CHAPTER ONE

1.1. Overview of Public Finance

Public finance is a study of the financial aspects of government. The term has been variously defined. According to Dalton, "public finance is one of those subjects which lie on the borderline between economics and politics. It is concerned with the income and expenditure authorities and with the adjustment of the one to the other." Harold Groves, an authority on the subject, defines public finance as: "A field of inquiry that treats of the income and outgo of governments (federal, state and local). In modern times this includes four major divisions: public revenue, public expenditure, public debt, and certain problems of the fiscal system as a whole, such as fiscal administration and fiscal policy. Therefore, the subject matter of public finance deals with public revenue, public expenditure, and public debt.

1.2. Definition and Scope of Public Finance

Public finance is a very old science and different economists have defined it in their own ways. Some of the important definitions of public finance are given as follow.

a. "Public finance is concerned with the income and expenditure of public authorities and with the adjustment of one to the other." **Huge Dalton**
b. "Public finance deals with the provision custody and disbursement of resources needed for conduct of public or government functions." **Lutz**
c. "Public finance is a science which deals with the activity of the statement in obtaining and applying the material means necessary for fulfilling the proper functions of the state." **Carl Plehn**
d. "Public finance is the study of the principles underlying the spending and raising of funds of public authorities." **Findley Shirras**
e. "The government, considered as a unit, may be defined as the subject of study of public finance. More specifically, public finance studies the economic activity of government as a unit." **Buchanan**
f. "Public finance deals with expenditure and income of public authorities of the state and their mutual relations as also with the financial administration and control." **Bastable**

All of them say that it is a study of income and expenditure of the central, state, and local governments. Government performs many functions which the individual can not or do not perform. Therefore, rising of funds for the expenditure and their disbursement constitutes the subject of Public finance **(Gupta, 2001)**

The contents (scope) of the science of public finance are divided into five categories of financial activities of the government:

i. Public Revenue,
ii. Public Expenditure,
iii. Public Debt,
iv. Financial Administration and Control, and
v. Economic Stability and Growth.

i. ***Public Revenue***: - this part includes the study of raising public revenues and the principles of taxation.

ii. ***Public Expenditure: -*** this consists of the study of the principles and the effects of public expenditure.

iii. ***Public Debt.*** A public authority can obtain income through loans and public borrowings. The loans raised in a particular year constitute receipts for that year. It is an income of a capital nature, while the provision for repayment of the capital sum for the year constitutes expenditure of a capital nature. The study public debt also includes:

(i) Methods and objectives of public borrowings;

(ii) Management of public debt; and

(iii) Burden of public-internal and external.

Methods of public debt are an important instruments of not only raising funds but also for meeting increasing government expenditure, for securing economic stability, increasing public borrowings during the periods of inflation and liquidation of public debt during the period of depression, borrowings from the people during inflation and borrowings from banks during depression and so on.

iv. ***Financial Administration and Control***:- The scope of public finance is not confined only to public revenue, public expenditure and public debt. We have to examine the mechanism by which the above processes are carried on. With out a study of relevant dimensions of financial administration the subject of public finance remains incomplete. Thus financial administration and control include the following:

(i) Study of budgets and their procedure.

(ii) Budget as an instrument of securing certain objectives, such as promotion of employment, economic growth with stability, welfare of the weaker sections, infrastructural development for promoting private investments, etc.

(iii) Financial and physical controls through different fiscal tools for controlling private expenditure in the economy to avoid the effects inflation deflation, recession etc.

v. ***Economic Stability and Growth***:- The study o f public finance includes fiscal policy of the government in dealing with inflationary and deflationary situations, instability of the price level, promotion of full employment, growth of economy, welfare of the people, etc. Economic stabilization is of recent origin. It has a wide scope to play especially in the less developed countries. The main task of this section is to frame and look after the implementation of various policies required for economic stabilization and growth.

1.3. Public finance and private finance

Finance in general means public as well as private finance. Public finance relates
to the money-raising and income-expenditure functions of the government. Private finance refers to the income-expenditure phenomenon of an individual or private business firm. By private finance we mean the financial problems and policies of an individual economic unit. It is a convention to look into similarities

and dissimilarities between the two so as to provide an analytical foundation for the decision making aspects of public finance

Similarities

(1) Satisfaction of Human Wants.

Both the public and private finance have the same objective, i.e., the satisfaction of human wants. Public finance is concerned with the satisfaction of social or collective wants, whereas private finance is concerned with the satisfaction of personal or individual wants.

(2) Maximum Advantage

Both the public finance and private finance try to secure maximum advantage or maximum benefit. An individual or a corporation or a private business firm tries to obtain maximum advantage from his expenditure. Similarly, the government also tries to obtain maximum good of the people by incurring expenditure on the society.

(3) Borrowings

Another similarity between the public and private finance is that many times both have to be obtained from the market in the form of borrowings whenever the expenditure of either the government or any individual or firm exceeds their income/revenue.

(4) Engagement in Similar Activities

Both the private and public sectors are engaged in activities that involve lots of purchases, sales and other transactions. Similarly, they are engaged in production, exchange, saving capital accumulation, investment, and so on. In order to finance these operations, the government, creates money, raises loans and makes payments etc. Similarly, a private economic unit lends, borrows, receives payments, and makes payments and so on. In these respects, therefore, both the public and private finance are quite similar to each other.

(5) Scarcity of Resources

The scarcity of resources is also an important factor which is common to both. They have unlimited objectives, whereas the resources are limited.

(6) Problem of Adjustment of Income and Expenditure

Another similarity between public and private finance is that both the public as well as private sectors face the problem of adjustment of income and expenditure.

Dissimilarities

(1) Adjustment Approach of Income and Expenditure

Another dissimilarity between the individual's private finance and the government's public finance is that every individual tries as far as possible to adjust his expenditure to his income because his expenditure depends on his income. Conversely, the government first prepares its budget. In other words, the government first determines its expenditure and then devises ways and means to raise the requisite revenue to meet its expenses.

(2) Nature of Resources

The resources (private finance) of an individual are more or less limited, whereas the resources of the government (public finance) are enormous. Government can raise resources from tax sources as well as non-tax sources. The government can borrow from internal as well as external sources.

(3) Coercive Methods

An individual (private finance) cannot use coercive methods to raise his income, whereas the government (public finance) can use forceful methods to collect revenue. In other words, to collect revenue, the government imposes taxes at a high rate on the people irrespective of their capacity to pay. Private individuals or bodies have no such powers.

(4) Secrecy of Budget

Public finance is an open affair as the government gives utmost publicity to its budget by publishing it in newspapers and by showing it on television. For example, the Ethiopian government tells to the public the yearly approved budget by parliament, whereas private finance is a secret affair. An individual tries to keep his accounts secret as he does not want his competitors to know his real financial position.

(5) Long/Short-term Consideration

Another point of difference between private and public finance is that the private individuals incur expenditure in those areas of business which give quick returns. They, as individuals keep in view short-term considerations. On the contrary, government incurs expenditure keeping in view the long-term considerations, such as construction of dams, multi purpose hydro-electric projects, etc.

(6) Elasticity of Finance

Public finance is elastic in nature-as compared to private finance. Public finance can be increased by imposing various taxes as public finance is open to drastic changes. Private finance on the other hand, cannot be increased as there is not much scope for changes in private finance.

(7) Motive of Expenditure: In the case of an individual, the main consideration in expenditure is whether it will be profitable and beneficial to him. On the other hand, the motives of profit and surplus do not influence government departments except such commercial departments as the railways, posts, telegraphs, etc. The government has to finance improvements of a general nature and activities for which financial return is uncertain or long delayed.

(8) Expenditure and Welfare: Every individual attempts to maximize his satisfaction by distributing his limited income on different goods and services in such a way that marginal utilities of money spent on all goods would be more or less the same. On the other hand, the government should spend its income in such a way that the welfare of the community should be maximized.

(9) Provision Made for the Future: The individual hopes to live only for a short period and he feels the present needs far more urgently; therefore, he goes about satisfying his present needs and allots only a very small portion of his income for the future since generally he underestimates the future. The state,

on the other hand, is a permanent organization and is the custodian of not only the present but also the future generations and, therefore, allots a large portion of its resources for the conservation as well as the promotion of future interests.

Thus, on important points, private and public finance differ from each other. It is not; therefore, correct to assume that the principles and rules which govern private finance are equally applicable to public finance.

1.4. Economic and Social Significance of Public Finance

i. Economic Significance

Economic Stability and maintenance of full employment are the two main goals of public finance in advanced countries like the U.K. and the U.S.A. In developing countries economists were of the view that the fiscal policies should be formulated for the rapid economic development. Public Finance occupies great significance in an under developed or developing country. According to **R.J. Chelliah**, "Public Finance has a positive and significant role in the context of economic development." The importance of public finance in an under developed/developing country discussed as follows:

(1) Capital Formation

Since the economic development of the country depends on the rate of capital formulation, the first and the foremost aim of public finance is to promote capital formation. In a developing country, the government's economic policy should concentrate on production and fiscal policy should act as a tool of capital formation. For rapid capital formation, the government should incur expenditure on the establishment of basic and heavy industries, infrastructural development, such as power projects, transport sector, means of communications etc.

(2) Economic Stabilization

Economic stabilization is yet another economically significant responsibility of the government. The problem arises whenever there is economic instability such as inflation, deflation and recession. Public finance (revenue and expenditure process of the government) may be, therefore, used to secure economic stability or to remove economic fluctuations in the economy.

(3) Full Employment

Public finance also plays an important role in increasing employment. In an underdeveloped/ developing country, major problem faced by the people is the problem of unemployment. This problem leads to low standard of living, poverty, backwardness, ignorance and above all starvation. It is the function of public finance to provide employment opportunities. Therefore, expenditure should be incurred by the government for increasing employment and for achieving full employment. To generate employment, public expenditure should be incurred on setting up new industries, encouraging small-scale and cottage industries through financial subsidies, expenditure on training schemes etc.

(4) Balanced Regional Development

For the economic development of a country, balanced regional development is very essential. Balanced regional development is possible by setting up private industries in backward areas instead of in urban areas. To encourage this diversion, the government should provide fiscal or tax concessions in the form of 5 year tax holiday, communication facilities should also be provided. If the private industries fail to divert to backward regions, should be taxed heavily.

(5) Reduction in Economic Inequalities

One of the major problems of underdeveloped countries is the unequal distribution of income and wealth. There is a gap between the rich and the poor. Public finance has an important role to play in this context. To bring about equitable distribution of income and wealth, the government should follow the system of progressive taxation. In other words, the government should impose heavy taxes on the richer section of society, and the amount realized from the rich should then be spent on the poor by way of providing them social amenities such as free education, medical facilities, public utilities like road, water facility, recreation facilities etc.

(6) Mobilization of Resources

Mobilization of resources is another important role of public finance. The government can mobilize or raise resources by imposing taxes on the people and industries, by encouraging savings through various saving schemes, surplus of public enterprises and borrowings and making them available for investment for the rapid economic development of the underdeveloped country.

(7) Optimum Utilization of Resources

Optimum utilization of scarce resources is very essential for the economic development of the underdeveloped countries. In a developing country it is not uncommon to find non-utilization or destruction of scarce resources. The solution of this problem lies in the optimum utilization of available resources by means of adopting planned monetary and public finance policies. The state can direct the flow of consumption, production and distribution in the right direction by adopting balanced budgetary policy.

ii. Social Significance

Social justice or equitable distribution of income and wealth is another responsibility of the government in its public finance operations. As already been discussed there is unequal distribution of income and wealth in developing countries. There is a wide gap between the rich and the poor. For example according to Fikreyesus (2006), the top 20 percent of the population have control about 50 percent of the Ethiopian economy. This gap can be bridged by adopting a rational fiscal policy, such as taxation and public expenditure. In other words luxury items purchased mainly by the rich should be subjected to higher rates of taxation, and necessary items should be exempted from taxation. Social justice also requires investment expenditure on the establishment of enterprises in the public sector. By doing so, the

government would be able to produce goods of mass consumption to make available cheap goods to the people.

iii. Satisfaction of Social Wants

Another significant point of public finance is the satisfaction of social or collective wants and merit wants. Wants are divided under three heads:

(a) Private Wants:

(b) Social Wants or Collective Wants and

(c) Merit Wants

a) Private Wants

Private wants are those wants which are satisfied by individuals according to their personal incomes. Degree of satisfaction depends upon their respective incomes. Wants for houses, food, clothes, entertainment or recreation etc, are satisfied according to individual preferences.

b) Social Wants or Collective Wants

Social or collective wants require public goods which are demanded by all members of society equally whether the people have the capacity to pay or not. Wants like defense, education, public health, flood control provisions, weather forecasting bureaus, research centers, police protection, social overhead capital like roads, bridges, etc. are collective wants which must be available to all the people, irrespective of whether they are rich or poor, whether they can afford to have them or not. In other words, consumer is supreme. Public expenditure on these heads is necessary to satisfy y social or collective wants. Since nobody is ready to pay for them, therefore, taxes are imposed on the people to meet expenditure for the satisfaction of these wants.

c) Merit Wants

Merit wants are essential private such as food, clothing, housing etc, which are
satisfied by the government at low prices for the poor due to their low level of income. Merit wants are, thus, provided by the government for the benefit of the poor. These wants are satisfied by the government for the upliftment and progress of the poor. Such wants are food, clothing, low cost housing (e.g. condominium), free nutritious means to school children, free education to the children of the poor, low priced milk to the poor, old age pensions and social security measures, maternity benefits etc. Satisfaction of these wants for the poor increases their productivity efficiency and there by their income.

Chapter Two

2. **The theory of public Economy**

i. **Welfare Economics**

In this section we sketch the fundamentals of welfare economics. The theory is used to distinguish the circumstances under which markets can be expected to perform well from those under which markets fail to produce desirable results.

We begin by considering a very simple economy: only two people who consume two commodities with fixed supplies. The only economic problem here is to allocate amounts of the two goods between the two people.

2.2. An economy with consumption

The framework used by most public finance specialist is **welfare economics**, the branch of economic theory concerned with the social desirability of alternative economic states. The fundamentals of welfare economics is used to distinguish the circumstances under which markets can be expected to perform well from those under which markets fail to produce desirable results.

We begin by considering a very simple economy: only two people who consume two commodities with fixed supplies. The only economic problem here is to allocate amounts of the two goods between the two people.

As simple as this model is, all the important results from the two good two person case hold in economies with many people and commodities. The two-by-two case is analyzed because of its simplicity. The two people are ***Adam*** and **Eve**, and the two commodities are **apples (food**) and **fig leaves (clothing)**. An analytical device known as the Edgeworth Box depicts the distribution of apples and fig leaves between Adam and Eve. In Figure 2.1, the length of the Edgeworth Box, *Os*, represents the total number of apples available in the economy; the height, *Or*, is the total number of fig leaves. The amounts of the goods consumed by Adam are measured by distances from point *O*; the quantities consumed by Eve are measured by distances from *O'*. For example, at point v, Adam consumes *Ou* fig leaves and *Ox* apples, while Eve consumes *O'y* apples and *O'w* fig leaves. Thus, any point within the Edgeworth Box represents some allocation of apples and fig leaves between Adam and Eve.

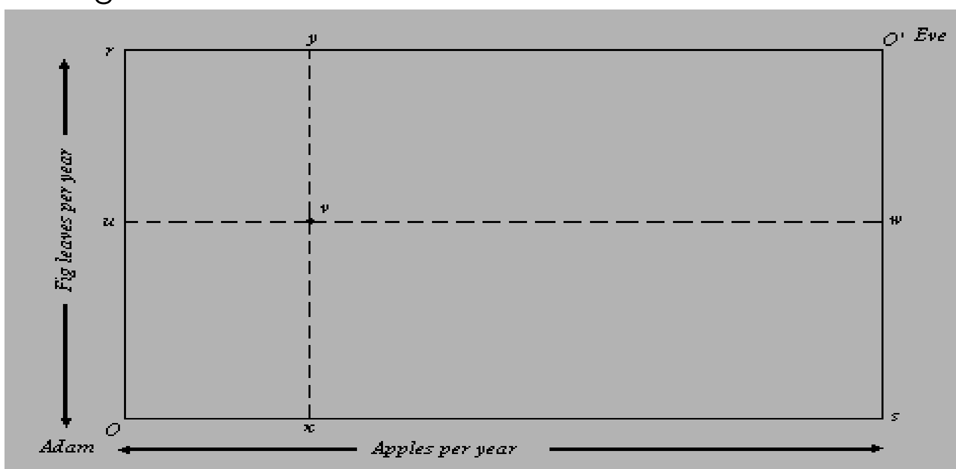


Figure 1.1: Edgeworth Box

Now assume Adam and Eve each have a set of conventionally shaped indifference curves that represent their preferences for apples and fig leaves. In Figure 1.2, both sets of indifference curves are superimposed onto the Edgeworth Box. Adam's ICs are labeled with *A's*; Eve's ICs are labeled with *E's*. Indifference curves with greater numbers represent higher levels of happiness (utility). Adam is happier on indifference curve A_3 than on A_2 or A_1, and Eve is happier on indifference curve E_3 than on E_2 or E_1. In general, Eve's utility increases as her position moves toward the northeast.

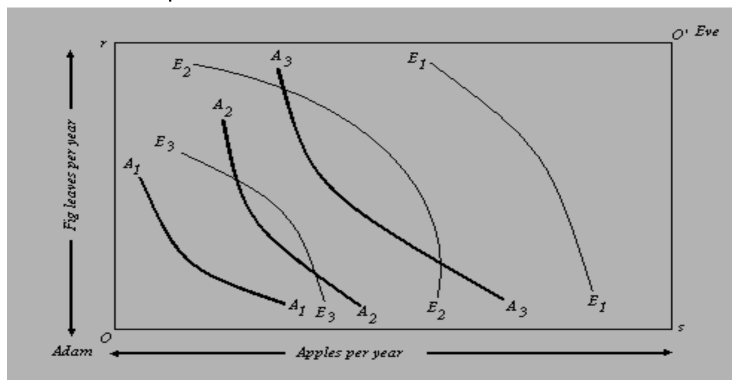


Figure 1.2: Indifference curves in an Edgeworth Box

Suppose some arbitrary distribution of apples and fig leaves is selected – say point ***g*** in Figure 1.3. $\boldsymbol{A_g A_g}$ is Adam's indifference curve that runs through point *g*, and $\boldsymbol{E_g E_g}$ is Eve's. Now pose the following question: Is it possible to reallocate apples and fig leaves between Adam and Eve in such a way that Adam is made better off, while Eve is made no worse off? A moment's thought suggests such an allocation, at point ***h***. Adam is better off at this point because indifference curve $\boldsymbol{A_h A_h}$ represents a higher utility level for him than ***AgAg***. On the other hand, Eve is no worse off at **h** because she is on her original indifference curve, $\boldsymbol{E_g E_g}$.

Can Adam's welfare be further increased without doing any harm to Eve? As long as Adam can be moved to indifference curves further to the northeast while still remaining on $\boldsymbol{E_g E_g}$, it is possible. This process can be continued until Adam's indifference curve is just touching $\boldsymbol{E_g E_g}$, which occurs at point ***p*** in Figure 1.3. The only way to put Adam on a higher indifference curve than $\boldsymbol{A_p A_p}$ would be to put Eve on a lower one. An allocation such as point ***p***, at which the only way to make one person better off is to make another person worse off, is called **Pareto efficient**. Pareto efficiency is often used as the standard for evaluating the desirability of an allocation of resources. If the allocation is not Pareto efficient, it is "wasteful" in the sense that it is possible to make someone better off without hurting anybody else. When economists use the word efficient, they usually have the notion of Pareto efficiency in mind.

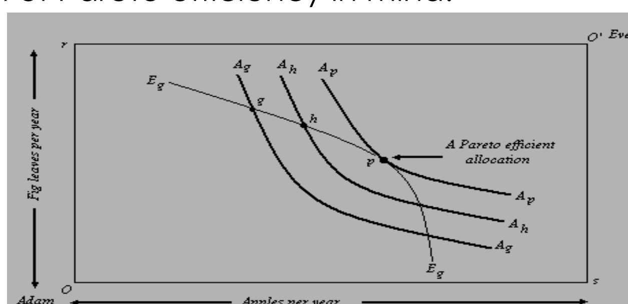


Figure 1.3: Making Adam better off without Eve becoming worse off

A related notion is that of a **Pareto improvement** – a reallocation of resources that makes one person better off without making anyone else worse off. In Figure 1.3, the move from ***g*** to ***h*** is a Pareto improvement, as is the move from ***h*** to ***p***. Point ***p*** is not the only Pareto efficient allocation that could have been reached by starting at point ***g***.

Figure 1.4 examines whether we can make Eve better off without lowering the utility of Adam. Logic similar to that surrounding Figure 1.3 suggests moving Eve to indifference curves further to the southwest, provided that the allocation remains on A_gA_g. In doing so, a point like p_1 is isolated. At p_1, the only way to improve Eve's welfare is to move Adam to a lower indifference curve. Then, by definition, p_1 is a Pareto efficient allocation. So far, we have been looking at moves that make one person better off and leave the other at the same level of utility. In Figure 1.5 we consider reallocations from point ***g*** that make both Adam and Eve better off. At p_2, for example, Adam is better off than at point ***g*** (Ap_2Ap_2 is further to the northeast than A_gA_g) and so is Eve (Ep_2Ep_2 is further to the southwest than E_gE_g). Point p_2 is Pareto efficient, because at that point it is impossible to make either individual better off without making the other worse off. It should now be clear that starting at point **g**, a whole set of Pareto efficient points can be found. They differ with respect to how much each of the parties gains from the reallocation of resources.

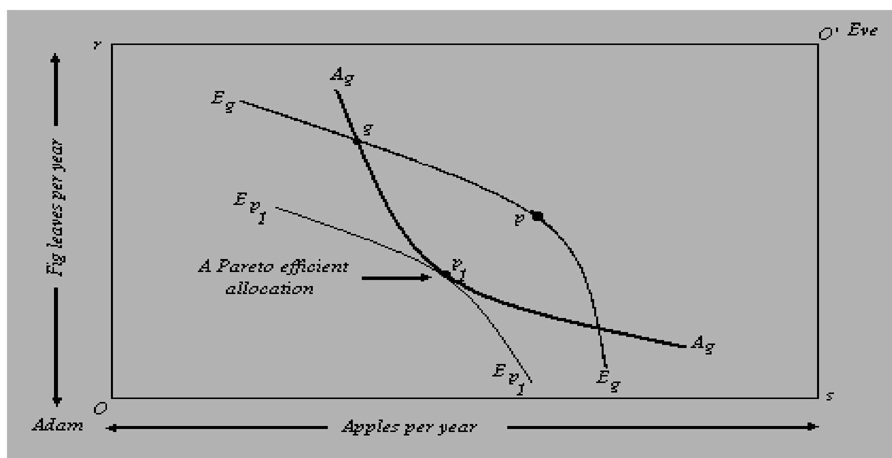


Figure 1.4: Making Eve better off without Adam becoming worse off

Recall that the initial point ***g*** was selected arbitrarily. We can repeat the procedure for finding Pareto efficient allocations with any starting point. Had point *k* in Figure 1.6 been the original allocation, Pareto efficient allocations like p_3 and p_4 could have been isolated. This exercise reveals a whole set of Pareto efficient points in the Edgeworth Box. The locus of all the Pareto efficient points is called the **contract curve**, and is denoted ***mm*** in Figure 1.7. Note that for an allocation to be Pareto efficient (to be on ***mm***), it must be a point at which the indifference curves of Adam and Eve are barely touching., In mathematical terms, the indifference curves are tangent – the slopes of the indifference curves are equal.

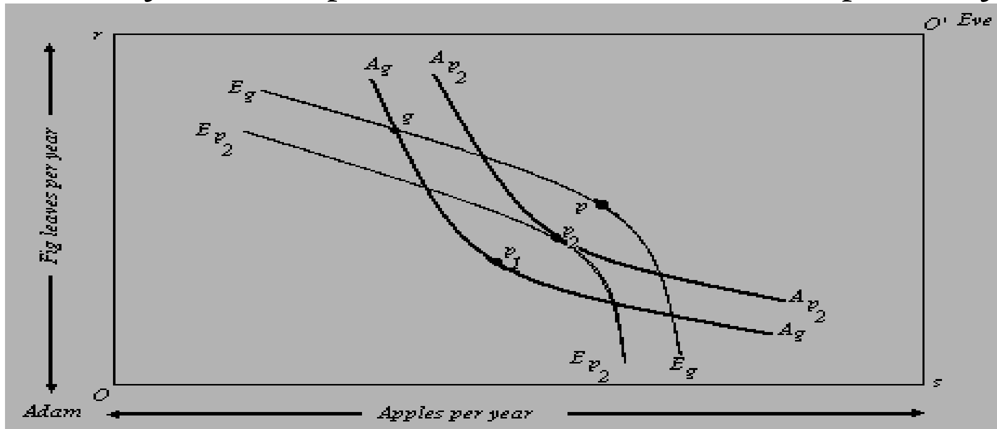


Figure 1.5: Making both Adam and Eve better off

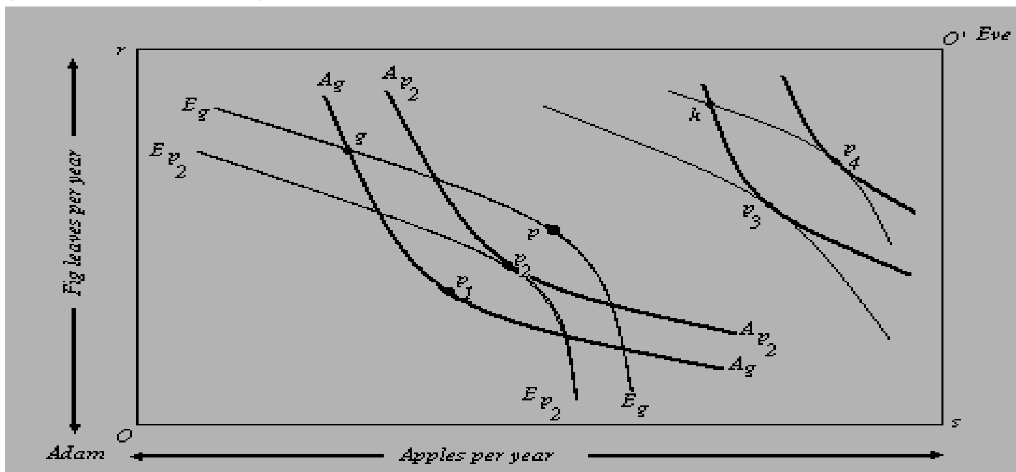


Figure 1.6: Starting from a different initial point

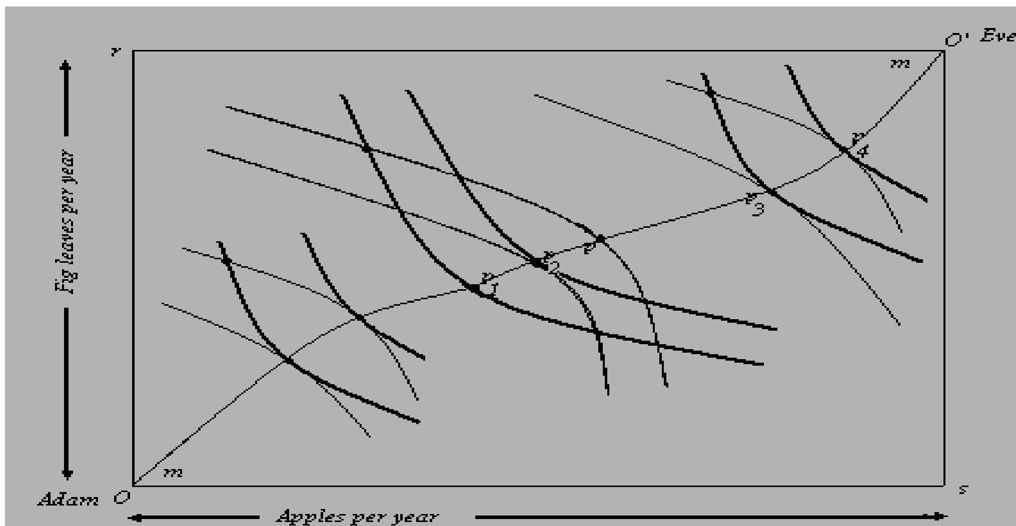


Figure 1.7: The contract curve

In economic terms, the absolute value of the slope of the indifference curve indicates the rate at which the individual is willing to trade one god for an additional amount of another, called the *marginal rate of substitution* (MRS). Hence, Pareto efficiency requires that marginal rates of substation be equal for all consumers:

$$MRS_{af}^{Adam} = MRS_{af}^{Eve} \quad \textbf{(1.1)}$$

Where MRS_{af}^{Adam} is Adam's marginal rate of substitution of apples for fig leaves, and MRS_{af}^{Eve} is Eve's.

2.2.i.1. An Economy with Production

The production possibilities curve. So far we have assumed that supplies of all the commodities are fixed. Consider what happens when productive inputs can shift between the production of apples and fig leaves, so the quantities of the two goods are alterable. Provided the inputs are efficiently used, if more apples are produced, then fig leaf production must necessarily fall and vice versa. The **production possibilities curve** shows the maximum quantity of fig leaves that can be produced along with any given quantity of apples. A typical production possibilities curve is depicted as *CC* in Figure 1.8. As shown in Figure 1.8, one option available to the economy is to produce *Ow* fig leaves and *Ox* apples. The economy can increase apple production from *Ox* to *Oz*, distance xz. To do this, inputs have to be removed from the production of fig leaves and devoted to apples. Fig leaf production must fall by distance *wy* if apple production is to increase by xz. The ratio of distance *wy* to distance xz is called the **marginal rate of transformation** of apples for fig leaves (MRT_{af}) because it shows the rate at which the economy can transform apples into fig leaves. Just as MRS_{af} measures the absolute value of the slope of an indifference curve, MRT_{af} measures the absolute value of the slope of the **PPC**.

It is useful to express the marginal rate of transformation in terms of **marginal cost** (MC) – the incremental production cost of one more unit of output. To do so, recall that society can increase apple production by xz only by giving up *wy* fig leaves. In effect, then, the distance *wy* represents the incremental cost of producing apples, which we denote MC_a. Similarly, the distance xz is the incremental cost of producing fig leaves, MC_f.

By definition, the absolute value of the slope of the production possibilities curve is distance *wy* divided by xz, or MC_a/MC_f. But also by definition, the slope of the production possibilities curve is the marginal rate of transformation. Hence, we have shown that:

$$MRT_{af} = \frac{MC_a}{MC_f} \quad . \qquad \textbf{(1.2)}$$

Efficiency conditions with variable production. When the supplies of apples and fig leaves are variable, the condition for Pareto efficiency in Equation (2.1) must be extended. The condition becomes:

$$MRT_{af} = MRS_{af}^{Adam} = MRS_{af}^{Eve} \qquad \textbf{(1.3)}$$

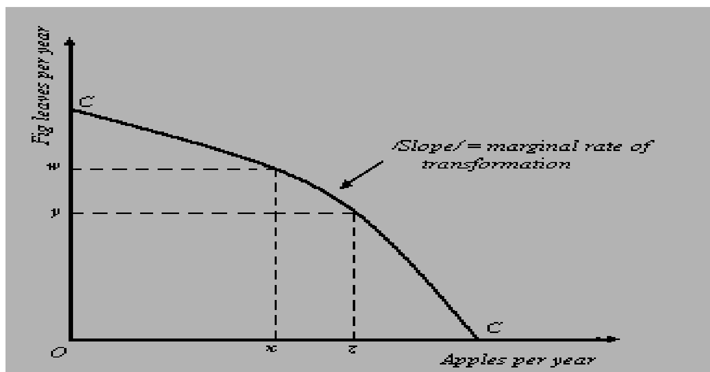


Figure 1.8: Production possibilities curve

A simple arithmetic example demonstrates why the first equality in Equation (1.3) must hold. Suppose that at a given allocation Adam's MRS_{af} is $\frac{1}{3}$, and the MRT_{af} is $\frac{2}{3}$. By the definition of MRT_{af}, at this allocation two additional fig leaves could be produced by giving up three apples. By the definition of MRS_{af}, if Adam lost three extra apples, he would require only *one* fig leaf to maintain his original utility level. Therefore, Adam could be made better off by giving up three apples and transforming them into *two* fig leaves, and no one else would be made worse off in the process. Such a trade is *always* possible as long as the marginal rate of substitution does not equal the marginal rate of transformation. Only when the slopes of the curves for each are equal is it impossible to make a Pareto improvement. Hence, $\mathbf{MRT}_{af}=\mathbf{MRS}_{af}$ is a necessary condition for Pareto efficiency. The rate at which apples can be transformed into fig leaves ($\mathbf{MRT}_{af}$) must equal the rate at which consumers are willing to trade apples for fig leaves ($\mathbf{MRS}_{af}$).

Using Equation (1.2), the conditions for Pareto efficiency can be reinterpreted in terms of marginal cost. Just substitute (1.2) into (1.3), which gives us

$$\frac{MC_a}{MC_f} = MRS_{af}^{Adam} = MRS_{af}^{Eve} \quad (1.4)$$

As a necessary condition for Pareto efficiency.

ii. The Fundamental Theorem of Welfare Economics

Now that we have described the necessary conditions for Pareto efficiency, we may ask whether a real-world economy will achieve this apparently desirable state. The Fundamental Theorem of Welfare Economics provides an answer:

As long as producers and consumers act as perfect competitors, that is, take prices as given, the under certain conditions a Pareto efficient allocation of resources emerges.

Thus, a competitive economy "automatically" allocates resource efficiency, without any need for centralized direction (shades of Adam Smith's "invisible hand"). In a way, the fundamental theorem merely formalizes an insight that has long been recognized: When it comes to providing goods and services, free enterprise systems are amazingly productive.

A rigorous proof of the fundamental theorem requires fairly sophisticated mathematics, but we can provide an intuitive justification. The essence of competition is that all people face the same price – each consumer and producer is so small relative to the market that his or her action alone cannot affect prices. In our example, this means Adam and Eve both pay the same prices for fig leaves (P_f) and apples (P_a). A basic result from the theory of rational choice is that a necessary condition for Adam to maximize utility is

$$MRS_{af}^{Adam} = \frac{P_a}{P_f} \quad (1.5)$$

Similarly, Eve's utility-maximizing bundle is characterized by:

$$MRS_{af}^{Eve} = \frac{P_a}{P_f} \quad (1.6)$$

Equations (2.5) and (2.6) together imply that

$$MRS_{af}^{Adam} = MRS_{af}^{Eve}$$

This condition, though, is identical to Equation (1.1) one of the necessary conditions for Pareto efficiency. However, as emphasized in the preceding section, we must consider

the production side as well. A basic result from economic theory is that a profit-maximizing competitive firm produces output up to the point at which marginal cost and price are equal. In our example, this means $P_a=MC_a$ and $P_f=MC_f$, or

$$\frac{MC_a}{MC_f}=\frac{P_a}{P_f} \qquad (1.7)$$

But recall from Equation (2.2) that MC_a/MC_f is just the marginal rate of transformation. Thus, we can rewrite (2.7) as

$$MRT_{af}=\frac{P_a}{P_f} \qquad (1.8)$$

Now, consider Equations (1.5), (1.6), and (1.8), and notice that P_a/P_f appears on the right-hand side of each. Hence, these three equations together imply that $MRS_{af}^{Adam}=MRS_{af}^{Eve}=MRT_{af}$, which is the necessary condition for Pareto efficiency. Competition, along with maximizing behavior on the part of all individuals, leads to an efficient outcome.

Finally, we can take advantage of Equation (1.4) to write the conditions for Pareto efficiency in terms of marginal cost. Simply substitute (1.6) or (1.5) into (1.4) to find:

$$\frac{P_a}{P_f}=\frac{MC_a}{MC_f} \qquad (1.9)$$

Pareto efficiency requires that prices be in the same ratios as marginal costs, and competition guarantees this condition is met. The marginal cost of a commodity is the additional cost to society of providing it. According to Equation (1.9), efficiency requires that the additional cost of each commodity be reflected in its price.

iii. The Role of Fairness

If properly functioning competitive markets allocate resources efficiently, what role does the government have to play in the economy? Only a very small government would appear to be appropriate. Its main function would be to establish a setting in which property rights are protected so that competition can work. Government provides law and order, a court system and national defense. Anything more is superfluous. However, such reasoning is based on a superficial understanding of the fundamental theorem. Things are really much more complicated. For one thing, it has implicitly been assumed that efficiency is the only criterion for deciding if a given allocation of resource is good. It is not obvious; however, that Pareto efficiency by itself is desirable.

To see why, let us return to the simple model in which the total quantity of each good is fixed. Consider Figure 1.9, which reproduces the contract curve ***mm*** derived in Figure 1.7. Compare the two allocations p_5 (at the lower left-hand corner of the box) and ***q*** (located near the center). Because p_5 lies on the contract curve, by definition it is Pareto efficient. On the other hand, ***q*** is inefficient. Is allocation p_5 therefore better? That depends on what is meant by better. To the extent that society prefers a relatively equal distribution of real income, ***q*** might be preferred to p_5, even though ***q*** is not Pareto efficient. On the other hand, society might not care about distribution at all, or perhaps care more about Eve than Adam. In this case, p_5 would be preferred to ***q***.

The key point is that the criterion of Pareto efficiency by itself is not enough to rank alternative allocations of resources. Rather, explicit value judgments are required on the

fairness of the distribution of utility. To formalize this concept, note that the contract curve implicitly defines a relationship between the maximum amounts of utility that Adam can attain for each level of Eve's utility. In Figure 1.10, Eve's utility plotted on the horizontal axis, and Adam's utility is recorded on the vertical axis. Curve *UU* is the **utility possibilities curve** derived from the contract curve. It shows the maximum amount of one person's utility given the other individual's utility level.

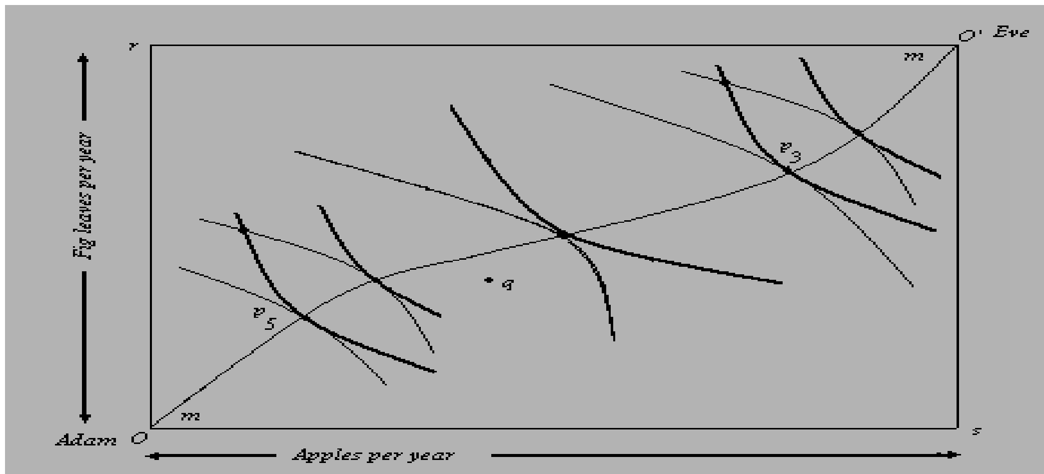


Figure 1.9: Efficiency versus equity

Point $\tilde{p}_5$ corresponds to point ***p5*** on the contract curve in Figure 1.9. Here, Eve's utility is relatively high compared to Adam's. Point $\tilde{p}_3$ in Figure 1.10, which corresponds to ***p3*** in Figure 1.9, is just the opposite. Point $\tilde{q}$ corresponds to point *q* in Figure 1.9. Because ***q*** is off the contract cure, $\tilde{q}$ must be inside the utility possibilities curve, reflecting the fact that it is possible to increase one person's utility without decreasing the other's.

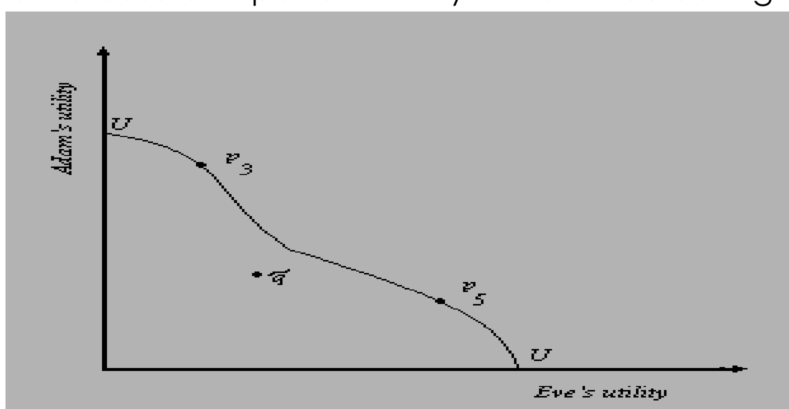


Figure 1.10: Utility Possibilities Curve

All points on or below the utility possibilities curve are attainable by society; all points above it are not attainable. By definition, all points on *UU* are Pareto efficient, but they represent very different distributions of real income between Adam and Eve. Which point is best? The conventional way to answer this question is to postulate a **social welfare function,** which embodies society's views on the relative deservedness of Adam and Eve. Imagine that just as an *individual's* welfare depends on the quantities of commodities she consumes, *society's* welfare depends on the utilities of each of its members. Algebraically, social welfare (W) is some function of each individual's utility:

$$W = F(U^{Adam}, U^{Eve}) \quad (1.10)$$

We assume the value of social welfare increases as either U^{Adam} or U^{Eve} increases – society is better off when any of its members becomes better off. Note that we have said nothing about how society manifests these preferences. Under some conditions, members of society may not be able to agree on how to rank each other's utilities, and the social welfare function does not even exist. For the moment, we simply assume it does exist.

Just as an individual's utility function for commodities leads to a set of indifference curves for those commodities, so does a social welfare function lead to a set of indifference curves between people's utilities.

Figure 1.11 depicts a typical set of social indifference curves. Their downward slope indicates that if Eve's utility decreases, the only way to maintain a given level of social welfare is to increase Adam's utility, and vice versa. The level of social welfare increases as we move toward the northeast, reflecting the fact that an increase in any individual's utility increases social welfare, other things being the same.

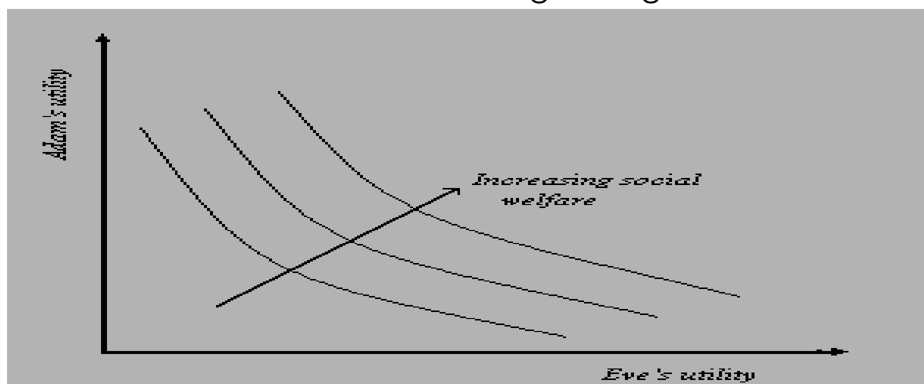


Figure 1.11: Social indifference curves

In Figure 1.12, the social indifference curves are superimposed on the utility possibilities curve from Figure 1.10. Point *i* is not as desirable as point *ii* (point *ii* is on a higher social indifference curve than point *i*) even though point *i* is Pareto efficient and point *ii* is not. Here, society's value judgments, embodied in the social welfare function, favor a more equal distribution of real income, inefficient though it may be. Of course, point *iii* is preferred to either of these. It is both efficient and "fair."

Now, the Fundamental Theorem of Welfare Economics indicates that a properly working competitive system leads to some allocation on the utility possibilities curve. There is no reason, however, that it is the particular point that maximizes social welfare. We conclude that, even if the economy generates a Pareto efficient allocation of resources, government intervention may be necessary to achieve a "fair" distribution of utility.

A second reason the fundamental theorem need not imply a minimal government has to do with the fact that the certain conditions required for its validity may not be satisfied by real-world markets. As we now show, an absence of these conditions may lead free markets to allocate resources inefficiently.

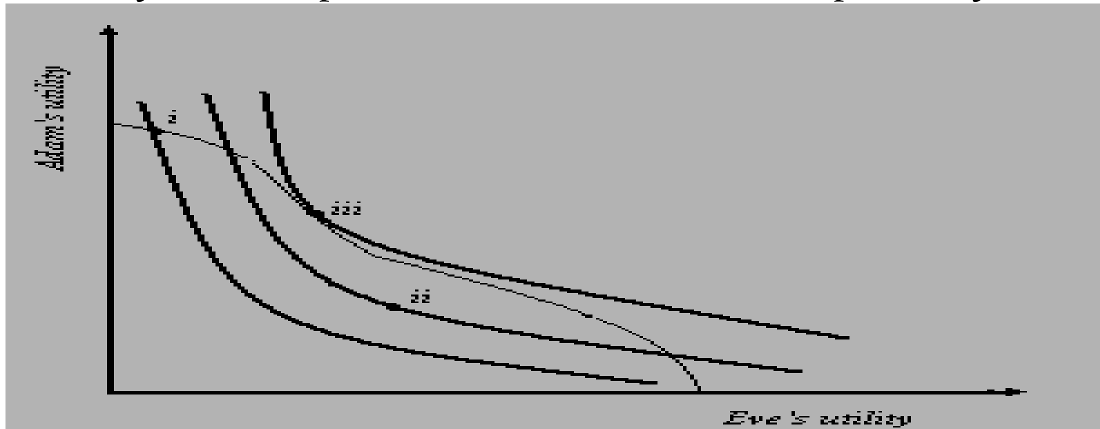


Figure 1.12: Maximizing social welfare

2.3. Market Failure

Whenever markets appear to be failing to allocate resources efficiently, economists round up the same group of possible causes for the supposed failure. An economy may fail to generate an efficient allocation of resources for two general reasons – market power and non-existence of markets.

i. Market Power

The Fundamental Theorem holds only if all consumers and firms are price takers. If some individuals or firms are price makers (they have the power to affect prices), then the allocation of resources will generally be inefficient. Why? A firm with market power may be able to raise price above marginal cost by supplying less output than a competitor would. Thus, Equation (1.9), one of the necessary conditions for Pareto efficiency, is violated. An insufficient quantity of resources is devoted to the commodity.

Situations in which firms are price makers can arise in several different ways. An extreme case is **monopoly**, where there is only one firm in the market, and entry is blocked. Even in the less extreme case of oligopoly (a few sellers), the firms in an industry may be able to increase price above marginal cost. Finally, some industries have many firms, but each firm has some market power because the firms produce differentiated products. For example, a lot of firms produce running shoes, yet Reeboks, Nikes, and Etonics are regarded by many consumers as distinct commodities.

ii. Non-existence of Markets

The proof behind the Fundamental Theorem assumes a market exists for every commodity. After all, if a market for a commodity does not exist, then we can hardly expect the market to allocate it efficiently. In reality, markets for certain commodities may fail to emerge. Consider, for instance, insurance, a very important commodity in a world of uncertainty. But, there are certain events for which insurance simply cannot be purchased on the private market. For example, suppose you wanted to purchase insurance against the possibility of becoming poor. Would a firm in a competitive market ever find it profitable to supply "poverty insurance"? The answer is no, because if you purchased such insurance, you might decide not to work very hard. To discourage such behaviour, the insurance firm would have to monitor your behavior to determine whether your low income was due to bad luck or to goofing off. However, to perform such monitoring would be very difficult or impossible. Hence, there is no market for poverty insurance – it simply cannot be purchased.

Basically, the problem here is one of **asymmetric information** – one party in a transaction has information that is not available to another. One rationalization for governmental income support programs is that they provide poverty insurance that is unavailable privately. The premium on this "insurance policy" is the taxes you pay when you are able to earn income. In the event of poverty, your benefit comes in the form of welfare payments.

Another type of inefficiency that may arise due to the nonexistence of a market is an **externality**, a situation in which one person's behaviour affects the welfare of another in a way that is outside existing markets. For example, suppose your roommate begins smoking large cigars, polluting the air and making you worse off. Why is this efficiency problem? Your roommate uses up a scarce resource, clean air, when he smokes cigars. However, there is no market for clean air that forces him to pay for it. In effect, he pays a price of zero for the clean air and therefore "overuses" it. The price system is failing to provide correct signals about the opportunity cost of a commodity.

Externalities have a simple interpretation in the analysis of welfare economics. In the derivation of Equation (1.9), it was implicitly assumed that marginal cost meant *social* marginal cost – it embodied the incremental value of all of society's resource used in production. In the example above, however, your roommate's private marginal cost of smoking is less than the social marginal cost because he does not have to pay for the clan air he uses. The price of a cigar, which reflects its private marginal cost, is not correctly reflecting its social marginal cost. Hence, Equation (1.9) is not satisfied, and the allocation of resources is inefficient. Incidentally, an externality can be positive – confer a benefit – as well as negative. Think of a molecular biologist who publishes a paper about a novel gene-splicing technique that can be used by a pharmaceutical firm. In the case of a positive externality, the amount of the beneficial activity generated by the market is inefficiently small.

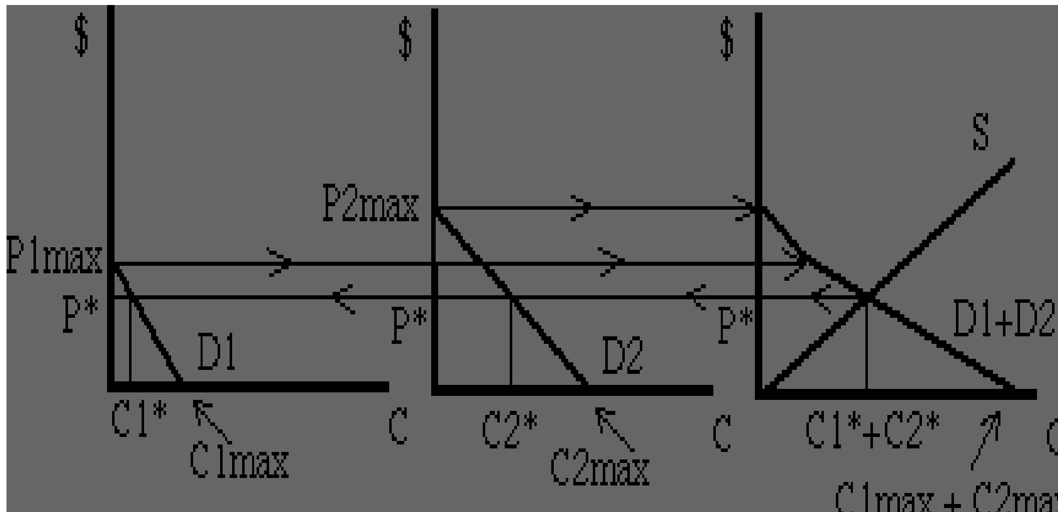
Closely related to an externality is the case of a **public good**, a commodity that is ***nonrival in consumption*** – the fact that one person consumes it does not prevent anyone else from doing well. The classic example of a public good is lighthouse. When the lighthouse turns on its beacon, all the ships in the vicinity benefit. The fact that one person takes advantage of the lighthouse's services does not keep anyone else from doing so simultaneously.

In using the lighthouse, people may have an incentive to hide their true preferences. Suppose it would be worthwhile to me to have the lighthouse operate. I know, however, that once the beacon is lit, I can enjoy its services, whether I pay for them or not. Therefore, I may claim the lighthouse means nothing to me, hoping that I can get a **"free ride"** after other people pay for it. Unfortunately, everyone has the same incentive, so the lighthouse may not get built, even though its construction could be very beneficial. The market mechanism may fail to force people to reveal their preferences for public goods, and possibly result in insufficient resources being devoted to them. Private markets often under provide nonexcludable public goods because individuals have the incentive to **"free ride"** -- not pay for the benefits they receive from consuming the public good.

Public Goods have two distinct characteristics:

- ✓ **Non-rivalry:** several individuals can consume the same good without diminishing its value and individual demand curves are summed vertically to get the aggregate demand curve for the public good. Where as for Private goods => individual demands are summed horizontally.
- ✓ **Non-excludability:** an individual cannot be prevented from consuming the good.

Deriving Aggregate Demand for Private Good

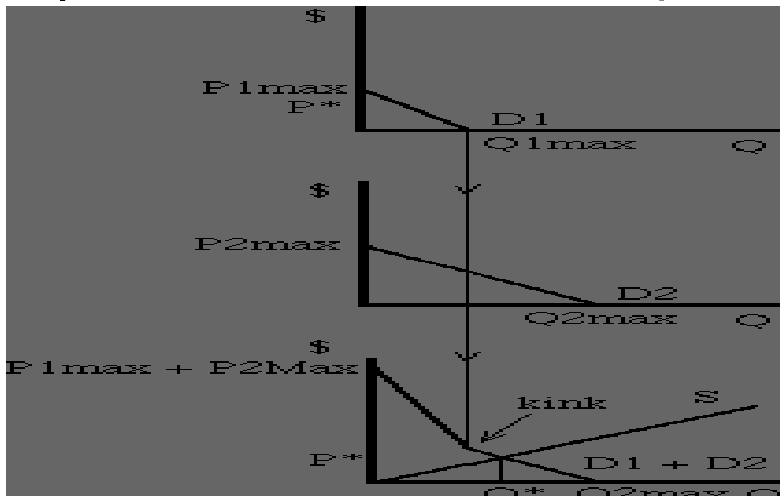


Why Private Goods Are Summed Horizontally?

- ✓ **Exclusive**: once you buy it, you own it and can consume it as you want.
- ✓ **Rival**: A good taken off the shelf isn't there for other people to consume.

Deriving Aggregate Demand for Public Good

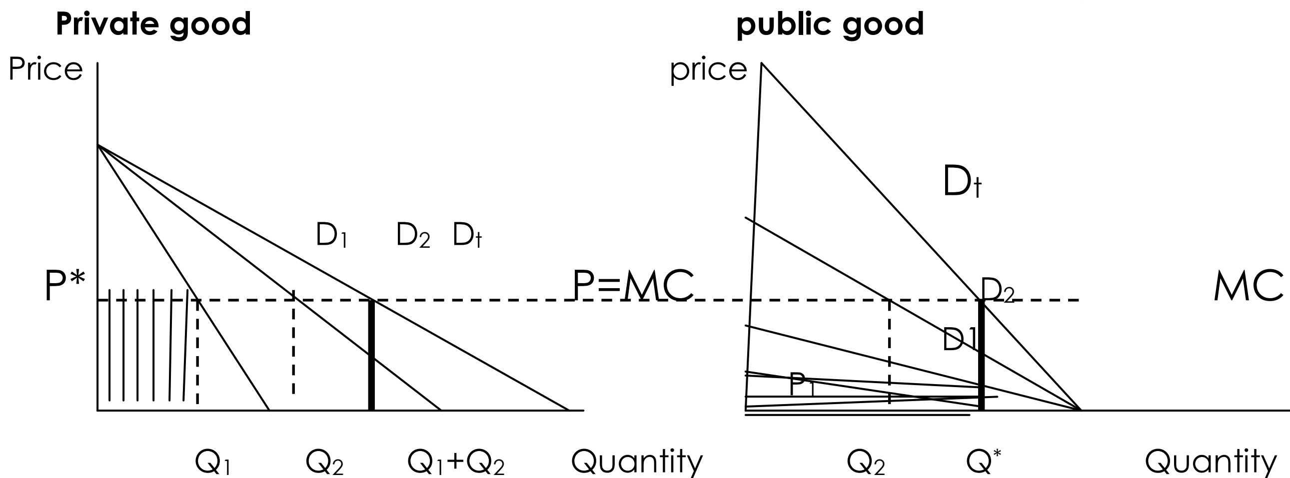
(Recreational Demand for Water Quality at Wanci Lake)



Heterogeneity, Non-Rivalry and Market Failure

Consider Two Goods with Identical Aggregate Demand:

The first good is a private good, (Chicken Sandwiches) and the second good is a public good, (Water Quality at Wanci Lake)



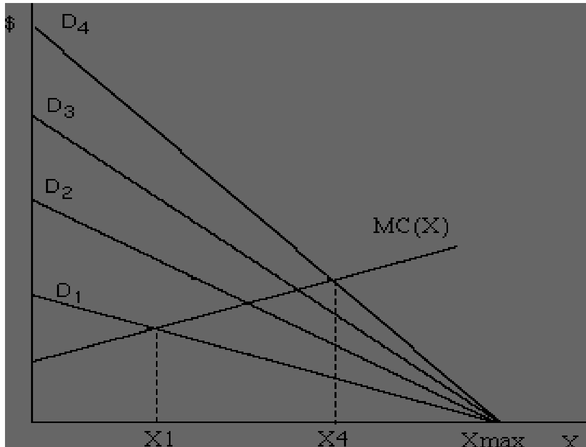
Private Good: market price is an efficient mechanism.

- Equilibrium price of a chicken sandwich is P=MC when $consumer_1$ eats Q_1 sandwiches; $consumer_2$ eats Q_2 (total revenue paid by each is shown by the shaded regions.)

Public Good: market price is not efficient mechanism

- Equilibrium price cannot be P=MC. consumer1 would not pay for any water quality improvements and $consumer_2$ would pay for only Q_2 where as $Q_2 < Q^*$, the efficient level of water quality would not be met. If Q* is provided and each consumer pays his marginal value. (total revenue paid by each is shown by the shaded regions)

Optimal Provision of a Nonexcludable Public Good, the Free-Rider Problem, and Market Failure



D_1 = Demand of one individual for public good X.
D_2 = Total Demand of two individuals for public good X.
D_3 = Total Demand of three individuals for public good X.
D_4 = Total Demand of four individuals for public good X.
MC= Marginal cost of providing the public good X.

- Socially-optimal level of public good X with four consumers is X_4. if individual_1 decides to purchase (and the others free ride), the private market will provide a level of the public good equal to X_1 (where MB_1 equals MC of provision)

The Socially-Optimal Provision of a Public Good

X = level of provision of a public good and n = number of homogeneous individuals in a society, then **(Inverse) demand** of one individual: Di(X) = a - bX.

(Inverse) demand of n individuals ("aggregate demand"):

Dn(X) = n (a - bX) = na – nbX.

(Inverse) Supply): MC(X) = c + d X

The socially-optimal level of provision of X occurs where MRn(X) = MC(X) or the difference between TBn(X) and TC (X) is maximized:

$$Max\ W(X) = \int_{x-0}^{X} Dn(X)\ dx - \int_{X-0}^{X} MC(X)\, dx$$

The FOC for this problem is:

$$Dn(X) = MC(X), or\ na - nbX = c + dX$$

Solving the FOC for X:

$$X^* = \frac{na - c}{nb + d}, as\ n\ becomes\ very\ large, \qquad X^*\ approaches\ to\ the\ value\ a/b.$$

Private Market Outcome for Non-excludable Public Goods

Private providers will provide public goods where the marginal benefit of one individual (the other individuals' free ride) equals the marginal cost of providing the public good

$$Max\ \pi(X) = TB_1(X) - TC(X)$$

The FOC for this problem is:

$$D_1(X) = MC(X), or\ a - bX = c + dX => X^{Comp.} = \frac{a-c}{b+d}$$

Solving for the level of the public good provided by the private market:

Note that $X^{comp} < X^*$(the private market under-provides the public good)

Mechanisms for Providing the Socially-Optimal Level of Public Goods:

- ✓ Civic responsibility, volunteerism, and donations. E.g. volunteer fire departments, donations to the arts
- ✓ Private provision of excludable public goods. E.g. movies, music concerts
- ✓ Public provision of excludable public goods through the use of entrance fees. E.g. entrance fees for a National Park.
- ✓ Public provision of nonexcludable public goods through the use of general government tax revenues. E.g. taxes earmarked for National Defense.
- ✓ Religious Beliefs. e.g. collection basket is passed around for donations

Gov't Provision of Non-Excludable Public Goods through Taxes

Public financing of public goods may be the only option in cases where the public good is non-excludable and, therefore, entry fees cannot be charged.

- Θ National Defense
- Θ Public Education
- Θ Social Welfare Programs.

The Governments' problem

- ✓ There is only one public good
- ✓ Gov't seeks to provide the public good in a budget balancing, or **revenue-neutral** manner.

  If there are 'n' individuals in the society, then:

Total Tax = TC(X*) = $\int_{X-0}^{X^*} MC(X)\, dx$, so that the tax per individual = TC(X*)/n.

Congestion Costs in Public Goods Models

- **congestion costs**: an increasing number of users can reduce the benefits to each individual

Negative congestion externalities

The benefits to each viewer of a scenic vista may be reduced if the overlook site becomes crowded

Positive congestion externalities

"Information highway": When the first individual subscribes to email, the value of the service is equal to zero, since there is no one out there to send messages to. As subscription to the service increases, however, the value of email increases due to the positive congestion externality.

X is the level of provision of a public good, N is the number of people consuming the public good and Bi(X, N) is the benefit to individual i from the public good at a level of X when N individuals are using the public good the existence of congestion costs implies that: dBi/dN < 0 benefit to an individual of consuming the public good decreases as the number of individuals consuming the public good increases. Consider the following functional form:

$Bi(X, N) = \frac{a + bX - cX^2}{N}$, where the parameters a, b, c > 0.

When we maximize Benefits with respect to N, we find that:

$\frac{dBi}{dN} = \frac{-(a + bX - cX^2)}{N^2}$, the expression is negative => a negative congestion externality

CHAPTER – THREE
PUBLIC EXPENDITURE

3.1. Meaning and importance of public expenditure

Public expenditure refers to the expenses which the government incurs for its own maintenance and/or for the society and the economy as a whole. In reality, Public expenditure is incurred by public authorities: Central, State and local governments either for the satisfaction of collective needs of the citizens or for promoting their economic and social welfare since the problems of labor exploitation, economic and social injustice etc, assumed serious proportions and would not be ignored.

It is incurred by the government for the attainment of public good. Every government has to maintain law and order, armed forces for providing protection, public parks, schools, health of the people. Government has to perform certain other welfare measures like maternity protection, arranging for cheap food, cloth and low-cost housing for the poor and so on. All these multifarious activities which are increasing every year require huge funds. Therefore public expenditure, deals with the expenditure which a government incur for its own maintenance, the society and the economy and helping other countries.

Objectives of public expenditure

- ✓ **Security of life** against the external aggression, internal disorder and injustice.
- ✓ **Development or up gradation** of social life in the community.

3.2. Kinds of public expenditure

Technically, most governments classify public expenditure into two:

- ***Recurrent expenditure and capital expenditure***

All sorts of administrative and defense expenditure and debt services are called *current expenditure*. They are also referred to as ***non-developmental*** *expenditure*. They are intended for continuing the existing flow of goods and services and maintaining the capital of the country intact. On the other hand, capital expenditures contribute to increased productive capacity of the nation and therefore, are known as **development expenditure**. Expenditures on construction of dams, public works, state enterprises, agricultural and industrial development etc., are instances o f capital expenditure.

- ***Productive and Unproductive Expenditures***

This distinction emphasizes that while some expenditure is in the nature of consumption; others are in the nature of investment and help the economy in improving its productive capacity. Under the *laissez-faire* philosophy, the only productive public expenditures are those which are incurred to create and maintain social overheads. Expenditures on administration, defense, justice, law and order, and maintenance of the State are unproductive.

- ***Transfer and Non-transfer Expenditures***,

This classification was favoured by Pigou. Transfer expenditure is a payment without corresponding receipt of goods and services by the State. Examples are interest payments, old-age pensions and unemployment benefits. In these cases, the government is simply transferring the right or claim to use the goods and services to certain sections of the society. In contrast, non-transfer expenditure is that by which the State pays for its purchases or use of goods and services. While in the case of transfer expenditure, the beneficiaries are to decide about the use of real resources, in the case of non-transfer expenditure, it is the State which uses the resources straightaway. Such a use of resources by the State, of course, may be for consumption purposes or for investment purposes. Expenditure on defense, education and such and such things are of non-transfer or real expenditure type as are the investment expenditures.

Though public expenditure is a means of maintaining the capital of the country intact, it is not merely a financial mechanism, it is rather a means of securing social objectives. Socialism can be realized only through progressive taxation and their distribution afterwards. Therefore, public expenditure is that expenditure incurred by the public authorities i.e. Central, State and Local Governments, to satisfy those common wants which the people in their individual capacity are unable to satisfy efficiency wants.

3.3. Reasons for growing of the expenditure

Q. Why government made expenditure for the acquisitions of some goods and services irrespective of who produce and supply them to the market?

Some of the basic causes of ever-increasing public expenditure have been mentioned in the theories associated with the issue. Among some of them are:

i. ***Population growth***. The growth in the number of population has been a major cause of the continuous rise in public expenditure since the responsibility of government relating to public services has been multiplied.

ii. ***Increasing urbanization***. As the rural areas cannot subsist the growing population, there is a continuous rush to the urban areas. The size of cities is becoming larger and larger, government responsible by increasing expenditure on water supply, electricity, construction and maintenance of hospitals, schools and other public services.

iii. ***Provision of economic overheads***. Without the creation and maintenance of economic overhead facilities, no country can develop. These facilities like provision of a good system of transport and communication, generation of electric power, etc. require heavy investment of capital which does not flow from private sector sources.

iv. ***Maintenance of law and order***. Along with the growth of population, urbanization and complexities of modern economic and sociopolitical life, law and order problems have also multiplied. The government responsibilities of internal protection of people from breach of peace by antisocial elements have gradually become multi-sided requiring government expenditure of more and more funds.

v. ***Welfare activities***. Previously, public expenditure was limited by only a few functions of government, viz, the defense, maintenance of law and order and administration. But, presently, the countries have emerged as modern welfare states where the greatest good of the greatest number is the main objective of statehood. The government now has to assume such responsibilities as family and child welfare, social security like old age pension, unemployment benefit, sickness benefit, etc. housing for the poor, welfare of handicapped and backward classes, rehabilitation of displaced persons, subsidy on food and production inputs, etc. Public expenditure on welfare programmes has, therefore, become tremendous with the passage of time.

vi. ***Provision of public goods and utility services***. Public goods are those that are consumed equally by all such as Defense and police services, justice, roads, irrigation and flood control projects, public parks, etc. They involve huge investment and have to be provided by the government. Moreover, there has been a growing trend of public utility services like railways and other transport services, postal, telegraph and telephone services, electricity services, etc. coming under the government sector. They all involve heavy expenditure on installation and maintenance.

vii. ***Servicing of public debt***. A substantial part of the huge expenditure program of government is met from public borrowings. This is because resources cannot be mobilized from taxation beyond a limit. Hence, modern states incur considerable internal and external public debt. The repayment of debt and obligation to pay service charges become huge.

viii. ***International obligation***. Finally, the modern states have to maintain many international socio-political and economic links. They have to maintain diplomatic relations, economic links with international institutions like IBRD (the International Bank for Reconstruction and Development), IMF, etc. Socio-cultural and academic exchange relations, linkage with development programs of the type of economic co-operation, gifts and donations, regional economic integration and membership of other international organization like UNO, UNDP, UNICEF, etc – all these involve a considerable amount of public expenditure.

ix. ***Growth of Democracy:*** Growth of democracy has been responsible for the increasing tendency of public expenditure to a great extent to achieve the goodwill o f the public, when the ruling party has to incur heavy expenditure on providing variety of services and facilities to the public. Expenditure on elections and by elections is increasing every year. Number of ministries and executive offices has also been increased. As a result of this the public expenditure increases rapidly.

3.4. Public Expenditure: Canons, Theories and Accountability

3.4.1. Canons of Public Expenditure

Findlay Shirras suggests that public expenditure should be beneficial to society while incurred economically and should not be wasteful. Other economists have added a few more guidelines. Taking all of them into consideration, the following will be the canons of public expenditure.

i. ***Canon of Benefit***. Public expenditure should be planned and implemented as to bring about the greatest possible benefit to society. This means that all the expenditures which do not bring benefit to society should be avoided. This canon also points to the need of undertaking a cost-benefit analysis of the competing schemes of public expenditure before the final selection of investment project is made.

ii. ***Canon of economy***. Public expenditure should be incurred carefully so that there is no wastage of funds. Most important reasons of wasteful expenditure are faulty planning, faulty execution, corrupt practice and delay due to time lag between plan and execution and, hence, escalation of prices. These types of wastage have to be avoided at any cost. It must be noted here that benefit to society cannot come without proper pursuit of the canon of economy.

iii. ***Canon of surplus***. This canon requires that expenditure of public authorities should be kept within the limits of current revenues. If possible, the expenditure should be less than the earnings of government so that the surplus so generated can be used when there is unavoidable deficit. This canon is important reminder of the fact that the government should not overspend and run into debts and that a deficit spending should be avoided as far as possible.

iv. ***Canon of sanction.*** This canon requires that the public authorities should not be allowed to spend funds without having a previous approval from appropriate authority for the purpose. It also requires that funds sanctioned for a particular expenditure should not be diverted to a different purpose and spent thereon.

v. ***Canon of elasticity.*** Canon of elasticity requires that the rules of public expenditure should not be too rigid to achieve the real purpose and that it should be allowed to vary according to the needs and circumstances.

vi. ***Canon of certainty.*** This canon requires that public authorities should clearly know the purpose and extent of public expenditure. The spending unit should be certain as to the amount and objective of public expenditure. This requires a proper expenditure plan well thought-out beforehand.

vii. ***Canon of Productivity:*** This principle implies that the expenditure policy of the Governments should encourage production in a country. That means a large part of public expenditure must be allocated for development purpose.

viii. ***Canon of Equity***: One of the foremost aims of public expenditure is to ensure the just and equitable distribution of income for the countries where the gap between the highest income and the lowest income groups is very wide.

3.4.2. Theories of Public Expenditure

There are two important and well-known *theories of increasing public expenditure:* **Wagner *Law of Increasing State Activities*** and ***the other Wiseman and Peacock hypothesis.*** To discuss about theories of Public expenditure, let's try to differentiate the two important terms; viz, public expenditure and private expenditure

With regard to similarities both private units and public authorities try to maximize returns per unit of expenditure (the returns being the objectives to be achieved), both private economic units and public authorities take a collective view of the income, expenditure and the possibilities of adjustments in each. Any shortfall on this front will be on account of inefficiency, uncertainty, lack of foresight and similar other causes

Though private and public expenditures are similar in their overall and complex ramifications, the *dissimilarities* between them are also quite glaring. The first dissimilarity is the objective with which the expenditure is incurred. . In the case of an individual economic unit, generally an exchange relationship determines the mode, pattern and volume of expenditure. As a consumer, an individual equates the marginal utility of the good (or service) purchased with the disutility of expenditure. A commercial economic unit compares private marginal returns from expenditure with the amount spent. Public authorities, however, cannot and do not always adopt a commercial attitude towards their expenditure plans. They have to consider social benefits generated in the process of their expenditure activities. And, in quite a few cases these benefits are vague and immeasurable. The State has to impute social valuation to these benefits and decide whether it is worthwhile undertaking these expenditures or not. Also, certain State expenditures are directed at bringing about social and economic justice. The benefits of such State expenditures cannot be evaluated directly.

1. Wagner's Law of Increasing State Activities

Adolph Wagner (1835-1917) was a German economist who set his ***Law of Increasing State Activities*** based on historical facts, primarily of Germany. According to Wagner, there are inherent tendencies for the activities of different layers of a government (such as central and state governments) to increase both intensively and extensively. There is a functional relationship between the growth of an economy and government activities with the result that the governmental sector grows faster than the economy. From the original version of this theory it is not clear whether Wagner was referring to an increase in (a) absolute level of public expenditure, (b) the ratio of government expenditure to GNP, or (c) proportion of public sector in the total economy. All kinds of governments, irrespective of their levels (say, the central or state governments), intentions (peaceful or warlike), and size, etc., had exhibited the same tendency of increasing public expenditure.

A number of reasons can be enumerated for this inherent long-term tendency recorded in history.

Firstly, we can mention an expansion in the traditional functions of the State. Defense became increasingly more expensive over time. Within the country, administrative set kept increasing both in coverage and intensity. The government machinery had to be manned by experts in their fields. With the progress of society, administration of the government and its services had to become increasingly more extensive, bulky and expensive so as to' retain efficiency.

Secondly, the State activities were increasing in their coverage. Traditionally, they were limited to only defense, justice, law and order maintenance of the State and social overheads. But with

growing awareness of its responsibilities to the society, the government started expanding its activities in till now unexplored field of socio-economic' welfare. These measures included efforts to enrich cultural life of the society and provision of social security to the people (such as old age pensions and so on). Subsidies for and direct provision of various *merit goods* also registered an increase. Most governments also took active steps to ensure distributive justice by reducing income and wealth inequalities.

Thirdly, the need to provide and expand the sphere of *public goods* received an increasing attention. The state tried to shift the composition of national produce in favour of public goods and this in turn necessitated an expansion of investment activity of the government.

Wagner's Law was based upon historical facts. *It did not reveal the inner compulsions under which a government has to increase its activities and public expenditure as time passes.* It was applicable only to modern *progressive* governments which were interested in expanding public sector of the economy for its overall benefit. This general tendency of expanding State activities had a definite long-term trend, though in the short-run, financial difficulties could come in its way. "But in the long-run the desire for development of a progressive people will always overcome *these* financial difficulties."

Thus, Wagner was emphasizing long-term trend rather than short-term changes in public expenditure. Moreover, he was not concerned with the mechanism of increase in public expenditure. Since his study is based on the historical experience, the precise quantitative relationship between the extent of increase in public expenditure and time taken by it was not fixed in any logical or functional manner. His argument that public expenditure had been increasing over time could not be used to predict its rate 0f increase in future. Actually, it is consistent with Wagner's law to state that in future the State expenditure would increase at a rate slower than the national income. Thus, in the initial stages of economic growth, the State finds that it has to expand its activities quite fast in several fields like education, health, civic amenities, transport, communications, and so on. But when the initial deficiency is removed, then the increase in State activities may be slowed down.

Additional factors which contribute to the tendency of increasing public expenditure relate to a growing role of the State in ever-increasing socio-economic complexities of modern society.

(i) Many societies are experiencing a growing population which becomes a major contributory factor in the growth of public expenditure. The sheer scale of state' services has to' increase to keep pace with population growth, including, for example, more schools, hospitals, and police, etc ..

(ii) Most countries have registered increasing urbanization. Existing cities grow and new ones come up. Urbanisation implies a much larger per capita expenditure on civic amenities. It necessitates a much larger supply of incidental services like those connected with traffic, roads, and so.

(iii) Prices have a secular tendency to go up. This also adds to public expenditure even if the scale of state services remains unchanged.

(iv) The size and nature of public services necessitates an ever increasing specialization. The quality of the services improves, both as a historical fact as also due to circumstantial compulsions. Better quality services and higher qualified administrators, technicians etc., imply a higher cost of providing public services. Also, the government has to purchase a number of goods and services for its own maintenance. With rising prices, expenditure on them also goes up.

(v) A modern government considers it a part of its duty to protect the economy from the "failures" of market mechanism. Accordingly, anti-cyclical and other regulatory measures

are adopted. Efforts are made to reduce the income and wealth inequalities and bring about social and economic justice which in turn adds to public expenditure.

(vi) Modern governments have shown a tendency to run into debt and this leads to a subsequent increase in public expenditure in the form of increasing cost of debt servicing and repayment of the loans.

(vii) Popularity of the philosophy of planning and economic growth as also increasing government activities in the areas of capital accumulation and economic growth have also contributed to the growth of public sector.

(viii) Musgrave emphasize growing complementarities between public and private consumer and capital goods so that with an increase in per capita income, demand for public services also increases with a corresponding growth in public expenditure.

(ix) There is an inherent tendency of vested interests to develop which demand an increase in public expenditure for their own benefit. For this reason, a variety of subsidies and other avoidable expenditures inflate the public budget.

(x) It is claimed that government bureaucracy has an inherent tendency to expand irrespective of the size and nature of public services provided by it

(xi) Recent investigations have brought into focus productivity and efficiency dimensions of government organs and public undertakings as also the manner in which these dimensions push up public expenditure. Specific mention may be made of the concepts of "productivity lag" advanced by Allan Peacocks and ***Baumol's Disease***. According to these concepts, public sector is less efficient and productive than the private one, and tends to be more labour-intensive (or over-staffed). Similarly, an element of avoidable inefficiency and therefore cost (termed **X-inefficiency**) creeps in due to poor supervision, non-fixation of responsibility, non-check on output of individual employees and non-quantification of government services.

(xii) At the same time, there is a myth that the individuals can voluntarily get together to resolve market deficiencies without government intervention which is known as Coase Fallacy. The myth is explained by: Fundamental Non-Decentralizability Theorem expounded by B. Greenland and J. Stiglitz.

Wagner's model has an important analytical limitation which can be removed in an expanded version. A government is not a monolithic entity. It comprises a number of organs and associated institutions. Households and business units in the private sector also don't observe government activities passively. Instead, they respond to them more actively. Thus, the government decision-making has become a complex phenomenon and has multifarious tendencies to increase public expenditure.

Buchanan and Tullock, in context of US experience, have viewed Wagner's theory in terms of increasing discrepancy between growth of government expenditure and output and termed the phenomenon as "Wagner Squared" hypothesis. They base their argument on two facts.

Firstly, in contrast with the situation prevailing in the private sector, expenditure on civil servants grows faster than the corresponding increase in their output.

Secondly, with increasing social security and other measures, the proportion of population receiving transfer payments from authorities keeps increasing. This way public expenditure increases both in absolute terms and as a proportion of national income. It may be noted that even if the expenditure on civil services as a proportion of expenditure on employees in the private sector does not increase, and even if the proportion of population receiving transfer payments remains stable, the Wagner Squared hypothesis would hold. The major limitation of this hypothesis is that output of public servants cannot be measured with any degree of accuracy.

Alan Tait Peacock does not agree with this explanation of Buchanan and Tullock. He says that a typical .individual does not relate his tax payments with the receipt of government services .He considers his tax liabilities as they are and strives for additional public services; that is, he fights for additional opportunities for milking government services and not for reducing taxes. The politicians, to win their votes try to expand government services and, therefore, impose more taxes. The government expenditure keeps on increasing without any reference to productivity/cost ratio of government services.

We may add that modern governments have found new weapons whereby to increase their expenditure even without collecting more taxes. They now own *public undertakings* which can be a source of revenue to them. But, more important than that is *their capacity and willingness to resort to deficit financing.* Even in advanced countries deficit financing has become a common occurrence. The public opinion is not strong enough to check this sort of policy even though it has disastrous inflationary effects.

2. Wiseman-Peacock Hypothesis

The second thesis dealing with the growth of public expenditure was put forth by Wiseman and Peacock in their study of public expenditure in UK for the period 1890-1955. The main thesis of the authors is that public expenditure does not increase in a **smooth and continuous** manner, but in jerks or step like fashion. At times, some social or other disturbance takes place, creating a need for increased public expenditure which the existing public revenue cannot meet. While earlier, due to an insufficient pressure for public expenditure, the revenue constraint was dominating and restraining an expansion in public expenditure, now under changed requirements such a restraint gives way.

The public expenditure increases and makes the inadequacy of the present revenue quite clear to every one. The movement from the older level of expenditure and taxation to a new and higher level is the ***displacement effect***. The inadequacy of the revenue as compared with the required public expenditure creates an ***inspection effect.*** The government and the people review the revenue position and the need to find a solution of the important problems that have come up and agree to the required adjustments to finance the increased expenditure. They attain a new level of ***tax tolerance***. They are now ready to tolerate a greater burden of taxation and as a result the general level of expenditure and revenue goes up. In this way, the public expenditure and revenue get stabilized at a new level till another disturbance occurs to cause a displacement effect. *Thus, each major disturbance leads to the government assuming a larger proportion of the total national economic activity.* In other words, there is a *concentration effect.* The concentration effect also refers to the apparent tendency for central government economic activity to grow faster than that of the state and local level governments. Moreover, this aspect of concentration effect is also closely connected with the political set up of the country.

On the face of it, Wiseman Peacock hypothesis looks quite convincing. But, we must remember that they are emphasizing the recurrence of abnormal situations which cause sizeable jumps in public expenditure and revenue. In all fairness to the historical facts, we must not forget that on account of advancement of the economy and the structural changes therein, there are constant and regular increments in public expenditure and revenue. Public expenditure has a tendency to grow on account of a systematic expansion of the public activities as also an increase in their intensity and quality. Increasing population urbanization and an ever-increasing awareness of the civic rights on the part of the public, coupled with an increasing awareness of its duties on the part of the State, leads to an upward movement of public expenditure. To an extent public expenditure gets financed by ever-increasing revenue which is made possible through the expansion and structural changes in the economy.

These days, in underdeveloped countries like Ethiopia, the State is deliberately trying to increase its activities and makes an effort to finance those activities through various tax efforts. Even in developed countries, the State finds that it has to perform an increasing regulatory duty to protect the economy against instability and excessive inequalities of income and wealth. *Thus, Wiseman Peacock hypothesis is still a description of a particular tendency and does not isolate all the relevant causes at work.*

It must be emphasized that apart from various factors like population growth, defense expenditure, urbanization, rising prices etc., which by themselves pushup public expenditure, an important *additional contributory* force is the failure of market mechanism in achieving various socioeconomic objectives of the country. Inherent deficiencies of market mechanism make the economy a prey of economic instability, income and wealth inequalities, defective patterns of consumption, employment and investment and so on. In a number of cases, the market mechanism is not able to pull the economy out of its vicious circle of poverty and launch it on a path of secular and rapid economic growth. Therefore: the government is forced to increase its field of activities with a corresponding increase in public expenditure.

3. Bowen's Model of Public Expenditure

Since social goods, by definition, are those goods and services which are consumed equally by all, the cost of supplying them have to be contributed by all beneficiaries. However, every user cannot be asked to contribute equal amount in meeting the cost of social goods because different individuals will derive different amounts of satisfaction. Since social goods benefit everyone, the amounts of benefit derived by different individuals are like joint products. Hence, it is the joint contribution of all individuals that has to meet the cost of supplying social goods.

It must be noted that each individual will pay an amount equal to the marginal valuation he attaches to the social good, i.e. the public park services. This follows from rules of economic efficiency. Since the capacity to enjoy benefit of the public park, as in case of anything else, is different for different persons, they will attach different marginal valuation to the benefit and will contribute different amounts for the consumption of the same public good. How much amount of social goods is to be supplied by the public authority will be determined at that level where marginal cost of supplying the social goods becomes equal to the sum of marginal utilities received by the beneficiaries. Assuming that there are only two individuals in society, viz., A and B and only one type of public goods, called X, the following condition will hold for the determination of public expenditure or, what it means the same thing, the amount of social goods to be supplied by the government.

$$MU_A + MU_B = MCx \quad \text{Or} \quad P^x{}_A + P^x{}_B = MCx, \text{ Hence, } TC_x = QP^x{}_A + QP^x{}_B,$$

where MU stands for marginal utility derived from social goods, MC stands for marginal cost of supplying social goods, A and B are consumers, X stands for the social good supplied, P stands for price to be paid by the consumer, Q indicates quantity of social goods and TC stands for total cost of supplying the quantity.

Bowen's model of determining public expenditure may be explained by the below figure where units of social goods are measured along horizontal axis and the combined unit price including the contributions of both A and B is measured in the vertical axis.

The demand schedules for social goods of A and B are shown by the lines ***aa*** and ***bb*** respectively. The line ***tt*** shows the aggregate demand schedule of both A and B. Let *SS* be the supply schedule of social goods which are assumed to be produced under conditions of increasing cost. Since the same amount of social good will be consumed by both A and B, the aggregate demand schedule, ***tt*** is made up of vertical addition of **aa** and **bb**.

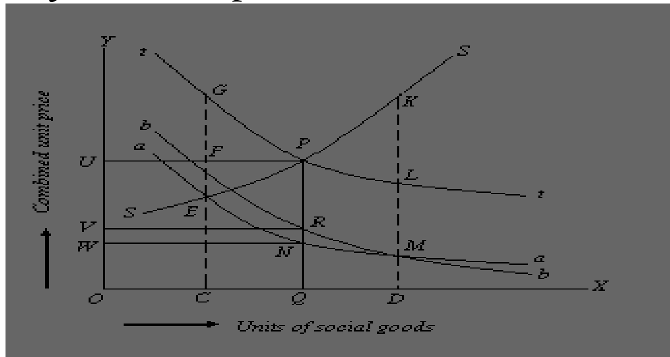


Figure 4.4: Bowen Model

The equilibrium output will be determined at OQ because it is at this level of production that the aggregate demand schedule and aggregate supply schedule intersect at point P, where the equilibrium price will be PQ. This is the combined unit price which will be contributed by both A and B. Of the unit price PQ, A contributes QR and B contributes QN, their respective demand prices. If the output is less than this, say, OC, the demand price or the combined contribution will be much larger (CG) than the supply price (CE). Since the combined offer price exceeds the unit cost, this will lead to increase in supply of social goods. If, on the other hand, supply is more than OQ, say, OD, the unit cost (DK) exceeds the combined offer price (DL). This will lead to reduction in supply of social goods. In this way, equilibrium output is established at OQ.

At OQ level of output, the marginal cost of supplying social goods is PQ which is equal to the sum of QN and QR, the marginal utility to B and A respectively. The total cost of supplying OQ amount of social good equals OQPU which is covered by A's contribution OQRV plus B's contribution OQNW since OQRV + OQNW = OQPU.

4. Samuelson's Benefit theory of Public Expenditure

The most recent benefit theory of Public expenditure comes from Samuelson as a critique of the voluntary exchange model of Erik Lindahl. The voluntary exchange principle has a partial equilibrium approach in which satisfaction of social wants is considered independently of private wants. Samuelson considers it an inadequate explanation and thinks that the problem must be restated in terms of general equilibrium. This is what he has done in his theory of public expenditure. In his general equilibrium approach to optimal allocation of public and private goods, Samuelson takes unto account both the allocation and distribution aspects to build up a unified system.

Application of market principle to the pricing of social goods to determine optimum allocation of resources becomes the starting point of ***Samuelson's theory***. In the case of a private good, marginal utility and marginal cost are equal for all consumers. Since utility schedules of individuals are different, such equality and hence efficient level of output will be attained with different consumers consuming different amounts of output at the same price. It follows that the aggregate demand schedule will be the horizontal summation of individual demand schedules. However, in the case of public goods which are consumed equally by all, different individuals will pay different prices for the same quantity of output. Here the sum of marginal utilities to consumers will be equal to the marginal cost. It follows that the individual demand schedules will be vertically added in this case. Thus under such circumstances, "even if all preferences are revealed, there is no single best solution analogous to the pareto optimum in the satisfaction of purely private wants. Instead, we are confronted with large number of solutions, all of which are optimal in the Pareto sense."

5. Musgrave's Optimum Budget Theory

The Optimum Budget theory of Musgrave seeking to determine the optimum amount of public

expenditure is a normative approach to budget policy. Musgrave built up an ideal theory according to which a budget should realize three objectives, viz, proper allocation of resources, proper distribution of income, and price level stability with full employment. For each of three objectives, Musgrave would consider a sub-budget. When these three sub-budgets are prepared according to their objectives, they will be consolidated into a single whole budget plan.
The optimum budget theory seeks to achieve the purpose of allocation branch of the budget. Musgrave's theory of determination of optimum public expenditure in the allocation branch of the budget is based on ***benefit approach***. The people have a choice pattern or preference schedule between public goods, private goods and leisure. Leisure is a component of welfare because leisure can be transformed into production of goods and services of earnings of income. Optimum budget theory seeks to allocate public expenditure or provide for public goods in such a manner and, to that extent, whereby the community, as a whole, is able to derive the greatest attainable satisfaction. This is possible when allocation of public expenditure in different lines of state activity is so determined in the budget that the community is able to reach the highest possible indifference surface as between public goods, private goods and leisure.
Practical difficulty, however, lies in the fact that the people cannot be made to reveal their preference pattern and that it is difficult, if not impossible, to construct community indifference surface from individual indifference patterns.

3.4.3. Control and Accountability of Public Expenditure

The necessity to control public expenditure in order to check misuse of public funds and ensure their efficient utilization is only obvious. Control does not necessarily mean reduction. "It means that expenditures are justified in terms of the whole welfare of society and in terms of the financial means at the disposal of government. Control implies that expenditures are economic by which we mean that resources not unlimited in quantity are devoted to their most productive uses."
Control of public expenditure is sought to be ensured multi-dimensionally at a number of stages. The most important means of control are (a) budgetary control (b) legislative control, (c) executive control, (d) audit control, and (e) parliamentary control.
(a) ***Budgetary Control***. Budget preparation is the most primary stage of expenditure control. Budget is a well thought-out plan of governmental activities during the coming year and speaks of much more than a mere statement of income and expenditure of public authorities. It specifies the functions and objects of public expenditure. How much of the public funds is to be spent for which particular purpose, and which particular department, what should be attainment of physical targets against the specific expenditure amount and what should be the allocation of funds for the use of a particular department are all specified in the budget frame. The budget also presents a comparable picture of the revenue earnings and expenditure of the outgoing year along with the estimates of such financial operation for the coming year. The difference between the two, if any, has to be convincingly explained. Hence, a budgetary exercise of this kind serves as a control of public expenditure in many ways. In recent years, the practice of breaking up of public expenditure in terms of major heads, minor heads and sub-heads has provided added means of controlling expenditure.
(b) ***Legislative Control***. After the budget plan is prepared, it has to be presented in the legislature for its approval. There occurs debate in the legislature where the members seek clarification and justification of expenditure programmes. After critical study of the budget plan, expenditures estimated originally may be curtailed or enhanced or kept unchanged according to the merit of the case. When the legislature is satisfied, it gives approval to the budget plan. During the legislative scrutiny of the budget, the details of expenditure, department-wise and ministry-wise are discussed. Thus, it is a very important stage of expenditure control.

(c) ***Administrative Control***. The rules and regulations ensure that no amount is spent without proper sanction or diverted to some other purpose for which it is not sanctioned. There is elaborate body of rules to fix responsibility on specific executive personnel for the funds spent. The rules ensure that there is no fraud or misuse or misappropriation or any other kind of leakage during the execution of public expenditure programmes. It is not only that the government official through whom is the public fund directly spent in the project work is responsible to his head of the department but also that the latter is responsible to higher authority.

(d) ***Audit Control***. The next stage is examination of accounts and audit control. There is the system of both internal and external audit. Every department has its accounts section which scrutinizes all accounts of expenditure and ensures that public funds are spent according to rules of propriety, economy and efficient utilization.

However, audit reports are less than vocal relating to efficiency of public expenditure. This shortcoming is sought to be removed through economic and functional classification of public expenditure and practice of performance and program budgeting which have an in-built mechanism to ensure efficient use of public funds.

(e) ***Parliamentary Control***. The last of these stages of expenditure control is the parliamentary right to enquire into any particular item of expenditure deal. There are two committees constituted by the parliament to go into such scrutiny. They are (i) Public Accounts Committee and (ii) the Estimates Committee. Public accounts committee is entrusted with the responsibility of examining audit reports and appropriation accounts. They also examine profit and loss accounts of government undertakings and autonomous bodies. They follow up cases of impropriety, unauthorized and illegal expenditure, misuse and misappropriation and go into further investigation if necessary. Estimates committee locks into the financial operation of the executive and suggests measures to achieve maximum economy of expenditure consistent with maximum efficiency. The parliamentary committees pinpoint the erring officials, examine them and suggest follow-up measures for suitable punishment to them.

3.5. Effects of Public Expenditure

Public expenditure, in modern government finance, is regarded as a means of securing social ends rather than just being a mere financial mechanism. Public expenditure is significant in a modern economy because it produces many direct and indirect socio-economic effects. A brief account of these effects may be given as under:

i. Effects of public expenditure on production and Employment

The expenditure of the central Government on development is meant to promote production and employment in the country. Expenditure on agriculture and allied activities, industries and minerals, water and power development, transport and communication and other expenditures on community and social development by the central and State Governments help directly to raise the level of production and employment in the country. Further, the enormous expansion in expenditure by the central and State Governments is to boost demand for goods and services and thus to boost production. The level of production and the level of employment in any country depend upon three factors, viz,

(a) ***Ability to Work, Save and Invest.*** If public expenditure can increase the efficiency of a person to work, it will promote production and national income. Public expenditure on education, medical services, cheap housing facilities and recreational facilities will increase the efficiency of persons to work. At the same time, public expenditure can promote income of the people. Finally, public expenditure, particularly repayment of public debt, will place additional funds at the disposal of those who can invest. Thus, it will be seen that public expenditure can promote ability to work, save and invest and thus promote production and employment.

(b) ***Willingness to Work, Save and Invest.*** The effects of public expenditure on the willingness-as different from ability to work and save and invest on production are not clear enough. Pensions, interest on loans, provident fund and other government payments provide security and safety to a person, and therefore, reduce the willingness of persons to work and save; why should a person work hard and save when he knows well that he will be looked after by the government when he is not in a position to earn an income?

(c) ***Diversion of Economic Resources.*** Public expenditure has far-reaching effects on the utilization of economic resources as between alternative uses. Public expenditure can bring about a better allocation of economic resources as between the present and the future. In a free capitalist society very little provision is made for the future. This is because people prefer the present rather than the future and, therefore, they do not make adequate provision for the future. The State on the other hand, is the custodian of the interests of the future generations also and, therefore, has to see that adequate provision is made for the future. Public expenditure on transport, irrigation and other projects which yield both immediate return as well as social and economic benefits for generations to come, are some examples. Secondly, the government spends money in the conservation of economic resources which are very essential for the future. Thirdly, the government spends money for encouragement of research and invention, promotes education and training, looks after public health and sanitation and also takes the responsibility of social security measures. It is necessary to emphasize that the diversion of economic resources in all these ways will greatly increase production.

Generally, the effects of public expenditure on production and employment are favorable. Taxation, taken alone, may check production; but public expenditure, taken alone, should almost certainly increase it. The development expenditures of the Central and State Governments aim at raising the level of production and employment in the country. It is possible that production will be adversely affected if public expenditure is carelessly planned, but it will positively stimulate production if carefully planned.

ii. Effects of public expenditure on Distribution of income

These days, every government aims at reducing inequalities of income. Public expenditure (as part of fiscal policy) can be used by the government to achieve this aim. While taxes, particularly progressive direct taxes, have the effect of reducing the incomes and wealth of the higher income groups, public expenditure has the effect of raising the incomes of the lower income groups. Government's expenditure on education, public health and medicine, housing, etc., is directed to help the poor and the lower income classes (who make use of government schools and hospitals). At the same time, social security schemes are run by the government for the benefit of the working classes so that they may be protected from unemployment, accidents, sickness and old age. Thus, public expenditure, if carefully planned and executed, will help in redistribution of income in favor of the poor provided, of course, taxation is used to reduce the incomes and wealth of the higher income groups.

iii. Effects of public expenditure on control of inflation

Inflationary pressures may be considerably narrowed if government expenditure is reduced. This may be taken as a simple and direct solution, but for the fact that, in the majority of cases, the most serious type of inflation has always been due to enormous government expenditure. This type of situation may be due to war when large sums are spent for military purposes or due to preparations for war during peace time. However, the government can suitably change and adjust its expenditure during an inflationary period so that the inflationary pressure may be reduced. For instance, all those schemes which may be justified during a period of depression and low level of employment may be omitted during inflation. At the same time, the government can

postpone the construction of social capital such as post offices, schools, etc., which will increase the size of income of people but will not contribute to the increase of goods. Secondly, the government can give subsidies to those industries which are producing inflation-sensitive goods so as to accelerate their production or to enable producers to sell them at lower prices

iv. *Effects of public expenditure on the content of development expenditure*

Development expenditure of the government should aim at stimulating and supplementing private initiative and enterprise. In a democratic setup, with parliamentary institutions, emphasis will have to be on the setting up of a mixed system in which private enterprise will be given active encouragement and, at the same time, the government will become an interested and active participant in development activities.

a. Stimulating private initiative. Development expenditure of the government will take the form of stimulating private initiative and enterprise. Direct stimulation is done by the Government helping the private sector through loans, subsidies, tax concessions and exemptions and providing market and other information and research facilities. The government can set up special banking and financial institutions whose main aim will be to provide finance for medium and long-term periods at low rates to help the private sector industries with adequate finance. In many underdeveloped countries, the government will have to set up a strong commercial banking system with a central bank at the top. These are direct methods of helping the private sector to expand and develop.

b. Provision of social and economic overheads. Indirect stimulation of the private sector may be done by the government through the provisions of social and economic overheads -education and public health will come under the first head, and provision of power, transportation, communication, etc., will come under the second head. The private sector industries would reap enormous benefits of economies of production from these facilities provided by the government. Social and economic overheads are necessary and essential prerequisites for economic growth. In fact, there are many competent authorities who would like governments of underdeveloped countries to provide only these facilities and leave the rest to the private sector.

c. Public enterprises. The government will have to start and run such undertakings which the private sector may be unwilling to undertake, either because profit margins are low or almost nothing, or because they require huge capital investment and a long time to yield returns. These enterprises may not be appealing to the private sector from the commercial point of view but may be of great significance from the point of view of economic welfare of the community as well as that of economic progress. In this group will come all the key and basic industries, development of irrigation resources, electric power, etc. In fact, any industry which is necessary for the country and which will help in the growth of the economy can be taken up by the government. The idea, however, is not to compete with the private sector but really to supplement and complement it.

3.6. Principle of Maximum Social Advantage

Dalton states this principle: "Public expenditure in every direction must be carried so far that the advantage to the community of a further small increase in any direction is just balanced by the advantage of a corresponding small increase in taxation and receipts from any other source of public income.

Pubic expenditure is made from the sources mobilized through taxation or borrowing. Thus, there is a continuous transfer of resources from one section of people to another. The funds paid by tax payers come to the public treasury. These funds go back to the people through public expenditure programmes. The principle lays down that public expenditure should be so planned and, hence, revenue resources so raised so as to bring about benefit larger than sacrifice and that the surplus of aggregate satisfaction in the society is maximum.

To judge whether the principle of maximum social advantage is secured or not, the following points have to be considered. The character and composition of public expenditure is the most important consideration. Large investment of expenditure means large sacrifice of tax payers. Even then if it is a capital investment, the ultimate benefit may be much larger than the communities' sacrifice. On the contrary, unremunerative public expenditure, even when amount is small, will not achieve the principle. Secondly, the method of taxing to raise resources for expenditure has to be judicious. The same amount may be raised from a number of alternative taxes. This method should be employed which will result in least sacrifice. Thirdly, tax-expenditure programme should be so structured as to result in increased productive capacity of community and, hence, enhanced national income.

It is, therefore, important to see that public funds are not spent for the benefit of a particular group only. In order that public expenditure contributes welfare to the whole community, they should be made on protection of the country from foreign attack and result in increased production and productivity, reduction of inter-personal and inter-regional inequality, maintenance of economic stability and provision of future development.

The principle of maximum social advantage is derived from the principle of equi-marginal returns as applied to an individual. Thus, if it is found that marginal utility from public expenditure on medical and public health measures is greater than the marginal utility derived from the same amount spent on provision of public parks, then the government should transfer the public funds from the latter to the former account. This will maximize social advantage. As shown in figures 4.1 and 4.2, the limited amount of public expenditure totals OA and the amount O_1B spent respectively on public parks and medical and public health. Expenditure is measured along horizontal axis and marginal utility along vertical axis. As clear from the figures, the allocation of expenditure at OA results in lower marginal utility than at O_1B. Hence, transfer of expenditure of the amount AK (=BL) from public parks to the provision of medical and public health will raise aggregate utility because the increase of utility area BLMD is larger than reduction of utility area KACN. This is how equality in marginal utility from public expenditure in all directions will maximize social advantage.

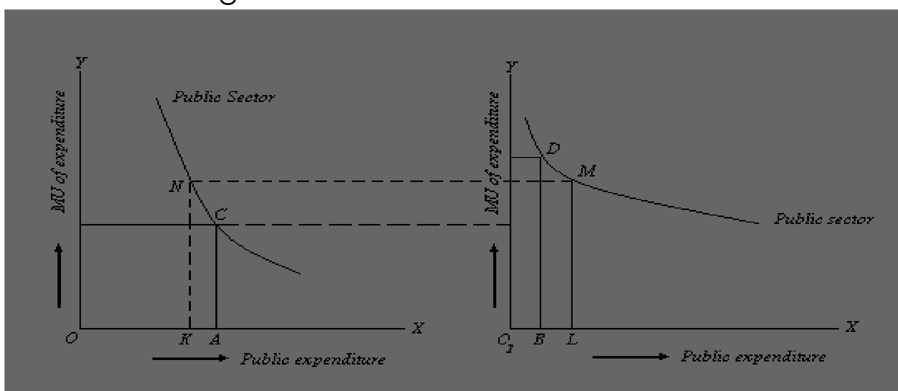


Figure 4.1 Public expenditure on public parks

Figure4.2 Public expenditure on medical and public health

The main defect of the theory is that it is not possible to measure precisely the difference in benefits from different directions of public expenditure. However, a rough guidance is obtained and this is what is important. Secondly, the requirement of the principle that expenditure should not be specially made for a particular section of society is not followed in many underdeveloped countries where special attention is paid to the benefits of backward sections of society in preference to other communities.

CHAPTER FOUR

4. GOVERNMENT REVENUE

4.1. *Sources of Public Revenue*

A government gets revenue from three different sources. In the first place, it gets income from taxes and from other sources in which there is an element of compulsion. Secondly, the government gets income for services rendered to the public. These may be fees or prices of services rendered or profits of enterprises, and so on. Thirdly, there are certain sources of income which may not come under any of the above two types; they are not compulsory nor are they voluntary payments.

The process of socio-economic development requiring huge expenditure cannot be carried out unless the government has the perennial source of income. Every government has two important sources of revenue. These are:

(a) Tax sources, and

(b) Non-tax sources. .

A tax is a compulsory charge imposed by the government, without any reference to the service rendered to a taxpayer. In other words, a tax is a compulsory contribution for which there is **no direct return or *quid pro quo***.

It is compulsory in the sense that once it is levied, the person concerned has to pay it and cannot escape it (though he may try to avoid or evade the tax). Most of the sources of income of the government these days come from taxes. Fines or penalties imposed by courts of justice resemble each other since there is compulsion in both. The distinction between them, however, is one of motive. While taxes are generally imposed to obtain revenue, fines are imposed as a form of punishment for mistakes committed or to prevent people from making mistakes in the future.

E.g. **Taxes sources**: taxes on income (Tax on personal income and Tax on corporation profits), tax on properties (rental income tax, land use tax, etc.), tax on commodities (Customs Duty, Excise Duty, Value Added Tax, Turnover Tax, etc.). And **non-tax revenues**: Fees, Licenses, Fines and Penalties, Forfeitures, Escheats, Special Assessment, Gifts and Grants, etc.

Every Government imposes two kinds of taxes:

(1) Direct taxes, and

(2) Indirect taxes

The meaning of these terms can vary in different contexts, which can sometimes lead to confusion. In economics, direct taxes refer to those taxes that are paid by the person who earns the income. By contrast, the cost of indirect taxes is borne by someone other than the person responsible for paying them. For example, taxes on goods are often included in the price of the items, so even though the seller sends the payments to the government, the buyer is the real payer. Indirect taxes are sometimes described as hidden taxes because the purchaser of goods or services may not be aware that a proportion of the price is going to the government.

1. Direct taxes

A direct tax is paid by a person on whom it is levied. In direct taxes, the impact and incidence fall on the same person. If the impact and incident of a tax fall on the same

person, it is called as direct tax. It is borne by the person on whom it is levied and cannot be passed on to others. For example, when a person is assessed to income tax or wealth tax, he has to pay it and he cannot shift the tax burden to anybody else. In Ethiopia, Government levies the direct taxes such as income tax, tax on agricultural income, professional tax, land revenues, taxes on stamps and registrations etc i.e. taxes levied on income and property.

Merits of Direct Taxes:

a) ***Ensures the Principle of Ability to Pay:*** Direct taxes are based on the principle of ability to pay. They fall more heavily on the rich than on the poor. The tax burden is distributed on different sections of the society in a just and equitable manner.

b) ***Reduces the Social and Economical Inequalities:*** Direct taxes reduce a disparity in the distribution of income and wealth. By adopting the **progressive tax system**, rich people pay on higher rates of taxation, while the poor pay on lower rates or given exemptions. This reduces the gap between the poor and rich to a considerable extent.

c) ***Certainty*:** Direct taxes satisfy the canon of certainty. In direct taxes, the **time** of payment, **mode** of payment, the **amount** to be paid etc are made clear. Both the taxpayers and the Government know the amounts to be paid and the Government can estimate the revenue from these taxes.

d) ***Economy:*** The cost of collection of these taxes is low because the government adopts the different methods of collections like tax deduction at source, advance payment of tax etc. Besides, the taxpayers pay the amount of tax directly to government. Thus, the principle of economy is achieved in the case of direct taxes.

e) ***Elasticity:*** Direct taxes are elastic in nature. For example, when the income of the people increases, the tax revenue also increases. Moreover, during the unforeseen situation like flood, war etc. the government can raise its revenue by increasing the tax rates without affecting the poor.

f) ***Educative Effect:*** Direct taxes create civic consciousness among taxpayers. Since the taxpayers feel the burden of tax directly, they are interested in seeing that the Government properly spends the money. They are conscious of their rights and responsibilities as a citizen of the State.

g) ***Control the Effects of Trade Cycles*:** Direct taxes control the effects of trade cycles. They can be used as a tool to mitigate the effects of inflationary and deflationary trends by raising or reducing the tax rates.

Limitations of Direct Taxes:

a) ***Arbitrary in Nature:*** Direct taxes tend to be arbitrary because of the difficulty in measuring the ability to pay tax. Paying capacity of the people cannot be measured precisely. The levy is highly influenced by the policies of the Government.

b) ***Difficulties in the Formulation of Progressive Tax Rates:*** Direct taxes take the form of progressive taxation i.e. the tax rates increases with the rise in income. It is very difficult

to formulate the ideal progressive rate schedules in this regard, since there is no scientific base.

c) ***Inconvenience:*** Under direct taxes, the taxpayer has to adhere to many legal formalities such as submission of the income returns, disclosing the sources of income etc. Moreover, he has to follow numerous accounting procedures which are difficult to comply with. Further, direct taxes have to be paid in lump sum and at times, advance payment of tax has to be made. This causes much inconvenience to the taxpayers.
d) ***Possibility of Tax Evasion*:** The high rates of direct taxes create the tendency to evade more. There is possibility for tax evasion by fraudulent activities. Thus, it is said that the direct taxes are the **taxes on honesty**.
e) ***Limited Scope:*** The scope of the direct tax is very limited. In Ethiopia, most of the people come under or below the middle-income category. If only direct tax is followed, these people cannot be brought into the tax net because of the basic exemption given. Thus, the Government cannot depend upon direct tax alone.
f) ***Disincentive to Work, Save, and Invest:*** When the taxpayer earns certain level, they have to pay more, because of the higher rate of taxes attributed to the higher slabs. This will in turn discourages them to work further, save and invest.
g) ***Expensive to Collect:*** Under direct taxes, each and every taxpayer is separately assessed. Thus, the large number of taxpayers to be contacted and assessed and the prevention of tax evasion make the cost of collection more expensive.

2. Indirect Taxes

Under indirect taxes, the impact and incidence fall on different persons. It is not borne by the person on whom it is levied and can be passed on to others. For example, when the excise duty is levied on the manufacturer of cement, he shifts the burden of tax to the consumers by raising the selling price. Here the impact of excise duty falls on the manufacturer and the incidence on the ultimate consumers. The person who is required to pay the tax does not bear its burden. Thus, indirect taxes can be **shifted**.

Merits of Indirect Taxes:

a. ***Convenience:*** Indirect taxes are more convenient to the taxpayers. Since the tax is included in the selling price of the commodities, the consumer pays the tax when he purchases them. He pays the tax in small amounts (installments) and does not feel its burden. Thus, indirect taxes are quite convenient and less burdensome.
b. ***Wide Scope:*** While the people with income and wealth above a certain limit are brought under the levy of direct taxes, indirect taxes are paid by all both poor and rich. Under indirect taxes, everybody pays according to their ability. The tax burden is not imposed on to the small section but it is widely spread. Thus, the indirect tax has wider scope.
c. ***Elastic:*** The revenue from the indirect taxes can be increased. Whenever the Government wants to raise its revenue, or lower it, it can be achieved by increasing and decreasing the rates of taxes on the commodities whose demand is inelastic.
d. ***Tax Evasion is Not Possible:*** Indirect taxes are included in the selling price of the commodities. So, evading of such tax becomes very difficult. If the person wants to

evade the tax, it can be done only by refraining the consumption of the particular commodity.

e. ***Substantial Revenue:*** Indirect taxes yield substantial revenue to both Central and State Governments. The developing countries like Ethiopia are heavily dependent on indirect taxes. Direct taxes have a limited scope in these countries because of low per capita income.
f. ***Progressive:*** Indirect taxes can be made progressive by imposing lower rates of taxes or giving exemption to the necessary articles and heavy taxes on luxurious articles. Thus, indirect taxes also confirm the principle of equity.
g. ***Effective Allocation of Resources:*** Indirect taxes have great influence in the allocation of resources among different sectors of the economy. Resources allocation can be made effective by imposing heavy excise duties on low priority goods and by granting relief to industries producing high priority goods. This results into mobilization of resources from one sector to another positively.
h. ***Discourages the Consumption of Articles Injurious to Health:*** Indirect taxes discourage the consumption of certain commodities, which are harmful to health. By imposing very high rates of taxes on commodities like liquors, drugs, cigarettes etc., which are harmful to health, their consumption can be reduced.

Limitations of Indirect Taxes:

a. ***Ability to Pay Principle is violated:*** Indirect taxes are not directly connected to the taxpayers' ability to pay. Therefore, both the rich and poor equally pay the tax. Thus, the principle of ability to pay is violated. Indirect taxes are regressive in nature.
b. ***Uncertainty:*** If indirect taxes are not levied on the commodities of common consumption and levied only on luxurious articles, they tend to be inelastic. The quantity demanded will be affected by the imposition of the taxes. Thus, the revenue generated from them is uncertain.
c. ***Discourages Saving:*** Indirect taxes are included in the selling price of the commodities. Hence, the people have to spend more on the purchase of the goods. This, in turn affects the savings of the people.
d. ***High Cost of Collection:*** Indirect taxes are uneconomical as they involve high cost of collection.
e. ***Civic Consciousness is Not Created:*** Under indirect taxes, taxpayers don’t feel the burden of the tax. They are not aware of their contribution to the State. Thus, indirect taxes do not create the civic consciousness in the minds of the people.
f. ***Inflationary:*** The indirect taxes cause an increase in the price all around. The increase in the prices of raw materials, finished goods and other factors of production creates inflationary trends in the economy.

Differences between Direct and Indirect Taxes:

Direct and Indirect taxes differ among themselves on the following grounds:

i. ***Shift ability of the Burden of Tax:*** In the direct taxes, the impact and incidence fall on the same person. It is borne by the person on whom it is levied and is not passed on to others. For example, when a person is assessed to income tax, he cannot shift the tax burden to anybody else, and he himself has to bear it. On the other hand, in the case of

indirect taxes, the impact and incidence fall on different persons. It is not borne by the person on whom it is levied. The burden of the tax can be shifted. For example, when the manufacturer of cement pays excise duty, he can shift the tax burden to the buyers by including the tax in the price of the cement.

ii. ***Principle of Ability to Pay:*** Direct taxes conform to the principle of ability to pay. For example, now people having income above Birr.150 pm, only is liable to pay income tax. But, indirect taxes are borne and paid by the weaker sections of the society also. As such, these taxes do not conform to the principle of ability to pay.

iii. ***Measurement of Taxable Capacity:*** In the case of direct taxes, tax-paying capacity is directly measured. For example, the taxable capacity for income tax is measured on basis of the income of the individual. On the other hand, in the case of indirect taxes, taxable capacity is measured indirectly. The luxurious articles are levied at the higher rate of taxes on the assumption that they are purchased by the rich people. However, low rate is charged on the articles of common consumption.

iv. ***Principle of Certainty:*** Direct taxes ensure the principle of certainty. Both the Government and the taxpayer know what amount is to be paid and the procedures to be followed. But in the case of indirect taxes, it is not possible. The taxpayer does not know the amount of tax to be paid and the Government cannot predict the quantum of revenue generated from the indirect taxes.

4.2 *Objectives of Taxation*

1. *Raising Revenue:* The basic purpose of taxation is raising revenue which used to render various economic and social activities.
2. *Removal of Inequalities in Income and Wealth***:** By framing suitable tax policy, this end can be achieved. It is stressed in the Canon of Equality. In Ethiopia, the progressive taxation on income is the suitable examples in this regard.
3. *Ensuring Economic Stability***:** Taxation affects the general level of consumption and production. Hence, it can be used as an effective tool for achieving economic stability.
4. *Reduction in Regional Imbalances***:** It is normal that certain parts of the country are well developed, whereas some other parts or states are in backward conditions. To remove these regional imbalances, the Government can use tax measures. By way of announcing various tax exemptions and concessions to that particular backward regions or states, the economic activities in those areas can be induced and accelerated.
5. *Capital Accumulation:* Tax concessions or rebates given for savings or investment in provident funds, life insurance, unit trusts, housing banks, post offices banks, investment in shares and debentures of certain companies etc. lead to large amount of capital accumulation which is essential for the promotion of industrial development.
6. *Creation of Employment Opportunities:* More employment opportunities can be created by giving tax concessions or exemptions to small entrepreneurs and to the industries adopting labour-intensive techniques. In this way, unemployment problem can be solved to certain extent.

7. *Preventing Harmful Consumption:* Taxation can be used to prevent harmful consumption. By way of imposing heavy excise duties on the commodities like liquors, cigars etc
8. *Beneficial Diversion of Resources*: The imposition of heavy duties on nonessential and luxury goods discourages the producers of such goods. The resources utilized for the production of these goods may be diverted into the production of other essential goods for which various tax concessions are given. This is called as beneficial diversion.
9. *Encouragement of Exports:* Now-a-days export oriented industries are encouraged by way of providing various exemptions like 100% relief from income tax, free trade zones etc.
10. *Enhancement of Standard of Living:* By way of giving various tax concessions to certain essential goods, the Government enhances the standard of living of people.

4.3. Characteristics of a Good Tax System

i. Tax is a Compulsory Contribution

A tax is a compulsory payment from the person to the Government without expectation of any direct return. Every person has to pay direct as well as indirect taxes. As it is a compulsory contribution, no one can refuse to pay a tax on the ground that he or she does not get any benefit from certain public services the government provides.

ii. The Assessee will be required to pay Tax if it is due from him

No one can be forced by any authority to pay tax, if it is not due from him. Suppose, if there is a tax on liquor, the state can force an individual to pay the tax only when he **drinks liquor**. But, if he does not drink liquor, he cannot be forced to pay the tax on liquor. Similarly, if an individual's income is below the exemption limit, he cannot be forced to pay tax on income. For example individuals earning monthly salary below birr **150** cannot be forced to pay tax on income.

iii. Taxes are levied by the Government

No one has the right to impose taxes. Only the government has the right to impose taxes and to collect tax proceeds from the people.

iv. Common Benefits to All

The tax, so collected by the Government, is spent for the common benefit of all the people. e.g. The Government incurs expenditure on the defense of the country, on maintenance of law and order, provision of social services such as education, health etc. Such benefits are given to all the people- whether they are tax-payers or non-tax payers. These benefits satisfy social wants. But the Government also spends on subsidies to satisfy merit wants of poor people.

v. No Direct Benefit

In the modern times, there is no direct relationship between the payment of tax and direct benefits. In other words, there is absence of any benefit for taxes paid to the governmental authorities. The government compulsorily collects all types of taxes and doesn't give any direct benefit to tax-payers for taxes paid.

vi. Certain Taxes Levied for Specific Objectives

Though taxes are imposed for collecting revenue for the government to meet expenditure **on social wants and merit wants**, certain taxes are imposed to achieve specific objectives. For example, heavy taxes are imposed on luxury goods to reduce their consumption so that resources are directed to the production of essential goods, such as cheaper variety of cloth, less costly goods of mass consumption, etc. Thus, taxes are levied not only to earn revenue but also for diversion of resources or saving foreign exchange. Certain taxes are imposed to reduce inequalities of income and wealth.

vii. Attitude of the Tax-Payers

The attitude of the tax-payers is an important variable determining the contents of a good tax system. It may be assumed that each tax -payer would like to be exempted from tax paying, while he would not mind if other bears that burden. In any case, he would want his share to be within the general level of tax burden being borne by others. In other words, it is essential that a good tax system should appear **equitable to the tax-payers**. Similarly, overall burden of the tax system is of equal importance. The attitudes of the tax-payers in this regard are influenced by a host of other factors like the political situation such as war or peace, natural calamities like floods and droughts, economic situations like prosperity or depression and so on.

viii. Good tax system should be in harmony with national objectives

A good tax system should run in harmony with important national objectives and if possible should assist the society in achieving them. It should try to accommodate the attitude and problems of tax-payers and should also take into consideration the goals of social and economic justice. It should also yield adequate revenue for the treasury and should be flexible enough to move with the changing requirements of the State and the economy.

ix. Tax-system recognizes basic rights of tax-payers

A good tax system recognizes the basic rights of the tax-payers. The tax-payer is expected to pay his taxes but not undergo harassment. In other words, the tax law should be simple in language and the tax liability should be determined with certainty. The mode and timing of payment should be convenient to the tax-payer. At the same time, a tax system should be equitable between tax -payers. It should be progressive and burden of taxation should be equitable on all the tax-payers.

It is commonly believed that there are five properties of a good tax system, these are: Economic efficiency, Administrative simplicity, Fairness, Political responsibility and Flexibility.

1. **Economic efficiency:** A good tax system **should not interfere** with the efficient allocation of resources. A good tax policy has to question whether the tax system discourages savings and work and whether it has distorted economic behavior in other ways.
2. **Administrative Simplicity:** There are significant costs associated with administering a tax system. There are direct costs-the cost of running the authority responsible to collect

and administer taxes and indirect costs, which taxpayers must bear. These indirect costs take on a variety of forms: the costs of time spent filling out the tax forms, costs o f record keeping, and the costs of accountants, if any.

3. **Flexibility:** Changes in economic circumstances require changes in tax rates. For some tax structures these adjustments are easy; for some they require extensive political debate; for still others they are done automatically. For instance it is said that there is usually a difficulty in adjusting the rate of income tax. What must be emphasized is that timing is very crucial element of flexibility. The speed with which changes in the tax legislation (one enacted) can be implemented and the lags in the collection of funds may limit the efficiency of the tax. An important aspect of the "flexibility" of a tax system for purposes of stabilizing the economy is timing: the speed with which changes in the tax laws can b e implemented and the lags in the collection of funds. If fluctuations in the economy are rapid, the lags may limit the efficacy of, say, the income tax, in stabilizing the economy.
4. **Political Responsibility**: The government is the competent authority to administer taxes. A good tax system requires that the **government is not to abuse its power** of tax administration. A politically responsible government has to address the feeling of the tax payers. The government should not take advantage of its tax payers. According to this view it is said that taxes where it is clear who pays are better than taxes where the burden is not so apparent. Thus the individual income tax is a good tax compared to the corporation tax. A politically responsible tax structure is also one in which changes in taxes come about as a result of legislated changes, and where the government must repeatedly come back to the tax payers for an appraisal of whether the government is spending too much or too little.
5. **Fairness**: Most criticisms of tax systems begin with their unfairness. It is, however, difficult to define precisely what is or is not fair. There are two distinct concepts of fairness: horizontal equity and vertical equity.

I) Horizontal Equity

A tax system is said to b e horizontally equitable if individuals who are the same in all relevant respects are treated equally. The principle of horizontal equity is so important. Thus a tax system that discriminates on the basis of race or color would generally be viewed to be horizontally inequitable. A condition of perfect horizontal equity can be said to exist when a tax or tax structure can be described as achieving an "equal tax treatment of equals." That is, horizontal equity requires that people who are deemed to be in an equal economic position should pay the same amount in taxes. James Buchanan has given a broader view to the concept of horizontal equity. For him it is fiscal residuum (the difference between benefits received and taxes paid) that should be equal for people in an equal economic position.

The significance of this rather straightforward criterion of horizontal equity should not be underestimated. Adherence to it provides a basic protection against discriminatory activity of government. By focusing on people's economic characteristics, the chance of grouping them by their geographic region or by their race is reduced. Horizontal equity represents an application of an ethical value judgment that is pleasing to those who

accept democratic as opposed to authoritarian principles of government. If the ethical guideline stopped here, however, designing a tax system would be easy. Everyone or perhaps every citizen would pay the same tax.

II) Vertical Equity

Fairness in taxation must also cope with the idea that we do not all fit in one economic group. Vertical equity, therefore, requires an acceptable pattern of tax payments among people deemed to be unequal. While the principle of horizontal equity says that individuals who are essentially identical should be treated the same, the principle of vertical equity says that some individuals are in a position to pay higher taxes than others, and that these individuals should do so.

There are three problems in relation to vertical equity: determining who, in principle, should pay at the higher rate; implementing this principle-that is, writing tax rules corresponding to this principle; and deciding, if someone is in a position to pay the higher rate, how much more he should pay than others.

Three criteria are commonly proposed for judging whether one individual should pay more than another. Some individuals may be judged to have a greater ability to pay; some may be judged to have a higher level of economic well being; and some may receive more benefits from general government spending. Even if agreement were to be reached on which of these criteria should be employed, there would be controversies concerning how to measure ability to pay, economic wellbeing, or benefits received. In some cases the same measures- such as income or consumption-might are used to judge ability to pay and economic well-being. Generally the principle of vertical equity says that those who are better off or have a greater ability to pay ought to contribute more to support the government. The principle of horizontal equity says that those who are equally well off (who have equal ability to pay) should all contribute the same amount. In both cases, there is a difficulty of determining whether an individual is better off than another, or of determining whether an individual has a greater ability to pay than another. This implies that the difficult questions namely-how do we tell which of two individuals is better off or which has a greater ability to pay and what do we mean by equality of treatment are very difficult to answer. Furthermore the principle of vertical equality does not tell us how much more someone who is better off should contribute to the support of the government; all that it tells us is that he should pay more.

Because of these difficulties economists have looked for other principles on which to base a fair tax. One such principle is the pareto-efficient taxation. The pareto-efficient tax structures are those that maximize the welfare of one (group of) individuals (s), subject to the government attaining given revenue. No one can be made better off without someone else being made worse off.

4.4. The Base, Buoyancy and Elasticity of Taxation

4.4.1. The Base of a Tax

The base of a tax is the *legal description* of the object with reference to which the tax applies. For example, the base of an excise duty is the production or packing or processing of a specific good; the base of an income-tax is the income of the assessee

defined and estimated in terms of certain rules laid down for the purpose; a gift may be defined and made a base for levying a gift-tax. **Note that** the base of each tax has to be defined legally and it is to be quantified for the purpose of determining the tax liability of an individual tax-payer. Each tax-payer is considered a legal entity for this purpose. Accordingly, an individual legal entity may be subjected to more than one tax. It should be noted that a tax base may have *a* ***time dimension*** also. For example, income-tax is usually on an annual basis and the law has to decide whether income would be taxed on the basis of accrual or receipt. The authorities, while determining a tax base, are expected to give due consideration to various questions like those of cost of collection, administration and effects of that tax. The exact coverage of a tax base is sought to be determined by an optimum combination of these considerations. With the passage of time, a tax base under consideration may grow or may shrink.

4.4.2. Buoyancy and Elasticity of a Tax

Buoyancy of a tax indicates the **factors** responsible for an increase in the yield of a tax-over time. If a tax revenue increase with the growth of its base, but without an upward revision of the tax rates (without an increase in the rate of tax), then the tax is said to be buoyant. It has an inherent tendency to yield more tax revenue with the growth of the base. Tax revenue changes when there is change in tax rate, tax coverage and tax base. Numerically, the buoyancy of a tax is measured as a ratio of the proportionate increase in tax

$$B_T = \frac{\%change\ in\ tax\ revenue}{\%\ change\ in\ tax\ base} = \frac{\%\Delta TR}{\%\ \Delta T_b}$$

Elasticity of tax is related to the rate of tax and yield of a tax. If the yield of a tax increases or decreases owing to reduction or increase in tax rates, we call it elasticity of a tax. The yield of a tax may also go up on account of extension of its coverage or a revision of its rates. Such a characteristic of a tax is ref erred to as its elasticity. In other words, the elasticity of a tax refers to the steps taken by authorities in increasing its yield through an extension of its coverage or revision of its rates. Numerically, the elasticity of a tax is measured by the ratio of proportionate change in its yield to the proportionate change in its coverage or rates.

$$\epsilon_T = \frac{\%change\ in\ tax\ revenue}{\%\ change\ in\ tax\ rate/coverage} = \frac{\%\Delta TR}{\%\ \Delta T_r} = \frac{\%\Delta TR}{\%\ \Delta T_c}$$

4.4.3. Canons of taxation

Taxation is an important instrument for the development of economy of the country. A good tax system **ensures maximum social advantage without any hardship** on taxpayers. While framing the tax policy, the government **should consider not only its financial needs** but also taxable capacity of the community. Besides the above, government has to consider some other principles like equality, simplicity, convenience etc. These principles are called as "**Canons of Taxation**". The following are the important canons of taxation.

1. ***Canon of Equality***: canon of equality implies that when ability to pay is taken into consideration, a good tax should distribute the burden of supporting government more or less equally among all those who benefit from government.

2. ***Canon of Certainty:*** "*the tax which each individual is bound to pay ought to be certain and not arbitrary. The time of payment, the manner of payment, the quantity to be paid, should be clear and plain to the contributor and every other person*". It means the time; amount and method of payment should all be clear and certain so that *the* taxpayer can adjust his income and expenditures accordingly. This principle removes all uncertainties in the payment of tax and ensures smooth functioning of the tax department.
3. ***Canon of Convenience:*** In the canon of convenience, "*every tax ought to be levied at the time or in the manner in which it is most likely to be convenient for the contributor to pay it*". That is, the tax should be levied and collected in such a way that is convenient to taxpayer.
4. ***Canon of Economy:*** "*every tax ought to be so contrived as both to take out and keep out of the pockets of the people as the little as possible over and above what it brings into the public treasury of the state*". This principle states that the minimum possible amount should be spent on tax collection and the maximum part of the collection should be brought to the Government treasury. Taxation should be economical i.e. this should be much more than mere saving in the cost of collection.
5. ***Canon of Productivity:*** tax system should be productive enough i.e. it should ensure sufficient revenue to the Government and it should encourage productive activity by encouraging the people to work, save and invest.
6. ***Canon of Elasticity:*** The taxes should be flexible. It should be levied in such a way to increase or decrease the tax revenue depending upon the need. For example, during certain unforeseen situations like floods, war, famine, and drought etc. the Government needs more amount of revenue. If the tax system is elastic in nature, then the Government can raise adequate funds without any extra cost of collection.
7. ***Canon of Diversity:*** According to this principle, there should be diversity in the tax system of the country. The burden of the tax should be distributed widely on the entire people of the country. The burden of the tax should be decentralized so that every one should pay according to his ability. To achieve this, the Government should impose both direct and indirect taxes of various types. It should not depend upon one or two types of taxes alone.
8. ***Canon of Simplicity:*** This principle states that the tax system should be simple, easy and understandable to the common man. If the tax system is complex and vague, the taxpayer cannot estimate his tax liability and it will cause irregularities in the payments and leads to corruption.
9. ***Canon of Expediency:*** According to this principle, a tax should be levied after considering all **favorable** and **unfavorable** factors from different angles such as economical, political and social.
10. ***Canon of Co-ordination:*** In a federal set up like Ethiopia, Federal and State Governments levy taxes. So, there should be a proper co-ordination between different taxes imposed by various authorities. Otherwise, it will affect the people adversely.

11. ***Canon of Neutrality:*** This principle stresses that the tax system should not have any **adverse effect**. That is, it shouldn't create any deflationary or inflationary effects in the economy.

4.5. Approaches to Taxation

How does the government impose tax? There are a number of theories on the basis of which the government distributes tax burdens. In this regard there are five approaches that have found a wide coverage. These are the expediency approach, cost-of-service approach, socio-political approach, benefit received approach, and ability to pay approach. But our discussion is limited to benefit received approach and ability to pay approach only.

1. Benefit received approach

According to this principle, the burden of taxation should be divided among the people in proportion to the benefits received from the state. The persons receiving equal benefits from the state should pay equal amount as taxes and those who receive greater benefits should pay more as taxes than those getting less benefits.

The benefit theory, therefore, demands that on the ground of equity, the people should be taxed according to benefits (protection, hospitals, education, roads, irrigation etc) they receive from the government and that the division apportionment of taxes be in proportion to the benefits received by each individual or group of individuals. Larger the benefits received, larger should be the amount of tax on the beneficiary concerned.

Limitations of Benefit Principle Approach:

i. It is very difficult to estimate the benefit that an individual receives from the expenditure of the government, e.g., how much benefit an individual receives from the army, police and educational institutions cannot be exactly estimated. And therefore, the burden of taxation may not be equitable.

ii. If the basis of taxation is benefit, then the poor will have to pay higher taxes than rich because the poor derives greater benefits than rich from the expenditure of the government, e.g., the poor may be more benefited by the provision of free medical service and free education. And, therefore, on this ground also, this theory cannot be accepted as the basis of taxation.

iii. Rich people have more capacity to pay taxes than poor; but according to this principle the per capita tax burden upon the rich and the poor is the same. This means regressive taxation. It is, therefore, clear that the benefit principle cannot ensure just distribution of burden of taxation among different sections of society.

iv. The principle is also not conducive to general welfare which requires redistribution of income in favour of the poorer sections through public welfare programmes and services for their benefit.

v. The general tax formula depends on the price elasticity of demand and income elasticity public goods and services.

$\epsilon_\rho = \frac{\delta Q}{\delta \rho} \cdot \frac{\rho}{Q}$ *and* $\epsilon_\gamma = \frac{\delta Q}{\delta \gamma} \cdot \frac{\gamma}{Q}$ And this implies that $\epsilon_\gamma / \epsilon_\rho = \delta\rho / \delta\gamma$, then we can get the following conclusion.

- ✓ If $\in_y > \in_p$, *we shuold have to apply the progressive taxation system.*
- ✓ If $\in_y < \in_p$, *we shuold have to apply the regressive taxation system.*
- ✓ If $\in_y = \in_p$, *we shuold have to apply the proportional taxation system.*

But $\in_y$ *and* $\in_p$, could not be calculated from market price because it is difficult to express the demand for public good and the price of public good and service

E.g. taxation of gasoline and automobile products to finance highway construction i.e. the owners of these product should responsible to finance the construction of the projected way. This type of financing /budgeting is known as ***earmarking*** i.e. selective taxation on the beneficiary body only.

2. Ability to Pay Approach:

This approach considers the tax liability in its true form-a compulsory payment to the state without quid pro quo. It doesn't assume any commercial or semi-commercial relationship between the State and the citizens. According to this approach, a citizen has to pay taxes because he can, and his relative share in the total tax burden is to be determined by his relative paying capacity. The basic tenet of the ability-to-pay doctrine is that the burden of taxation should be shared amongst the members of the society so as to conform to the principles of justice and equity, and that this equity criterion will be satisfied if the tax burden is apportioned according to their relative ability to pay.

The supporters of the ability theory have justified it on three grounds:

Firstly, it has been justified on psychological effects of tax payments upon individual tax-payer. Psychologically every tax -payer should feel that he has made **equal sacrifice** in the payment of tax. Equality of sacrifice means that all the tax-payers should feel the same pinch by paying the last Birr as tax.

Secondly, it has been justified in terms of diminishing marginal utility of income. As income increases, marginal utility of additional unit of income decreases and vice-versa. The tax-burden should be more on rich than on poor.

Thirdly, ability is known as the **faculty interpretation**. The faculty is represented by the income, property and wealth on an individual.

The real burden of taxation should be equal for all and that "similar and similarly situated persons ought to be treated equally". But the term "equal" in equal sacrifice has been interpreted differently. There are three concepts of equal sacrifice-equal absolute sacrifice, equal proportional sacrifice and equal marginal sacrifice.

Equal Absolute Sacrifice. Equal absolute sacrifice implies that the total loss of utility as a result of tax should be equal for all tax-payers. If there are two tax-payers with different incomes, the one who has more will pay more tax and the one who has less will pay less, but the sacrifice to both as a result of the tax should be equal. This principle received the greatest support at one time because of its apparent fairness.

Equal Proportional Sacrifice. Equal proportional sacrifice implies that the loss of utility as the result of a tax should be proportional to the total income of tax-payers. Here, too, those with a higher income will pay more but the ratio of sacrifice to the income will be the same for all. This can be expressed as:

$$\frac{\text{Sacrifice to taxpayer A}}{\text{Income of A}} = \frac{\text{Sacrifice to taxpayer B}}{\text{Income of B}} = \text{etc.}$$

This proportional sacrifice principle attempts to relate the sacrifice of tax payment to the capacity of enjoyment or satisfaction resulting from income. Every taxpayer's loss in proportion to his income should be the same as everyone else's. The difficulty with this principle is to give a practical shape; besides, the concept is somewhat difficult to grasp.

Equal Marginal Sacrifice. Equal marginal sacrifice implies that the marginal sacrifice for the different taxpayers should be the same. Since marginal utility of a higher income will be very much low as compared to a low income, equal margined sacrifice will imply that the person with a higher income will be expected to bear the heavier burden. In fact, it is under the minimum sacrifice principle that the total or collective sacrifice of all taxpayers will be the lowest. Hence, this principle is also known as the least aggregate sacrifice principle of taxation.

4.6. Effects of Taxation

An important objective of taxation in most of the welfare states is to reduce the inequalities of income and wealth and to bring about an equal society. The effects of taxation on the distribution of income and wealth among the different sections of the society depend upon two important factors. They are;

1. Nature of Taxation, and
2. Kinds of Taxes.

1. Nature of Taxation

The nature of taxation influences the distribution of tax among the different sections of the society. It includes proportional, regressive and progressive nature of taxation.

(a) ***Effects of Regressive Taxation on Distribution:*** Under regressive taxation, the burden of taxation falls more heavily upon the poor than on the rich. Regressive taxation may increase the inequalities on the distribution of income and wealth. Hence, the burden of taxation is higher on the poor than on the rich. In effect, this system widens the gap between the rich and the poor.

(b) Effects of Proportional Taxation on Distribution: Under the proportional taxation, taxes are levied uniformly upon the rich and the poor. When the tax rate remains the same, it creates inequalities between them. However, if there is any increase in the income of these sections, the inequalities in distribution of income will also increase. The burden of taxation falls more heavily upon the poor than on the rich.

(c) Effects of Progressive Taxation on Distribution: Under the system of progressive taxation, the tax rates go up with the increase in the income. Thus, in this system, the inequalities in the income and wealth will be reduced. The major portion of the income and the wealth of the rich is taken away by way of higher tax rates. Hence, the progressive tax system tends to reduce the inequalities in the distribution of income and wealth.

2. Effects of Taxation on the basis of Kinds of Taxes:

The effects of taxation depend upon the kinds of taxes i.e. direct or indirect taxes.

(a) Effects of Direct Taxes on Distribution: Direct taxes take the form of taxation on the income and property. It attempts to reduce the income of the richer sections and transfers the income to the Government. The Government may use these resources to raise the standard of living of the poor. Therefore, all those taxes, which fall heavily upon the higher income groups, can have favourable distributional effects.

(b) Effects of Indirect Taxes on Distribution: Indirect taxes are levied on commodities. They fall heavily on the lower and middle-income groups who spend a large portion of their income on commodities. In such a situation, indirect taxes have adverse distributional effects. However, indirect taxes may be made progressive if the necessity goods are exempted from taxation or levied on low tax rates, and luxuries are subjected to higher rates of taxes.

(c) Effects of Taxation on Consumption:

Taxes increases the price of the taxed goods relative to the prices of untaxed or lower taxed goods. The increase in the relative price affects the taxpayer in two ways.

1. *Income Effect:* The tax reduces the taxpayer's purchasing power or real income.
It takes resources away from the taxpayer and transfers them to the government. This is often referred to as the direct burden of the tax.

2. *Substitution (or Price) Effect* : The tax creates an incentive for the taxpayer to substitute less preferred but untaxed or lower-taxed goods for the more-preferred taxed good. The loss in consumer utility from this substitution is the excess burden (or welfare cost) of the tax.

Taxation influences the consumption as well. Such influence can be studied on the following grounds:

1. *Influence the Allocation of Resource of Individuals:* Every individual has limited money income and allocate it to different uses. Taxation affects their allocation directly or indirectly. For example, the income tax reduces the money income of a consumer and forces him to buy a smaller volume of goods and it reduces the standard of living of the consumers. Likewise, a levy of indirect taxes on the goods of common consumption will affect the allocation of individual resources. Thus, taxes influence the allocation of resources of individuals.

2. *Effects of Taxation on Consumption and Employment:*

Taxation reduces the purchasing power of the people and it reduces their consumption. The decline in consumption leads to decrease in effective demand for the goods and services, which in turn affects the production of these commodities. Ultimately, the reduction in consumption leads to a reduction in employment opportunities. For example, due to rise in price, instead of getting two different commodities, the individual may buy more quantity of any one commodity to maximize the utility and his satisfaction.

3. *Effects of Taxation on Consumption during Inflation and Depression:*

Taxation has different effects in times of inflation and depression. During the time of inflation, the purchasing power of the people is reduced by a raise in the rates of existing taxes or imposition of new taxes. This would control the consumption and therefore, help in bringing up stability in prices. During the period of depression, taxation may be reduced. As the result of the reduction on direct tax rates, the people will have more disposable income and higher purchasing power and a decrease in indirect taxes leads to the reduction of selling prices. Both of them encourage the total consumption of the people and thereby the economic activities are induced in the country.

4. *Regulatory Effect of Taxation on Consumption:*

Taxation may be used to regulate the production and consumption. Consumption can be regulated by taxing the production and use of certain commodities. For example, the object of some taxes may be to reduce the consumption of certain harmful commodities such as liquors, cigars etc. In short taxation has the following roles: Distributive role, Allocative role and stabilization role in the economy.

4.7. Impact, Shifting and Incidence of Tax

The traditional concept of shifting and incidence of tax is more popularly associated with the classical theorist, E.R.A. Seligman. According to him, answer to the following three questions relating to a tax will give us the meaning of the terms impact, shifting and incidence.

(a) Who bears the money burden of tax in the first instance?
(b) Is it possible to transfer this money burden of tax to some one else?
(c) Who ultimately bears the money burden of tax?

It is clear from the above that the person who bears the burden of tax in the first instance need not be the person to ultimately bear it. He may transfer the burden. He may not however, be able to transfer the money burden of tax completely to some one else and he may have to bear a part of the burden. Thus, there are three distinct situations in the process of taxation. Impact (statutory incidence) of the tax refers to the point of original assessment. Hence, impact is on that person who pays the tax in the first instance. It is the immediate money burden of tax. Thus, when a tax is imposed, its impact is on that person who bears the immediate money burden of it.

The person need not, however, continue to bear this money burden. He will try to transfer this burden to some one else, i.e., he will try to shift the tax. If he is able to transfer the burden to some one else, shifting of tax has taken place. Thus, shifting is the process of transferring money burden of tax. Shifting ends in incidence of tax (economic incidence of tax). Incidence is the ultimate money burden of tax. Hence, incidence of tax lies on that person who is the ultimate bearer of the tax burden. Thus, if the original tax payer is unable to shift the burden of the tax at all, then the impact as well as incidence will be on him. If, on the other hand, he is able to transfer the money burden of tax, i.e., if he has succeeded in shifting the tax to some one else, say, Mr. X, then the incidence of tax will be said to have moved from him to Mr. X who becomes the ultimate bearer of the tax burden.

Suppose, for example, an excise tax is levied on cloth and the tax authority collects it from the manufacturer of cloth. Hence the impact of tax is on the manufacturer. If he is now able to transfer the money burden to the whole-seller by raising the price to the extent of tax, tax shifting has taken place. The whole-seller may again be able to shift this money burden to the retailor and the retailor may pass on the burden to the consumer through a continued process of shifting. If the consumer has no more possibility of shifting the tax, he becomes the ultimate bearer of the money burden of tax and, hence, incidence will lie on him. If at the retail level, on the other hand, the retailor succeeds in shifting only half the tax burden to ultimate consumers and has to bear the rest half by himself, then fifty percent of the tax incidence will be on consumers and fifty percent on the retailor, i. e., the incidence will be equally shared between the buyers and the seller.

CHAPTER FIVE

5. GOVERNMENT BUDGETING

5.1. Meaning and purpose of government budget

Today, the government budget is much more than a statement of income and expenditure of public authorities. It is a reflection of not only taxation and public expenditure policy, but also of a plan for future course of action. As Gladstone remarks, "Budgets are not merely maters of arithmetic, but in thousand ways go to the root of prosperity of individuals and relation of classes, and the strength of kingdom."

According to Bastable, budget has come to mean the financial arrangements of a given period, with the usual implication that they have been submitted to the legislature for approval. Though budget is a program for future action and is generally framed for a year, it presents a picture of the details of expenditure, taxation and borrowings for three consecutive years, i.e., the actual receipts and disbursements of the previous year, the budget and revised estimates of the current year and the estimated receipts and expenditures of the coming fiscal year. The fiscal year in our country, Ethiopia, comprises the period from July 1st to June 31st. Though budget estimates for the coming fiscal year contain proposals of taxation, borrowing and public expenditure, the government in course of implementation of the budget programs might face shortage of funds due to some important additions of activity and, hence, might be in the necessity of fresh proposal of revenue receipts and expenditure which are made in what is called a "Supplementary Budget". In this way, the action plan of the original budget gets revised. A good budget should be one that will enable the legislature and the people to appreciate the proposals of receipts and disbursements in the context of prevailing state of economy of the country.

The budget undergoes through different stages of action. Firstly, the budget frame is structured. The government asks different departments to submit their proposed programs of action for the coming year. After all such proposals are received, they are consolidated into an overall budget plan. In the second stage, the budget is presented in legislature for its approval. At this stage, the legislature carefully considers the proposals. There may be additions or alternations in budgetary provisions as considered necessary by the legislature. After the budget is approved, the government is authorized to take

action on the budget. Thirdly, the implementation of the budgetary programs is the next stage. Revenues are raised and expenditures relating to the budget plan are made.
In the forth and the last expenditures relating to the budget plan are made. In the fourth and the last stage, a scrutiny and Parliamentary Committees look after how best financial abuse can be prevented.

Purpose.

The purpose of government budget is varied. There are a number of objectives which the budget seeks to attain simultaneously. The overall purpose is to use the budget as instrument of government economic policy. The following are the chief purpose of the budget. To achieve any purpose, a planning is necessary. The government needs to achieve many goals all of which cannot be attained at a time. A proper plan of action is, therefore, necessary. A budget is such a plan which explicitly mentions the programs that are to be taken up in the course of the fiscal year. Secondly, implementation of a program requires availability of necessary funds. The extent of availability depends upon the budgetary sources of revenue. Hence, that program-structure has to be built which can be supported by the funds. This is the most important purpose of the government budget. Thirdly, to achieve efficiency in public expenditure, physical targets of achievement are specified in the budget. In fixing the physical targets, careful considerations is given to the factors of efficiency in course of implementation of the programmes so that nearer the actual achievement at the close of fiscal year, the higher is the efficiency of level of expenditure agencies. Fourthly, most of the countries, particularly in developing world, today have taken up their task of their economic development in the phased manner of five year plans and long-drawn perspective plans. In order that the planned targets are achieved at the end of the plan period, resources have to be found. The annual government budgets are framed with an eye to the provision of necessary funds for the purpose. Lastly, the government budget serves the purpose of public accountability of funds to a considerable extent. The first control is imposed at the budgeting framing level itself when the government asks different departments to submit their own budgets. Because the departments know that their programmes of expenditure will be scrutinized by the government level, they become careful to observe economy in the budget. The next stage of control is imposed by the legislature which is the ultimate authority to decide the size and extent of the budget. At the end of the financial year, again, the government and its various departments are

responsible to the legislature for their action and budgetary performance. Hence, budget serves as a powerful weapon of financial control in respect of both collection of revenues and disbursement of them.

5.2. Theories of government budgeting

There are two theories of government budgeting, viz., (1) the classical theory of balanced budget and (2) the modern theory of 'Managed Budget'.

I. Classical Theory.

The classical theory of balanced budget is based on the assumption of full employment on one hand and the 'laissez-faire' doctrine on the other. Since the economy operates at full employment level, the problem of economy in the classical system is not attainment of growth. The economy functions with maximum efficiency. Moreover, with the philosophy of 'laissez-faire' followed, the functions of government are limited to the minimum and, hence, most of the economic activities are performed by the private sector. Under such a situation, the size of the budget is always small and the budget should always be balanced. If there is budget deficit and it is financed by public borrowing, it will withdraw funds from private sector where they are more productively employed. Such diversion of resources will bring ***down overall economic efficiency***.

Another justification of the balanced budget is that since deficit financing through borrowing is easy, the practice of unbalanced budget will encourage expansion of government activities as against the classical notion of small budgets. This will reduce the capacity of government to spend for more important purposes because interest charges on borrowed funds have to be paid in addition to repayment of the principal amount. Thus, public borrowings are expensive; they require double payment in the form of debt charges as well as repayment.

There are two views regarding the balanced budget theory. According to one view, the balancing of budget is brought about by equating current revenues with current expenditure. There is no role of borrowing in the budget. Since total revenues are equal total expenditures, the budget is balanced. In the other view of balanced budget, governmental receipts include public debt also. The budget has, however, two parts – current budget and capital budget, both of which are balanced. Thus, current expenditures are financed by current revenues while capital expenditures are financed by public borrowing. Thus, the overall budget is balanced.

II. Modern Theory.

As against the above, the modern theory of Managed Budget does not agree with the classical assumption of full employment. The celebrated Keynesian theory of underemployment equilibrium shows that full employment is only a limiting case and is not automatically attained. It follows that the normal situation is one of less than full employment in an economy. Hence, in order to ensure employment of unutilized and idle resources, **a flexible budgetary policy** is needed. Thus, when widespread unemployment exists, the classical system of balanced budget becomes helpless. The modern economists like **Keynes, Hansen, Dalton** and others advocate that the objective of budget policy should be **to attain and maintain full employment.** The modern approach to flexible budget policy is essentially a counter measure against economic fluctuations of business cycle to which advanced countries are subjected. When depression and unemployment occurs in the economy due to deficiency of effective demand, the need is to inject additional purchasing power into the economy that effective demand, hence employment of production factors are enhanced. This objective can be realized through a **deficit budget policy**; because such a budget will put additional purchasing power into circulation and the aggregate consumption expenditure will increase. This will raise prices and profit prospects of the business community which will employ available unutilized production factors to increase production and meet the increased demand. When the economy, on the other hand, suffers from inflation due to excess purchasing power over and above the amount necessary to deal with the transaction of available goods and services at prevailing prices, the necessity is to **pump out the excess amount** from the economy. This can be done by surplus budget which will raise more revenues like taxes and borrowings and lower down government expenditures.

The process will cure the ills of inflation and bring about economic stabilization. When there is neither inflation nor unemployment, the **budget should be balanced**. Thus, there should be flexibility in the budget policy according to the modern economists. Whether the budget should be balanced or a deficit or a surplus should be decided by the prevailing economic circumstances. Hence, the modern theory is called **the principle of managed budget.**

The main difference between classicists and modem economists in so far as the principle of government budgeting is concerned lies with their views on **savings and investment.**

To the classical economists, saving is always equal to investment because the former is automatically converted into the latter. In such a system, there is no unemployment. To

the modem economists, however, savings and investment need not be equal. They are determined by different factors and, more normally, they are different. When savings become more than investment, deficiency of effective demand develops and unemployment occurs due to fall in production. The economy is then faced with depression. On the other hand, when investment becomes more than saving, the aggregate purchasing power in the economy increases and the available output cannot absorb it at the prevailing price level. Thus, there becomes inflation. It is only when savings are equal to investment, the stabilization function of the economy remains undisturbed and the society suffers neither form unemployment nor from inflation.

Under such circumstances, the modem theory argues, the budget policy of government should be flexible, allowing for balanced budget when there is neither inflation nor unemployment i.e., when savings and investment are equal and for unbalanced budget when the economy suffers from either inflation or unemployment, i.e., when savings and investment are unequal.

5.3. Budget Framing

A government budget is framed in the shape of a financial plan which is a statement of income and expenditure relating to various economic and other activities that the government intends to perform in the coming period. The structure of budget frame may be different in different countries.

i) Revenue and Capital budget. Many countries, particularly the less developed ones, prepare budget in two parts, viz., the revenue and capital budgets mainly because the government has to spend enough resources on economic infrastructure without which development process cannot start. Capital budget in these countries separates the revenue expenditure items of capital account from those of current or revenue account.

The main sources of government revenue are taxes and borrowings from internal sources on one hand and loans and grants from other governments and international agencies on the other. In the revenue budget, the current expenditure is met out of domestic taxation, while the expenditure on capital account is made out of domestic and foreign borrowings. Government obligations for some extra-ordinary expenditure particularly in the initial stages of development arise on account of economic overheads like roads and railways, electricity generation, schools and hospital buildings and facilities and other investment projects which require special revenues and are generally financed by borrowing. Such expenditures and receipts are shown in the capital budget.

Revenue Budget		Capital Budget	
Items of receipts	items of Expenditure	Items of receipts	items of Expenditure
1. Taxes on income	Administrative and general services	1. Loans and recoveries	Public works
2. Taxes on property	Social services	2. Market loans	Construction of power generation plant
3. Custom duties	economic services	3. Small savings	construction of roads and railways
4. Union excise duties	Community services	4. External loans	Flood control works
5. Non-tax revenue	Maintenance of road and railways.	5. Other receipts	Irrigation canals etc.
6. Total revenue receipts	Total revenue expenditure	6. Total capital receipts	Total capital expenditure

Since capital projects are very important as they will form the sources of regular flow of productive services in future, the long drawn financial plan and its consequence on the economy over years ahead can be read from the capital budget. Such a separation of the budgets secures expenditure discipline and, hence, the lenders can form a clear idea about the solvency or otherwise of the country. It is, therefore, very important for developing countries to frame such a type of budget. The above table will give an idea of the structure of revenue and capital budgets.

ii) Incremental and Zero-base Budgets. The budget, in order to be meaningful, should be appraised occasionally and requests for grant of fund should be properly reviewed. The review is necessary at both administrative and legislative levels. But, there is a proper allocation of economic resources. 'Such a focus on increases and reductions can well lead to hardening of the bureaucratic arteries, maintain old programmes that go unexamined simply because no substantial changes are called for in the budget'. This deficiency of incremental budgeting is done away with by what is called 'Zero-base budgeting'.

Since every outlay in the budget has some attainment objective, either short-run or long-run, it is necessary to regularly examine the expenditure components in the light of

anticipated results. In the case of budgeted expenditure having been associated with long term objective, the time-bound expected result-component should be examined occasionally. This is what is done by Zero-base budgeting. It is not necessary, however, that each and every programme be reviewed afresh or restructured anew every year under the zero-base budgeting, though such necessity might arise in case of some of the programmes. But it does require that programmes should not go unscruitnished in any case for a long period. Such budgeting is a new technique of bringing the spending agencies under a regular scrutiny and accountability. **Zero-Base-Budget**, therefore, acts as a constant reminder of the necessity of utmost efficiency in public expenditure and in resource allocation programmes.

iii) Plan and non plan budgets. Most of the underdeveloped and developing countries pursue planned economic development through periodic plans. The basic aim of economic planning is to achieve repaid development in different sectors like agriculture, industry, power, transport, etc. and to raise per capita income, remove poverty, unemployment and regional disparity so that social justice can be achieved. Ethiopia practices five-year plans. A part of the budgetary receipts and expenditures is devoted to the administration and implementation of the plans. The part of budgetary receipts which goes to finance the plan expenditure and the outlays on planned developmental heads constitute the plan budget, while the remaining part of the budgetary resources and expenditures is referred to as the **'Normal' or 'Non-plan budget.**' general tendency to confine the exercise of scrutiny within the area of changes proposed for particular budget items rather than to extend over every aspect of the whole programme structure. Past levels of expenditure are taken as given and only new additions to or reductions from the past outlay are examined. This is what is known as 'incremental budgeting' which should not be allowed to be in vogue since it cannot ensure.

iv) Balanced and Unbalanced Budget. Government budget may be balanced or unbalanced. Unbalanced Budget may be either a surplus budget or a deficit budget.

When the government revenues are equal to government expenditures, the budget is balanced and when they are not equal, the budget is unbalanced. P. E. Taylor explains the nature of budget balance in the following terms. (a) A budget is balanced if during the budget period revenue receipts are exactly equal to cost payments. (b) If revenue receipts for the budget period are greater than cost payments, the difference is budget

surplus and (c) if revenue receipts for the budget period are less than cost payments, the difference is budget deficit.

In the advanced countries, a balanced budget is pursued at a time when the economy suffers neither from inflation nor from unemployment or depression so that the objective of maintaining full employment with price stability is achieved. When the economy suffers from inflation, a surplus budget is operated while a deficit budget is pursued when the economy suffers from unemployment. The developing and underdeveloped countries suffer normally from idle resources and, to make their proper use, additional expenditures are incurred and, hence, they mostly pursue deficit budgets.

5.4. Modern Classification of Budget

There are many governmental functions on which expenditure is planned in the budget.

To get a fuller picture of the various implications of budget frame, a proper analysis is necessary. Modem budgeting recognizes this need and attempts to classify the budget from different analytical angles. The Economic Commission for Asia and Far East explains this necessity in the following words. The systems of classification provide information on the working of budgetary process. Since such a process has a multitude of functions and objectives, different types of classification are needed, either singly or in combination, to serve the purpose of appropriation, programme management and review, evaluation of plan implementation, and financial and economic analysis. The various ways in which the public sector transactions can be classified are (a) by organization, (b) by object, (c) by function, (d) by their economic character, (e) by programme and (f) by origin of the purchases affected by the government. Accordingly, from different analytical view points, we may classify the budget in the following ways.

i. Functional Classification. A better idea of government expenditure is obtained from functional classification since it goes by purpose of expenditure rather than by departments of government. As the United Nations says, "It classifies public expenditure by specific governmental function such as defense, health, education, promotion of agriculture, etc". Since the resources of government are limited and since the functions of government are many, the latter are essentially competing objectives. Therefore, it is important to determine the extent of budgetary resources that can be earmarked for each of these purposes of public expenditure. This is what the functional classification does.

ii. Economic Classification. Economic classification seeks to categorize the government receipts and expenditures into different classes of economic significance so that the pattern of resource allocation and its impact on the rest of the economy can be readily grasped. This classification shows how expenditure for a particular purpose, say, health, is divided between such classes of economic significance as current expenditure on goods and services, capital formation, current transfers, capital transfers and loans. It also shows how expenditure belonging to a particular category, capital formation, is designed to serve different purposes. Such classification provides important macroeconomic information that is essential for construction of national accounting data.

Economic classification broadly categorizes public expenditure into two classes, viz., current expenditure and capital expenditure

1. Current Expenditure	**1. Capital Expenditure**
a. Consumption expenditure	a. Gross capital formation
b. transfer payment	b. Capital transfers
c. **Total current expenditure =(a + b)**	c. Investment in shares
	d. Loans and advances
a. Consumption Expenditure	e. Repayment of public debt
i. Salaries and wages	f. **Total capital expenditure = (a + b + c + d + e)**
ii. Goods and services	**a.** Gross capital formation
iii. ***Less*** outside sales	i. Buildings and other construction
iv. **Net consumption expenditure = (i) + (ii) – (iii)**	ii. Machinery and equipments
b. Transfer payment	iii. net increase in stock
i. Interest payment	**Total G.C.F = (i) + (ii) + (iii)**
ii. Grants to local bodies	**b.** Capital transfers
iii. Subsidies	i. Grants for capital formation to total bodies
iv. Income account of household	ii. Other capital transfers
Total transfer payment = (i + ii + iii +v)	**Total cap. Transfers = (i) + (ii)**
	c. Loans and advances
	i. Capital formation
	ii. Current consumption
	Total = (i) + (ii)

v. Programme Budgeting Classification. Under this classification, the budget would frame a programme structure to attain a particular objective and specify spending to attain it. We may think of all those expenditures allocated to the set of programmes under a particular objective as belonging to a total spending agency which is responsible for attainment of the objective. If, for example, the objective is poverty removal, these expenditures would constitute the poverty removal programme. It is important to note that since these expenditure agencies are inter-related, some programmes expenditure

would draw support from a number of agencies. To explain the anatomy of programme budgeting, let us take the following example.

1. Current Expenditure	1. Capital Expenditure
Specific objective No.1	Increase of earning capacity
programs	a. Elementary and secondary education program b. Enrollment incentive program c. Teachers training program d. Adult literacy program e. Vocational education program f. Labour mobility program g. Skill formation program h. Job placement program
Specific objective No. 2	Income maintenance
Programs	i. Employment insurance program j. Social security programs like retirement and disablement benefits k. Consumption subsidy program l. Public distribution program m. Price support program etc.
Specific objective No. 3	Community Improvement program
Programs	a. Low income housing program b. Area development program c. flood control program d. consumers' co-operative program e. market improvement program
Specific objective No. 4	Agriculture Improvement Program
Programs	✓ Input supply program ✓ Irrigation improvement program ✓ Flood control program ✓ Land reforms program ✓ Agriculture wage restructuring program, etc

In this way, there may be as many specific objectives as would be helpful in securing the general objective of purpose. A more detailed programme budgeting will break down each of these programmes into what are known as programme elements.

VI.*Performance Budgeting Classification*. The scientific treatment to budget making is well demonstrated in the programme and performance budgeting. The approach is essentially managerial in outlook. Burk head defines performance budget as one which presents the purposes and objectives for which funds are requested, the costs for programmes proposed for achieving these objectives and quantitative data measuring the accomplishments and work performance under each programme.

The difficulty of functional budget to detect whether the anticipated benefits from expenditure is really materialized is overcome by the performance budget. Its main purpose is to measure the benefits and to relate them to costs incurred. The targets to be achieved during the budget period are set as objectives. Thus, a determination of attaining a specific amount of benefit from a particular outlay inevitably takes into consideration some sort of cost-benefit analysis on the basis of either past performance or comparative study of the relevant market situation.

In the mixed economy of developing countries where a part of the budget is concerned with planned development programmes and a time bound achievement of objectives is all the more necessary, the role of performance budgeting is paramount. This classification also helps to detect the pockets of inefficiency in administration as well as resource allocation so that corrective steps may be designed to improve the efficiency level of administering and executing the development programmes.

5.5. Budget as an Instrument of Economic Policy

Government budget is an important instrument of economic policy in both developed and developing countries. In the developed countries, the economy operates at full employment level and, hence, there does not exist unemployed resources. But the economy is subjected to trade cycle and, therefore, occasionally faces the problems of depression or unemployment and inflation or pressure of excess purchasing power. In the underdeveloped countries, the economy operates at less than full employment level and, hence, the main problem is how to attain economic growth. In these poor countries, growth process is faced with a number of problems. They are allocational, distributional and stabilisational. Budget serves as an important device to achieve economic development in these countries also. The following are the important ways in

which the government budget can influence the economy of a country.

(1) *Revenue Raising Device.* The government requires enough revenue to discharge its fiscal responsibility. Modern countries have increasingly become welfare states with larger and larger state activities coming under the fold of public sector. Hence, resources have to be found in sufficient quantity. Budget secures this purpose through a financial plan. The receipts side of the budget clearly mentions the sources and the extent of funds for the purpose of financing state activities.

(2) *Building of Economic Overheads.* The main reason of underdevelopment, of the poor countries is absence of proper economic infrastructure. Without proper transport and communication system, large scale generation of electric power, establishment of basic and key industries and proper training facilities for workers and entrepreneurs, industrial development is not possible. Similarly, agricultural production and productivity cannot improve in the absence of proper irrigation facilities, flood control measures, technological improvement with research and development activities, etc. These facilities must be provided by the government. The cost of supplying these services is heavy and cannot be raised directly from the beneficiaries. Therefore, these facilities are supplied free of direct charges through the budgetary provisions. Thus, budget has a tremendous influence on the industrial and agricultural development.

(3) *Diversion of Resources to More Useful Production.* Free market mechanism leads to production of those goods which give maximum profit to private enterprises. Hence private investment is generally concentrated on the production of luxury commodities. It is, therefore, necessary to divert resources to the production of more useful goods and services, particularly of the kind of mass consumption ones. This can be done by government interference through the budget. Imposition of heavy tax on harmful and less essential goods and tax exemption or tax concessions granted to more essential goods and services can divert resources to the production of right kind of goods and services. Grant of facilities through budgetary expenditure can also do the same job.

(4) *Proper Allocation of Resources*. Most efficient allocation of resources is given by the equality between marginal cost and price which is possible only under perfect market conditions. Underdeveloped countries seriously suffer from malallocation of resources. The general market conditions in private sectors are set by existence of monopoly, monopolistic competition and oligopoly. To correct this misallocation, the government has to interfere either in the form of production subsidy or supply of goods and services

by public authorities so that the gap between average revenue (i.e. price) and the marginal cost is reduced as far as possible. This is the reason why the heavy investment public welfare industries which are subjected to decreasing cost conditions are increasingly coming under the fold of public sector.

(5) *Balanced Development*. Underdeveloped countries suffer from regional imbalance in economic development. Left to the private sector which is motivated by profit maximization, the industries will be located in the urban and already-developed areas. The government can correct this geographical imbalance by setting up public sector industries in backward areas. Moreover, the development of agriculture and small scale and village industries can be secured through government patronage in the form of supply of infrastructure facilities and various incentive or subsidy measures. This will develop the economy of rural areas.

(6) *Income and Employment.* Since underdeveloped countries are low income economics, people live in poverty and, hence, saving and investment is very low. Income of the people can be increased only through increased productivity and production. Budgetary provisions can go a long way to achieve this. When agricultural technology is improved through budgetary programmes, the income of the people engaged in agriculture rises. People get gainful employment in the sector. Improvement in small scale industries in the rural areas and setting up of public sector industries in the backward regions will increase employment opportunities in these industries. The budgetary provisions of employment-related tax concessions can influence creation of employment opportunity in the private sector also.

(7) *Saving and Investment.* In underdeveloped countries, the level of saving and investment is very low. Moreover, without increased saving and investment, economic growth cannot be achieved. Due to low level of income, marginal propensity to consume is very high and, hence, the mass people cannot save. Public saving is, therefore, necessary. Taxation of various types serves this purpose. The saving and investment of private individuals are also influenced by the savings-investment-related tax concessions and other budgetary subsidy programmes. Capacity and willingness to work, save and invest of the people is increased through various human capital formation measures and creation of employment opportunities. These are all done through budgetary expenditures.

(8) *Poverty Removal.* Poverty removal programme is a part and parcel of the budget in

underdeveloped countries. All expenditure measures are designed in such a way that they directly or indirectly influence reduction of poverty in the economy. Thus, when budgetary resources are spent on account of education, whether general or technical and vocational or on health measures, land reforms, flood control and irrigation, etc, an important objective is to remove poverty of people. Direct budgetary programmes for poverty removal are those of increasing employment opportunities and creation of community assets like employment insurance, social security, consumption subsidy, public distribution system and price support programmes, low-income housing, area development, input supply, agricultural wage restructuring, etc.

(9) *Full Employment and Price Stability*. An important function of the budget is to secure the objective of full employment and price level stability. We have seen how this should be done in the case of depression and inflation. When the economy, on the other hand, suffers from neither inflation nor deflation, the budget is to maintain full employment and prevailing prices through judicious programmes of public expenditure and taxation. In this case, a balanced budget is helpful in developed countries. In the underdeveloped economies where resources are not fully employed public expenditure programmes and tax incentive measures are put into operation to secure full employment.

(10) *A Check to Misuse of Public Funds.* Since budget is a financial plan relating to public revenues and public expenditures for the budgeted period, it imposes definite restraints on the tax gatherer and public funds spender. The legislature and the people know from the study of budget how the revenues will be raised and how will they be spent. Revenue mobilization and public expenditure activities will be put to scrutiny of the legislature and also of the members of public. In case of inefficiency or misuse in the task of budgetary performance, the executive agencies will be accountable. This will definitely put a check on the improper use and mishandling of public funds.

CHAPTER SIX

PUBLIC DEBT

In this chapter we will cover five sections: 1) Nature and kinds of public debt. 2) Effects of public debt. 3) Burden of public debt. 4) Redemption of public debt. 5) Public debt in a developing economy.

6.1. NATURE AND DEFINITION OF PUBLIC DEBT

Public debt is of recent growth and was unheard of prior to the 18th century. In modern times, however, borrowing by the States has become a normal method of government finance along with other sources such as taxes, fees, etc. The government may borrow from banks, business houses, other organizations and individuals. Besides, it can borrow within the country or from outside. The government loan is generally in the form of bonds (or treasury bills if the loan is required for short periods) which are promises of the government to pay to the holders of these bills the principal sum along with interest at the stated rate. Borrowing is resorted to in order to provide funds for financing a current deficit. This definition very clearly explains the three features of public debt.

1. Public debt arises in the form of borrowings by the treasury or by the state
2. The government borrows a certain amount now but promises to pay in the future not only the principal amount but the interest also.
3. The government borrows when there is a budget deficit i.e. public expenditure is more than revenue.

6.2. CLASSIFICATION OF PUBLIC DEBT

Public debt can be classified in different ways according to various factors like sources of borrowing, purpose of loan, the term duration of loan provision for repayment, nature of contribution, marketability.

1.**Source of Borrowing (internal debt and external debt).**

There are two sources of public debt, internal and external. Internal debt refers to public loans floated within the country, while external debt refers to the obligations of a country to foreign governments, or foreign nationals or international institutions.

Internally, the government can borrow from individuals, financial institutions, commercial banks and the central bank. Externally, the government generally

borrows from individuals and banks, international institutions and other governments.

When individuals purchase government bonds, they are diverting fund from private use to government use. More important than individual subscribers to government bonds are the financial institutions such as insurance companies, investment trusts, mutual savings banks, etc. These non-banking financial institutions prefer government bonds because of the security provided by the latter and also due to their high negotiability and liquidity. While individuals and non-banking financial institutions take up government bonds out of their own funds, the commercial banks can do so by creating additional purchasing power-known as credit creation. The central bank of the country can subscribe to government loans. By purchasing government bonds, the central bank irradiates the account of the government. Borrowing from the central bank is the most expansionary of all the sources, for not only the government secures funds for its expenditure but the commercial banking system gets additional cash which can be used as the basis for further credit expansion.

Government may borrow from other countries too to finance war expenditure or to pay for development projects or to payoff adverse balance of payments. Two important sources have become prominent. They are: *(a)* international financial institutions, *viz.*, the IMF and World Bank, which give loans for short term to payoff temporary balance of payments difficulties and for long term for development purposes; and *(b)* government assistance generally to assist in development projects. For developing countries like Ethiopia, external sources of borrowing are becoming considerably important in recent years.

Though external debt is becoming very common these days, there has been general prejudice against foreign debt, based on ignorance and faulty economics.

2. **Purpose of the loan (Productive and unproductive debt)**

Public debt is said to be productive if the investment yields an income which will not only meet the yearly interest payments of the debt but also help repay the principal over the long run. All public debt can be said to be productive in another sense too. The government may undertake certain projects through loans which may not

be productive in the sense given above but which may be really useful to the community – for example, a railway line connecting a backward region, an irrigation work to prevent famine conditions in an area, and so on. In this sense all public debt is productive. But in many cases, public debt may be contracted during war-time to finance war. Such debt is unproductive because it does not create an asset; it is a dead-weight debt or a useless burden on the community.

3.**Funded debt and unfunded or floating debt.**

Broadly speaking, funded debt is a long-term debt, undertaken for creating a permanent asset and the government normally makes arrangements about the mode and the time of repayment. Unfunded and floating debt is a relatively short-period debt meant to meet current needs. The government undertakes to pay off the unfunded debt in a very short period, say, within six months. Treasury bills are examples of unfunded debt. The rate of interest on unfunded debt is lower.

4.**Time Duration of loan (short, medium, and long term loan).**

According to time duration of the loan, public debt can be classified into short term, medium term, and long term loans. Short term loan is usually incurred for a period varying from three months to one year. Usually government gets such loans from the central (national) banks by using treasury bills. These loans are also called 'ways and means advances'. Such loans are obtained to overcome temporary deficits in payment to be made by the government in the course of one year to pay salaries etc.

Medium term loans are those which are obtained for more than one year but less than ten years. Usually the governments borrow only long term loans for more than ten years. The maturity period is long so that the rate of interest tends to be higher on the long term loan than short term loan. Long term loans are incurred to finance development schemes.

6.3. CAUSES OF PUBLIC DEBT: WHY PUBLIC DEBT IS INCURRED?

Public loans in modern times are necessary to meet difficult situations. In the first place, modern governments do not have any large accumulated balance or treasure to meet a budget deficit. Normally, the annual expenditure of the government should be and is met by annual income. But because of many

circumstances the yield from taxation and other sources may not be equal to the actual expenditure. Similarly, there may be unplanned and unexpected emergency situations like major fires, floods and famines. It may not be possible to secure funds through taxation. Short-term borrowing in anticipation of tax collections in subsequent years is ordinarily used in the above two circumstances.

Secondly, a factor which necessitates public loans is war. Modern warfare is so costly that the normal income through taxation falls short of the actual war expenditure. A public loan is a better and easier method of collecting revenue than taxation. Governments, therefore, have to borrow extensively from individuals and institutions towards war financing. In fact, the enormous increase in public debt in most countries is due mainly to the First and Second World Wars.

Thirdly, public borrowing is considered very useful to remedy a depression. Business depression and unemployment are generally due to deficiency of demand for goods and services. Keynes advocated increased public expenditure financed through borrowing and not through taxation. For, while taxation will reduce the incomes of the public and their demand still further, borrowing will have no such effect. Besides, loans enable the government to make use of idle and unutilized funds of the public.

Finally, public loans are resorted to for development purposes. Underdeveloped countries interested in the development of their natural resources to the optimum *level* find public borrowing a very useful device to finance the various development projects. In countries like Ethiopia, public debt has been increasing in recent years because of this factor.

6.2. **EFFECTS OF PUBLIC DEBT**

We should clearly distinguish economic effects of public borrowing from non economic effects of public debt. Borrowing refers to the method of securing funds, and it is one of the four alternatives available to the government-the other sources being taxation, profits from State enterprises and money creation. The effects of borrowing, therefore, relate to government expenditure financed through borrowing are different from the effects of a similar programme financed by taxation. On the other hand, the effects of public debt refer to the effects on the

economy which are caused by the existence of public debt, after it had been incurred.

Public borrowing from individuals and firms has effects on all aspects of economic life. They may be considered as follows:

1. Effects on consumption. The effect of public debt on consumption depends upon how it is financed by individuals. If they lend to the government out of their idle savings, consumption is not affected. If they buy out of past savings it has only a limited impact on present expenditure. But if they lend by cutting present savings, it may make them feel less secure and so they may reduce consumption. But if the people feel that they have invested in government securities which are considered safe investment, they may actually increase their consumption.

2. Effects on Production and Investment. The effect of public debt on production depends upon whether it affects private investment or not. If people buy government bonds by selling their shares or debentures in private individual firms, there is an adverse effect on private investment. But if the money borrowed by the government is for productive purpose, over all production is not affected. But if it is used for wasteful or non-productive purpose, total investment is affected negatively.

If people buy government bonds by taking away their bank deposits, bank's lending capacity is reduced and this again affects private investment. Private investment is not affected only when it is financed by people out of their idle funds.

If the government uses the funds for productive purpose, it can repay it out of income generated by these projects. But if pubic debt is used for unproductive purposes, it can be repaid only by through additional taxation in future which affects future consumption as well as production by reducing future disposable incomes. However, if public debt is used for welfare schemes, it may increase people's efficiency to work and thus improve productive capacity.

3. Effects on Distribution. Public debt is bound to have effects on distribution of income because it involves transfer of purchasing power from one sector to

another. Usually government bonds are purchased by the richer section. But the burden of tax to repay the debt falls on all sections including the poor. To that extent the inequality of income will increase. If the bondholder and taxpayers is the same people, theoretically there will be no effect on redistribution of income. Hence redistribution of income effects of public debt depends upon whether the taxpayers and the bond holders are the same people or not.

However if the public debt is used for public welfare programmes especially the poor, inequalities of income decreases. But if public borrowing creates inflation, the beneficial effects of redistribution will be neutralized as prices rise.

4.**Effects on National Income**. Public debt has an adverse effect on national income only if private investment is adversely affected. However if government expenditure is incurred on capital goods, it gives incentive to greater production and this again increases the income. Government investment financed by public debt will have a multiple effect on national income. If public debt is financed by commercial banks and national banks, the credit creation and the public expenditure from that will have a very large expansionary effect on national income.

5. **Effects on Resource Allocation.** Unlike tax finance, public debt has little effect on resource allocation. Public borrowing curtails business investment activities but the decline of business investment varies from one industry to another. Allocation of resources is not affected much.

6. Effects on Liquidity. Effect of public debt on liquidity is favorable if the governments bonds are liquid assets which can be sold in the market whenever the bondholders need money. So public debt increases the volume of liquid assets in the country. Secondly the larger quantity of such liquid government bonds can result the failure of monetary policy. For example, when national bank tries to control inflation through monetary policy tools like bank rate, the commercial banks can increase their cash reserves by selling government bonds.

7.**Effects on Money Market.** The government has to compete with the private sector for fund. Usually if the rate of interest paid by private sector on borrowing is high, the government also will have to rise its interest rate to attract public funds. On the

other hand if the state tries to borrow from commercial banks and national banks, more than what is available at current rate of interest it results in currency expansion.

6.3. BURDEN OF PUBLIC DEBT

There has been considerable confusion as regards the burden of public debt. Two extreme views have been held, the traditional view and its counterarguments. The traditional view is that public debt, as in the case of private debt, imposes a real burden on the community. This opinion is based on the following assumptions:

(a) Public debt necessitates a transfer of funds from the private sector (individuals and companies) to the Government in the form of additional taxation;

(b) Public debt is a more costly method of financing public expenditure than taxation because of the additional cost of interest payments;

(e) Public debt tends to transfer the burden of a particular outlay to future taxpayers; and

(d) Excessive borrowing by and huge public debt of the Government, may undermine the creditworthiness of the Government.

The traditionalists, therefore, conclude that public debt should be kept to the minimum and should be redeemed as early as Possible. The other extreme view-held by some modern writers – is that internal public debt is not burdensome, since payment of interest and the use of taxes to meet the same involve simply a transfer of funds between people within the country. People will be receiving interest from the Government for the bonds they hold but will be paying taxes to meet interest obligations of the Government. In other words, it is almost like transfer of funds from one pocket to another, or from one individual to another. The result is that the internal public debt does not impose a real burden on the community. Both these apparently conflicting views on the burden of public debt can be easily shown to be wrong. For this Purpose, it would be convenient and useful to adopt Dalton's distinction between direct and indirect burden of public debt and between money burden and real burden of public debt. We can, therefore, speak about four types of burdens of public debt, *viz.*,

(a) Direct money burden,

(b) Direct real burden,

(c) Indirect money burden, and

(d) Indirect real burden.

(a) Direct Money Burden. Public debt involves payment of interest and repayment of the principal by the government, who will have to raise the necessary amount by way of taxes. The direct money burden of public debt consists of the tax burden imposed on the public and it is equal to the sum of money payments for interest and repayment of principal. Actually, in the case of an internal debt, there can be no direct money burden because all the money payments (taxes) and receipts (interest) cancel out. Suppose the government of Ethiopia collects taxes to the extent of Birr 1000 million a year from the general public towards its debt services. This amount is transferred from the public to the government. But the latter distributes this amount to the general public by way of interest on its loans. Thus servicing of internally held public debt is reduced to a series of transfers of wealth between parties – total receipts will necessarily be equal to total payment. There would, therefore, be not net direct money burden in internal debt. On the other hand in the case of an external debt, money payments by the debtor nation (say Ethiopia) are to external creditors (say, Americans); these constitute clear direct money burden of public debt on the debtor nation.

(b) Direct Real Burden. When we refer to monetary transfers between taxpayers and creditors we are speaking about the direct money burden. But when we refer to the distribution of taxes and public securities among the public, we are referring to the real burden of public debt. We know that people hold public securities (and get interest from the Government) but they also pay taxes towards the cost of the debt service. If the proportion of taxation paid by the rich towards the cost of the debt service is smaller than the proportion of public securities held by them, while on the other, if the proportion of taxation paid by the poor and middle income groups towards the cost of the debt service is greater than the proportion of public securities held by them, there is a direct real burden from public debt. In this case, public debt has been responsible for worsening inequality of *incomes.* Suppose, on

the other hand, government bonds and securities are held by the working classes and the middle income group (and, therefore, they receive the interest) while the taxation towards the cost of debt service is paid by the rich (by way of income tax and the other highly progressive direct taxes) then public debt actually tends to decrease the *inequality* of incomes in the country. In this case there is actually no direct real burden but there is a *direct real burden to the* community. Thus whether internally held public debt imposes a direct real burden or provides a, direct real benefit will depend upon the distribution of taxation on the one hand and ownership of public securities on the other, among different sections of the community. Dalton argues that in most modern capitalist or mixed economies, with large inequality of incomes, internally held public debt will generally result in transfer of money from poorer to richer sections of the community and hence will impose a direct real burden because:

(i) the bulk of the government bonds and public securities will generally be held by the richer sections of the community, directly or indirectly, (through their ownership of banks and insurance companies which hold public securities among their assets); and

(ii) even the most progressive of taxation cannot fall so heavily on the rich as to counterbalance, among the richer classes, the income derived from public securities.

We may now refer to the direct real burden of external debt. In the case of external debt, there is a transfer of payment from the debtor country to the creditor country. The direct real burden refers to the loss of economic welfare which these money transfers involve. In case the money payments for servicing external debt are made by the richer classes, the direct real burden will be less; if, on the other hand, they are contributed by the poorer sections of the country, the direct real burden will be much more.

(c) Indirect money and real burdens. Heavier taxation to meet debt charges may reduce taxpayers' ability and desire to work and save and thus check production. Heavy debt charges may also force the government to economies on public expenditure as might promote production. In case these adverse effects of

taxation could be neutralized by some favourable effects of public expenditure, the indirect burden of public debt can be cancelled out. In practice, however, this may not be possible. In the case of external debt, indirect money and real burden arise from checks to production because of additional taxation (to pay for debt charges) and to possible economies which government may effect in desirable social expenditure.

Burden of External Debt

In one sense, the burden of a *foreign* debt is similar to that of domestic debt. That is, the government will have to pay it through additional taxation. But, while in domestic debt, interest payments and the repayment of loans are available to local nationals; in the case of foreign debt they are available to *foreigners*. In another sense, the total money burden of an *external* debt is more because there is the additional transfer problem. That is, the government will have to find necessary monetary resources to pay off the *external* debt and besides will have to secure foreign currencies too (after all, *foreigners will* have to be paid in their currencies). The transfer problem, therefore, requires that during the term of the loan, the balance of trade must become favourable. In other words, a regular payment of interest and principal to foreign countries will be possible only if the export value exceeds the import value by at least the obligations arising from the loan.

But external debt can mean a certain impoverishment of the economy. The payment of interest and debt redemption to *foreign* Countries means a corresponding exhaustion of national income and makes greater demand on the gold and foreign exchange resources of the country. This is what has been referred to as the transfer problem in the previous paragraph. But properly speaking, there is no impoverishment involved. What actually happens *is* this: originally, when foreign loans were made, they entered the debtor country in the form of machinery, raw *materials* and other essential goods, for which no corresponding exports were made at that time. After the lapse of a certain *time,* the debtor country manages to secure excess of exports over imports to pay for the external loan. In this case, there is no actual impoverishment of the economy involved but goods are paid for goods. But if the external debt would really deprive the citizens of a debtor country

of a certain amount of, goods and services, this would be a net direct real burden of an *external* loan.

However, there is one sense in which an external loan can be a source of trouble to a debtor country. The transfer problem necessitating the creation of an export surplus means "an exhaustion of the country's future capacity to import," which is of vital importance for development. But if the foreign loans are floated only when it is absolutely essential and when internal resources are utilized as far as possible, and if the foreign loans are used to increase the total national product, including goods specially meant for export, there is no reason why the debtor country should suffer in the future.

An underdeveloped country which borrows abroad for the development of social and economic overheads and basic industries will find that the benefits outweigh the burden of repayment of the loan. Thus, an external loan for development purposes is not a burden but a profitable venture. This is exactly like an internal loan meant for development purposes.

Measurements of debt burden.

There are various ways of estimating the burden of public debt. Three simple methods are suggested.

1. The first method is to consider the ratio of aggregate public debt to national income i.e., P/Y , where P is the quantum of public debt and Y is the national income. If changes in the quantum of public debt are greater than the change in the national income, the net relative burden can be said to have increased. This is the simple, yet commonly adopted method.

2. The second method considered the interest paid every year on public debt as proportion of national income i,e., I/Y where 'I' is the interest payment or debt service charges and 'Y' is the national income. This method gives an idea of the extent of burden from the point of view of debt service charges.

3. The third method considers the ratio of debt service charge (I) to total public expenditure in a year I/E where 'I' is interest payment on debt and 'E' is public expenditure. This method has the advantage of comparing the cost side i.e. interest charges in relation to benefit side i.e. public expenditure.

Can the Future Generation be made to bear the burden of Public Debt?

It is often contended that the burden of public debt can be shifted "to make posterity pay" the debt of the present generation. The argument assumes that taxation imposes a direct burden on the present generation while government borrowing does not impose such a burden. Suppose public expenditure is financed out of taxes, the benefit of public expenditure as well as the burden of taxation will fall upon the present generation. On the other hand, in the case of debt financing of public expenditure, the benefit of public expenditure will accrue to the present generation but the burden of taxation to pay for the interest and repayment of principal will fall upon the future generations. Financing of investment projects such as construction of irrigation works, rail and road construction, etc., through borrowing is sought to be justified on the ground that *(a)* the benefit of public debt accrues to future generations, and *(b)* the burden of servicing and repaying public debt would, therefore, be borne by the future generations. This line of thinking is obviously wrong and cannot be maintained.

In the first place, real resources required by the government for war, economic development or any other purpose have to be obtained now and at the immediate cost of the present generation, whether they are derived from taxation or borrowing. Borrowing is only an alternative to taxation for diverting real resources from private sector to the government. The present generation will have to transfer these resources to the government either through taxes or through loans and will, therefore, have to suffer a loss of resources. In other words, the present generation will have to bear the burden of public debt and the question of shifting it to the future generations does not arise.

Secondly, there is no direct money burden of public debts on the future generations. As we have seen earlier, the burden of taxation to pay for public debt is cancelled out by the receipt of interest from the government. While some groups in the future pay taxes some others will receive interest. The question of shifting the burden to the future generations is actually confusing.

It is, however, possible to argue that under tax financing, the present generation will have to curtail its consumption, but in the case of debt financing there will be no

such reduction of consumption. The assumption here is that those who are paying taxes do so out of their current income and, therefore, reduce their consumption expenditure but those who are subscribing to public debt do so out of their savings. Debt financing leaves in the hands of public debt owners bonds and other securities which they consider as part of their wealth. While tax financing makes the general public poorer and, accordingly, reduce their consumption, debt financing does not have such a result since the owners of public debt do not feel that they are poorer. In fact, they have bonds and securities on behalf of funds transferred to the government. Under debt financing, therefore, consumption is not likely to fall. In this sense, tax financing imposes a real burden on the present generation, while debt financing does not impose such a burden on the future.

Suppose, the present generation reduces its savings to subscribe to public debt, and suppose further that as a result of reducing saving and capital formation, the capital stock of future generation is reduced. In such a case debt financing can impose a heavy indirect burden on the future generation. On the other hand, if the present generation reduced its consumption, to subscribe to public debt, saving and capital formation would not be affected and the future generation would not be burdened through inheritance of reduced capital stock. The above analysis is defective since the expenditure side of the government is ignored. If the government resorts to debt financing for planned economic growth and accumulation of capital stock, the benefits will be available to the future generations and there will be no real burden from such debt – for the loss of welfare through taxation will be more than made good by benefits from government investment.

Only in the case of external debt, the burden of public debt can be passed on to the future generations. When a country raises resources in foreign countries for war, the present generation receives additional resources and, therefore, need not curtail its consumption or saving. The future generations will have to pay the interest and also repay the principal, and hence the burden of external debt is on them. But in case the country has borrowed in a foreign country for development purposes (as in the case of India), the future generations may not feel the burden

on account of increased productivity which external borrowing has made possible. Generally, therefore, the burden of public debt cannot be shifted from one generation to another. We cannot "make posterity pay". Nor is it normally correct to make the future pay for policies taken now for which the future has no control or influence.

Can a Country Become Bankrupt?

Sometimes people assert that with mounting public debt, the nation would become bankrupt. This is partly true and partly untrue. If bankruptcy means inability to return the amount borrowed, a country can never become bankrupt, however much its domestic debt may have gone up. The government can always honor its obligations either through higher taxation or through printing of money. It has the option to impose a heavy capital levy and pay off the debt at one stroke. Even repudiation of public debt – though morally indefensible – will be justified, since, after all those who receive interest payments from the government will have to pay taxes to enable the government to pay the interest. Will it not be better to cancel the debts altogether or at least scale down considerably so that interest receipts as well as tax payment will be proportionately cut down? In any case, a government does not become bankrupt because of its internal debt.

Debt Trap: However, there may be circumstances when a government may not be able to honour its obligations to foreign countries. When interest on foreign loans and repayment of debt amount to a considerable figure and when adequate export surplus has not been built up for various reasons a debtor country may be unable to honour its obligations. Either it can ask for postponement or raise new foreign loans to repay the old ones. This has come to be known as the "debt trap." Many South American countries are caught in this trap. Only in extreme cases, it may repudiate external loans. Repudiation is an extreme measure, since the country loses its creditworthiness in the international capital markets and will never again be able to borrow from foreign sources.

6.4 REDEMPTION OF PUBLIC DEBT

Experience shows clearly that mounting public debt has a demoralizing effects of the people apart from the fact that the public is subjected to higher rates of

taxation. Besides, public debt consists mostly of unproductive or dead-weight debt – war debt is a good example of such debt – the sooner it is paid off, the better both for the government as well as for the public. The various methods available to the government to pay off its debt are:

i.Repudiation of Debt. Repudiation of debt means simply that the government refuses to pay the interest as well as the principal. Repudiation is not paying off a loan but destroying it. Normally, a government does not repudiate its debt, for this will shake the confidence of the general public in the government. However, in extreme circumstances, a government may be forced to repudiate its internal or external debt obligations. For instance, internally the country may be facing financial ruin and bankruptcy and externally, it may be faced with shortage of foreign exchange. Generally, a government may not repudiate its internal debt lest it should lead to internal rebellion: those who have lent to the government would obviously rise against the government. However, the temptation of a government to repudiate its external debt obligation may be strong at certain times. Of all the methods of redeeming debt, repudiation is the most extreme.

ii.***Conversion of Loans.*** Another method of redemption of public debt is known as conversion of loans, that is, an old loan is converted in to a new loan (in a broad way, conversion is the same as refunding debt; *i.e.*, repayment of a debt through a new loan). Conversion may be resorted to:

(a) When at the time of redemption of a loan, the government has not the necessary funds, and/or

(b) When the current rate of interest is lower than the rate which the government is paying for its existing debt, so that the government can reduce its *interest* obligations. Conversion of a loan is, always done through the floating of a new loan. Hence, the volume of public debt is not reduced. Really speaking, therefore, conversion of debt is not redemption of debt.

iii.***Serial Bond Redemption***. The government may decide to repay every year a certain portion of the bonds issued previously. Therefore, a provision may be made so that a certain portion of public debt may mature every year and

decision may also be made in the beginning about the serial number of bonds which are to mature each year. This system enables a portion of the debt being paid off every year. A variant of this type of bond redemption is to determine the serial number of bonds to mature every year through lottery. While under-the first variant, the bond-holders know when the different sets of bonds would mature and could take up the bonds according to their convenience, under the second variant, the bond-holders are uncertain about the time of repayment and they may get back their money at the most inconvenient time.

iv.***Buying up Loans.*** The government may redeem its debt through buying up loans from the market. Whenever the government has surplus income, it may spend the amount to pay off government loan bonds from the market where they are bought and sold. It is a good system, provided the government can secure budget surpluses. The only defect of this method of canceling debts is that it is not systematic.

v.***Sinking Fund.*** Sinking fund is probably the most systematic and, therefore, the best method of redeeming public debt. It refers to the creation and the gradual accumulation of a fund which will be sufficient to pay off public debt. Suppose the government floats a loan of Birr10 billions, redeemable in say, 10 years, for the purpose of road construction. At the time the government is floating the loan, it may levy a tax on petrol, the proceeds of which would be credited to a fund known as the sinking fund. Year after year, the tax proceeds as well as interest on investments will make the fund grow till after 10 years it becomes equivalent to the original amount borrowed; at that time, that debt will be paid off. One danger of the sinking fund methods is that a government, in need of money, may not have the patience to wait till the end of the period of maturity but may utilize the fund for purposes other than the one for which originally the sinking fund was instituted.

vi.Capital Levy. Public debt may be redeemed through a capital levy which, as we have seen earlier, may be levied once in a way with the special objective of redeeming public debt. It is generally advocated immediately *after* a war for the following reasons:

(a) Heavy public debt is incurred during a war to prosecute it and hence is quite heavy immediately after war.

(b) War debt is unproductive and is a dead weight on the community necessitating heavy taxation year after year. It will be better to wipe it out *once*

and for all by a special levy.

(c) Due to war-time inflation, businessmen, producers and speculators would have amassed large fortunes and hence it is easier for them to contribute to a capital levy and, in a sense, it is just they bear a part *of* the war burden.

(d) Redemption of public debt through capital levy will leave the higher *income* groups almost in the same old position, since they will be receiving back from the government what they had paid by way of a special levy.

Redemption through a special levy is said to be superior to the method of the sinking fund, as it is levied only once, while for purposes of the sinking fund, taxes have to be imposed year after year. The greatest merit of capital levy is that it will reduce heavy tax burden which will otherwise be necessary to redeem public debt. But the danger of a capital levy is that the government may be tempted to resort to it too often.

vii.Redemption of External Debt. The redemption of external debt can be made only through accumulating the necessary foreign exchange to pay for it. This can be done by creating export surpluses. Towards this end, foreign loans should be carefully invested in those industries which have high productive potentialities and which will promote exports directly. At the same time, the exportable surplus should consist of goods which can be really taken by foreigners. Temporarily, of course, redemption of an old debt can be made through the floating of new loans.

Of the various methods available to a government to payoff its debt, the most common and- sensible method is to redeem part of the public debt every year, so that the debt may not go on mounting.

6.5 PUBLIC DEBT IN A DEVELOPING ECONOMY

Public borrowings may be for short and long periods but we are interested only in long-term borrowings for purposes of investment. Since voluntary loans come from voluntary savings, the scope for domestic borrowings will be limited. The reasons for this are not far to seek: low income levels of the masses, very low savings of the peasants and the middle classes, the perpetual attempt towards higher consumption, etc. The small minority of the rich does save a considerable portion of

their incomes, but these savings are not generally available to the government. The only good source for the government is the banking system and the financial institutions. But the banking system is still undeveloped and the financial institutions are too few to be significant.

Even though domestic borrowings may not be of much importance during the initial years of economic development, its importance would grow as time passes. With increased tempo of economic development incomes rise and savings also rise. The government tries to stimulate savings through educative propaganda, tax concessions and exemption, etc. Besides, the government promotes the setting up of a sound banking system and a well-organized money and capital market and a whole set of financial institutions/financial intermediaries. These institutions help in the mobilization of savings and make them available for investment.

Public Borrowings from Foreign Sources

A developing country borrows from three foreign sources: Foreign capital markets, foreign governments and international institutions. In the past, governments generally floated loans in foreign capital markets and expected the foreign nationals to subscribe to them. But nowadays the demand for funds is so large and political and other difficulties are so numerous against private foreign investment that prospects of investment of funds by foreign nationals and institutional investors in government securities seem to be not attractive. The government of a developing country can lessen political and social unrest and economic instability by appropriate measures but it would be difficult to convince foreign nationals and make them accept government bonds as riskless. After all, the repayment of interest and principal over the long period implies a high degree of risk and what guarantee can there be in the promises of a government which may be overthrown by another in no time.

In recent years, advanced countries are taking great interest in the economic development of underdeveloped and developing countries. Intergovernmental loans are becoming very significant these days. Besides, international institutions, such as the World Bank and the I.D.A, Asian Development Bank (ADB) etc., are important sources from which developing countries draw for purposes of

development. But these institutions insist upon certain minimum conditions before granting loans and many developing countries may not be able to fulfill them.

Conditions Necessary for Foreign Loans

Foreign loans enable a developing country to secure capital and technology which it cannot get internally and which are so essential for economic development. But the total burden of a foreign loan is higher than that of an internal loan of equal extent, because the former involves also a transfer problem. Besides, debt redemption to foreign countries means a corresponding exhaustion of national income and moreover makes greater demand on the gold and foreign exchange treasures of the country. It is essential therefore, that great care is taken in the matter of securing foreign loans. It is but natural that certain internal conditions are fulfilled so as to justify foreign loans.

(a) The foreign loan should be used to stimulate economic growth directly. This will facilitate repayment later.

(b) The foreign loans should be invested in such a way that the country secures a favourable balance of trade in the future. This is necessary, as we have pointed out earlier, because foreign loan involves a transfer problem, *viz.,* the necessity to transfer from the debtor country to the creditor country. This would further necessitate the excess of exports over imports.

c) Foreign loans will be justified only if the productive resources of the country are insufficient to bring about a planned pace of growth. This is so because the gross burden of foreign borrowing is higher than that of domestic borrowing.

A backward country is not justified in borrowing from abroad unless internal sources are inadequate and there could be proper use of loan proceeds. The existence of an adverse balance of payments alone cannot be a sufficient reason for borrowing. It is not really necessary that foreign loan should be used on projects which will increase exports and check imports and thus help in remedying adverse balance of payments. What is required basically is the development of the total national product and not be development of exports only. However, there may be circumstances under which even a temporary adverse balance of payments may

have serious adverse effects on economic development. Foreign borrowing will be justified here, again, not to remedy adverse balance of payment but to prevent internal disturbances.

Public Debt management

Public debt management refers to important policy decisions to be made with regard to public debt. This is an important aspect of modern public finance as it is now accepted that public debt is an active fiscal tool just like taxation and public expenditure, all of which have varied effects on the economy. Hence the floating and repayment of debt should be carefully planned. The forms of public debt, the terms of loan with regard to interest and duration, the ownership pattern are all crucial issues in management of public debt. In short public debt management is concerned with the policy decisions on the structural characteristics of public debt.

Objective of public debt management

Public debt management can help the Government to achieve several goals. Important objectives of public debt management in this respect are:

1. It should not have any adverse effect on the economy, especially on willingness and ability to work and save
2. During inflation public debt management should aim at curtailing aggregate demand
3. During depression it should help to raise aggregate demand in order to improve employment.
4. Public debt management can help to secure funds during War.
5. It should go hand in hand with monetary policy to strengthen the money market.

Principles of public debt management

Phillip E. Taylor points out that a general principle of public debt management should be to get loans from the public without undue coercion or force. The raising of loans by the government as well as its redemption should not interfere with the smooth functioning of the economy. The government should not enter the loan

market when it is not convenient to do so. Accordingly following principles of Public Debt management can be stated.

1. Minimum interest cost. The first principle of public debt management is that the government should keep the interest cost of the loan at the minimum. If the interest is low, it will impose less burden of taxation at the time of redemption

2. Satisfaction of investor's needs. Public debt should be managed in such a way that the needs of different types of investors should be satisfied with regard to the type of securities as well as general terms. The terms of loan should attract the public to invest in government securities.

3.Funding of short-term debt into long-term debt. Public debt management should enable the Government to convert short-term loans into long-term loans. But such funding operations should not harm economic stability because the conversion of short-term loans into long-term loans will necessarily result in a rise in the interest rates. This rise in interest rate on Government securities will affect the volume of private investment. The low demand for short term securities will reduce their interest rate and may even make such funds go out of the country.

4. Co-ordination of public debt policy with monetary and fiscal policy. Public debt management should not clash with monetary or fiscal policy. The Government may want to keep interest rates low. So it might advise the central bank to follow a cheap money policy of low interest rates. This will encourage inflationary trends. Such a problem can be avoided if there is a proper co-ordination of public debt policy with monetary and fiscal policy.

5. Composition of public debt and maturity. If the public debt programme results in a large proportion of short-term debt held by commercial banks, there will be a high degree of liquidity in the market. This can generate inflation. If the holders of such liquid assets try to monetize their debt obligations before maturity, controlling inflation will be difficult.

An analysis of the objectives and principles of debt management makes it clear that debt management is a subtle art. The basic requirement of an efficient public debt management is that from the time of floating the debt to its redemption, the strains and friction are kept to the minimum. Public debt has become an important

instrument of fiscal policy and public debt management should be coordinated with general economic policy to realize maximum social advantage.

CHAPTER SEVEN

DEFICIT FINANCING

7.1. INRODUTCION

In this chapter we will discuss four sections: 1) the meaning of deficit financing. 2) Objectives of deficit financing. 3) Effects of deficit financing. 4) Limits of deficit financing.

7.2. MEANING OF DEFICIT FINANCING

Deficit financing has become an important tool of financing government expenditure. In simple terms it means the way the gap between excess of government expenditure over its receipts is financed. However the concept of deficit financing is interpreted in different ways in the western countries.

In the western countries whenever the public expenditure is greater than its revenue receipts, it is financed through public borrowing or creation of new money. Whenever there is deficit in the current account, its financing becomes deficit financing. Even public borrowing is a way of deficit financing.

In the modern sense public borrowings to finance excess of public expenditure over revenue is included in the capital account of the budget. After including these borrowings in the capital account, there may still be a deficit in the budget. The method adopted by the government to finance this overall budget deficit in the current and capital account together is known as deficit financing.

Thus budget deficit and deficit financing are two different concepts. Budget deficit is a narrower concept, referring to excess of public expenditure over current revenues. Most countries adopt a wider concept of deficit financing whereby any method adopted to bridge the budget deficit even after borrowings, becomes deficit financing. Further in the narrower concept, the budget deficit is managed through market borrowing out of public saving. So it is non-inflationary. But in the broader sense of deficit financing, it refers to borrowing from the banking system. Hence it is inflationary in character.

Different Methods of Deficit Financing

Governments can adopt three methods of deficit financing and the impact is different in each case. Firstly governments can borrow from non-bank investors or

commercial banks. This is considered non-inflationary as it tends to replace private expenditure. For example when government borrows from commercial banks, their liquidity is reduced so that it reduces loans to the private sector. Thus the government borrowing from commercial banks replaces private expenditure and hence it is non-inflationary. If the non bank investors get loans from the commercial banks against their fixed deposits and use it to lend to government it would be inflationary.

In the second case when the government draws from its cash balances with the central (National) bank it is not inflationary. But in the third method when the government borrows from the central bank against its securities, the central bank creates new money by resorting to the printing press. This would again result in a secondary reaction of expansion of bank credit. This type of deficit financing by loans from central bank tends to be highly inflationary.

7.3. OBJECTIVES OF DEFICIT FINANCING

Deficit financing has been ascribed an important role in fiscal policy on account of increases in public expenditure on various accounts. The different objectives of deficit financing make it clear.

1.To finance wars. Deficit financing has been found to be the simplest and quickest method to finance huge War expenditures. War time emergency makes it difficult for government to raise urgent resources through its usual methods of taxation and public borrowing. The funds obtained through deficit financing are used by the government to purchase goods and services to fight war. This raises the aggregate demand. Resources are mobilized by the government not for productive purpose but for war efforts which is unproductive. Thus the rise in aggregate demand and non-availability of sufficient goods result in an inflationary price rise. The experience of Germany during the two world wars is a classic example of the harmful effects of Wartime inflation. During First World War, the German paper Mark depreciated so much in value that one gold Mark could not be purchased by even one billion papers Mark. Similarly during Second World War, the ratio of gold to paper currency became as low as 0.01 per cent on account of deficit financing. However, wartime emergency requires a quick mode of financing. Hence deficit financing cannot be

avoided. Precautions should be taken to control private demand.

2.To fight unemployment during depression. Keynes advocated deficit financing as an important tool of solving the problem of involuntary unemployment during depression. This unemployment during depression occurs due to lack of effective demand since private spending is low. Therefore the only way to combat unemployment would be for the government to invest in public works programmed to create employment. Further during depression welfare payments to be made by the government would also increase. Government cannot get finance for this expenditure out of taxation or public borrowing as taxable capacity and ability to contribute to government loans is very low during depression. Hence the government has to borrow from the banking system. Thus deficit financing becomes the best mode of financing anti-deflationary expenditure.

Keynes suggested that the investment undertaken by the government will result in a multiple increase in incomes via the multiplier effect. However the operation of the multiplier may not be that successful in underdeveloped countries as there is unutilized or idle capacity in both agricultural and industrial sectors. Supply of working capital is also very low. On the other hand marginal propensity to consume is very high. Thus Keynes' multiplier may actually raise the aggregate demand instead of raising the aggregate supply. Hence deficit financing to combat unemployment in underdeveloped countries requires great caution in handling so that inflationary pressures are not generated.

3. To promote economic development. Deficit financing can go a long way in promoting economic development in underdeveloped countries. There are two issues to be discussed here. First refers to the way in which deficit financing can be used to finance development projects. Second whether deficit financing for development results in inflationary potential. The major obstacle to development in these countries is low rate of capital formation which is not enough for sufficient investment to provide jobs for the large number of unemployed. With increasing population the level of unemployment also increases necessitating greater capital formation. Low incomes of people reduce the taxable capacity as well as ability to save. For the same reason, government cannot raise resources through public

borrowing too. Hence deficit financing becomes the only way of mobilizing required resources, in developing countries.

Deficit financing can help to stimulate the rate of investment indirectly. Deficit financing for development first of all increases incomes and thus savings too. It results indirectly in forced saving too because when the government purchases goods and services for its projects, people do not get them. So the reduced private spending results in larger saving.

If the government uses deficit financing to undertake productive projects then output would increase and it may not be inflationary. But there are certain rigidities in the developing countries which do not result in complementary factors for investment. Firstly there is a lack of entrepreneurship and technical know-how. Secondly there is no adequate infrastructure such as organizations, market communications etc. These market imperfections fail to increase effective supply along with increasing demand and these causes rising prices.

Further elasticity of supply is not the same in different sectors of the economy. For example elasticity of supply tends to be low in agriculture than in industry. In the initial stages of development if the government expenditure is directed towards these sectors whose elasticity of supply is low, it is certain to increase incomes and demand in these sectors but lack of supply response would raise prices. In all these cases, if deficit financing used for development schemes results in inflationary price rise, the government should carefully raise taxation to siphon off the excess purchasing power in the hands of the people.

Another way in which deficit financing can promote development is when it increases the incomes of the entrepreneurs whose propensity to save is high. In fact this may result in greater inequality of income. But in the initial stages, higher propensity to save of the entrepreurial class is a welcome feature in the interest of general economic development. This fits into the theory of imbalanced growth given by A.O. Hirshman.

In general it is accepted now that so long as care is taken to avoid inflationary potential, deficit financing is a very useful instrument of development in developing countries. Deficit financing should preferably be used for quick yielding projects in

the initial stages so that the increase in production will control inflationary pressure. If development projects have long gestation period, deficit financing for such projects would bring in inflationary price rise. Hence in developing countries deficit financing should be carefully used in the initial stages to lay a good foundation for necessary infrastructure for development.

4. To mobilize surplus, idle and unutilized resources. Keynes had advocated deficit financing for the mobilization of surplus labour and other resources during depression. This argument may be applicable to underdeveloped countries only with limitations. If deficit financing is used to employ such labour in the agricultural sector in these countries, it may create inflationary price rise.

On the other hand deficit financing is recommended for its ability to create new resources in these countries. When deficit financing raises prices in these countries, it reduces consumption and savings become forced. Thus deficit financing is recommended in developing countries for the mobilization of forced savings or for the creation of new resources, which again can be used for next stage of development. That is why W. A. Lewis said that "Inflation for the purpose of capital formation is in due course self-destructive".

5. To finance the Plans. In developing countries like Ethiopia which have adopted planned economic development huge resources are required for implementation of government investment. The government takes greater interest to create infrastructure, industrial development in vital sector besides transport and communication. Deficit financing is a. useful tool to finance the Plans.

6. To serve as an alternative tool. Underdeveloped countries suffer from low taxable capacity and low savings. Hence government's ability to raise resources gets constrained. Therefore there is no harm in resorting to deficit financing as an alternative source of mobilizing resources besides taxation and public borrowing.

7.3 EFFECTS OF DEFICIT FINANCING

Deficit financing can make or mar progress if it is not carefully planned. It has diverse effects depending upon how it is handled. The major effects pertain to inflation and distribution of income.

1.Deficit financing and inflation. There are two views regarding the impact of

deficit, financing on prices. The first view is that deficit financing is pro inflationary. This view holds that the first impact of deficit financing is on the creation of new money. Deficit financing is recommended for the creation of capital goods whose gestation period is long. There is increase in money incomes in this sector. But consumer goods producing sector does not respond quickly to bring more production. This results in rise in prices of consumer goods which may prove to be spiraling. The price rise will be greater if market imperfections exist as bottlenecks to increased production.

Further, a part of the increased incomes, in the absence of sufficient goods to spend, may be channelized into commercial banks who may use it for further credit creation. In fact in developing countries the inflationary pressures are due to monetary expansion after deficit financing. Inflation then tends to be demand-pull type while deficit financing in developed countries causes cost-push type of inflation on account of long-term gestation projects.

The poor developing countries are not well equipped in terms of monetary and fiscal policy to control inflation. Hence there is a possibility that unabated inflation on account of deficit financing may hinder economic development of these countries.

The second view holds that deficit financing is not necessarily inflationary because public sector has emerged as a dominant sector in these economies. If this additional finance is utilized for productive purposes, it need not be inflationary. Deficit financing is required to provide finance for increasing output at stable prices. If deficit financing is not resorted to there may be a decline in prices which will have an adverse effect on output and employment.

W. A. Lewis points out that there are three stages in the impact of deficit financing. Inthe first stage, only capital goods industries are created through deficit financing and as they have long gestation, prices rise steeply. In the second stage, the rise" in prices makes people reduce consumption which results in forced savings which increases investment. In the third stage, the capital formation of the first stage begins to bring consumer goods to the market which helps to lower prices.

Therefore deficit financing is 'dangerous and painful' only in the first stage. In Lewis' view inflationary potential of deficit financing is therefore self-destructive. Others however point out that if the consumer goods are not increased in the second and third stages due to some constraints, inflation becomes rampant.

2. Effect on distribution of income. Deficit financing has certain undesirable effects on the distribution of income. Deficit financing provides incentives to entrepreneurs through larger profits on account of rising prices. But the same rising prices reduce real incomes of the wage earning class. This leads to a distribution of income in favour of the profit earning classes. Hence inequality of incomes widens. This is very much against the social objectives of equitable distribution of income and wealth.

Thus an analysis of the objectives and effects of deficit financing proves that it is a double-edged sword. Its effects can be good so far as it promotes capital formation and does not allow for a steep increase in prices. Its effects can be harmful if the inflationary potential goes uncontrolled, bringing about adverse effects on distribution of incomes and wealth, thus increasing inequality. The exact impact of deficit financing depends upon the mode of deficit, governments' attitudes and policies, reaction of the private sector and growth of the public sector.

Deficit financing can be a very useful and effective fiscal tool for development in under developed countries if it is used only for capital formation to channelise resources into productive areas. The mild price rise on account of deficit financing in the early stages acts as an incentive to entrepreneurs to increase productive activity. Such a functional rise in prices is harmless.

7.4 LIMITS TO DEFICIT FINANCING

It is now recognized that deficit financing is a bad master but can be a good servant *i.e.,* it should be handled carefully without using it excessively. This raises the question as to what is the safe limit for deficit financing. Several factors are to be considered in determining the safe limit.

1.Growth rate of the economy and money supply. The money supply should expand to facilitate the growth rate of the economy. Suppose the total money supply in the economy is 4,000 million Birr and the growth rate of the economy is 5

per cent, it requires an additional money supply Birr. 200 billions per annum to sustain the growth rate. Hence deficit financing can be used to create Birr 200 billions per annum. But since it is used for productive assets creation, deficit financing can be even more than 5 per cent of the money supply. Thus even 7 or 8 per cent expansion in money supply on account of deficit financing need not be inflationary in developing countries.

2. The efforts made by the government to mobilize its resources. Deficit financing should be used only as a last resort after all alternative source of finances are exhausted. The public will not mind the effects of deficit financing when they know that the government has undertaken all efforts to mobilize other resources and only when they are exhausted, deficit financing is adopted.

3. Control of incomes and prices. Deficit financing to finance government projects enters the income stream in the form of wages and salaries. It is this increasing incomes and wages which exert an inflationary pressure. Hence a proper control over income and prices acts as a control over the inflationary potential of deficit financing.

4. The growth of monetized sector. It is the existence of a large nonmonetised sector which aggravates the inflationary potential of deficit financing. The extent to which the non-monetized sector is brought into the ambit of monetized sector, acts as a safe limit to deficit financing.

5. Increase in the production of public sector. Deficit financing is incurred to finance public sector projects. If their production increases, this increase in production will cushion the inflationary potential of deficit financing. It is for the same reason deficit financing should not be incurred for unproductive purposes.

6. Promotion of imports. Deficit financing is bound to increase incomes in the initial stages which causes and increase in demand for goods and services. Since production does not increase immediately in the early stages, the inflationary pressures can be kept within safe limits by permitting import of goods. This of course depends upon the foreign exchange reserves to the country.

7. Restriction on credit A large portion of new money created through deficit

financing may reach the banking sector in which case it gives them an opportunity to create credit further. Restriction on credit can limit inflationary pressures.

8. Direct and indirect control. Government should adopt various measures to control prices directly and indirectly. Direct control refers to the control of prices beyond the stipulated levels. It is a type of administered prices. Indirect controls result in government's improving the public distribution system to supply goods to the people at reasonable prices.

9. Public spirit of cooperation and toleration. Some economists point out that "The role of public understanding and public cooperation is a factor in tending to diminish the price effect of deficit financing". Unless the government enjoys the public cooperation, it will have to face open, popular and political opposition to further use of deficit financing when the prices rise excessively. The spirit of tolerance on the part of public acts a limit on government's use of deficit financing.

In the final analysis the state of the economy, the purpose for which deficit financing is incurred, the control over money expansion, prices and incomes, the magnitude of the deficit financing, are all factors /which, limit the government's powers to resort to deficit financing excessively.

CHAPTER EIGHT

PRINCIPLES OF FEDERAL FINANCE

(Principles of allocation of resources between Federal and State governments)

8.1. Introduction

In this chapter we will discuss three sections, namely 1) Principles of Federal finance, 2) Problems of Federal finance, 3) Different forms of inter-governmental financial transfers

In a federal set up, the federal-State financial relations are based on the principle of federal finance. The world federation connotes the union of two or more states. In a federation we have on the one hand, the Federal Government and on the other the Constituent States. Federation may be defined as a "form of political association in which two or more states constitute a political unity with a common government, but in which these member states retain a measure of internal autonomy."

According to the Encyclopedia Britannica, "federation is a form of Government in which the essential principle is that there is union of two or more states under the central body for certain permanent objectives."

Sir Robert Farn defined, "a federation as a form of government in which sovereignty of political powers is divided between the central and local governments, so that each of them within its own sphere is independent of the other."

Thus, in a federation, there is constitutional division on powers, functions and resource between the federal and the state governments. The two sets of governments are independent so far as their own functions and resources are concerned.

8.2. PRINCIPLES OF FEDERAL FINANCE

Prof. B.P .Adakar, in his celebrated book on principles and problems of federal finance lays down three principles which should govern the working of federal finance, system. These principles have been discussed as follows:

1. Independence and responsibility – In the first place Prof. B.P. Adarkar said that "full freedom of financial operations must be extended to both federal as well as state governments in order that they may not suffer from a feeling of cramp in the

discharge of their normal activities and in the achievement of their legitimate aspirations for the promotion of social and economic advancement." It means that central and state governments must each have under it, its own independent central financial resources sufficient to carry out its exclusive functions. In other words, central and state governments should be financially independent within their own sphere. Besides, each government should take the responsibilities of taxing, borrowing, and raising resources in their spheres for performing their functions. The authority which has a pleasing job of spending money should also do the unpleasant job of raising it. Thus, "taxing autonomy and spending autonomy should go hand in hand."

However, there are some who believe that, if every level of government is to raise the money that it was going to spend, then there would be great disparity in quality and quantity of public expenditure from state to state. State with wealthier population and richer tax resources will be able to fulfill their social obligation much better than the poor ones." In an under-developed country certain practical considerations such as uniformity in tax rates throughout the federation, promotion of economic growth and maintenance of internal and external stability, balancing economic and social development in all regions, etc., cannot be ignored. In other words, the advocate of this view intends that taxing autonomy should lie with federal government while spending autonomy with the states.

Theoretically speaking the case of centralization of revenues in the hands of the federal governments appears to be very sound in the case of under developed countries on the ground of economy and efficiency and balanced economic growth.

However, the practical point of view should not be totally ignored. If too much dependence of State government on central government for finance is accepted then the former may be reduced to the status of spending agencies of the federal government and may not feel as partners in progress. It is, therefore, concluded that central government and state governments both should be autonomous in the sphere of raising resources and performing their functions effectively, but periodical

adjustment in these aspects is necessary for the successful working of both governments.

2. Adequacy and elasticity – The principles of adequacy means that the resources of central and the state governments should be adequate so that each layer of government can discharge its obligations laid upon it. It stands for sufficiency of resources for the discharge its obligations laid upon it. It stands for sufficiency of resources for the discharge of functions and duties assigned. Thus, Sir Johan Latham, former Chief Justice of Australian High Court said "If a federal system with real independence in the state is to continue, the state must have financial resources under their own control reasonably adequate to meet their responsibilities."

Besides to adequacy, there should be elasticity in the financial resources. It means that resources should be capable of expansion in response to rapidly growing needs and responsibilities of the government concerned. Otherwise, the Federal Finance Scheme will become an obstacle in time s of economic and defense crisis. For this, each layer should have considerable initiative and freedom to raise finance.

3. Administrative economy and efficiency – For the success of central-state financial relations, it is very much required that the administrative cost should be minimum and there should be no frauds and evasion in matter of finances. It should also be taken into account that at the time of allocating resources as to whether a certain source can be better administered by federal or state government. Corruption and inter-regional smuggling are to be avoided and the resources of revenue are to be fully exploited.

Some other principles: Besides these principles, some scholars on the subject of central-state financial relations have added a few more principles in view of the needs and present conditions, especially of under-developed countries.

4. Principle of equity – Equity is an important canon of taxation laid down by Adam Smith. The applicability of this principle in federal system is important, because in the assignment and allocation of functions, there is an opportunity for inequity to creep in and may spoil the entire structure basically. Different state of a federation

may have disparity in the level of economic development and, therefore, according to this principle, the burden of taxation will be in equally distributed as the marginal sacrifice will be different in different states. The marginal sacrifice of the tax-payers of richer states will be less as compared to those of the poor states. Therefore, a need may arise to adjust the federal and states taxes in such a way that the marginal sacrifice of the federal and state taxation taken together is equal or nearly equal to every person, no matter in which state he resides. Therefore, there should be proper adjustment between federal and state taxation so as to make the tax burden on all citizens equitable as far as possible.

5. Principle of integration and coordination – The whole financial system of federation should be well integrated and each layer of financial system of federation should not be taken as completely isolated from the other layers of financial system. Integration of financial systems of federal and state governments is essential in contemporary federations. This should be done in a way that promotes working of federal financial system. The coordination of federal state should not be in taxation alone but in every aspect of finance. "The coordination of federal state and local finance should, however, be concerned not only within taxation. It should also embrace the current budgets, capital outlay programs and credit operations of various authorities and should be accompanied with a coordination of administrative activities as well."

6. Principles of accountability – freedom and democracy are sister institutions in a federal system. Therefore, in federal system such government should be accountable to its own legislative for its having and spending decisions and should make these decisions with due regard for their effect on other government.

7. Principle of uniformity – The financial system in a federation should be such as to enable each regional government to provide an adequate level of public service without resort to higher rates of taxation substantially than those of other regions.

8. Principle of fiscal access –This canon implies that the resources should grow with the increase in functions and responsibilities. The state governments should have access to develop new sources of revenue to meet their financial needs. There should be no bar on central and state governments in developing new sources of

revenue within their own prescribed fields to meet the growing financial needs. It implies that resources should grow with the increase in responsibilities.

The problem of federal finance should not be over shadowed by dogmas or rigid principles but should be solved by an approach of reality and pragmatism, so that healthy financial relations may develop. The conditions differ from time to time and, therefore, a fixed division of financial resources cannot be applied. Thus, division of resources should be subjected to flexibility and adaptability. There can be no final solution to the allocation of financial resources in a federal system. There can be only adjustments and re-allocation in the light of changing condition. Thus, rigidity should be replaced by dynamism and changes be made according to the needs of different layers of the government. "The importance of flexibility or adaptability in the distribution has been widely recognized." Flexibility seems to be sine-qua-non of a rational system of federal finance. According to Dr.Gyan Chand, the system of federal finance should be designed to meet the needs of changes that may have to be introduced in the interest of harmony and efficiency. It should be based on a large measure of general consent. It can, however, be concluded that central and state governments should collaborate in such a way that ensure maximum utilization of national resources, accelerated economic development, reduction in disparity and augmentation in production and productivity.

8.3. PROBLEMS OF FEDERAL FINANCE

In a unitary government there is centralized public finance; but in a federation two constitutionally independent fiscal systems operate upon the fiscal resources of the individual citizens.

There is multiplicity of taxing and spending authorities in a federation. Thus, in a federation, fiscal structure is decentralized, and wheels with it's the wheels operate in the financial machinery. Hence, it may be called multi-unit public finance. Thus, the federal finance faces the problem of "financial arrangement between the federal government and states. This is of crucial importance for them, for they

govern the effective powers of the center and regions in the field of economic affairs and the nature of their future development.

Thus, in federal system, the functions and duties of the state are divided between the central government and several state governments and they are generally defined in the constitution. The allocation of function and resources between the central and state governments, however, differ from country to country. The general principle on which the allocation of functions and duties are based is "whatever concerns the nation as a whole, principally external relations and inter-regional activities should be placed under the control of the central government and that all maters which are primarily of regional rather than common interest should remain in the hands of the regional government." It should however, be noted that functions and duties should be allocated in such a way that each layer of the government gets those functions and duties which it is able to perform. In other words, the main criterion in the allocation of functions is whether a particular function can best be discharged by the centre or by the states and the allocation should be made accordingly. Thus, following this principle, generally external affairs, foreign and inter-regional trade, shipping, inter-regional communications, defense, post and telegraph, etc, are assigned to the central government. Subjects of local interests such as education, health services, public works, social services, internal law and order, etc, are assigned to the state government. Broadly speaking, the functions which are of national importance have generally been assigned to the central government and those which are of local or regional importance have been assigned to the state governments.

It should, however, be kept in mind that these functions cannot be strictly separated in present times. There is no function in which both central and state governments are not interested. For instance, the central government is equally interested in the developmental functions like education, public health, etc. Similarly, state governments cannot ignore defense, communication, etc. Thus, there should be a close coordination between the policies of central government and state governments. In any case, the interests of central government should not come in conflict with state governments. Thus, James A. Marxwell rightly said that

"the practice of cooperative federalism does not correspond to the theory of separation of functions." Here, he also quotes, Morton Gordzins saying that "colors are mixed in marble cake, so functions are in the federal system."

Allocation of functions may create problem in the allocation of resources between central and state governments corresponding to their requirements. Therefore, "the fundamental problem of federal finance is that ensuring that the division of revenue between central and regional governments corresponds with the distribution of function in order that teach government may have the functional capacity to carry out its responsibilities as far as possible." This is a difficult problem which generally arises, in a federal set up. It is not easy to allocate functions between federal and state governments and when they are allocated, it is still harder to allocate resources between them, because both functions and the responsibilities for financing them over-lap. Besides, functions and responsibilities are dynamic in character. For instance, the responsibilities of the state government may be comparatively fewer fifty years back than what they are at present. Accordingly, the financial requirements of the state may be less at that time than what they are at present. And the same may be true for the central government. Thus, the success of federal finance depends upon the efficient solution of these problems and adjusting it with changing circumstances.

Problem of Imbalance in Financial Resources

Causes of imbalance:

It has been observed that the problem of imbalance in the allocation of financial resources and functions between center and all state governments generally arise because almost all important and elastic sources of revenue like customs, income tax, corporation tax, etc., are allocated to the federal government on the consideration of administrative efficiency. On the consideration of autonomy, state governments are assigned expenditures on social and developmental items. Thus, in practical life, it has been found that federal revenue grow more quickly than state revenues and state expenditures grow more quickly than the federal, while resources have increased in the account of Federal Government, need for spending has increased in the account of regional government. As a result, the

federal government has the resources and the state have responsibilities. Hence there is imbalance in the federal financial system.

This imbalance has led to a general strain. Even in a well established federation this problem exists. This has been due to the fact that federal and state governments had limited functions and utilize resources of revenue which were fairly separate. The scope of government now has expanded everywhere and the original division of functions and resources has been characterized as belonging to the 'Horse and Buggy Period'. With the expansion of functions, central government began to encroach upon the tax revenues of the regional government and the regional governments in turn have been faced with growing maladjustments between resources and functions.

There is one other aspect of this problem; there are differences in the levels of the economic development leading to marked disparities in income and wealth of the constituent units. In this context Mr.K.V.S. Sastri said that "the question of financial imbalances is made worse by the fact of inter-regional inequalities in economic development and fiscal capacity." Thus, for bringing nation-wide uniformity in economic and social development, there will be greater than average financial strain for the poorer states in a federation, and, therefore, the ideal of "welfare state" may suffer. Thus, financial resources are in paucity, where they are needed most.

With the growth of activities of the modern state on the one hand and the lop sided allocation of financial resources on the other, it becomes inevitable to make adjustments into the financial system of federation. However, there cannot be any final solution to the problem. There can, however, be adjustments, reallocations or transfer of resources in the light of changing circumstances.

How to Remove Imbalances

The financial imbalance between federal and state governments may be corrected either by transferring some functions from states to central government or by transferring some resources from federal governments to state governments. However, no developing society can afford a rigid division of powers and functions. If there are great inequalities in the economic and social development to different

constituent units, and it is desired in the national interest to mitigate them, the federal government may undertake the functions which lie in the sphere of regional governments; Switzerland provides an example of such adjustment. Functions, such as social security, can easily be transferred to federal government. This was also to bring uniformity in the standard of social service. But this step may generally be opposed by state government on the ground of interference with autonomy.

The problem of imbalance between federal and state governments can be solved by transferring certain federal taxes to the state governments. But, this is opposed on ground of uniformity of rates and administrative efficiency. However, if it is thought highly important to maintain the rights of the states vis-à-vis those of federal government, one should favor as much financial autonomy for the states as possible. States should not starve for funds or be always looking at center for help. Thus, the financial imbalance between federal and state governments should be removed.

This imbalance of financial resources between the central and state governments can be solved by transferring funds from the center to state governments. The practice is very common in almost all the federations. The common wealth grant commission of Australia observes that "we have an accepted practice of transferring large and increasing sums from commonwealth to state governments primarily because the commonwealth can raise the money more easily." Thus, by transfer of funds from the federal to states government, the financial balance is achieved. Therefore, inter-governmental financial transfer constitutes an integral part of the system of federal finance in maintaining financial equilibrium. It may assume various forms, which have been discussed as follows.

8.4. FORMS OF INTER-GOVERNMENTAL FINANCIAL TRANSFER

1. **Distributive Pool Method, or Distribution of Tax Proceeds, or Tax Sharing:**

According to this method, pre-determined proportions of the proceeds of certain central taxes are combined into a single pool, and the contents of this pool are then allocated percent wise to different states on a pre-determined basis. Three problems are involved in putting this method into practice, which taxes should be

shared, what proportion of these taxes should be assigned to the regional government, and how the share of each state should be determined.

The taxes to be shared are mentioned in the constitution of the federation concerned. As regards the proportion of the shared taxes to be assigned to the states, it may also be provided for in the constitution itself. In India and certain African Federations a commission, set up in terms of the constitution, decides the share of taxes to be assigned to the states. In Canada, it is a matter of five-yearly agreements between federal and provincial governments. In this respect, Indian provisions have flexibility. The finance commission fixes the proportion according to the needs of the state and it has been increased by the succeeding finance commissions.

It should, however, be noted that, if the proportion of shared taxes to be assigned to the states is laid down in the constitution, it will make the system rigid, as changes in the constitution cannot easily be made.

The other problem is concerned with the determination of each state share in the distributive pool. However, this is a tough problem. In Ethiopia the House of Federation determines the share of each state and in India and certain African Federation, this is determined by an Independent Finance Commission on the basis of such factors as the size of population, economic and social backwardness and contribution of each unit in the divisible pool. Thus, allocation to the states from the distributive pool should be done according to the principle of need, keeping in view with the size of population, economic and social backwardness, responsibilities which the government has to perform.

In Ethiopia, a combination of both the principles (i.e., population and contribution) is followed. For instance, the proceeds of income tax from the divisible pool may be allocated to each state, 80 percent on the basis of population and 20 percent on the basis of collection. It is done, because population is not only considered as the criterion of needs of the state but per-capita income and contribution has also been given due consideration.

Advantages and Disadvantages:

1. Distributive pool method has certain advantages. In the first place, the superior position of the central government is maintained without destroying autonomy of the regional governments.
2. Secondly, the method has the merit of simplicity
3. Thirdly, the method is helpful in distributing the proceeds in equitable and efficient manner. In this context the requirements of the centre as well as those of the component states can be met in the most equitable and efficient manner, by distributing the proceeds after these have been collected by the central government, rather than by dividing power of tax collection between centre and states which would not only means high costs of decentralized collection and large scope for evasion but also varying rates of taxation in different areas and rigidity of distribution in the face of changing requirements.
4. Regional governments would be encouraged to undertake those activities for which Federal Government would be interested in those activities of individual states which will bring them on equal footing.
5. Fifthly, the share of regional government will expand with the expansion of tax revenue of the central government.
6. Lastly, it involves some measures of redistribution of national wealth.

But, this device also suffers from certain defects. For instance, there will be fluctuations in their share, upward as well as downward and the regional government may not have the capacity to react to these changes. In this context, Harold M.Grove said that "this technique is attractive for those who attach supreme importance to logical and simple mechanism, but encounters impressive objections. It involves a high degree of centralization as to both levies and administration. The fiscal independence of the regional units under sharing is about the same as that of minor son placed upon a revocable allowance by a generous father."

2. Loans:

Loans play a special role in federal set up. Loans can be given by the center to the states or by states to the center. However in almost all the countries, the common

practice has been-loan given by center to the states. At the same time the state governments should follow principle of economy while spending the loans.

3. Supplementary Levies

According to this method the principal tax is levied by the federal government and supplementary tax is levied by the regional governments or vice versa. Generally, regional governments levy supplementary tax over the principal tax levied by the federal government. States add a percentage to the national levy for their own use. "It secures an integrated tax and is administratively efficient, since assessment and collection will be the responsibility of the federal government." It should, however, be noted that a ceiling has to be put over the state's supplementary levy, so that the tax burden may not become heavy or may not exceed 100 percent.

4. Grants:

If taxation devices are insufficient to correct the imbalance between revenues and expenditure of the regional governments the other obvious solution is grant from the federal to the regional governments. The system of grants is an effective instrument for bridging the gap between revenues and expenditure of the regional governments. It is a device for making the constitution more flexible and is a means of modifying the distribution of tax burden. The grants may be on a number of bases, there may be general grants or grants-in-aid and special grants. A new technique of giving grants is a matching grants system or specific purpose or conditional grants system or shared cost programs. In almost all the federations, there is provision for federal grants to the regional government.

Grants-in-aid are given to fill up the gap between the revenues and the expenditures of the regional governments. Generally, budgetary needs of the regional governments are the criterion for giving such grants. Different states may be given different amounts of grant in aid. Such grants leave the state budgeting unfettered, as their amounts may be utilized by the recipient units as they desire.