CHAPTER 7

SUMMARY AND CONCLUSIONS

Summary

Classical Economists opined that the government should not interfere in the economic life of the people. The main duty of the government is to maintain law and order. In modern times the role of public expenditure has changed drastically. Besides maintaining law and order, the government should stimulate growth process in the absence of private initiative in the economy which requires higher levels of government expenditure. This results in rapid expansion of public sector in almost all the countries of the world.

There are two views pertaining to the relationship between growth and size of the public sector. One was propounded by Adolf Wagner and the other was by J.M. Keynes. According to Wagner the expansion of public expenditure is in proportion to the growth of gross national product. The Macro Economic theory of J.M. Keynes assumes that public expenditure causes national income. The two divergent views have different policy implications. Under the Wagnerian approach, public expenditure is a behavioural variable with a passive role. Under Keynesian approach, public expenditure is treated as an exogenous policy variable and it is mainly formulated to ease out short run cyclical fluctuations. Hence, there is a need for an empirical testing before choosing between the two approaches. In
addition, there is also a chance of a feedback pertaining to the relationship between public expenditure and national income.

There are umpteen works pertaining to the relationship between public expenditure and gross national product. The results of the earlier works are:

(i) public expenditure causes national income
(ii) National income causes public expenditure
(iii) there is a bi-directional relationship between public expenditure and national income
(iv) there exists an independent relationship between public expenditure and national income.

The differences in the results of earlier studies are mainly due to differences in the procedure of causality testing and comparability of data.

Further the earlier works are related to national and international level and their relevance to the state economy like Kerala is limited due to vast differences in their socio-economic and political features. Hence, one of the issues of the present study is an inquiry of the causal nexus between public expenditure and state domestic product in Kerala.

Secondly, the growth of public expenditure is influenced by multifarious factors such as income, tax revenue, density of population, unemployment rate, urbanisation, grants, inflation, public debt, weaker sections of society and political party in power. In this context large number of works have been conducted, but only a few studies considered political variable as one of the determinants of public expenditure. Besides, dummy variable is considered as
a proxy for quantifying political factors in identifying its influence on public expenditure. It is questionable on the ground that it leads to the problem of errors in measurement. Hence, it is better to quantify the political factors as a percentage of elected representatives of one party to the total elected representatives in a year. The quantification is justified on the following two grounds:- (i) The state government and Central government allocate certain amount for each constituency development through elected representatives and it will normally be spent in the constituency on the rationality of vote maximising principle. (ii) The majority of the ruling party in recent times is very thin. Shifting of loyalty of a few members of the Legislative Assembly or Members of Parliament from one party to the other results in changes in party in power. Hence, due weightage has to be given for the opinion of each member of Legislative Assembly and members of Parliament in policy formulation. Based on the above rationality, even a single study does not exist in identifying the socio-economic and political determinants of public expenditure in a regional economy like Kerala. Hence, the second issue of the present study is an investigation of the socio-economic and political factors which influence different components of state expenditure in Kerala.

On the above back ground, the main objectives of the present study are:-

(i) To sketch the earlier literature pertaining to public expenditure and to identify the gap of such studies.
(ii) To elucidate different tools employed by the earlier authors to verify the theories of public expenditure and to identify the path in which the entire work proceeds.

(iii) To examine the trend and pattern of various components of public expenditure in Kerala.

(iv) To identify causal nexus between state expenditure and economic growth.

(v) To identify the socio-economic and political determinants of various components of state expenditure in Kerala.

The present study consists of seven chapters. Chapter one deals with introduction, objectives, methodology, scheme and limitations of the study. The necessary information for the analysis are collected from various issues of State government publications like Budget in Brief, Economic Review of Government of Kerala, Basic Statistics relating to Kerala economy, and Reports of annual plan of Kerala economy for the year 1957-58 to 1996-97.

The chapter two deals with the first objective of the study. The earlier literature pertaining to verification of Wagner’s Law of public expenditure and determinants of public expenditure are examined in the second chapter of the study.

The second objective of the present study is examined in chapter III which explains the various theories of public expenditure pertaining to our
studies and various tools employed in verification of the theory by earlier researchers.

Chapter IV deals with third objective of the study. It examines the trend and pattern of various components of state expenditure of Kerala. Simple ratios and percentages are employed to examine the trend and pattern of public expenditure in Kerala. Besides, to examine the trend of State expenditure, per capita State expenditure is constructed. In addition, State expenditure is also deflated by wholesale price index of 1980-81, to identify the real increment in public expenditure. Linear growth rate of per capita expenditure at current and constant prices of various components of state expenditure is computed to identify the trend of state expenditure in Kerala.

The fourth objective of the study is examined in the Chapter V. Granger, Sims and Multiple Rank ‘F’ test are employed to examine the objective of causal nexus between State expenditure and State domestic product.

The fifth and last objective of the study is examined in Chapter VI. Log-linear multiple regression equation analysis was carried out to identify the socio-economic and political determinants of various components of State expenditure. Simple correlation matrix was computed to identify the possible association between various components of expenditure and its determinants and also the relation among the determinants. Besides, step-wise regression
analysis was carried to overcome the problem of multicollinearity and the equation selected for the analysis is on the basis of higher $R^2$ value and a larger number of significant explanatory variables.

Main findings of the study

The results of earlier literature pertaining to verification of Wagner’s law of public expenditure reveals the following observations:-

(i) Public expenditure causes national income,

(ii) National income causes public expenditure,

(iii) Bi-directional relationship between public expenditure and national income, and

(iv) An independent relationship exists between public expenditure and national income.

The above results differ across different studies and even single study does not exist relating to Kerala economy. Further, the results of earlier study may not hold good to Kerala economy due to vast differences in their socio-economic and political characteristics compared to other nations and states of India. Kerala economy is similar to less developed economy in terms of per capita income, poverty and standard of living and similar to developed country in terms of literacy, health indicators and political awareness. These reasoning
led to the need for testing the relevance of Wagnerian theory in Kerala economy.

The earlier work pertaining to determinants of public expenditure reveals that socio-economic and political constraints are influencing public expenditure. However, the results of various studies differed with each other. Further, the earlier studies adopted dummy variable approach to quantify the political variable. This will lead to the problem of errors in measurement. To overcome this, we introduced political party index to quantify the political variable. In this background, another issue of the present study is that of the socio-economic and political constraints influencing various components of public expenditure in Kerala.

The results of this second objective of the study reveals that earlier researchers employed ratio income elasticity test and causality test to verify the Wagnerian hypothesis. The determinants of public expenditure are examined in the frame work of multiple linear regression analysis.

The present study considered Granger, Sims and Multiple Rank ‘F’ test to verify the validity of Wagnerian hypothesis in Kerala economy.

The log linear multiple regression equation is employed to identify socio-economic and political determinants of various components of public expenditure in Kerala.
By and large, the analysis of the trend and pattern of state expenditure in Kerala reveals that different components of expenditure have increased over the years. But in terms of real per capita the increment of state expenditure is marginal. This is due to population pressure and increase in the price level. Further, the enhancement of state expenditure is also due to increasing the cost of public services and capacity of the state.

The analysis of causal nexus between public expenditure and state domestic product reveals that there is an independent relationship between the two in Kerala. The possible reasons behind an independent relationship between the two are:-

i) Economic growth is not having an impact on public expenditure due to the vested interest of elected representatives. Expansion of public expenditure is on the basis of populistic measures and enhancement of vote bank of elected representatives.

ii) The positive and negative impact of public expenditure on economic growth will nullify the actual influence of public expenditure on economic growth. The impact of government expenditure is positive due to (a) government will play a role of harmonising the complex between private and social interest, (b) there is a prevention of exploitation of the country by foreigners, and (c) securing an increasing productive investment and providing a socially optimum direction of growth and development.
The government size is negatively acting on economic growth due to :-
(a) government operations are not often conducted efficiently, (b) many government expenditure policies tend to distort economic incentives and lower the productivity of the system.

The analysis of determinants of various components of state expenditure reveals that per capita income, per capita debt, percentage of urban population and percentage of Members of Legislative Assembly in Left Democratic Front to total number of Members of Legislative Assembly in state legislature were positively influencing the per capita total expenditure of Kerala state.

The positive determinants of per capita total revenue expenditure are per capita income, per capita debt, percentage of Members of Legislative Assembly in the Left Democratic Front to total number of Members of Legislative Assembly of Kerala and wholesale price index.

The positive determinants of per capita revenue development expenditure are per capita tax revenue, per capita income, density of population and wholesale price index.

Per capita tax revenue, per capita income and wholesale price index are positively influencing per capita social development expenditure.
Per capita tax revenue, per capita income, density of population are positively associated and unemployment rate is negatively associated with per capita expenditure on irrigation.

The positive determinants of per capita expenditure on public works are per capita income, urbanisation and density of population.

Per capita public expenditure on forest is positively influenced by per capita tax revenue, per capita income and wholesale price index.

Per capita income, density of population and percentage of scheduled caste and scheduled tribe population in total population are positively influencing per capita expenditure on transport and communication. The negative determinants of per capita expenditure on transport and communication are unemployment rate, wholesale price index and percentage of Members of Legislative Assembly of Left Democratic Front to total number of Members of Legislative Assembly of the state.

Per capita expenditure on health is positively influenced by per capita debt and wholesale price index.

The positive determinants of per capita non-development expenditure are per capita income, per capita debt, percentage of Members of Legislative Assembly of Left Democratic Front to total number of Members of Legislative Assembly of Kerala state and wholesale price index.
Per capita expenditure on administration is positively influenced by per capita tax revenue, per capita debt, and wholesale price index and negatively influenced by density of population.

Per capita debt, percentage of urban population, percentage of Members of legislative Assembly of Left Democratic Front to total number of Members of Legislative Assembly of the state, and percentage of scheduled caste and scheduled tribe population in total population are positively associated and primary sector contribution is negatively associated with per capita total capital expenditure.

Per capita development capital expenditure is positively influenced by per capita tax revenue, per capita income, per capita debt, unemployment rate, urbanisation and percentage of Members of Legislative Assembly in Left Democratic Front regime to total number of Members of Legislative Assembly in the state legislature and negatively influenced by primary sector contribution.

Per capita income, per capita debt, urbanisation and percentage of scheduled caste and scheduled tribe in total population are the positive determinants of per capita non-development capital expenditure of Kerala.