Chapter 2

Positive Theory of Public Expenditure

Public expenditure reflects the policy choices of governments. Once governments have decided upon which goods and services to provide and the quantity and quality in which they will be produced, public expenditures represent the costs of carrying out these policies. Historically, public expenditure has recorded a continuous increase over time in almost every country. While a private economic unit was guided by its own economic interests, the public sector had no motivation. Because welfare State could not ignore problems of economic growth and social justice, it could not remain silent spectator of the miseries of the people. This resulted in the acceptance of several versions of socialist and welfare philosophy.

There are two important explanations of government expenditure dominated by two general hypotheses. The first one is known as Wagner's Law and second one is known as the "*Displacement Effect*", introduced by Alan T. Peacock and Jack Wiseman. Both Wagner's Law and Displacement Effect have been tested statistically in various efforts to identify separately the determinants of government expenditure. In this chapter we have proposed to analyse in detail the Wagner's Law and Displacement Effect and the relevance of these two hypotheses will be analysed in the latter section of this chapter.

2.1 Wagner's Law:

Adolph Wagner a German economist of the latter half of the 19th century, who based his Law of Increasing State Activities on historical facts, primarily of Germany, which reflected the growing importance of government activities and expenditure as an inevitable feature of a "*progressive*" state. He tried to establish a direct link between economic development and growth and the relative size of public sector and consequently public expenditure.

According to Wagner, there is an inherent tendency for the activities of different layers of a government (e.g. Central and State governments) to increase both intensively and extensively. Prevailing public expenditure reflects the requirement of a given historical situation. Any change in the public expenditure reflects the underlying changes in the economic structure and development. He justified public expenditure in terms of objective criteria, such as population or transportation needs.

Wagner's Law was based upon historical facts. It did not reveal the inner compulsions under which a government has to increase its activities and public expenditure as time passes. It was applicable only to modern progressive governments which were interested in expanding public sector of the economy for its overall benefits, and public expenditure would grow faster than output. This general tendency of expanding state activities had a definite long-term trend, though in the short-run, financial difficulties could come in its way. "But in the long-fun the desire for development of a progressive people will always overcome these financial difficulties (Musgrave, R.A. and Peacock, A.T., 1958) .

According to Wagner, there is an inherent tendency for the activities of the government of different layers e.g. central and State government to increase extensively and intensively. As the time passes, various levels of government undertake new functions. This means that the range of activities carried on within the public sector is extended. This process of adding new activities may be termed as extensive growth in government services. On the other hand the tendency of the governments to perform both old and new functions more efficiently and completely is called intensive growth in public activity.

Wagner hypothesized that as per capita income increases due to industrialization, there is a secular growth in public sector economic activity. The growth of public sector is attributed to three factors: (i) Most countries have registered increasing urbanization. Urbanization implies a much larger per capita expenditure on civil amenities that are needed to deal with the increased population and urbanization, (ii) Societies are experiencing a growing population which leads to the increase in 'cultural and welfare' expenditures, particularly for education and the redistribution of income because of elastic nature of income elasticity of demand for cultural and welfare expenditures, and (iii) rise in public investment activity because of market failure and because of the monopolistic trends which require state intervention in the form of nationalization or monopoly control.

Therefore, Wagner's Law refers only to those states in which income is rising as a result of industrialization and excludes explicitly the 'non-progressive' societies. In this connection Bird (1971) has pointed out that "the conditions under which one might expect the 'Law' to operate would therefore, seem to be (i) rising per capita income; (ii) technological and institutional changes of a particular sort; and (iii) at least implicitly, democratization in the sense of wider political participation of the polity" "(Bird,1971)

Wagner's model, while containing many insights, suffered from the drawback that it did not contain a well articulated theory of public choice. Indeed, Wagner assumed away the problems of public choice by employing an organic theory of the state'. According to him the state was assumed to behave as it were an individual existing and making decision independently of the members of society (Bird.,1971).

In spite of criticism of Wagner's Law, it continues to play an important role in the study of public expenditure behaviours. According to Wagner's Law, there is a functional relation between the growth of an economy and the government activities with the result that the government sector grows faster than the economy. From the original version of this theory it is not clear whether Wagner was referring to an in increase in (a) absolute level of public expenditure, (b) the ratio of government expenditure to GNP, or (c) proportion of public sector in the total economy. Musgrave believes that Wagner was thinking of (c) above.

Wagner's Law has been interpreted in terms of the concept of elasticity. It suggests greater than unity income elasticity for a number of public goods.

According to this Law, the percentage change in the public expenditure is greater than percentage change in GNP or national income.

2.2 Empirical Testing of Wagner's Law:

If a long-time period is taken, Wagner's Law seems to be quite sound and researchers using time series data have accumulated evidence to support the contention that the relative size of the public sector has increased over time in almost all the developed countries of the world. But different cross-section analyses have come out with conflicting empirical results. In this connection Gandhi (1971) remarks that a major cause of conflicting findings of cross section studies on government expenditure-shares might be the compositions of the samples used in those studies (Gandhi, 1971)

F. S. Nitti (1903) not only supported Wagner's thesis but also concluded with empirical evidence that it was equally applicable to several other governments which differed from each other. All Kinds of governments, irrespective of their levels (Central or State), intentions (Peaceful or Warlike), and size, etc, had exhibited the same tendency of increasing public expenditure. Most of the other writers on this subject have agreed with this conclusion, including even those who have, on varying grounds, criticized the rationale offered by Wagner or the suitability of the available evidence for testing his proposition (Bird,1971).

2.3 Wiseman-Peacock Hypothesis:

According to Wagner's Law the principal determining force for the rise in public expenditure is the growth of real per capita income or in other words increased public demand for new public services arising out of the growth of real per capita income. There have been some recent attempts at the positive theory of public expenditure stressing the supply side operating through tolerable limits to taxation on the financing of public expenditure as the more important determinant of the growth of public expenditure. Of the supply side theories of public expenditure, the displacement hypothesis of Peacock and Wiseman has received deepest attention.

Peacock and Wiseman's empirical study of the growth of public expenditure in the United Kingdom from 1890 to 1955 is probably one of the best-known analyses of the 'time pattern' of public expenditures. They founded their analysis upon a political theory of public expenditure determination, namely that governments like to spend more money but citizens do not like to pay more taxes, and that governments need to pay some attention to the wishes of their citizens. Thus they opened up public expenditure to the influence of the ballot box. Peacock and Wiseman make the following assumptions about the nature of the state: (i) decisions about public expenditure are taken politically, and so can be influenced through the ballot box or by whatever media citizens can bring pressure to bear upon the government, (ii) political choices about the use of resources differ from choices made through the market system, and (iii) citizen can have ideas about desirable public expenditure which are quite different from and incompatible with their ideas about tolerable burden of taxation. Peacock and Wiseman viewed the voter as an individual who enjoyed the benefits of public goods and sources but who disliked paying taxes. Thus the government when deciding upon the expenditure side of its budget keeps a close watch on the voters' reactions to the implied taxation. They assumed that there is some tolerable level of taxation' which acts as a constraint on government behaviors.

As the economy grows, tax revenue, at constant tax rates, would rise, thereby enabling public expenditure to grow in the line with GNP. In normal times, therefore, public expenditure would show a gradual upward trend, even though within the economy there might be a divergence between what people regarded as being a desirable level of public expenditure and desirable level of taxation. During the period of social upheaval, however, this gradual upward trend in public expenditure would be disturbed. These periods would coincide with war, famine or some large-scale social disaster which would require a rapid increase in public expenditures. In order to finance the increase in public expenditures the government would be forced to raise taxation levels. This raising of taxation levels would, however, be regarded as acceptable to the electorate during the periods of crisis.

Peacock and Wiseman referred to this as the 'displacement effect'. Public expenditure is displaced upwards and for the period of the crisis displaces private expenditure for public expenditures. The process represents an upward shift in the trend line of public expenditure. Following the period of crisis public expenditure does not, however, fall to its original level. A war is not fully paid for from taxation; no nation has such a large taxable capacity. Countries therefore borrow, and debt charges have to be met after the event.

Another effect that they thought might operate was the '*inspection effect*'. This effect arises from the voters' keener awareness of social problems during the period of upheaval. The government therefore expands its scope of services to improve these social conditions, and because the electorates' perception of tolerable level of taxation does not return to its former level the government is able to finance these higher level of expenditure originating in the expanded scope of government and debt charges.

Along side the displacement effect, there is another influence, called the '*concentration process*' (Peacock and Wiseman,1967*)*. This concentration effect refers to the apparent tendency for the central government economic activity to grow faster than that of state and local level government. British data are consistent with this hypothesis. Moreover, this aspect of concentration effect is also closely connected with the political set up of the country.

Peacock and Wiseman's theory has not gone without criticism. Gupta (1967) argued that the concept of the tolerable burden of taxation would rather suggest a shift in the downward direction depending on the prevailing situation. During the depressions public expenditure expands, but it becomes difficult for the government to raise the level of taxation. Higher public expenditure is incurred without increasing the burden of taxation. For meeting revenue needs, government resorts to deficit financing. Therefore, if the concept of the tolerable burden were expanded so as to include not only that of taxes but also that of other methods of financing government expenditure, it would provide a better explanation of the growth of public expenditure.

2.4 Empirical Testing of the Hypothesis:

Peacock and Wiseman hypothesis has been carried out in a number of studies. Some of the studies using econometric techniques have reached conflicting conclusion. On the whole, the studies have more or less extended support to the hypothesis.

Reddy's (1972) Study of the growth of public expenditure in India, from 1872 to 1968, supports the 'displacement effect' hypothesis. Goffman and Mahar (1971) in their study of the growth of public expenditure in six developing Caribbean Countries have found definite evidence of the displacement effect hypothesis. But the source of this 'displacement' appears to differ from those observed in developed countries. Bird (1970) and Rosenfeld (1973) in their study of Canada have found little empirical evidence in support of the displacement hypothesis. Auld and Miller (1977) observed that when war and related expenditure are deducted from total expenditure for United Kingdom, for the period from 1890 to 1955, the displacement effect vanishes. They, therefore, concluded that the empirical evidence therefore, suggests that wars do not cause displacements but only temporary peaks on a rising trend.

Nagrajan (1978) makes an attempt to test the displacement effect hypothesis for central government expenditure In India as a consequence of less pronounced political-social upheaval which he called 'non-global crisis' like the Sino-Indian hostilities of 1962. He observation that the crisis did not affect public expenditure in 1961-62, but the impact of the crisis was felt from 1962-63 onwards. Therefore, he finds empirical support for the displacement effect hypothesis in public expenditure associated with hostilities of 1962.

In the development models of Musgrave and Rostow, public expenditure growth reflected the role of government in the process of development as a supplier of infrastructure, capital and social investment, and especially to overcome market failure. Wagner on the other hand concentrated more on the income elasticity of demand for public outputs and again recognized the market failure type arguments that have been used since. Peacock and Wiseman's approach was to look at the underlying politics of the fiscal system in an attempt to account for the time pattern of public expenditures that they had observed. They concentrated especially on the shift points in the relative scale of public expenditure which coincided with periods of catastrophe such as wars.

2.5 Relevance of Wagner's Law and Peacock–Wiseman Hypothesis in Present Study:

If we assume that the government admits the need and worthwhile ness of economic development, public expenditure and economic development are dependent on each other at any given time. In developing countries like India, Wagner's Law is not directly capable of being applied, but is often felt indirectly in the estimation of income elasticity of public expenditure, which is central to Wagner's scheme of thought. With the process of economic development, public expenditure increases on social and economic services, such as education and health, which have a higher income elasticity of demand. Since mass of public expenditure is not homogeneous, income elasticity of public expenditure has a tendency to vAry widely from category to category.

The present study is designed to deal with time-series analysis in order to verfty Wagner's Law in the case of Indian Union. This will contribute to a better understanding of the relation between public expenditure and economic growth in India.

Now one basic question arises and this is – to what extent does the Peacock and Wiseman hypothesis be tested to a country like India as it was established for great Britain. In fact, it is an answer to this question that our study set out to find. In India, the growth of public expenditure can not expect the applicability of 'displacement effect' hypothesis of Peacock and Wiseman in the same sense in which the hypothesis has bean used by them. But in course of our study, we should be able to say whether or not the growth in public expenditure in a developing country is likely to follow the same path as that in a developed economy.

Like any Western democratic country, India follows the constitutional procedure for the increase in the real national income and since independence, India follows the same parliamentary form of government is obtained in the United Kingdom. People in India can influence indirectly the national policy through the ballot box. The electorate in India enjoys a considerable vote power over the formulation of national policy, and broad freedom to dissent and to organize peaceful opposition. Therefore, the assumptions about the nature of the State made by Peacock and Wiseman do hold well in the case of India.

India is a developing country and has passed through all the important social disturbances as were witnessed in the United Kingdom. Britain had to face two social upheavals – World War-I & II, similarly, India passed through four social upheavals e.g. the Sino-India War of 1962, Indo-Pakistan War of 1965, Bangladesh Freedom War of 1971 and Kargil War of 1999 since Independence. Therefore, the growth of public expenditure in India can be analysed in the context of social upheavals such as the wars of 1962, 1965, 1971 and 1999.

Further, the government has set before itself very impressive economic and social goals of achieving higher level of income, employment and out put and reduction of income inequality which are to be achieved through the Five Year Plans. The government has become the biggest buyers of certain product and the greatest employers in the construction business. Thus estimation of the size and composition of public sector and distribution of limited real resources among the different alternative use is of great analytical use to the policy-makers.

Reference:

Auld, D.A.L. and Miller, F.L., *Priciples of Public Finance,* Toronto, 1977.

Bird. R. M., "Wagner's Law of Expending State Activity", *Public Finance*, XXVI (I), 1971,.

Gandhi, V.P., "Wagner's Law of Public Expenditure: Do Recent Cross-section Studies Confirm It"? *Public Finance*, XXVI (1), 1971.

Goffman, I.J. and Mahar, D.J., "Growth of Public Expenditures in Selected Developing Nations : Six Caribbean Countries 1940-65", *Public Finance*, XXVI (1), 1971.

Gupta, S.P., "Public Expenditure and Economic Growth: A Time Series Analysis," *Public Finance*, XXII (4), 1967.

Musgrave, R.A. and Peacock, A.T. (eds.) *Classics in the Theory of Public Finance*, Macmillan and Co. Ltd., London, 1958.

Peacock, A.T. AND Wiseman, J., *Growth of Public Expenditure in the United Kingdom,* Rev edn., George Allen & Unwin Ltd., London.,1967.