PART I – INTRODUCTION

CHAPTER 1

Evolution of Public Finance

1.1. INTRODUCTION : Definition, Subjectmatter and Scope of Public Finance

Definition :

Some years ago public finance was taken as "a dull, unimaginative, extremely limited and almost irrelevant discipline", but it is today "one of the most exciting areas in political economy."[1] Public finance, sometimes referred to as public sector economics, or simply public economics, shapes the course of development. "It affects aggregate resource use and financing patterns and, together with monetary and exchange rate policies, influences the balance of payments, the accumulation of foreign debt, and the rates of inflation, interest and exchange. Public spending, taxes, user charges, and borrowing also affect the behaviour of producers and consumers and influence the distribution of wealth and income in an economy. Balance of payment crises and foreign debt problems are at least aggravated, and are often caused, by imprudent fiscal policy." This quotation from the World Development Report 1988 (P.1) makes it amply clear that public finance is no longer an extremely limited and irrelevant discipline. Its activities now extend to almost all aspects of the life of an individual as also of the whole society.

Though discussions of the various aspects and meanings of public finance have a long history[2], yet it did not exist, as a science in ancient times. In the medieval period, the feudal system of public finance was referred to, by De Viti de Marco, as "patrimonial" finance as distinguished from the modern system known as "contributory" finance. In Germany financial advisors of princes, known as Cameralists, also took a paternalistic view of state. In this view state is conceived as "a magnified family with a big farm as its property" and hardly any distinction was made between the "welfare of the people" and "welfare of the prince."

Thus public finance, *i.e.*, "financing of the government, how much of a country's resources the government should acquire for its own use, how and what makes for their efficient spending.... have been a subject of perennial interest to thinkers since ancient times. It has however attracted special attention in the post-war period because there was a phenomenal expansion of the public sector during this period. The public expenditure – GDP ratio which was no more than 10 per cent in the beginning of the 20th century and only 18 per cent in 1939, increased to over 40 per cent by 1980. Such expansion of the public expenditure and the consequent increase in tax-revenue/GDP ratio resulted in public finance being also known as public sector economics. In deference to its widening horizon, public finance is also called public economics. It has now become a central discipline in economics.

Public Economics is about the Government and the economic effects of its policies. In the widest sense, it is the study of economic efficiency, distribution and government policy. It includes topics 'as diverse as responses to market failure due to the existence of externalities, the motives for tax evasion, and the explanation of bureaucratic decision making. In order to reach into all of these areas, public economics has developed from its initial narrow forces upon the collection and spending of government revenues, to its present concern with every artfact of government interaction with the economy. Public economics is concerned with both how the government makes decisions and what decisions it should make. It is thus both a positive and normative study of public finance.

The subject matter of public finance is the issues that arise in order to achieve efficient organisation and working of the public sector. Broadly, there are three such issues, viz.,

(*i*) Determination of the appropriate role and size of the public sector in the economy. Who determines them in a democratic society and how ?

(*ii*) Raising resources for the public sector through taxation and borrowing and their implication for equity and efficiency of the economy.

(*iii*) Need for the performance of governmental functions at more than one level, that is, multilevel finance to secure efficient use of resources in the public sector.

The above encompasses the following five theories :[5]

1. Approaches to the role of government in the economy; in other words, the fiscal tasks of the state, such as provision of public goods.
2. Theory of public choices and the role of government, particularly in a developing economy.
3. Financing of government: Theory of Taxation.
4. Role of fiscal policy as an instrument of microeconomic policy and the constraints.
5. Decentralisation and fiscal federation.

Both the subject matter and the scope of public finance today stand extended as shown in a tabular form below.

Subject Matter of Public Finance	*Traditional Scope*	*Modern Extension of Scope*
Taxation	Principles of taxation, classification of taxes, problem of justice in taxation, shifting and incidence of taxation, economic effect of taxation, taxable capacity.	System of taxation in the context of equitable distribution, tax system in the context of stabilization policy, tax multiplier, optimal taxation, partial and general equilibrium analysis of tax incidence, principle of tax structure design, nature of subsidy and its effects.
Public Expenditure	Principles of public expenditure, causes of growth of public expenditure, classification of public expenditure, effects of public expenditure.	Theory of social goods, optimum level of public expenditure, relative size of public and private expenditure, political process of public expenditure determination by voting, nature of public expenditure in the context of equitable distribution, importance of public expenditure for stabilization policy, public expenditure multiplier, cost-benefit analysis.
Public Debt	Justification of public debt for productive public works, methods of public debt redemption, burden of public debt	Role of public debt in the context of stabilization and economic development, burden of public debt (in the context of future generation), management of public debt, relation with monetary policy, redemption of public debt

Fiscal federation	Principles of fiscal federalism, assignment of taxes to different levels of government	Problem of finance among federal, state and local government, principles of federal finance in the context of allocation, distribution and stabilization
Fiscal Administration	Preparation of traditional budget, principle of balanced budget	Modern budget, budget innovation, relation between budget and planning performance budget, programme budgeting, zero-base budgeting
Fiscal policy	–	Fiscal multipliers, development finance and economic development, appropriate note and size of the public sector in an economy (also known as fiscal tasks of government)
International fiscal coordination	–	Tax coordination, public expenditure coordination, coordination of stabilization policy

1.2. MODERN PERIOD : Major Themes

Public finance in the modern period has thus undergone far-reaching changes. These can be studied (*a*) in a chronological fashion, that is, moving from year to year and encompassing the entire subject or (*b*) on an author-by-author basis or (*c*) the major themes of the periods can be selected to see how they evolved. The third alternative is followed here. Musgrave[3] has selected five such themes, namely, (*i*) the theory of public expenditures or of social goods, (*ii*) principle of equity in taxation, (*iii*) efficiency condition in taxation, (*iv*) shifting and incidence of taxation, and, (*v*) the macro aspects of fiscal policy. The first four themes focus on the microeconomic functions of government, that is, how does the government affect the allocation of resources and the distribution of income. The fifth theme relates to the macro-economic functions of government. It is concerned with the uses of taxation, public expenditure and monetary policy to affect the overall level of employment and price level. These issues are generally treated under fiscal policy.

While analysing the development of these themes we must keep in mind that there is a close link between economic theory and public finance theory, i.e., development of every theory of public finance reflects growth in general economic theory. Thus, for instance, the analysis of tax incidence reflects the prevailing theory of price and distribution. Discussion of tax equity was profoundly influenced by the growth of utility theory. Paretian welfare economics made it possible to analyse the modern theory of social goods. And it was the Keynesian revolution that assigned a major role to fiscal policy as an instrument of macroeconomic policy.

But tools of economic analysis are only one of the forces influencing the history of public finance. Changes in economic and social institutions—from feudalism to the modern legal and financial institutions—also had their effects. Yet another factor has been the changing social philosophies and values such as the rise of egalitarian philosophy.

1.2.1. Public Goods

Private Economics is concerned with the activities of the individual that are directed toward the satisfaction of individual wants. Public Economics, that is, the Economics of Public Finance studies the productive activities of the state as directed toward the satisfaction of public wants. Issues involved in this study are the choice of the public services which are to be produced, the determination of their respective shares and the distribution of the cost among the consumers, etc. "The core of fiscal theory addresses the question of what public services should be provided by the public sector and how much."[7] There are several answers to this question. Let us begin by analysing the views of the classical economists. (See also chapter 3)

Classical Economists

These economists developed the operation of the public sector in the context of a natural order which is based on the principle of non-interference. The need for the public sector arises only in exceptional cases where the market economy fails to perform efficiently. They treated government expenditures and taxation as separate issues. In the words of De Viti de Marco :

> "Taxes were regarded as a sort of hail that destroys part of the crop. Therefore, the use to which the tax was put, after its payment, was not studied at all. The consequence was that taxes were regarded, without further ado, as being accompanied by a contraction in the supply of available goods, with all the mistaken consequences of this mistaken premise."[8]

Adam Smith's epoch-making book, *The Wealth of Nations,* published in 1776, provided a broader and firmer ground for the study of public finance. But he did not allow an unlimited and unquestioned power to the state as was the case with the cameralists. He was in favour of a system of natural liberty that establishes itself of its own accord once governmental restraints are withdrawn. Yet the government is needed and it has to perform three functions, namely, (*i*) protection of the society from foreign invasion, (*ii*) maintenance of law and order so that every member of the society is protected from the injustice of every other member, and (*iii*) the erection and maintenance of certain public works such as roads, bridges and canals which contribute to the advancement of commerce and educational institutions for the instruction of the people.

Having stated these functions of the ruler, Adam Smith does not go to the core issue of why they are to be undertaken by a state. About defence he simply states that the army has to be maintained by the state rather than by private persons. He then says that the administration of justice is required to protect life, limb and property against internal offence. Smith believed that natural liberty required a framework of security and legal rules which only government could provide. His third duty of the sovereign relates to public works. In his words :

> "The third and last duty of the Commonwealth is that of erecting and maintaining those public institutions and those public works which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature that the profit could never repay the expense to any individual or small number of individuals, and which it, therefore, cannot be expected that any individual or small number of individuals should erect or maintain."

It is clear from the above statement that there are certain situations where market fails to work properly; there are goods which it does not pay the individual to provide. But Smith is unable to explain the causes of the market failure. In the modern discussion of social goods these causes are explained in terms of joint consumption, externalities and free-rider behaviour. None of them is present in Smith's writing.

Ricardo does not say anything in this respect. He discusses the effects of taxation on the private sector of the economy but is almost silent on public expenditure where all that he has to observe is to repeat the golden maxim of J.B. Say that "the very best of all plans of finance is to spend little, and the best of all taxes is that which is least in amount."

J.S. Mill was familiar with the works of early socialists. So he examined the proper scope of government in detail. Like Adam Smith he was also a believer in non-interference by the government. As he put it, "*laissez faire* should be the general practice : every departure from it, unless required by some great good, is a certain evil." In his opinion, the instances of departure from *laissez faire* can be divided into 'ordinary' and 'optional' functions. Ordinary functions of the state include defence and law and order. These are essential even for maintaining a system of *laissez faire*. Besides there are numerous other functions which a government has to perform because they are conducive to general convenience. Examples cited by him are coinage, setting of standard weights, road construction, street lighting, erection of harbours, lighthouse and dykes.

Apart from general convenience, Mill gives the following reasons for state interference :

(*a*) Individuals may be unable to evaluate the utility of certain products, such as elementary education for children.

(*b*) Lack of foresight may lead individuals to enter into irrevocable contracts from which they must be restrained. Regulation of working hours may be cited as an example.

(*c*) In the case of delegation of powers by individuals to managers whose interests differ, state intervention may be needed. Regulation of monopolies is an example in this case.

"Mill's explanation why certain goods require public provision thus moves beyond Adam Smith's generalisation, but still falls short of precise formulation. Emphasis is on the difficulty of collecting tolls, an argument also advanced subsequently by H. Sidgwick."[9]

Public Finance in European Continent

The tradition of British authors in matters of public finance has been quite different from that of the writers of the West European countries. English writers of the classical period viewed the market as the rule and the public sector as the exception. Public sector is needed in those areas only where market failure takes place. West European, particularly, German, tradition looked at the economic system in dual terms : public sector being as important as the private sector. The cause for this difference may be found in the differences in tradition. British tradition emerged from the Lockean background of social contract. The society is based on individual entitlements and free exchange. Such a society is guided by an invisible hand whose working is beneficial for the society. Continental approach follows from the cameralist teaching. According to this tradition, rules for the conduct of public affairs are developed in the enlightened state.

Dietzel noted that where a commodity possesses the characteristic of indivisibility, it has to be produced by the state because the same quantity of this good would be available to all consumers. But by consuming the same quantity of it, all consumers do not get the same marginal utility. Hence differential prices have to be charged. This is the application of the benefit principle. "With public expenditure linked to consumer evaluation, the basis for the modern theory of public goods was laid."[10]

Austrian, Italian, Scandinavian and German writers dealt with these questions in detail in the 1880's and 90's. Mention may be made of Pantaleoni, Mazzola, De Viti de Macro, Sax, Wicksell, and so on. Wicksell too accepted the benefit principle and extended the range and applicability of this principle on both sides. On the one hand, following the lead of Sax and his successors, he applied the concept of marginal utility to public services and to the individual contributions for these services and, on the other hand, he related the tax principle itself to the form of modern tax administration, specifically the parliamentary approval of taxes.[11] Thus, according to him, the provision of public goods should be designed to maximise individual satisfaction. But he added that justice in taxation presupposes justice in the existing distribution of property and income. The benefit rule is, in this way, qualified. Wicksell further stated that the individuals would not reveal their preferences for public goods. A political process becomes necessary for this. (See also Chapter 6 (b)).

Wagner formulated his law of expanding state activity. He based his law, however, on technical factors such as increased density of population and urbanisation as also growing acceptance of social policy objectives in fiscal affairs.

Subjective Value and Social Goods

Cameralist tradition provided a more open-minded view of the public sector. It failed, however, to furnish an economic theory of social goods. This could be possible only after the marginal revolution of the 1870s which led to the application of subjective utility to the value theory on the demand side. This new approach, as developed by Menger and Jevons, was soon applied to the government budget as well. "Thereby the analysis of public provision was placed in an entirely new perspective. Focus was no longer on the duty of the sovereign, but on the demands of the individual consumer."[12] The principle of the efficient resource allocation was now applied to both the public and private sectors. Public sector was no longer viewed as an exception to the laws of economics.

The essence of this approach was that, when individual preferences are given, welfare maximisation requires that for each individual marginal utility equals price. This is the basic efficiency rule which applies to both private and public goods, with one difference. In the case of private good, goods are sold at uniform price and through quantity adjustment price is equated with marginal utility for each consumer. In the public good case consumers pay different prices though each consumes the same quantity of the good. The culmination of this line of development is the voluntary exchange theory of Lindahl in which each consumer pays a tax-price that equals the value of the marginal utility which he derives from the social good and the sum of such tax-prices equals the cost of providing the public good. (See also Chapter 6 (a)).

Pigou

"The Austrian and Italian models of fiscal analysis and the Wicksellian interpretation of voting behaviour did not enter the purview of English-language authors for over half a century."[13] Mill's tradition continued till the 1920s. Marshall did not say anything significant on the subject. Jevons did not apply his marginal analysis to the public sector. A new perspective was introduced by Pigou only in his *Economics of Welfare* through his concept of externalities. He made a distinction between marginal and social net product. The private net product measures the internalised costs and benefits and they are recorded in market price. The social net product refers to marginal private net product plus the non-recoverable positive and negative costs and benefits associated with an increment of output of that commodity which are borne by or accrue to individuals outside the industry. Where social benefit exceeds private, a bounty should be paid to permit for the addition of external benefit not reflected in market demand. In the case of social costs exceeding private costs, a tax is to be levied on the producer of such a commodity. Thus, the existence of externalities calls for fiscal instruments.

The concept of externalities was not applied by Pigou to the case of social goods in his subsequent book "*Study in Public Finances*." This book is more concerned with the theory of taxation and gives scant attention to public expenditure.

Public Goods and Pareto Efficiency

The continental discussion of public goods of the 1880s and 1890s became familiar to the English-reading students of public finance in 1938 through an article of R.A. Musgrave entitled "The Voluntary Exchange Theory of Public Economy" (Quarterly Journal of Economics). In 1948 Bowen in his book, *Toward Social Economy*, reinvented Lindahl's earlier formulation through the vertical addition of demand curves for social goods. The major breakthrough, however, came in 1954 and 1955 by the two articles of Paul A. Samuelson. These "papers met the long delayed need for a rigorous integration of social goods into the conditions of Pareto efficiency. Thirty years later, his solution may seem evident to the well-trained senior, but at the time it offered a giant step forward."[14]

Musgrave departs from Samuelson in the sense that he does not evade the problem of determining individual demand for public goods. Proceeding on the basis of Wicksell, he says that through voting individuals can be asked to reveal their preferences for these goods. The subsequent development in the field of social goods theory can be best summed up in the following words of Musgrave :

> The analytical neatness and abstract formulation of Samuelson's model meets the pure spirit of Paretian welfare economics and as such has invited the attention of economic theorists. The greater realism of Wicksellian approach has offered a more workable stepping-stone to the problems of budget policy. Subsequent work has drawn on both traditions."[15]

Important extensions of these two approaches have been the examination of non-polar cases, pollution and environmental economics, local public goods, different voting theories, positive theory of government behaviour, cost-benefit analysis, etc.

1.2.2. Equity in Taxation

The development of the theory of public expenditure as discussed in the preceding section, has been mostly separate and independent of taxation, though Samuelson, Musgrave, the Austrian school and Wicksell are exceptions to it. It means that taxation theory has developed largely in isolation from the expenditure side. It is true of classical economists as well as in the context of optimal taxation theory now.

Adam Smith had laid down the criteria of a good tax system. His four maxims of taxation, namely, equality, certainty, convenience and economy, are well-known.

There have been two explanations of equity : (*i*) in the form of benefit (payment of taxation related to benefit received from public services), and (*ii*) in the form of ability to pay (payment of taxation related to the taxpayer's ability to pay the tax). Both versions of equity gave rise to a long controversy pertaining to the distribution of tax burden, whether the tax system should be proportional or progressive. Another important issue was the determination of the index of benefit and ability to pay. Property, income and expenditure have been discussed at different times as index of ability. It is to be noted further that economic analysis is not of much use for a proper discussion of equity.

1.2.3. Efficiency in Taxation

For the construction of a good tax system, equity is not everything; efficiency also matters and here economic analysis assumes control. The analysis of efficiency may begin from Adam Smith's fourth maxim that "every tax ought to be so contrived as to take out and to keep out of the pockets of the people as little as possible, over and above what it brings into the public treasury of the state." This maxim includes the costs of tax administration, obstruction to industry, the burden of penalties and hateful examination. A good tax system is one which is as little burdensome to people as possible. It is emphasised that the production effect of a tax or a tax system may have more importance than distribution effect.

The discussion of efficiency in taxation started with the concept of consumer's surplus. The modern formulation of efficiency was anticipated by Dupuit in 1844. Marshall, using the concept of consumer's surplus, stated that maximisation of welfare requires taxation of industries working under condition of increasing costs (diminishing return) and granting of subsidies to decreasing costs (increasing return) industries. A host of writers advocated the use of an expenditure tax on grounds of efficiency. Economists have noted the conflict between equity and efficiency criteria—simultaneous attainment of both may not be possible. Pigou and Ramsey laid the basis for the modern theory of optimal taxation. In 1938, Hotelling derived the superiority of a lump sum tax over an excise tax. He could do this without using the concept of consumer's surplus. Later, this analysis