CHAPTER II

REVIEW OF LITERATURE

In this chapter, a brief review of the available literature on the growth of public expenditure is presented.

By advocating limited government, Adam Smith\(^1\) wrote that the sovereign has only three duties to attend to such as defence, maintenance of law and order, and creating and maintaining certain public works.

David Ricardo\(^2\) considered public expenditure as a waste.

Some other British economists also had the same view.

To many nineteenth century English economists, the main task of public finance was simply “to make the best of a bad lot and to allocate the burden of taxes as fairly as possible among the members of affiliated community”.\(^3\)

Even the early 20\(^{th}\) century writers, A.C. Pigou\(^4\) and Huge Dalton\(^5\) concentrated on the various “Sacrifice theories”, though they were aware of the problem of determining the range and composition of public expenditure.

However, during the same period, the continental writers Banlaleoni, Mazzola, Sax, Wiese, Wicksel, and Lindal analysed the interdependence between the revenue and expenditure sides of government activity and the way in which the activities of government satisfied social wants.\(^6\) Even then, public expenditure did not receive sufficient attention. Subsequently, the works of Richard A. Musgrave\(^7\) and Howard R. Bowen\(^8\)
appeared. But the real awakening came after the publication of the two articles of P.A. Samuelson\(^9\) and the book by Richard A. Musgrave\(^10\). The articles of Samuelson revived the concept of a pure “public good” as something which people as individuals desire but which cannot be provided through the normal workings of the market because, the way in which the services are provided ensures that, they will be equally consumed by all citizens. That is, no one can be excluded from enjoying the service provided, whether, he pays for it or not. Samuelson is credited with developing a set of conditions necessary to achieve Pareto-optimality in the allocation of resources between “pure public goods” and “private goods”. He has demonstrated that if individual preferences for public goods are known and if there exists a “social welfare function” which reflects the ethical judgement of society, a unique output mix of public goods and private goods can be determined which satisfies the criteria of Pareto-optimality.\(^11\)

Since the publication of Samuelson’s articles and Musgrave’s book, a good volume of literature on the theory of public goods came into existence.

Richard A. Musgrave\(^12\) has classified the theories of public expenditure as the positive theory of public expenditure and normative theory of public expenditure.

The normative theory of public expenditure is concerned primarily with establishing the requirements for achieving the optimal provision of certain goods and services.\(^13\) As such, the normative theory of public expenditure falls in the domain of Welfare Economics.
The ‘Positive Theory’ or ‘Behavioural Theory’ of public expenditure is “that body of economic and political analysis which attempts to understand and explain the observed pattern and levels of government expenditures and changes in those expenditures over time”.

Therefore, positive theory of public expenditure embraces the study of

i) the determinants of the volume of public expenditures;

ii) the determinants of the composition of public expenditure – what goods and services are financed through the public sector and how the ‘mix’ of public expenditures changes over time; and

iii) such behavioural properties of public expenditure as centralisation and stability.

The positive theory of public spending was formulated explicitly first in the nineteenth century by Adolph Wagner, a German economist who presented the famous “law of the ever increasing state activities”.

According to Wagner’s law, there is a functional relationship between the growth of an economy and the growth of government activities so that the government sector grows faster than the economy. As per Wagner’s law the income elasticity for government services is greater than unity.

A number of studies have been done to test the validity of Wagner’s law. Such kind of studies are made by Solomon Fabricant, R.A. Musgrave and J.M. Gulbertson, Francis H. Bactor, T.E. Boreherding for United States, B.U. Ratchford for Australia, Peacock and Wiseman for the United
Kingdom, Suphan Andic and Jindrich Veverka\textsuperscript{21} for West Germany, Koishi Emi\textsuperscript{22} for Japan, K.N. Reddy\textsuperscript{23} for India, Goffman and Mahar\textsuperscript{24} for Caribbean countries, and Richard M. Bird\textsuperscript{25} for Canada.

A number of empirical studies came up comparing the public expenditure growth in the international framework.\textsuperscript{26} All these studies examined the validity of one or more of the following three hypotheses – the ‘law’ of ever increasing activity given by Adolph Wagner and the displacement hypothesis and centralisation hypothesis offered by Peacock and Wiseman.

An automatic increase in government expenditure with an increase in State Domestic Product (SDP) is impossible. In the long run, SDP may bring an increase in government expenditure. As explained by Peacock and Wiseman, it takes sometime for governments to change its expenditure pattern upon the alterations in national income.\textsuperscript{27}

Alfred Bucher says in his ‘Public Finance’, “To some persons a relative increase in public expenditure seems a calamity, to others it is a cause of rejoicing and to still others it is a matter of indifference. No definite percentage of national income can be named as the proper limit for the cost of government, since such a limit must depend upon relative circumstances. The proper size of the expenditure depends on the desires and needs of a community, the effects of government spending and the revenues supporting the spending, the willingness of the population to be taxed, existing burdens of taxation, the resources and population of a community, the distribution of wealth and incomes, the stage of economic development and other variables.
The real issue is the advisability of a particular expenditure of a particular government at a particular time.\textsuperscript{28}

In recent times, public expenditure has increased enormously. The main reason is that the functions of the state have increased manifold. Unlike in the past when the state was considered as a ‘policeman state’, now the state is regarded as a welfare state which is concerned with promoting the welfare of its citizens. As such, it has to provide not only social security but it has also to look to economic stability and economic growth which calls for ever increasing investment expenditure.\textsuperscript{29} At present, “Public expenditures are a fascinating sector of a government, a powerful instrument for social and economic policy for a richer life”\textsuperscript{30}

The significance of government expenditure arises from the fact that those services are provided by the governments which might not otherwise be provided or which could not be provided in significant amount by private expenditure.

So, very many studies on the working of the governments have emerged.

J.B. Say\textsuperscript{31} conceded very little room for state activity.

Musgrave\textsuperscript{32} analysed and emphasized that public policy is needed to guide, correct and supplement to monetary policy in certain respects.

A study undertaken by Rajendra Jain\textsuperscript{33} deals with the problems of state finances in India between 1960-61 and 1976-77. According to him, state
governments in India have not made adequate efforts to mobilise financial resources and their dependence on central assistance has been increasing, causing erosion of their fiscal autonomy.

Frederic C.L. Pryor\textsuperscript{34} examined the growth and determinants of expenditure in socialist countries. He concluded that, the welfare and social service expenditures grew faster than defence expenditure in socialist countries. The reverse is the truth in the capitalist states.

The study undertaken in Canada reveals that the social expenditures accounted for 13.01\% of GNP in 1965 compared to 77\% in 1933, while, as a percentage of total government spending it rose from 29\% to 42\% during the same period.\textsuperscript{35}

Just as in other countries, particularly, the United Kingdom, Germany, and Japan, the experience of India confirms the Wagnerian doctrine – “the government expenditures in any society will grow at faster rate than community output.”\textsuperscript{36}

Over the period of 65 years (1890-1955) per capita expenditure in real terms increased by 82 per cent in India, 926 per cent in Japan, 611 per cent in the United Kingdom, and 601 per cent in Germany. During the same period, the per capita real income increased by 29 per cent in India, 237 per cent in the United Kingdom, and 135 per cent in Germany. The income elasticity of demand for government expenditure in all these countries was far in excess of unity. It was 2.8 in India, 3.9 in Japan, 8.3 in the United Kingdom, and 4.5 in Germany.\textsuperscript{37}
The study of K.N. Reddy\textsuperscript{38} also reveals that, the proportion of national income devoted to social and developmental expenditures increased by 183 per cent, while the proportion of administrative expenditure in national income remained roughly the same at 1 per cent, not only in pre-Independence period, but in the post-Independence period also.

The expenditure on social and developmental services as a proportion of national income varied from 1.90 per cent in 1921-1930 to 11.40 per cent in 1961-68. In terms of correlation coefficient between national income and developmental expenditure, there had been a low positive correlation up to the commencement of World War II and a very high positive correlation in the period after Independence.\textsuperscript{39}

In India, public expenditure has grown enormously between 1872 and 1968. The expenditure has grown at a rate faster than national income and so income elasticity was greater than one during the same period. The share of public expenditure in national output was 9.61\% in 1872, 20.31\% in 1968, and 32\% in 1984-85.\textsuperscript{40}

A.R. Prest\textsuperscript{41} had pointed out that in developed countries, the expenditures grow because of increasing revenue, but in developing countries expenditures grow and revenues are made to grow. The pressure of expenditure in such countries tends to increase because of growth of population, emergence of strong local opinion, and emergence of strong world opinion.
A.R. Prest\textsuperscript{42} had reported that education absorbed 17.7\% of central government expenditure in twenty three developing countries compared to 12.8\% in eighteen developed countries.

While examining the growth of budget deficits in Karnataka, M.C. Shanthamurthy\textsuperscript{43} has listed out the factors responsible for the rapid growth of public expenditure and has given some suggestions for reducing the size of public expenditure.

V.S. Angadi\textsuperscript{44} traced the growth of public expenditure on economic and social services in Karnataka from 1971-72 to 1980-81. Between 1971-72 and 1980-81, the expenditure on economic services has increased by more than 500\% and expenditure on social services has increased by about 400\%. The expenditure on general administration has also gone quite high. This is partly due to the revision of pay scales and increased dearness allowance paid to the government employees from time to time.

Shibbani Dutta\textsuperscript{45} examined the relationship between the theory of public expenditure and the behaviour of state government in West Bengal during 1951-52 to 1973-74. He has stated that the rate of increase in government expenditure over the period has been higher than the rate of increase in state income. Development expenditure is found to have kept pace with and not gone very much ahead of total expenditure. Both development and non-development expenditures are influenced mostly by the degree of urbanization, per capita income, and per capita revenue.
Lewis and Jackson\textsuperscript{46} studied the psychology of the people regarding public expenditure in the United Kingdom. The results have shown a remarkable consistency in the opinion of the people on public expenditure. In 1980, Lewis conducted another study to know the views of the people. He selected 200 electors at random from the electoral register of the city of Bath. Majority of them favoured increased spending on the National Health Service (59.5\%) and on education (53.5\%). Edgel and Duke, in a 10 per cent sample of two parliamentary wards in Greater Manchester, recorded similar results, but with evidence of stronger support for increased public expenditure on Public Health, and Education.

A study by D.T. Nanga Gowda\textsuperscript{47} on Karnataka's state expenditure reveals that major part of the expenditure on social services has been earmarked for education, while, public health, and labour and employment have been accorded the second and third places. From 1950-51 to 1977-78, Karnataka's total expenditure has increased by more than 15 fold. Developmental expenditure as a proportion of total expenditure declined steadily from 72.13\% in 1957-58 to 63.61\% in 1970-71.

Growth pattern of Karnataka expenditure between 1957-58 and 1984-85 was assessed by K. Gayathri.\textsuperscript{48} According to her, public expenditure in Karnataka increased from Rs.80.86 crores in 1957-58 to Rs.3379.50 crores in 1984-85 accounting for 42 times increase in its level at current prices. The share of government expenditure in the SDP increased from 15.16\% to 40.40\%. The developmental expenditure has increased by 2.4 times whereas the non-developmental expenditure has increased by 2.97 times. This study
strongly recommended that expenditure policy should take into consideration the needs and requirements of each sector and accordingly fix the priorities.

Nirupam Bajpai and Jeffrey D. Sachs⁴⁹ while analysing the state of state government finances in India say, "The financial condition of the state governments in India has been a cause for concern for sometime now. Over the years, the consolidated financial position of the state governments has shown a marked deterioration in some of their major deficit indicators. One of the fundamental weaknesses of state government finances in India can be attributed to the increase in non-developmental expenditure, particularly the revenue component of the non-developmental expenditure, and interest payments as a proportion of revenue receipts. Structural imbalances in the form of large revenue deficits, rising interest burden, increasing distortions in the pattern of expenditure, and very slow growing non-tax revenues are major problem areas for state finances.

The study undertaken by Srivasta Krishna⁵⁰ highlighted the facts that the condition of state finance in India between 1980-81 and 1995-96 was rather precarious and required urgent therapeutic treatment, or else it would push the economy especially the social sectors to brink. Ever increasing subsidies, administrative expenses and terminally sick public sector undertakings are ensuring that state finances continue to remain in a perilous state. More alarming is the fact that this situation is common to all the states. The two chief reasons for this situation are the unabashed population and the poor fiscal management.
Vaughan Dickson and Weiqiu Yu\textsuperscript{51} have studied the spending behaviour of 10 provincial governments from 1962 to 1992. It is noted that provincial governments do react to increases in cyclical unemployment by increasing spending. It is also observed that the income elasticity results do indicate that provincial government outputs are a normal good, but they do not support Wagner’s law since the elasticity coefficients are not greater than one.

Archana R. Dholakia\textsuperscript{52} examined whether the deceleration in the total fiscal expenditure in Gujarat has resulted due to that of revenue expenditure or capital expenditure or both. Regression estimates relating to these items indicate that the trend rate of revenue expenditure decelerated by only 2.9 percentage points, whereas in the case of capital expenditure it was to the tune of 8.5 percentage points. This implies that behaviour of capital expenditure has largely been responsible to cause the deceleration in the total fiscal spending of the state government. In such a situation, it would be important to further examine the behaviour of the sub-components of capital expenditure. It is because, if the deceleration in the aggregate capital expenditure of the state has come about largely due to deceleration in the developmental capital spending rather than non-developmental, then there is a greater cause of concern, as it would imply deceleration in the pace of infrastructural development of the state. Increase in non-developmental revenue expenditure has been a major factor behind increase in total revenue expenditure, which in turn is mainly responsible for the persistence of revenue deficit on fiscal account.
N.J. Kurian\textsuperscript{53} in his study attempts to bring out the deteriorating trend in state finances in India between 1995-96 and 1998-99. According to this study, the reasons for deteriorating trend of state finances are;

a) Failure to contain wasteful expenditure and reluctance to raise additional resources.

b) Tax wars among the state governments to attract private investments in the wake of economic reforms as well as competitive populism on the part of ruling parties and contenders for power.

c) The pay revision of employees forced upon the state governments by the centre.

A study undertaken by Le-Yin Zhang\textsuperscript{54} aims to provide an overview of the key elements of Chinese public finance to highlight the relative insignificance of the Chinese budget.

In 1994, the Chinese government launched important reforms to the central–provincial fiscal relationship, aiming to replace the previous revenue-sharing system with a tax-sharing system, and ultimately to stem the so-called fiscal decline.

The results of the study of Le-Yin Zhang suggests that, although successful in changing the pattern of revenue collection, the 1994 reform has not led to significant changes in the nature of the central-provincial fiscal relation in terms of revenue allocation and spending.
The objective of the study of Bagala Biswal, Urvashi Dhawan and Hoo-Yean Lee\textsuperscript{55} is to test Wagner’s and Keynes’s hypotheses for Canada using both aggregated and disaggregated government expenditure variables for the period 1950-95. This is the only study which tests Wagner’s and Keynes’s hypothesis for Canada using expenditure variables at the disaggregated levels. Although these two hypotheses have been tested for Canada in the past, none of the previous studies has attempted to use the disaggregated public expenditure variables.

The use of the disaggregated public expenditure variables offers a better explanation of the role of each component of public expenditure in the economic process.

Government expenditure as a ratio of GDP increased from 22.4% in 1950 to 53.0% in 1992 and thereafter declined to 49.3% in 1995. A fairly similar pattern is also observed for the various components of total government expenditure. Government spending has gone down in all categories except the interest payments components which have gone up in order to pay off the past public debt.

The study finds a long-run relationship between GDP and government expenditures at the aggregate level only. Other components of government expenditure such as transfer payments to persons, transfer payments to business, government investment, interest on public debt, wages and salaries of civilian and military personnel, and expenditure on other goods and services do not posses any long-run equilibrium relationship with GDP.
In the case study of Greece, Cheletsos and Kollias (1997) show that the growth of defence expenditure may be explained in terms of Wagner's law. In another case study of Greece and Portugal, Courakis et al. (1993) show the validity of Wagner's law in the case of transfers.

According to the World Development Report 1993, the central government expenditure in India, on the health sector in 1991, as a percentage of total expenditure continued to be a low 1.6%. The figure does not include expenditure by state governments which spend much more, accounting for over 75% of total government expenditure. The 7th Plan outlay on health services was Rs.3393 crores which has been increased to Rs.7582 crores in the 8th Plan. However, if the per capita expenditure on medical and public health including sanitation, water and family welfare is considered, one sees some increase in expenditure in real terms, but given the fiscal and slow economic growth constraints, it is evident that the government's ability to increase expenditure substantially is extremely limited.\textsuperscript{56}

The study conducted by Ashok K. Lahiri\textsuperscript{57} on “Sub-national Finance in India” analysed the financial position of Indian states from 1970-71 to 1996-97. This study focuses on five states, namely Assam, Haryana, Kerala, Punjab and Tamil Nadu. This study pointed out that populist policies such as the supply of free power to farmers and cheap power to households, inadequate water charges, supply of subsidised rice and the inability of states to mobilise resources promised at the time of formulating the Five Year Plans have contributed to the worsening of the fiscal position of the states.
Montek S. Ahulwalia focused on the economic performance of the individual states in the post reform period. His study covers the period between 1980-81 and 1997-98. According to this study, inter-state inequality as measured by the Gini co-efficient, has clearly increased showing that the rich states got richer and the poor states got poorer is not entirely accurate. State plan expenditure to SDP declined from an average of 5.7% in the 1980s to 4.5% in the 1990s. Interest payment as percentage of revenue has increased from 7.7% in 1980-81 to 13.1% in 1990-91 and further to 17.6% in 1996-97. Over the years, both the centre and the states have seen a burgeoning of non-plan expenditure in the face of inadequate buoyancy of revenues.

The theoretical model and empirical finding of Kevin Sylwester reveals that a higher level of income inequality is associated with more spending for public education. Although these expenditures have a negative impact upon growth contemporaneous with these public education expenditures, the impact upon future growth is positive. These empirical findings differ from those of Easterly and Rebelo (1993) who report that income inequality raises public expenditures for education, but they find that these expenditures are positively associated with growth. However, they treat education expenditure as an exogenous variable.

Valentino Piana says that public expenditure is determined by political will of the leading forces in the state: their priorities, their desired state model, and their interpretation of current economic and political phase. Past choices have relevant impact on public expenditure because of inertia and
incrementalism. Bureaucracy may play an important decision role for the actual expenditure.

Sometimes considered as a completely exogenous variable, the public expenditure would thus be fully in the hand of political decision makers without dependency from the economic context.

A GDP component as it is, public expenditure has an immediate impact on GDP. An increase of public expenditure raises GDP by the same amount, other things equal.

Public expenditure may turn out to be pro-cyclical or anti-cyclical depending on the political and institutional attitude toward public deficit. Still, real world law shows often little reaction of public expenditure to the cycle. Most cycles show public expenditure as a stabilising tool just keeping the same dynamics when the rest “goes wrong”.

Rajmal provides a phase-wise analytical review of the fiscal situation of the Indian major states over the previous two and half decades and examines the effectiveness of the policy measures to strengthen the state finances. The analysis reveals that the states’ fiscal position showed imbalances. The effectiveness of policy measures has remained largely inadequate. As the States face large resource gap, they require effective and time-bound policy measures to enhance revenues particularly non-taxes and shift in expenditure pattern towards economic infrastructure and social sectors to facilitate acceleration in the growth. The factors responsible for the widening fiscal imbalances include: (i) growing interest burden, (ii) increasing wages
and salaries, (iii) pension liabilities, (iv) losses incurred by State Public Sector
Undertakings, (v) inadequate user charges/cost recoveries, and (vi) deceleration in the Central transfers (RBI, 2004). In the recent years, interest payments alone constitutes over one-fourth of the revenue expenditure and absorbs between 30-35 per cent of revenue receipts in many states such as West Bengal, Orissa, Punjab, Rajasthan, Gujarat, Uttar Pradesh. Notably, during 2002-03 to 2003-04, interest payments and pensions outgo taken together absorbed as high as around 70 per cent of revenue receipts in case of West Bengal and nearly 50 per cent of revenue receipts in Kerala.

According to the Report of the National Commission on Macroeconomics and Health, 2005, households undertook nearly three fourths of all the health spending in the country. Public spending was only 22 per cent, and all other sources accounted for less than 5 per cent.
Table II-1
Health Care Spending in India, 2004-05

<table>
<thead>
<tr>
<th>States</th>
<th>Per capita Expenditure (Rs.)</th>
<th>Per cent spent by</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Household</td>
<td>Public</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>1. Andhra Pradesh</td>
<td>1118</td>
<td>73.4</td>
<td>19.4</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>2. Assam</td>
<td>1347</td>
<td>80.8</td>
<td>17.8</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>3. Bihar</td>
<td>1497</td>
<td>90.2</td>
<td>8.3</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>4. Gujarat</td>
<td>1187</td>
<td>77.5</td>
<td>15.8</td>
<td>6.7</td>
<td></td>
</tr>
<tr>
<td>5. Haryana</td>
<td>1786</td>
<td>85</td>
<td>10.6</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>6. Karnataka</td>
<td>997</td>
<td>70.4</td>
<td>23.2</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>7. Kerala</td>
<td>2952</td>
<td>86.3</td>
<td>10.8</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>8. Madhya Pradesh</td>
<td>1200</td>
<td>83.4</td>
<td>13.6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>9. Maharashtra</td>
<td>1576</td>
<td>73.3</td>
<td>22.1</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>10. Orissa</td>
<td>995</td>
<td>79.1</td>
<td>18</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>11. Punjab</td>
<td>1813</td>
<td>76.1</td>
<td>18</td>
<td>5.9</td>
<td></td>
</tr>
<tr>
<td>12. Rajasthan</td>
<td>808</td>
<td>70</td>
<td>24.5</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>13. Tamil Nadu</td>
<td>933</td>
<td>60.7</td>
<td>26.6</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>14. Uttar Pradesh</td>
<td>1152</td>
<td>84.3</td>
<td>13</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>15. West Bengal</td>
<td>1188</td>
<td>78.4</td>
<td>17.3</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>All India</td>
<td>1377</td>
<td>73.5</td>
<td>22</td>
<td>4.5</td>
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</tr>
</tbody>
</table>


As Table II-1 shows, both the per capita spending and the share of households for health care varied widely across states. There are many states where households undertake more than 80 per cent of all health spending, indicating an exceptionally high burden upon them.63
There have been many studies analysing the relationship between government expenditure and economic growth. Some of these studies have looked specifically at the link between government spending and agricultural growth and poverty reduction (Elias 1985; Fan, Hazell and Thorat, 2000; Fan Zhang, and Zhang, 2000). These studies show positive growth and poverty reduction effects from public spending in agriculture. Yet, in the majority of developing countries aid and public expenditure to agriculture is stagnant or declining.64

In developing countries, agricultural spending as a percentage of agricultural GDP has averaged 10 per cent or less over the period 1980 to 2002. In Africa, agricultural expenditure as a percentage of agricultural GDP remained at relatively similar levels (5.4 – 7.4 per cent) throughout the study period. About half of African countries decreased agricultural spending relative to agricultural GDP. In Asia, expenditure as a percentage of agricultural GDP was much higher (8.5 – 10.5 per cent) than in Africa. For Latin America, agricultural spending as a percentage of agricultural GDP decreased from 19.5 per cent in 1980 to 11.5 per cent in 2002.65

In 2000, on an average, developing countries spent 0.5 per cent of agricultural GDP on R & D. In the same year developed countries as a group spent 2.4 per cent of agricultural GDP on research; a sizable increase over the 1.4 per cent that developed countries spent two decades earlier.66
REFERENCES


