CHAPTER I

INTRODUCTION

1.1 INTRODUCTION

Public expenditure (PE) analysis is a relatively neglected area in India and elsewhere, more at the theoretical level. Despite its importance and widespread impact on the various economic parameters, it is relegated to secondary position in developing as well as developed economies. Traditionally, public expenditure was restricted to few areas and therefore it was of a smaller magnitude. Following the Keynes' prescription and especially since the Second World War, there has been mammoth growth of public expenditure throughout the world including India. Public expenditure emerged as an important strategy of economic development in a modern welfare state. But the excessive public expenditure, particularly on the revenue account (as was the case in India too) started having an adverse impact on the economy. Hence under the so-called reform period, emphasis was laid on the pruning of public expenditure so as to maintain it at moderate levels. Several changes have taken place with respect to the behaviour of public expenditure in India since eighties. Hence it becomes imperative to analyze several aspects of public expenditure in India since eighties in comparison with in the previous decades.

Public expenditure refers to the aggregate expenditure incurred by the government authorities at various levels - Central, State, local, municipal etc. The term 'government' according to UNO (1958) may be used as a noun or adjective. As a noun-it refers only to the executive or administrative organisations is central charge of a country's affairs. This definition is too narrow. Used as an adjective, it refers to (a) all legislative, legal and executive bodies established through the political process both at central, state and lower levels, (b) all agencies directly answerable for their
actions by bodies covered by (a). This is fairly a broader definition and more useful for analysis and comprehension.

The Central Statistical Organization, in the Indian context, (CSO, 1983) defines the constituents of public/government sector as -

a) Government administrative departments providing general services (like defence, law and justice, social services (like education and public health), fiscal services (tax collection, etc) and some economic services,

b) Departmental commercial undertakings which are un-incorporated enterprises owned, controlled and run directly by the public authorities, e.g., railways, posts and telegraph, etc.

c) Non-departmental commercial undertakings which are autonomous enterprises with an independent legal status, in which government holds 51 percent equity. This may include public enterprises (PSEs), financial enterprises (like nationalised banks and insurance companies).

Annual Financial (budgets) Statements in India include expenditure incurred by administrative departments and departmental undertakings, i.e., (a) and (b) only. The expenditure on non-departmental undertakings is covered only to the extent annual grants and loans are disbursed to them by government.

1.2 ARGUMENTS FOR PUBLIC EXPENDITURE

Despite the much antipathy towards the government intervention and public expenditure, the economic theory and practice provide enough justifications to the contrary. Public expenditure cannot always be seen from the efficiency and allocation related angle. Indeed many times even these aspects too make a case for government intervention. Public expenditure cannot be viewed as impinging and encroaching upon the individual liberties and distorting the efficient functions of the market mechanism. Rather public expenditure performs several important functions - like maintenance of law and order, providing public goods and correcting market failure,
and achievement of economic growth and stability and all these instances make a strong case for public expenditure.

1.2.1 THE TRADITIONAL FUNCTIONS

The rule of law and orderly functioning of the socio-political and economic systems is an essential pre-requisite, even for the market economic system. For example-in a market economy, it is essential that the laws of contract, property and exchange processes are well in place (that requires a well posited legal system), for it to survive, exist and prosper. The state also needs to protect the lives and property from external aggressors and internal disturbances and public expenditure is necessary to ensure this. Government intervention is referred not alone to facilitate-production, exchange and distribution of goods and services, at times, government needs to step in to provide these goods and services as well. One such sphere is the case of public goods

1.2.2 PUBLIC GOODS AND MARKET FAILURE

Public goods exhibit some special characteristics namely-non rivalry, non-excludability, problem of free riding and externality. The case of non-rivalry, arises when A’s consumption does not diminish the consumption of B. In such a situation excluding any individual from consumption is not possible (i.e., non-excludability) and is inefficient since access to the commodity by that individual would increase community welfare, without incurring any additional cost to the society. In such circumstances, the market fails to deliver/function, as consumers will not voluntarily pay for the supplies of the commodity in question. Here the government intervention alone solves the problem. Even when true individual preference is sought, the consumer always understates the true preference and thereby through ‘free ride’ enjoys publicly provided services financed out of the revenue collected from the other tax payers. Here the political (voting) solution is substituted for the price mechanism to gather information on individual preferences for public goods.
The state intervention also becomes necessary in cases of ‘externality’. This is a situation where, there exists uncompensated interdependence with regard to costs and benefits. In such cases market solution leads to too little or too much production or provision/consumption of certain commodities. In either case the problems of free riders plus problems of high cost of negotiations where the numbers are too large, require state intervention. The problems of pollution or the problems of how to increase the consumption of certain services like-education, health are the best examples of externality.

The market failure may not be specific to pure public goods; it may be true in certain cases of ‘Impure Public Goods’, where complete joint supply and impossibility of exclusion are not fully in force. Similar is the case of ‘Merit Goods’, as introduced by Musgrave, which do not pose any special problems with respect to exclusive or joint supply, but do embody certain characteristics which make them more or less unsuited for private market provision. Hence the public expenditure is justified even in the provision of certain impure public goods and merit goods.

1.2.3 REDISTRIBUTIVE JUSTICE

The promotion of redistributive justice and equity objectives is outside the domain of the market system as these things do not possess price signals, and the market as is widely accepted is sensitive only to price signals. Redistribution, be it among different regions, persons or producers, that are socially acceptable, can only be under the domain of government. Because market system rewards individuals or regions according to whether or not they own something that is marketable. Therefore, in all likelihood markets tend to neglect the sick, aged or unemployed, thereby requiring state intervention.

1.2.4 ECONOMIC GROWTH AND FULL EMPLOYMENT

The public sector also has the responsibility for the efficient allocation of resources (to ensure economic growth), both in private markets and within the public
sector. The regulatory public policy-directed towards countering or offsetting the imperfections in the private markets, go to a great length to aid private decision making, with regard to use and allocation of resources. This regulatory function has assumed even greater proportions under the liberalized economic regime as the process of privatisation and government withdrawal from the commercial activities is taking place at a faster pace. Economic growth is also fostered through the traditional state functions of providing internal and external defence/security.

1.2.5 ECONOMIC STABILITY

The economies subjected to market regime are often subjected to severe fluctuations in output and employment. The instability aspect may also assume wider dimensions including the balance of payment, exchange rate, price-level related instabilities as well, thus requiring regular doses of government intervention. Often government may have to intervene, say for example, to take the economy out of recession or depression, by way of expansionary fiscal policy which may involve increase in public expenditure or cut in taxes or both. In case of inflation and higher degree of BOP disequilibrium, government may have to go in for the opposite set of policies by resorting to contractionary or deflationary policies. Left alone markets may not solve these problems, even if they do so the solution may not be efficient and may take a long time to make appropriate corrections required.

The role of state, now fashionably called as ‘Welfare State’ has gone beyond the traditional functions. Governments have got involved themselves in plethora of activities. The following Box (1.1), gives the type of functions and accordingly the type of expenditure incurred by the State.
Box 1.1: Public Expenditure: Functions and Types

<table>
<thead>
<tr>
<th>Functions</th>
<th>Type of expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a) Basic or essential functions:</strong>&lt;br&gt;i) Defence&lt;br&gt;ii) Administration of law and order&lt;br&gt;iii) Certain basic social services.</td>
<td>Expenditure on:&lt;br&gt;Military programmes&lt;br&gt;Police, law courts, primary school education</td>
</tr>
<tr>
<td><strong>b) Optional functions:</strong>&lt;br&gt;Improve economic welfare but are not essential. As society develops they may come to be regarded as essential</td>
<td>Various social services</td>
</tr>
<tr>
<td><strong>c) Legal commitment functions:</strong>&lt;br&gt;Arising out of legislation that requires the government to provide certain goods and services and makes use compulsory</td>
<td>Schooling</td>
</tr>
<tr>
<td><strong>d) Contractual obligation: functions:</strong>&lt;br&gt;Arise out of an agreement between the State and groups of people, e.g., National Insurance scheme, when in return for specific contributions the government offers specific benefits.</td>
<td>Pensions</td>
</tr>
<tr>
<td><strong>e) Membership of international organisations functions:</strong>&lt;br&gt;Arise out of the membership, e.g., European Community, UNO.</td>
<td>European Community Budget contributions, aid to developing countries.</td>
</tr>
<tr>
<td><strong>f) Policy functions, economic objectives</strong>&lt;br&gt;(i) achieve economic growth&lt;br&gt;(ii) stabilise the economy&lt;br&gt;(iii) improve the standard of living</td>
<td>Investment grants to Industry, public works, Housing</td>
</tr>
<tr>
<td><strong>g) Policy functions, political and social objectives</strong>&lt;br&gt;(i) extension of the public sector&lt;br&gt;(ii) redistribution of income and wealth&lt;br&gt;(iii) protection of the environment&lt;br&gt;could also be regarded as an economic objective</td>
<td>Nationalisation benefits for people in lower income range, Pollution control.</td>
</tr>
</tbody>
</table>

Source: Trotman (1996)

Taken together, all the above arguments make a formidable case for public expenditure. However as noted by Mundle and Rao (2000), the pure theory of public expenditure has not advanced a great deal since the two classic papers by Samuelson in 1954 and 1955 establishing that “public-goods, characterised by non-rivalry and non-excludability, had to be provided by the state because they would not be provided by the market; that markets could not emerge because free-riding consumers would resist revealing their preferences for such goods” (Ibid: 197).

Therefore, except for these ‘Public Goods theory’ arguments, all other arguments are “merely shopping lists of arguments for public spending and are no substitute for an integrated theory”, (Ibid:197) and that “accordingly the application of
Despite the absence of a comprehensive theory, public expenditure, the need and efficiency have been discussed in different schools of economic thought. The following few paragraphs briefly traverse through the public expenditure theories, i.e., from the days of the laissez-faire to the public choice theories.

1.3 THE DOCTRINE OF PUBLIC EXPENDITURE – FROM CLASSICS TO MONETARISTS

It is important to understand the role of state/public expenditure from classics to the monetarists and observe as to how the perception regarding the role of state has been closely intertwined (explicitly and implicitly) in these different theories/paradigms. There is no unanimity of views in this aspect among different economists belonging to different schools. This is clearly evident as one passes through the different schools of thought—from Classical through Neo-Classical, Keynesian, Monetarist and post-Keynesian schools, as well as the New Classical economists. This historical journey of economic theory helps to get insights into the views about the role of state during the respective periods.

1.3.1 PRE-CLASSICAL

The science of public finance as we have today has been first developed towards the end of the middle ages as a part of administration. In the days of Cameralists taxation was not fully developed and much of the revenue came from the royal and princely domains consisting of cultivated lands, forests and mines. Even Chanakya talks about public expenditure. The end of middle ages marked the beginning of the theoretical study of the finance. Budin’s Work, ‘Republic’ (1576), contains the examination of various form of public revenue. And Hume’s ‘Political Essays’ (1752) talks of economic influence of taxation and credit. Mercantilists—who believed in State building, advocated the active state intervention in getting more
riches/gold as a part of accumulation of wealth that was synonymous with economic growth. For this, they advocated the regulation of international trade, but that still meant minimalist role for the state. “In general, the mercantilists’ idea was that men should be taxed according to the benefits they received from the state” (Singh, 1996:10). Since the state had to protect the nation, the expenditure required for the same was only to come from taxation, it was argued. Thereby, the role of State was confined to the protection and expansion of the nation states (with the view to accumulate wealth), without meddling too much into the economic/commercial domain. For this they favoured low customs and higher excise duty, in line with their general ideas about wealth and the need for a favourable trade balance, to achieve it (Ibid).

The Physiocrats, led by Quesnay believed in the superiority of the direct taxes (though admitted the temporary use of other taxes). They strongly advocated a single tax i.e., tax on the income from the land/agriculture. “Single tax on land was the financial maximum of Physiocracy” (Singh, 1996:11) for the taxing industry was only to tax land in a round about way, and therefore, is an uneconomical way, they believed. This recommendation of the single tax system meant that the government expenditure was to be on limited items only.

1.3.2 THE CLASSICAL SCHOOL AND LAISSEZ-FAIRE

The problem of how to increase national wealth has been the concern and focus of all economists and the national economic policies. The prescriptions to achieve it, however, have been different in the writings and advocacy of different economists. The Mercantilists sought to achieve this by exchange (rather than production), while the Physiocratic doctrine believed in wealth enhancement it by agricultural production only. The classical school starting from Adam Smith sought to advance national wealth by both agricultural and industrial production, rather than exchange. For this Smith firmly believed in the assumption of a naturally self-equilibrating mechanism inherent in all free markets. Smith was strongly convinced
that the rational pursuit of 'self-interest' and 'personal gain' balanced by institutions and human beings' social propensities tends to maximise the national wealth in a freely competitive environment. He advocated that the governments should work within this order, rather against it and need for government arises out of the existence of private property. “Till there be no property, there can be no government, the very end of which is to secure wealth and to defend the rich and poor” (Naastepad, 1998:15). The classical economists, however, failed to develop a theory of public expenditure in true sense. They only said that State should have limited role and should spend peoples’ money discretely and sparingly. This is reflected in J.B.Say’s famous expression, The very best of all plans is to spend little and best of all taxes is that which is least in amount. Adam Smith devoted a long chapter on public debt and recognised only those functions of the State basically concerning protection of state from violence from both, internal and external sources. He was against public borrowings is it may crowd out productive private investment, encourage war and may lead to mismanagement of funds, higher taxation and flight of capital.

David Ricardo advocating the ‘Labour Theory of Value’ says that national rate of economic growth is influenced by changes in factor shares. “The implication of Ricardo’s theory of factor shares for fiscal policy was that the State should for its resources rely primarily on the taxation of rent and avoid taxation of profit so as to prevent any negative effect on capital accumulation in the economy” (Naastepad, 1998:16). With respect to public expenditure, he thought it so wasteful that he never felt it necessary to analyse it (Singh, 1996:13)

Mill too had similar opinion with regard to fiscal functions of the state, but the doctrine of public expenditure reached perfection with Mill (Ibid). Though advocating narrowest possible role for the public expenditure, Mill allows for good deal of government activity as long as it does greatest good of the greatest number. However, with the advent of industrial revolution and with the resultant constant and unpredictable change in the level and distribution of incomes, the policy of laissez-
faire and its invisible hand came under criticism. These policies were found to be insufficient to bring about social harmony and economic growth. Karl Marx in his theory of exploitation of profits argued that a system based on competition for profits amongst capitalists and on exploitation of proletarian majority is inherently unstable, in economic as well as socio-political terms because it leads to over production and immiserisation.

1.3.3 NEO-CLASSICAL APPROACH

Certain important developments in the aftermath of the industrial revolution, viz., widening income disparities between the rich and poor, the changing socio-economic context, the trends towards political democracy, the end of international economic boom by 1870s (that threw European economics into deep depression) necessitated the need for new vision. This led to reconstruction of economic theory of market exchange based on micro economic behaviour of individuals to the virtual exclusion of macroeconomic questions.

Marshall, differing from classical economists, discarding the concept of surplus in favour of savings as a source of accumulation, said the saving comes from the deferment of consumption, not from a particular distribution of income. He brought back the costs of production back into the analysis and gave marginal productivity a role in determination of the equilibrium.

Pigou further extended the marginal principles to the discussion of public expenditure. Pigou and Dalton expressing similar views said that the level of public expenditure be carried so far that the advantage accruing to the community from it is just counter balanced by the disadvantage of corresponding increase in taxation (Singh,1996:15), i.e., the principle of Maximum Social Advantage. The marginal concept is criticised as being impracticable, due to non-measurability of marginal social benefit of a particular social expenditure item and hence marginal principle ceased to exist as an accepted guide to welfare policy. But Marshall and others in a
true classical tradition, continued to be optimistic of the free competition in achieving the economic goals.

Meanwhile in the mid nineteenth century some new forces came on to the scene like the rise of ‘historical school’ for socio-political theory of public finance. One such theory is the ‘Law of the Increase of State Activities’ – by famous German fiscal theorist-Adolph Wagner famously known as – Wagner’s hypothesis which was based on the historical facts. Several others in Germany, - Cohn, Conard, Raschd, Wicksell etc. also worked on the various facets of fiscal theories under the influence of the historical school of thought.

1.3.4 KEYNES AND THE END OF LAISSEZ-FAIRE

The direct state intervention in the free market during the First World War (especially in Europe), led to the increases in public expenditure. But after the war and before the onset of great depression it was back to the minimalist role for the state. Despite the increasing public expenditure, the theory of fiscal policy was not yet in evolution. Before 1930- the discussion on the theory of public expenditure was confined to the four canons of public expenditure as given by Adam Smith (the canons of economy, benefit, surplus and sanction) and the principal of maximum social advantage.

On the theoretical side, the classical proposition particularly Pigou’s version of automatic adjustment came under severe scrutiny, especially by J.M.Keynes. The existence of money, Keynes said, separated the act of savings and investment and the ex-ante saving and investment equality is achieved only by coincidence. The ex-post equality of savings and investment is brought about by variation in income and (not by the rate of interest), thus repudiating Say’s law. The manipulation of money wages, as proposed by neo-classical thinkers does not work, he argued. According to him the “the systematic failure to reach full employment was due to deeper structural reasons than merely rigidity in level of money wages” (Naastepad, 1998:18). Investment may be influenced by rate of interest, but the rate of interest itself is determined out side
the sphere of output, by monetary factors of money demand and supply. The lack of perfect information increases the woes of the market system even further. The monetary policy under these circumstances becomes ineffective, especially due to insensitivity of interest rate to money (due to the existence of liquidity trap) and that of investment desired to the changes in interest (investment also depends on expectations).

The best way therefore to solve the problem of lack of aggregate demand is through-fiscal policy-public expenditure and taxation. The public expenditure/public investment working through investment multiplier brings out the desired changes in output, income and employment. Hence Keynes makes the first ever strongest case (both on theoretical and empirical considerations) for the public expenditure outside traditional functions performed by the State.

1.3.5 NEO - CLASSICAL MODEL REVISITED

The 20th century neo-classical theory, in 1950s, led by Arrow and Debreu using Walras' general equilibrium model-developed a neo-classical justification for no government intervention. According to them the central problem is the allocation of resources, which is responsive to relative prices. If the commodity / goods market is perfect, set of relative prices compatible with optimal allocation of resources are ensured and they in turn guarantee full employment of labour and capital. Thus, twentieth century neo-classical model based on competitive general equilibrium-guarantees best possible welfare maximising equilibrium (Debreu, 1959). Hence, here there is no place for government intervention on efficiency grounds. Government intervention can only distort the system by distorting the relative prices. The role for public expenditure is to be confined to the establishment of property rights and to create conditions required for the production and exchange. As the government intervention is generally seen as the major cause of distortion in relative prices, the remedy for correction of imbalances is generally believed to line in a correction of relative prices through reduction in the size of the government. A reduction in public
expenditure will in general be efficiency enhancing because it creates more room for the private sector which is more efficient. Ideally, government expenditures are cut to the extent that the taxes and tariff can also be reduced.

1.3.6 IS-LM MODEL

Attempts have been made to integrate Keynesian with neo-classical marginal analysis, that resulted in the Hicks’ IS-LM (1937), where the money market and goods (real sector) market variables are closely interrelated leading to simultaneous determinations of the equilibrium levels of output and rate of interest, i.e., simultaneous equilibrium in money and goods market. What is the role of monetary policy and fiscal policy within the IS-LM frame work and which was expected to be used to achieve full employment equilibrium? Both Keynesians and Monetarists use IS-LM frame work to explain their positions.

1.3.7 MONETARISM

Monetarism reformulates classical quantity theory of money in terms of IS-LM model. Friedman’s ‘restatement of quantity theory of money’ comes close to Keynesian viewpoint, as it relies on rate of interest as a mechanism of transmission of monetary changes to the real sector. But the proximity ends here. Their belief in stable demand for money function (when money supply increases, prices also increase in the same proportion) and implicit in this is the ineffectiveness of fiscal policy. Government induced money supply, i.e., monetary policy, alters output only in the short run, but in the long run it only leads to rise in price level. Since the length of transmission mechanism is not known, monetary policy can lead to pro-cyclical rather than anti-cyclical effects. “Assuming a stable private sector and deficiencies in knowledge, government intervention will only lead to a reduction in welfare by causing aggregate demand and prices to deviate from their welfare-maximising equilibrium level. The best the authorities can do is to keep the economic environment stable by stabilising the rate of growth of money supply” (Ibid: 24). Implicit here is only a limited role for the government.
1.3.8 POST-KEYNESIANS

Post-Keynesians form a heterogeneous group of economists. One stream, like Keynes, denies the efficacy of the price system (in disseminating appropriate information with sufficiency and quickness) to guarantee full employment. They agree with Keynes that investment determines savings, and investment decisions are mostly taken independent of the saving decisions. They also agree with Keynes that the problem of demand is a very important factor and that Say’s Law does not hold in market economies of the capitalist type. Kaldor, for instance, was of the opinion that growth is seldom supply constrained in advanced market economies.

Kalecki (1955) however observes that supply can be a problem, along with demand in predominantly agricultural economies. Kalecki further states that growth of aggregate GDP is not an appropriate measure of welfare, and that true development also entails some equality in the distribution of income. Thus he makes out the case for fiscal policy. He says that the sound fiscal policy must be based on taxation of the consumption of non-essential good which provides sufficient resources to finance the public investment particularly the agricultural infrastructure. Kalecki also agrees with Keynes that the level of aggregate demand in capitalist economy can be regulated by the policy decisions of the state.

1.3.9 COMMON ISSUES

The doctrine of public expenditure from classics through the monetarists is best summarised by Naastepad (1998) and to quote, “The brief historical survey above suggests that fiscal policy recommendations drawn from different theories differ widely, and that these differences can in turn be traced to diverging views regarding how an economy functions. Most importantly, assumptions differ regarding (i) the driving force in the economy, or the saving-investment causation; (ii) the determination of savings; (iii) the existence of a full employment equilibrium; (iv) the efficiency of markets versus the state in the allocation of resources; and (v) the nature of the linkages between the real and the financial side of the economy. Very broadly
(and without doing justice to many important differences in emphasis), two views can be distinguished.

On the one hand there is the view that the limiting factor on output is the availability of investible resources or savings. Assuming full employment of resources, output can be enhanced only by enlarging the stock of productive resources or by making a more efficient use of available resources. For a given stock of resources, therefore, the central economic problem is the allocation of existing resources between alternative uses. The best possible allocation of existing resources leading to maximum output will be achieved when relative prices reflect true scarcities in the economy. Relative prices will best succeed in signaling emerging scarcities when price formation is left to the market. The real and financial sides of the economy are dichotomised: money is exogenous and changes in the stock of money lead only to an increase in the general price level without changing relative prices or production. The task for the government is to intervene only where markets fail, but without distorting this allocative process.

On the other hand, there is the view that the economy when left to it is not able, except by coincidence, to raise production and income to its full employment level because producers generally lack information about present and future production possibilities. The limiting factor on growth is not the availability of resources but the lack of information which may lead investors to make choices which leave many possibilities unexploited. Government intervention in this case can be a factor promoting internal balance and growth by matching demand and supply through mobilisation of resources on the hand and regulating spending on the other. In addition, government intervention may be called for to remove bottlenecks in production which are not taken care of by the private sector due to the existence of market failures including external effects, increasing returns to scale and imperfect completion. Money can play a role in the determination of production. However, money's role in the determination of production is generally held to be subordinate
with the supply of money passively adapting to the demand for it rather than the other way around. Only in more recent writings has money come to be accorded a more important role in influencing output" (Naastepad: 27-28).

Thus, when it comes to drawing policy recommendations for a particular economy it is crucial to know what assumptions regarding the functions of an economy are most relevant for the economy under consideration.

1.4 THE POSITIVE THEORIES OF PUBLIC EXPENDITURE

The meaningful analysis and interpretation of the public expenditure data requires the review of the theories of public expenditure, both implicit and explicit in the economic literature. In the above discussed theories the reference to public expenditure more often than not is only implicit. Moreover these do not deal with the specific aspects of public expenditure like the need, the optimum level, the decision making, and behavior of public expenditure. Hence the discussion of the theories covering some of these aspects becomes essential. These theories are divided into different categories in different ways like micro or macro theories, positive and pure theories etc. Without bothering about the categorisation, an attempt is made here to look into these theories briefly, with some what detailed analysis of the few.

1.4.1 LAISSEZ-FAIRE THEORY

As discussed earlier, this idea was put forward by the classical and neoclassical economists and philosophers, who advocated the principle of minimalist state intervention. The pursuit of self interest and the aid from the invisible hand would do the desired, they opined. The need for public expenditure according to this theory is minimum and be confined to few areas. So, this theory focused on the question whether the public expenditure is needed or not. However the industrial revolution and subsequent developments undermined the belief in this theory.
Certain theories try to look into the aspect of public expenditure decision making i.e. as to who takes the public expenditure decisions. The 'Individual Choice Theory' seeks to answer the question of the basis for the public expenditure decisions. This theory, led by Ferrara (1850), advocated individual decision as the basis of social choice and collective choice making. However this poses the problem of aggregation of individual preferences for the policy purpose.

Therefore the 'Ballot Box Theory' tries to answer the question raised above (the basis of public expenditure decision) further by giving it a sophisticated treatment. This theory believed, that the individual choices/preferences-can be expressed, in a democratic society, by majority vote i.e., aggregate of individual choice by voting (putting a vote in the ballot box) during the elections. But empirically, this theory has several difficulties, in the general elections, the specific questions relating to the level and allocation of public expenditure are only but one of the several issues. There are only few instances of expenditure issues put for a direct vote by way of referendum, as it happened in the state of California, USA (1978, 1979 and 1980). In democratic societies, this may happen in an indirect way, through 'pressure groups' and other such agents.

However according to the organic theory - theory of Authoritarian conceptions under the authoritarian regimes- public expenditure decisions are made by the ruling group mostly in a centralised manner.

1.4.3 THEORY OF THE OPTIMUM LEVEL OF PUBLIC EXPENDITURE

Having accepted the need for public expenditure in some areas, in addition to the traditional state functions, the attention by the turn of the 19th century turned to the question of the optimum level of public expenditure. This was answered in terms of application of Marginal Utility theory to public finance-by several economists - Walras, Jevons, and Gossen independently. Accordingly, the optimum level of public expenditure...
expenditure is decided by the equality between the marginal level of satisfaction (derived from the goods and services provided by the state) and the marginal sacrifice (in terms of payment of taxes to finance such expenditures). That is “the optimum level of public expenditure can be defined as the point at which the benefit to all individuals from additional expenditure is equal to the additional sacrifice by them involved in paying more tax” (Trotman, 1996:76). However, this poses, in its practical application (though theoretically appealing), problems in terms of measurement and aggregation of the satisfactions/benefits and sacrifices. “What is regarded as desirable level will be influenced by political, social and economic considerations. It will vary from society to society, and change over time” (Ibid: 76).

1.4.4 THEORIES OF TIME PATTERN OF PUBLIC EXPENDITURE

Public expenditure follows certain time pattern. According to Brown and Jackson (1978), there are three macro theories/models, explaining the time behaviour of public expenditure. Viz,

a) Development Theory  

b) Wagner's Hypothesis  

c) Peacock-Wiseman Hypothesis

a) DEVELOPMENT THEORY OF GROWTH OF PUBLIC EXPENDITURE

The essence of this theory is contained in the works of Rostow and Musgrave. In the ‘Early Stages’ of economic growth – the share of public sector investment as percentage of total investment is high as the government sector is involved in the provision of several social overheads (health, education, transport, law and order etc). These expenditures are considered essential to “gear-up the economy for ‘take-off’ into the middle stages of economic and social development” (Singh, 1996:15). In the ‘Middle Stage’ of growth, public investment is complementary to private investment and government role in supply of investment goods continues. As the economy reaches the ‘Maturity-Stage’ the expenditure focus shifts from infrastructure/investment goods to education, health and welfare services. In the
'Mass Consumption Stage' the policies designed to ensure 'redistributive justice' would gain significance. Hence, during all stages of economic development; over a period of time, market failure necessitates the need for government involvement in one way or the other.

b) WAGNER'S HYPOTHESIS

Wagner’s hypothesis of rising public expenditure and state activity is a celebrated hypothesis of public expenditure expounded by Adolf Wagner (1883-1917), a German thinker and economist of the so called theoretical school, whose influence flourished in the fourth quarter of the 19th century (Toye, 1981).

His “aim was to establish generalisations about government expenditures, not from the postulates about the logic of choice, but rather by direct inference from historical evidence” (Peacock and Wiseman, 1961:16) of several countries in the 19th century. According to this hypothesis, public expenditure increases, as economic development takes place, public expenditure grows faster than the output (at least in industrial countries). “Wagner predicted that as the process of economic development takes place government expenditure must increase at a faster rate than output” (Toye, 1981:3). The precise prediction of the law, however is controversial, and has been subjected to empirical investigations in several ways. Even much earlier to Wagner, the economists, for instance Adams in USA (in 1898) had suggested that “government expenditure must grow in proportion to a community’s output per head” (Peacock and Wiseman, 1961:17). But, Wagner went further than this arguing that “government expenditure must increase at an even faster rate than output” (Ibid: 17). The core of his argument is, in his words (as quoted by Peacock and Wiseman, 1961) “the law (of increasing state activity) is the result of empirical observation in progressive countries, at least in Western European civilisation; its explanation, justification and cause is the pressure of social progress and resulting changes in the relative spheres of private and public economy, especially compulsory public economy. Financial stringency may hamper the expansion of state activities, causing their extent to be
conditioned by revenue rather than the other way round, as is more usual. But in the long run the desire for development of a progressive people will always over come these financial difficulties” (Ibid: 17).

Hence by implication “the growth in expenditure derives from the growth in state activity” which in itself is the consequence of social progress” (Peacock and Wiseman, 1961:17). Hence, expanding State activity is an “inevitable component of social progress- and “it is a secular behaviour of public expenditure rather than with short run change or actual process of change” (Ibid: 17).

The causes, as Wagner himself provides, for increasing state activity are three fold –

*One* – The provision of necessary social preconditions as reflected in the ‘maintenance and enforcement of law and order internal as well as external. This is necessitated by the increasing friction in the society due to industrialisation and the resultant division of labour.

*Second* – Growing State participation in material production. This happens because the technical progress (Wagner was thinking particularly of steam power) that makes public corporation as the only alternative to the (private) Joint Stock Company (JSC). And the private joint stock companies won’t be able to handle large amounts of capital as effectively as large public corporations that may result in mismanagement and waste of capital.

*Third* – The provision of other economic and social services, i.e., Cultural and welfare services like-education, health etc. which could be best provided by the state (monopolies).

Wager’s prediction has been subjected to severe testing at theoretical and empirical levels and the exercise continues even today. According to Peacock and Wiseman (1961), Wagner’s thesis in part depended on a particular organic view of the state which was not a necessary interpretation of the situation, because “what appear
to be technical reasons for expenditure growth are often not independent of about the views of the State. As Toye (1981), notes, while Wagner correctly identifies the ubiquitous feature of modern economic growth but “he did not succeed in explaining why this feature is so generally found”. Wagner’s formulation is also criticised for its neglect of war/defence expenditure, which was quite frequent in the 20th century.

Thus, the war effect on the size of public expenditure is also important, which was duly considered by Peacock and Wiseman. However, several empirical tests from number of developed and developing economies-have been found to be consistent with the Wagner’s formulation. There are evidences to the contrary too. Hence the evidence, by no means, is conclusive. According to Pryor (1968) the law was supportive to those countries in the process of transition from rural agricultural to urban industrial economy. Musgrave’s study (1969) supports Wagner’s hypothesis for UK, USA and Germany. Our review of the studies on Wagner’s hypothesis shows mixed results across countries.

c) PEACOCK-WISEMAN HYPOTHESIS: THE DISPLACEMENT EFFECT

This is another important theory with respect to the time behaviour of public expenditure. This was the result of the analysis of public expenditure trends in UK (1880-1955) by Peacock and Wiseman, a time pattern study in which they gave war and social upheaval a central place. According to the hypothesis the government expenditure “grows over time not at constant rate but rather stepwise. The movement from one step to another generally coincides with a war. Such disturbances create a displacement effect, shifting public revenue and expenditure to new plateau” (Sury, 2000:179).

According to Peacock and Wiseman, there is a divergence between the tax payers’ view of correct level of taxes, during normal times and during times of crisis, which gets upwardly revised during the crisis and accordingly the public expenditure also increases. After the crisis, both come down, but not to the pre-crisis levels, showing downward rigidly thereby causing ‘ratchet’ or ‘upward’ displacement effect.
In the words of Toye (1981), the Peacock-Wiseman Hypothesis postulates that “increased government spending is a primal urge of politicians and bureaucrats which is held in check only by tax payers’ democratically enforceable view of the correct level of taxes. The tax payers’ view of the correct level of taxes is revised upwards in times of war or social upheaval. Consequently, graphs of public spending show a ‘ratchet’ or upward displacement effect” (Toye, 1981:5).

Peacock and Wiseman found that, the movement from one step or plateau to another coincided with the two world wars, when shifting of public revenue and expenditure to new levels took place. This hypothesis operates through two stages. One, during war expenditure reaches a new plateau as explained above (and is called ‘displacement effect’). Two, even after war, the changes in social ideas and new social upheavals impose, new and continuing obligations of payments of war pensions, debt, interest, repatriation payments etc that continue to keep public expenditure at a higher level, though little lower than the war level and at definitely higher level compared to the pre-war period. This is termed as ‘inspection effect’.

The Peacock-Wiseman hypothesis is criticised for its inherent assumption of inexhaustible demand for public spending (at any price), that may not always be true. Government need not always be spend thrifts. Even if they are, why should public expenditure rise only until the new higher revenue restraint is encountered? Further, like the Wagner’s proposition, Peacock-Wiseman hypothesis is also solely concerned with the time pattern of the expenditure and not with the reasons. The Peacock-Wiseman hypothesis does not explain the slow and gradual expansion of size and character of public expenditure that often is witnessed in reality. The hypothesis is also criticised for its neglect on the substitution of defence for civilian expenditure in war time and a reverse substitution afterwards.

Many empirical studies have tested the Peacock-Wiseman Hypothesis. S.P.Gupta subjected the displacement effect to rigorous economic and statistical scrutiny for number of countries and confirmed the existence Peacock-Wiseman
Hypothesis. This was confirmed by public expenditure behaviour, in other countries during the great depression of 1930s, and also during the Korean War.

1.4.5 PUBLIC CHOICE THEORIES

The Public Choice literature has emerged as an important branch of study in the recent years. These theories postulate that the government is at best, indifferent and at worst, even malevolent (Rao and Rajagopalan, 1990). Here, the public expenditure growth is explained in terms of the collusive behaviour of politicians and bureaucrats to maximise their gains (Downs, 1957, Brennen and Buchanan, 1970).

Another public choice-based explanation for growth in public expenditure and its changing composition of public expenditure is given in terms of operation of various ‘Pressure Groups’ in the polity. In the Indian context, for example, Bardhan explains the growth of subsidies in terms of the relative pressures exerted by the three proprietary classes, namely, the rich farmers, the industrial capitalist classes and the professionals including the white collar workers.

1.5 EXPENDITURE CLASSIFICATION

For a systematic and meaningful public expenditure analysis, a proper expenditure classification is essential. The classification explains the interrelationship between the government sector and rest of the economy and also reveals the relative size of different government activities in the economy (Sury, 2000). However in theory as well as practice, there is no unique system of classifying the public expenditure. Different economists have attempted different classification “according to their own idea of suitability of the object in view” (Khan, 1993:18). J.S.Mill classifies public expenditure as necessary and optional, while for Dalton divides it into grants and purchase price; Shirras into primary and secondary; Pigou into transfer and non-transfer categories. Pryor favoured functional classification (economic services, social services, defence etc.) and while economic classification
(consumption, capital formation, transfers and subsides) is favoured by Musgrave (ibid).

In practice several practices are adopted by different countries and within the country by the different agencies (for example-in India by RBI, GOI, etc.). However, the analysis in terms of economic cum functional classification as suggested in the U.N. Manual (1958) “provides very useful insights into the economic implications of growth of public expenditure” (Rao and Tulasidhar, 1989:3).

The Ministry of Finance, GOI, started the economic classification of the budget from 1957. But since 1967, it has been the-economic-cum functional classification as adopted by the UN. Several states have undertaken similar classification. The traditional budget documents contained classification mainly for getting legislative authorisation and control for the government expenditure proposals (Khan, 1993). However, this traditional method does not provide required information for meaningful analysis of government transactions (Rao and Tulasidhar, 1989). The method of economic-cum-functional classification has several advantages. First, it ensures comparability of data over time and across different states. Second, it presents a more realistic picture of government transactions by eliminating-various inter-government (intra departmental) transfers, and transfers to various funds and by adjusting the accounts to show net receipts of commercial departments instead of showing them on a gross basis (ibid).

The present study adopts for the analysis, the economic and functional classification, as available in the Indian Public Finance Statistics (IPFS) and Budget documents, GOI (various issues) and the details of which are given in the following paragraphs.
1.5.1 REVENUE AND CAPITAL EXPENDITURE: ECONOMIC CUM FUNCTIONAL CLASSIFICATION

The Budget Documents and IPFS adopt the somewhat modified versions of the UN and IMF methods of classification, and in particular, broadly adopt the expenditure classification under revenue and capital heads. In fact it is mandatory under the constitution (Articles 112 and 202) for the Central and State governments to present their expenditure under these heads (Sury, 2000). Each of these categories, in turn contain the expenditure under the sub heads of developmental and non-developmental.

1.5.2 REVENUE EXPENDITURE

The expenditure on revenue (current/recurrent) account, as the name suggests, includes the expenditure on goods and services for current consumption, within the accounting period. This broadly includes the expenditure for normal running of the government departments and various services. This expenditure does not directly lead to the creation of capital assets. The statutory grants given to the states are also treated as revenue expenditure. The revenue expenditure is shown under developmental and non-developmental head. The **Non-Developmental Revenue Expenditure** includes:

- expenditure made towards interest payments, defence services (revenue side), organs of the state, fiscal services, administrative services, subsidy, pension and other retirement benefits, assignments to local bodies, technical and economic co-operation with other countries, grants to states for natural calamities, and grants to union territories (non-plan).

The **developmental revenue expenditure** includes the expenditure incurred in running and maintenance of the social and community services, general economic services, agricultural and allied services, power irrigation and flood control, transport and communication services, industry and minerals and fertiliser subsidy and grants made to states union territories for rural development and other social services. It is
interesting to note that, while the food subsidy is shown under non-developmental category, and that the fertiliser subsidy under-the developmental category. The total revenue expenditure therefore includes non developmental revenue expenditure, developmental revenue expenditure, statutory grants to states and self balancing items. The details of the revenue expenditure are contained in Box.1.1 (appendix).

1.5.3 CAPITAL EXPENDITURE

The capital expenditure refers to the expenditure incurred towards the creation of physical or financial assets or reduction in recurring financial liabilities (Sury, 2000). Hence, this expenditure-directly leads to the creation or acquisition of capital, physical assets (like land, building, machinery, equipment) and financial assets (like-investment in shares, bonds, loan and advances to state governments, public sector enterprises etc). As in case of revenue expenditure, here too, the expenditure is shown under the developmental and non-developmental heads in addition to the column ‘Loans and Advances’ made to the states, union territories and others.

The non-developmental capital expenditure includes defence (capital), border roads and fiscal services and where as the developmental capital expenditure includes-the expenditure on railways, posts and telegraphs, social and community services, general economic services, agriculture and allied services, public works etc. among others. The details of the capital expenditure items are shown in Box 1.2 (appendix).

1.5.4 DEVELOPMENTAL AND NON-DEVELOPMENTAL EXPENDITURE

As noted earlier, in India, the distinction is also made between the developmental and non-developmental items of expenditure. It only refers to the broad functional classification adopted in the budgets and does not have any obvious growth implication and is not directly linked to the promotion of economic growth (Khan, 1993). The expenditure incurred on defence(revenue) and on the organs of the state like-elections, audit, police, external affairs, etc categorised as non-
developmental, may not directly contribute to economic growth. But by no means these can be categorised as non-developmental (or obliquely meaning as non-productive) in the strict sense of the term. The various items of developmental and non-developmental items of expenditure both under revenue and capital account are shown in Box 1.1 and 1.2 (appendix).

1.5.5 PLAN AND NON-PLAN EXPENDITURE

Since 1986-87, the classification of expenditure in the central government budget is also under the plan and non-plan heads. This is a purely administrative classification and has nothing to do with economic or national accounting principle, basically to indicate roles of Finance and Planning Commissions with regard to their recommendations to the centre regarding assistance for states under revenue and capital accounts (Khan, 1993). However this classification goes beyond the plan head and includes those programs and projects recommended by the Planning Commission, whereas the Finance Commission recommends only non-plan heads of financial assistance to the states. However, the expenditure related to the new programs and projects come under the plan expenditure during the period of five year plan. After the completion of the projects, the provision for maintenance of these completed projects is brought under the non-plan head. So, the non-plan outlay is "essentially in the nature of maintenance expenditure for various schemes launched earlier" (Ibid: 21) under the planned expenditure. It is a committed expenditure on completed schemes of earlier plans and (or) is a spill over from the preceding plan and (or) is outside the plan allocation approved by the Planning Commission.

The Non-Plan expenditure also includes in addition to the items mentioned above, various non-developmental items (like organs of the state, administrative services etc.), and also developmental activities like education, public health etc. The Plan expenditure may also indicate some non-developmental items of expenditure. Therefore, it is to be noted that "the expenditure under plan and non-plan needs do not necessarily fall under developmental or non-developmental category. Both
developmental and non-developmental types of expenditure are included under, plan and non-plan heads" (Ibid: 22).

Whichever way one looks at the aggregate government expenditure will be the same, whether one is looking from revenue and capital side, or developmental and non-developmental angle, or plan and non-plan perspective.

1.6 CONCLUSION

The brief survey of the different theories of public expenditure reveals that a comprehensive theory of public expenditure is yet to be developed. However, there is no dearth of arguments for public expenditure. The maintenance of law and order, provision of public and merit goods and market failure, the reasons of economic stability and redistributive justice provide enough of arguments for public expenditure. The need and importance of public expenditure, however varies from one school of thought to the other. The classical, neo-classical and monetarist school abhor the need for public expenditure and government intervention. However, Keynes and the Keynesians strongly support the government intervention through the instrument public expenditure to achieve economic goals. Many other theories of public expenditure per se have also been developed from time to time. One such hypothesis is developed by Wagner that analyses the time behavior of public expenditure. Accordingly as the economic development takes place public expenditure grows at a faster rate than the output. The displacement hypothesis by Peacock and Wiseman hold the wars and other social upheavals for the upward displacement of public expenditure.

The chapter also considered the public expenditure classification in India which broadly resembles the economic and functional classification contained in the UN manual. Accordingly public expenditure is categorized as revenue and capital expenditure. Within this economic classification the functional categories like administrative services, social and community services etc are also provided.
## APPENDIX

Box 1.1 Items of Revenue Expenditure

<table>
<thead>
<tr>
<th>Category</th>
<th>Subcategory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a. Non-Developmental Expenditure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a_1</td>
<td>Interest Payments</td>
<td></td>
</tr>
<tr>
<td>a_2</td>
<td>Defence Services, Net</td>
<td></td>
</tr>
<tr>
<td>a_3</td>
<td>Organs of State</td>
<td></td>
</tr>
<tr>
<td>a_3_1</td>
<td>Administration of Justice</td>
<td></td>
</tr>
<tr>
<td>a_3_2</td>
<td>Elections</td>
<td></td>
</tr>
<tr>
<td>a_3_3</td>
<td>Audit</td>
<td></td>
</tr>
<tr>
<td>a_3_4</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>a_4</td>
<td>Fiscal Services</td>
<td></td>
</tr>
<tr>
<td>a_4_1</td>
<td>Tax Collection Charges</td>
<td></td>
</tr>
<tr>
<td>a_4_2</td>
<td>Currency, Coinage and Mint</td>
<td></td>
</tr>
<tr>
<td>a_4_3</td>
<td>Interest on Compulsory Deposits</td>
<td></td>
</tr>
<tr>
<td>a_4_4</td>
<td>Charges Under Extended Arrangement with IMF</td>
<td></td>
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<tr>
<td>a_4_5</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>a_5</td>
<td>Administrative Services</td>
<td></td>
</tr>
<tr>
<td>a_5_1</td>
<td>Police</td>
<td></td>
</tr>
<tr>
<td>a_5_2</td>
<td>Stationery and Printing</td>
<td></td>
</tr>
<tr>
<td>a_5_3</td>
<td>External Affairs</td>
<td></td>
</tr>
<tr>
<td>a_5_4</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>a_6</td>
<td>Pension and Other Retirement Benefits</td>
<td></td>
</tr>
<tr>
<td>a_7</td>
<td>Technical and Economic Cooperation with other countries</td>
<td></td>
</tr>
<tr>
<td>a_8</td>
<td>Assignments to Local Bodies</td>
<td></td>
</tr>
<tr>
<td>a_9</td>
<td>Loss/Subsidy on Vegetable Oils</td>
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<tr>
<td>a_10</td>
<td>Subsidy on Controlled Cloth</td>
<td></td>
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<tr>
<td>a_11</td>
<td>Subsidy to Food Corporation of India</td>
<td></td>
</tr>
<tr>
<td>a_12</td>
<td>Grants to States for Natural Calamities</td>
<td></td>
</tr>
<tr>
<td>a_13</td>
<td>Grants to Union Territories, (Non-Plan)</td>
<td></td>
</tr>
<tr>
<td>a_14</td>
<td>Social Security and Welfare</td>
<td></td>
</tr>
<tr>
<td>a_15</td>
<td>Others</td>
<td></td>
</tr>
<tr>
<td><strong>b Developmental Expenditure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b_1_1</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>b_1_2</td>
<td>Art and Culture</td>
<td></td>
</tr>
<tr>
<td>b_1_3</td>
<td>Scientific Services and Research</td>
<td></td>
</tr>
<tr>
<td>b_1_4</td>
<td>Medical, Pub Health, Sanitation and Water Supply</td>
<td></td>
</tr>
<tr>
<td>b_1_5</td>
<td>Family Welfare</td>
<td></td>
</tr>
<tr>
<td>b_1_6</td>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td>b_1_7</td>
<td>Urban Development</td>
<td></td>
</tr>
<tr>
<td>b_1_8</td>
<td>Broadcasting</td>
<td></td>
</tr>
<tr>
<td>b_1_9</td>
<td>Labour and Employment</td>
<td></td>
</tr>
<tr>
<td>b_1_10</td>
<td>Social Security and Welfare, Plan Exp.</td>
<td></td>
</tr>
</tbody>
</table>
### b. Information and Publicity, Plan Exp.

### b.2 General Economic Services
- b.2.1 Foreign Trade and Export Promotion
- b.2.2 Cooperation
- b.2.3 Others

### b.3 Agriculture and Allied Services
- b.3.1 Crop Husbandry
- b.3.2 Animal Husbandry
- b.3.4 Rural Development
- b.3.5 Others

### b.4 Industry and Minerals
- b.4.1 Subsidy to Cotton Corporation of India
- b.4.2 Others

### b.5 Fertilizer Subsidy

### b.6 Power Irrigation and Flood Control
- b.6.1 Power Projects
- b.6.2 Major and Medium Irrigation
- b.6.3 Minor Irrigation
- b.6.4 Others

### b.7 Transport and Communication
- b.7.1 Roads and Bridges
- b.7.2 Civil Aviation
- b.7.3 Ports, Lighthouses and Shipping
- b.7.4 Others

### b.8 Public Works

### b.9 Grants to States/U.T.s
- b.9.a for Drought Prone Area Programme
- b.9.b for Rural Water Supply Scheme
- b.9.c for Rural Roads
- b.9.d for Gainful Employment in Rural Areas/NREP
- b.9.e Plan Grants
- b.9.f for Welfare of Backward Classes
- b.9.g as Special Central Assistance for SCs
- b.9.h towards Special Incentive Scheme
- b.9.i Misc. Grants to States/U.T.s

### c. Self Balancing Items

### d. Statutory Grants to States
- d.1 Article 275(1), Substantive Provision
- d.2 In Lieu of Tax on Railways Pass. Fares

### f. Total Revenue Expenditure = a+b+c+d

*Source: Derived from Indian Public Finance Statistics, Various Issues.*
# Capital Expenditure

## Non Developmental Expenditure
- **a** Defence Services
  - **a.1** India Security Press
  - **a.2** Currency, Coinage and Mint
  - **a.3** Subscription to IMF
  - **a.4** Other Fiscal Services
- **a.5** Others

## Developmental Expenditure
- **b** Railways
- **b.1** Posts and Telegraphs
- **b.2** Social and Community Services
  - **b.3.1** Scientific Services and Research
  - **b.3.2** Education, Art and Culture
  - **b.3.3** Medical, Public Health, Sanitation, Water Supply
  - **b.3.4** Family Welfare
  - **b.3.5** Housing
  - **b.3.6** Urban Development
  - **b.3.7** Broadcasting
  - **b.3.8** Others
- **b.4** General Economic Services
  - **b.4.1** Investment in Gen. Fin. and Trading Institution
  - **b.4.2** Investment in Int'l Financial Institution
  - **b.4.3** Cooperation
  - **b.4.4** Special and Backward Areas
  - **b.4.5** Foreign Trade
  - **b.4.6** Other General Economic Services
- **b.5** Agriculture and Allied Services
  - **b.5.1** Crop-Husbandry
  - **b.5.2** Soil and Water Conservation
  - **b.5.3** Animal Husbandry
  - **b.5.4** Food Storage and Warehousing
  - **b.5.5** Dairy Development
  - **b.5.6** Others
- **b.6** Industry and Minerals
- **b.7** Power, Irrigation and Flood Control
  - **b.7.1** Power Projects
  - **b.7.2** Major and Medium Irrigation
  - **b.7.3** Minor Irrigation
  - **b.7.4** Others
- **b.8** Transport and Communications
  - **b.8.1** Roads and Bridges
  - **b.8.2** Civil Aviation
  - **b.8.3** Ports, Lighthouses and Shipping
  - **b.8.4** Others
- **b.9** Public Works

Source: Derived from Indian Public Finance Statistics, Various Issues.