expenditure of state governments showed a rapid increase compared to that of capital expenditure, due to the low capital formation in Indian states. In addition, expenditure such as health, education and industry showed an irregular pattern, which may be due to changes in policy formulation of the government.

The empirical results of the causality test showed that tax revenue caused total expenditure in Indian states and capital expenditure was also caused by tax revenue. In the case of causality test on revenue expenditure, based on the Granger test, tax revenue caused revenue expenditure only in the long run. The Granger test on tax revenue vs. revenue expenditure supported the supply side economists' view that increased revenue causes increased spending. Based on the sims test of causality, results were obtained which indicated that tax revenue of Indian states caused total expenditure. The Sims causality test on tax revenue vs. capital expenditure and revenue expenditure showed bi-directional relationship. Thus, by and large, the empirical results of both Sims and Granger test suggested
that tax revenue caused total expenditure, capital expenditure and revenue expenditure in Indian states.

The results of seemingly unrelated Regression analysis on the determinants of expenditure in Indian states showed the significant factors influencing each item of expenditure. Capital expenditure was significantly determined by tax revenue, percentage of urban in the total population and state debt, while state debt had a negative influence on capital expenditure. Capital development expenditure was influenced significantly by tax revenue, percentage of urban in the total population and density of population.

Capital expenditure on agriculture was positively influenced by factors such as state debt, primary sector contribution, and percentage of Scheduled caste and Scheduled tribes in the total population, and negatively influenced by factors such as grants-in-aid and national income. Capital expenditure on industries was positively determined by national income at current prices, density of population, and state debt.

Capital expenditure on public health was significantly determined by national income at current prices and density of population. But non-development
capital expenditure was positively influenced by national income at current prices alone.

Tax revenue, grants-in-aid and national income, which constitute the financial position of the states, contributed positively to revenue expenditure. But the density of population showed a negative influence on this item of expenditure. Development revenue expenditure was significantly influenced by only one factor, namely density of population.

Grants-in-aid, primary sector contribution and percentage of Scheduled caste and Scheduled tribes in the total population were the significant determinants of revenue expenditure on agriculture, while grants-in-aid was negatively associated with this item of expenditure.

Revenue expenditure on industries was significantly influenced by two variables, namely national income at current prices and density of population. Revenue expenditure on education was significantly determined by tax revenue, grants-in-aid and national income at current prices. Further, revenue expenditure on public health was positively associated with tax revenue and density of population.

State debt and national income at current prices contributed positively to revenue non-development
expenditure due to the rise in non-developmental services such as interest payment and servicing of debt, administrative services, and maintenance of law and order.

The analysis of the public expenditure determinants across Indian states during 1969-70, 1980-81 and 1988-89 showed that in 1969-70, per capita grants-in-aid influenced positively per capita capital expenditure, while percentage of Scheduled caste and Scheduled tribes in the total population influenced negatively this item of expenditure. In 1980-81, one per cent rise in density of population leads to a decline of 0.89 per cent in this item of expenditure, whereas in 1988-89, one per cent increase in per capita tax revenue, per capita grants-in-aid and percentage of Scheduled caste and Scheduled tribe in the total population resulted in an increase of 1.06 per cent, 0.4 per cent and -0.41 per cent respectively. It was interesting to note that there was an increment of 0.18 per cent in this item of expenditure when a state moved from a non-Congress to a Congress state.

In 1969-70, only the percentage of Scheduled caste/ Scheduled tribes in the total population negatively influenced per capita development capital expenditure, while in 1980-81, one per cent increase in density of population led to a decline of 0.86 per cent in per capita development
expenditure. In 1988-89 per capita tax revenue had a positive influence, while percentage of Scheduled caste and Scheduled tribe in total population and per capita income had a negative impact on this item of expenditure. Political variable showed a positive influence when a state moved from a non-Congress to a Congress government.

Both in 1969-70 and 1980-81, per capita expenditure on agriculture was not influenced significantly by any variable. In 1988-89, per capita grants-in-aid was a positive determinant and percentage of urban population was a negative determinant of per capita capital expenditure on agriculture. Further, when a state changed from a non-Congress to a Congress government, this resulted in an increase of 0.29 per cent in this item of expenditure.

In 1969-70, per capita tax revenue and literacy rate had a positive influence, while density of population had a negative impact on per capita capital expenditure on industry. In 1980-81, per capita debt and density of population negatively contributed to this item of expenditure. In 1988-89, per capita grants-in-aid had a positive influence. Further, political variable did not influence significantly this item of expenditure.

In 1980-81, per capita grants-in-aid, primary sector contribution, density of population and percentage of
urban in the total population were negatively associated with per capita capital expenditure on public health, while per capita debt was a positive determinant of this item of expenditure. Further, when a state changed from a non-congress to a congress-ruled state, there was a decline of 0.81 per cent in this item.

In 1969-70, one per cent increase each in primary sector contribution and literacy rate resulted in a decline of 18.94 per cent and 14.13 per cent in per capita non-development capital expenditure respectively. In 1980-81 the primary sector contribution and literacy rate had a positive influence and density of population had a negative influence on this item of expenditure. But in 1988-89, only per capita grants-in-aid influenced positively this item of expenditure. Political variable did not exhibit any influence during this period.

In 1969-70, per capita revenue expenditure was positively influenced by per capita grants-in-aid. In 1980-81, one per cent increase in density of population led to a decline of 0.54 per cent in per capita revenue expenditure. In addition, when a state moved from a non-Congress to a Congress government, there was a decline of 0.15 per cent in per capita revenue expenditure. But in 1988-89, per capita tax revenue and grants-in-aid had a positive influence and
percentage of Scheduled caste and Scheduled tribe in the total population had a negative influence on this item of expenditure. During the period of the study political variable did not at all influence this item of expenditure.

In 1969-70, the positive determinants of per capita development revenue expenditure were per capita tax revenue, per capita grants-in-aid and literacy rate, and the negative determinant was per capita debt. But in 1980-81, percentage of urban in the total population negatively influenced this item of expenditure. During this period, when a state changed from a non-Congress to a Congress-ruled state, there was a decline of 0.18 per cent in this item of expenditure. In 1988-89, per capita grants-in-aid had only a positive influence.

In 1969-70, one per cent increase in per capita grants-in-aid and per capita debt of the state resulted in an increase of 0.48 per cent and -0.25 per cent in per capita revenue expenditure on agriculture respectively. In 1980-81, literacy rate influenced positively while density of population influenced negatively per capita expenditure on agriculture.

In 1969-70, per capita grants-in-aid and per capita income of the state had a positive influence on per capita revenue expenditure on industry. In 1980-81, one
per cent increase in density of population led to a decline of 0.54 per cent in this item of expenditure while in 1988-89, per capita tax revenue and per capita grants-in-aid were positively associated with this item. Political variable did not exhibit any influence.

In 1969-70, per capita grants-in-aid was positively associated with per capita revenue expenditure on health. In 1980-81, literacy rate influenced positively while density of population influenced negatively this item of expenditure. In 1988-89, per capita tax revenue, and per capita grants-in-aid influenced positively while per capita debt and density of population influenced negatively this item. Political variable did not exhibit any influence.

In 1969-70, per capita expenditure on education was influenced positively by per capita grants-in-aid and negatively by per capita debt. In 1980-81, density of population was associated negatively with this item of expenditure. When a state moved from a non-Congress to a Congress government, there was a decline of 0.35 per cent in this item of expenditure. But in 1988-89, per capita grants-in-aid positively influenced whereas per capita debt and density of population influenced negatively this item. Political variable was not at all a significant determinant of this item.
In 1969-70, per capita non-development expenditure was influenced positively by per capita grants-in-aid, but in 1980-81, density of population influenced negatively; in 1988-89, per capita tax revenue positively influenced this item of expenditure. Political variable did not exhibit any influence.

The results of the study of the determinants of per capita expenditure on administrative services in 1969-70 showed that per capita grants-in-aid and tax revenue contributed positively, while per capita debt and primary sector contribution influenced negatively per capita expenditure on administrative services. But in 1980-81, density of population was negatively associated, while percentage of Scheduled caste and Scheduled tribes in the total population was positively associated with this item of expenditure. Further, when a state changed from a non-Congress to a congress government, there was a decline of 0.22 per cent in this item. In 1988-89, per capita tax revenue and per capita grants-in-aid influenced positively, while per capita debt and literacy rate influenced negatively this item of expenditure. Further, when a state moved from a non-Congress to a Congress government, there was an increment of 0.21 per cent in per capita expenditure on administrative services.
Thus, the study revealed that in the later phase (i.e., 1980-81 and 1988-89), political variable had a significant impact on the expenditure of Indian states.

7.3 POLICY IMPLICATIONS

1. Indian state governments can mobilise more and more tax revenue in order to meet the mounting pressure on state expenditure.

2. State expenditure is influenced by several socio-economic, demographic and political factors. Also, the determinants differ for different items of expenditure. But the finance commissions have considered basically population and collection of tax as the main criteria for transferring resources from the centre to the state governments. Hence the study also calls for a consideration of the influence of socio-economic, demographic and political factors on different items of expenditure in transferring resources.

3. In the later phase (1980-81, 1988-89) political variable is one of the main determinants of state expenditure, which may be due to the instability of the government. Therefore, the present study stresses the importance of stability of the state government in maintaining a regular pattern of expenditure growth.