

MAECO 2.1



**M.A. ECONOMICS
SEMESTER - II**

**(REVISED SYLLABUS
AS PER NEP 2020)**

PUBLIC ECONOMICS

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Name of the Course
PUBLIC ECONOMICS

Semester-II

Credit-4

Module 1: Government in a Market Economy:

(15 Hours)

Theorems of Welfare Economics: Implications, Lump Sum Taxes and Transfers Rationale for State Intervention: Market Failures and Externalities, Tax and Regulation, Distribution, Social Choice, Voting Rules, Arrow Impossibility Theorem

Module 2: Public Expenditure: Rationale and Evaluation:

(15 Hours)

Public Goods: Pure and Local, Optimal provision, Lindahl's Voluntary Exchange Approach, Preference Revelation mechanism, Private provision of Public Goods, Merit Goods, Club Goods
Evaluation of Government Expenditure: Elements of Cost-Benefit analysis

Module 3: Taxation:

(15 Hours)

Basic Concepts of Tax Theory: Direct vs. Indirect Taxes, Ability to Pay, Horizontal and Vertical Equity. Commodity Taxation: Tax Rules, Optimal Commodity Taxation, Public Sector Pricing.
Income Taxation: Equity and Efficiency, Taxation and Labour Supply, Optimal Income Taxation (linear and non-linear). Tax Evasion: Basic Model, Auditing and Punishment.

Module 4: Reforms and Government:

(15 Hours)

Fiscal Rules: Rationale, International and Indian Experience. Decentralization: Decentralization Theorem. India's Federal Structure: Taxation powers, Expenditure responsibilities, Intergovernmental transfers, VAT, GST

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GOVERNMENT IN A MARKET ECONOMY – I

Unit Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Theorems of Welfare Economics
- 1.3 Lump Sum Taxes and Transfers
- 1.4 Rationale for State Intervention
- 1.5 Market Failure
- 1.6 Externalities
- 1.7 Conclusion
- 1.8 Questions

1.0 OBJECTIVES

After studying this unit, learners will be able to

- Know the two fundamental theorems of welfare economics.
- Identify the rationale for government's intervention in market economy
- Evaluate the lump sum taxes and transfers.
- Define the concept of 'market failure' and identify the sources of market failure.
- Understand the concept Externalities

1.1 INTRODUCTION

The study of public economics has a long tradition. It developed out of the original political economy of J.S. Mill and David Ricardo, through the public finance tradition of tax analysis into public economics, and has now returned to its roots with the development of the new political economy. From the inception of economics as a scientific discipline, public economics has always been one of its core branches.

Public Economics is about the Government and the economic effects of its policies. In the widest same, it is the study of economic efficiency, distribution and government policy. It includes topics as diverse as responses to market failure due to the existence of externalities, the motives for that evasion, and the explanation of bureaucratic decision making. In order to reach into all of these areas, public economics has developed from its initial narrow forces upon the collection and spending of government revenues, to its present concern with every artifact of government interaction with the economy. Public economics is concerned with both how the government makes decisions and what decisions it should make. In the broadest interpretation, public economics is the study of economic efficiency, distribution, and government economic policy. The subject encompasses topics as diverse as responses to market failure due to the existence of externalities, the motives for tax evasion, and the explanation of bureaucratic decision-making. In order to reach into all of these areas, public economics has developed from its initial narrow focus on the collection and spending of government revenues to its present concern with every aspect of government interaction with the economy. Public economics attempts to understand both how the government makes decisions and what decisions it should make.

1.2 THEOREMS OF WELFARE ECONOMICS

A major concept in welfare economics is the notion of Pareto efficiency in evaluating economic allocations. But it must also be remembered that Pareto efficiency has nothing to say about the distribution of welfare across people. Consumer utility, production mixes, and factor input combinations consistent with efficiency come up with lots of combinations. In other words, there will usually be many Pareto efficient allocations. So how can society choose the most desirable among them? This decision is made when we specify the social welfare function, which embodies value judgments about interpersonal utility. Since the concept of efficiency plays a major role in welfare economics, we begin by discussing it in brief. After that, we will study the two fundamental theorems of welfare economics.

A Pareto efficient allocation is one where we cannot make an individual better off without making the other one worse off. To reach the ideal state, three criteria's are required to meet:

The condition for Pareto optimality with regard to the distribution of goods among consumers requires that the marginal rate of substitution (MRS) between any two goods, say X and Y, must be the same for any pair of consumers. Let A and B be the two consumers between whom two goods X and Y are to be distributed. Under perfect competition prices of all goods are given and same for every consumer. It is also assumed that consumers try to maximize their satisfaction subject to their budget constraint. Now, given the prices of two goods, consumer

A will maximize his satisfaction when he is buying the two goods—X and Y in such amounts that:

$$A \quad \text{MRS} = P_x/P_y \quad \text{-----} \quad 1$$

Likewise, the consumer B will also be in equilibrium (maximize his satisfaction) when he is purchasing and consuming the two goods—X and Y in such amounts that:

$$\text{MRS}_{xy}^B = P_x/P_y \quad \text{-----} \quad 2$$

Since this is an essential condition of perfect competition that prices of goods are the same or uniform for all consumers, the price ratio of the two goods P_x/P_y in equations (1) and (2) above will be the same for consumer's —A and—B.

It, therefore, follows from equations (1) and (2) above that under conditions of perfect competition marginal rate of substitution between two goods —X 'and Y' will be equal for the two consumers. That is,

$$\text{MRS}^A = P_x/P_y = \text{MRS}^B = P_x/P_y \quad \text{-----} \quad 3$$

This result will hold well between any pair of goods for any pair of consumers.

It has been shown above that perfectly competitive equilibrium is Pareto optimal. This is called the fundamental theorem of welfare economics. This is also called the invisible hand theorem. The belief that competitive market economy provides an efficient means of allocating scarce resources goes back to Adam Smith who argued in his famous book "Wealth of Nations" that individuals pursue their self-interest, they operate through markets to promote the welfare of others and welfare of the society as a whole. Thus individual consumers seek to maximize their own satisfaction and producers pursue to maximize their own profits. Even though promoting the interests of the society as a whole is not a part of their intention, they are led by the invisible forces of the market system. When ex promotes the interest of the society as a whole.

Perfect competition in the market satisfies Pareto's optimum condition of exchange, that is a) MRS_{xy} of any pair of individuals under it is the same, b) Pareto's optimality Condition of production, that is, MRTS_{LK} of any pair of firms using the two factors for producing products under it is the same, and c) Pareto's condition for optimal direction of production to product mix, namely, MRT_{xy} in production equals MRS_{xy} of consumers.

There are two fundamental theorems of welfare economics. The welfare properties of the economy, which are commonly known as the Two Theorems of Welfare Economics, are the basis for claims concerning the desirability of the competitive outcome. In brief, the First Theorem states that a competitive equilibrium is Pareto-efficient and the Second Theorem that any Pareto-efficient allocation can be decentralized as a competitive

equilibrium. Taken together, they have significant implications for policy and, at face value, seem to make a compelling case for the encouragement of competition. The Two Theorems are easily demonstrated for a two-consumer exchange economy by using the Edgeworth box diagram. The first step is to isolate the Pareto-efficient allocations.

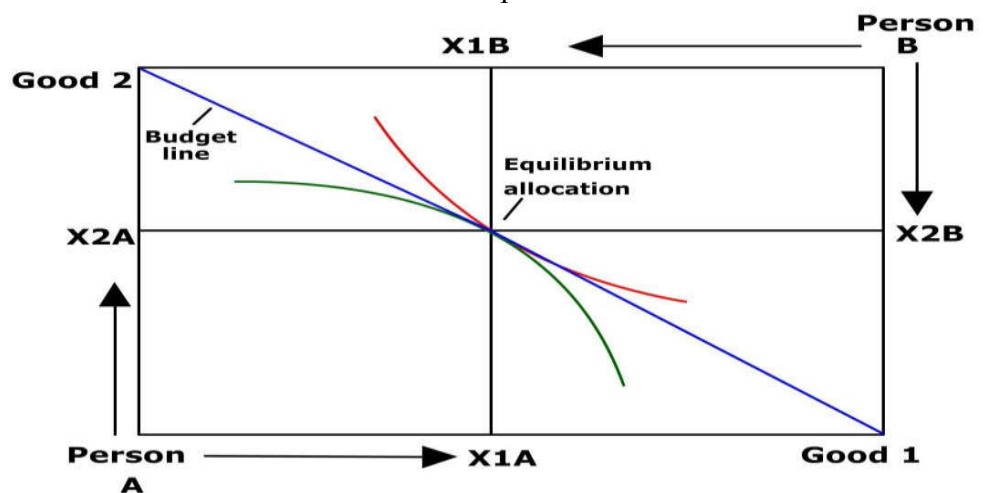
1.2.1 The First Welfare Theorem:

It has been deemed by several economists that perfect competition is an ideal market form which ensures the attainment of Pareto optimality or maximum social welfare as it fulfils all the marginal conditions required for the purpose. Essentially Pareto optimality involves efficiency in the use and allocation of resources at the disposal of a community. As seen above, if Pareto efficiency is not achieved it implies one can be made better off without anyone being made worse off. In this case there is scope of increasing social welfare by reorganization of resources, say through a public policy. An important feature of general equilibrium reached in perfectly competitive markets leads to maximum social welfare or economic efficiency in the sense of Pareto optimality. This is known as the first or fundamental theorem of welfare economics. According to this theorem, all possibilities of increasing welfare of the individuals from exchange between them or allocation of resources in the production of different goods. In other words, the first fundamental theorem of welfare economics postulates that general competitive equilibrium is Pareto optimal.

This theorem states that the equilibrium in a set of competitive markets is Pareto efficient. This is illustrated in Figure 1.1.

Figure 1.1 Pareto efficient Equilibrium

It turns out that the market equilibrium allocation is Pareto efficient. This can be proved as follows: an allocation in the Edgeworth box is Pareto efficient if the set of bundles that A prefers doesn't intersect the set of bundles that B prefers. That is to say that the indifference curves of the two agents (A and B) must be tangential to each other at any Pareto efficient allocation in the interior of box. If the two indifference curves are not tangent at an allocation, then they must cross. In such a situation, there must be some mutually advantageous trade --- so that point cannot be



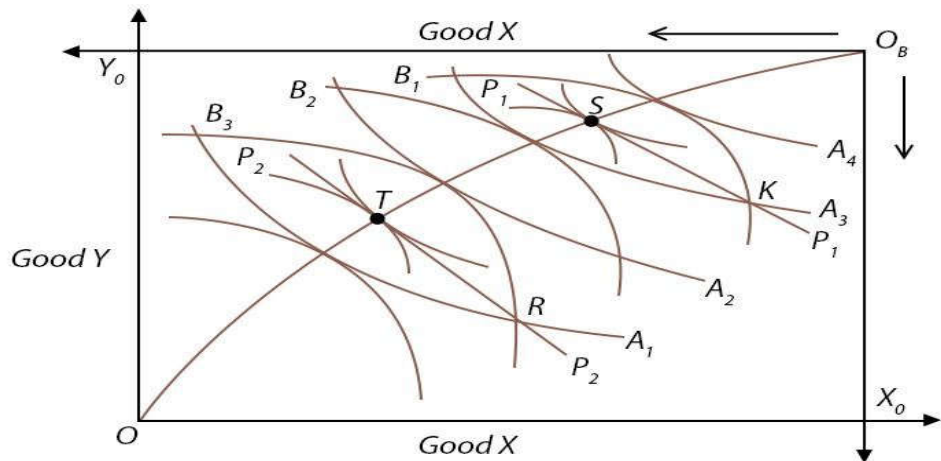
bundles that B prefers. That is to say that the indifference curves of the two agents (A and B) must be tangential to each other at any Pareto efficient allocation in the interior of box. If the two indifference curves are not tangent at an allocation, then they must cross. In such a situation, there must be some mutually advantageous trade --- so that point cannot be

Pareto efficient. But at the market equilibrium, the total amount that A and B want to buy of each good must equal to the total amount available. Said another way, the set of bundles preferred by A must lie above his budget set, and the same thing holds for B. This implies that in equilibrium, each person is choosing the most-preferred bundle in his budget set, and the choices exhaust the available supply. Thus, the two sets of preferred allocations cannot intersect. This means that there are no allocations that both agents prefer to the equilibrium allocation, so the equilibrium is Pareto efficient.

Summary, the First Welfare Theorem guarantees that a competitive market will exhaust all of the gains from trade an equilibrium allocation achieved by a set of competitive markets will necessarily be Pareto efficient. The first welfare theorem ensures that a perfect competitive equilibrium is Pareto efficient.

1.2.3 The Second Welfare Theorem:

According to above explanation perfectly competitive general equilibrium leads to the first or fundamental theorem of welfare economics, that is, competitive equilibrium is Pareto optimum. There is also a second theorem of welfare economics according to which for every Pareto optimal situation there is a competitive equilibrium, given the initial income distribution or factor endowment. Take for instance the case of Pareto optimality of exchange. When the Indifference curves, are convex to the origin, every efficient allocation (i.e., Pareto optimal distribution) on the contract curve for exchange is a competitive equilibrium for some given initial distribution of goods or allocation of factors (i.e. income) among individuals. This implies that whatever the initial distribution of Income In a society the corresponding Pareto optimality or economic efficiency with regard to exchange and distribution of goods among the Individuals can be reached through perfectly competitive equilibrium. Consider Figure next where allocation of goods, between two individuals is shown. If initial distribution of goods between the two goods is given by point K, then perfect competition can lead to the determination of price ratio of goods as shown by price line P_1 , P_1 , so that through exchange the two individuals can reach at point S which depicts higher level of welfare for both and as it lies at the contract curve, it is Pareto optimal. Similarly, If Initial distribution of goods (i.e. real income) is given by point R, then perfect competition can determine price ratio of the two goods as given by price line P_2 , P_2 , so that through exchange the two individuals can reach point. This theorem states that when preferences are convex, a Pareto efficient allocation is equilibrium for some set of prices. This is illustrated in Figure 1.2.

Figure 1.2 the Second Welfare Theorem

(Ref: Dr. H L Ahuja, Advanced Economic theory, 19th revised edition)

This observation gives us the Second Theorem of Welfare Economics: if all agents have convex preferences, then there will always be a set of prices such that each Pareto efficient allocation is a market equilibrium for an appropriate assignment of endowments. Second welfare theorem states that any Pareto efficient allocation can be rationalized as competitive market equilibrium.

Summary, Pareto Efficiency/Optimality it is the state of allocation of resources such that no one can be made better off without making someone else worse off. A Pareto efficient allocation is one in which there is no feasible reallocation of the goods that would make all consumers at least as well-off and at least one consumer strictly better off. The First theorem of Welfare Economics states that a competitive equilibrium is Pareto efficient. The Second theorem of Welfare Economics states that as long as preferences are convex, then every Pareto efficient allocation can be supported as a competitive equilibrium.

1.3 LUMP SUM TAXES AND TRANSFERS

The discussion of the Second Theorem noted that it does not describe the mechanism through which the decentralization is achieved. It is instead implicit in the statement of the theorem that the consumers are given sufficient income to purchase the consumption plans forming the Pareto-efficient allocation. Any practical value of the Second Theorem depends on the government being able to allocate the required income levels. The way in which the theorem sees this as being done is by making what are called lump-sum transfers between consumers.

A transfer is defined as lump sum if no change in a consumer's behavior can affect the size of the transfer. For example, a consumer choosing to work less hard or reducing the consumption of a commodity must not be able to affect the size of the transfer. This differentiates a lump-sum transfer from other taxes, such as income or commodity taxes, for which changes in behavior do affect the value of the tax payment. Lump sum

transfers have a very special role in the theoretical analysis of public economics because, as we will show, they are the idealized redistributive instrument.

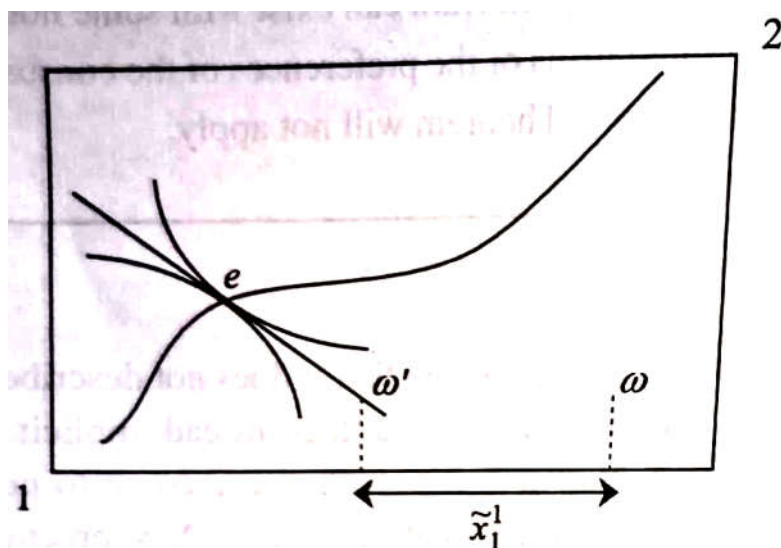
The lump-sum transfers envisaged by the Second Theorem involve quantities of endowments and shares being transferred among consumers to ensure the necessary income levels. Some consumers would gain from the transfers; others would lose. Although the value of the transfer cannot be changed, lump-sum transfers do affect consumers' behavior because their incomes are either reduced or increased by the transfers—the transfers have an income effect but do not lead to a substitution effect between commodities. Without recourse to such transfers, the decentralization of the selected allocation would not be possible.

The illustration of the Second Theorem in an exchange economy in **figure no 1.3** makes clear the role and nature of lump-sum transfers. The initial endowment point is denoted ω , and this is the starting point for the economy. If we assume that the Pareto-efficient allocation at point e is to be decentralized, then the income levels have to be modified to achieve the new budget constraint. At the initial point the income level of h is $p\omega^h$ when evaluated at the equilibrium prices $\hat{p}$. The value of the transfer to consumer h that is necessary to achieve the new budget constraint is

$$M^h - \hat{p}\omega^h = \hat{p}x^h - \hat{p}\omega^h.$$

One way of ensuring this is to transfer a quantity x_1^1 of good 1 from consumer 1 to consumer 2. But any transfer of commodities with the same value would work equally well.

Fig. 1.3 Lump-sum Transfers



(Ref. Jean Hindriks and Gareth D. Myles, 'Intermediate Public Economics' 2013)

There is a problem, though, if we attempt to interpret the model this literally. For most people, income is earned almost entirely from the sale

of labour so that their endowment is simply lifetime labour supply. This makes it impossible to transfer the endowment since one person's labour cannot be given to another. Responding to such difficulties leads to the reformulation of lump-sum transfers in terms of lump-sum taxes. Suppose that the two consumers both sell the lifetime endowments at price $\hat{p}$. This generates incomes $\hat{p}\omega^1$ and $\hat{p}\omega^2$ for the two consumers. Now make consumer 1 pay a tax of amount $T_1 = \hat{p} \times l_1$ and give this tax revenue to consumer 2. Consumer 2 therefore pays a negative tax (or, in simpler terms, receives a subsidy) of $T_2 = -\hat{p} \times l_1 = -T_1$. The pair of taxes T_1, T_2 moves the budget constraint in exactly the same way as the lump-sum transfer of endowment. The pair of taxes and the transfer of endowment are therefore economically equivalent and have the same effect on the economy. The taxes are also lump sum because they are determined without reference to either consumer's behavior and their values cannot be affected by any change in behavior.

Lump-sum taxes have a central role in public economics due to their success in achieving distributional objectives. It should be clear from the discussion above that the economy's total endowment is not reduced by the application of the lump-sum taxes. This point applies to lump-sum taxes in general. As households cannot affect the level of the tax by changing their behavior, lump-sum taxes do not lead to any distortions in choice. There are also no resources lost due to the imposition of lump-sum taxes, so redistribution is achieved with no efficiency cost. In short, if they can be employed in the manner described they are the perfect taxes.

Imagine that each individual in a society can be described by a list of personal attributes upon which the society wishes to condition taxes and transfers (e.g. tastes, needs, talents and endowments). Individuals are also identified by their names and possibly other publicly-observable attributes (such as eye color) which are not judged to be relevant attributes for taxation. The list of personal attributes associated to every agent is not publicly known but is the private information of each individual.

The motivation for working the high-ability type harder is the most efficient way to raise the level of total income for the society which can then be redistributed using the lump-sum taxes. Thus, the high-ability type works harder than the low-ability type but they only get to consume the same. Therefore, the high-ability type is left with a lower utility level than the low-ability type after redistribution. Now suppose that the government can observe incomes but cannot observe the ability of each individual. Assume it still attempts to implement the optimal lump-sum taxes. The taxes are obviously not incentive compatible because, if the high-ability type understand the outcome, they can always choose to earn as little as the low-ability type. Doing so then qualifies the high-ability type for the redistribution aimed at the low-ability type. This will provide them with a higher utility level than if they did not act strategically. The optimal lump-sum taxes cannot then be implemented with private information. Who would work hard if the government stood ready to tax away the result- in income? Optimal (utilitarian) lump-sum redistribution makes the more able individuals worse off because it requires them to work harder but

does not reward them with additional consumption. In this context, it is profitable for the more able individuals to make themselves seem incapable. Many people believe there is something unfair about inequality that arises from the fact that some people are born with superior innate ability or similar advantage over others. But many people also think it morally right that one should be able to keep some of the fruits of one's own effort. This example may have been simple but its message is far-reaching. The Soviet Union and other communist economies have shown us that it is impossible to generate wealth without offering adequate material incentives. Incentive constraints inevitably limit the scope for redistribution.

The observations of the example are now shown to reflect a general principle concerning the incentive compatibility of optimal lump-sum taxes. We state the formal version of this result for a "large economy" which is one where every individual is insignificant and so powerless to affect the distribution of announcements. In other words, there is a continuum of different agents which is the idealization of a competitive economy with a very large number of small agents with no market power. The theorem shows that optimal lump-sum taxation is never incentive compatible

Implies that the lump-sum taxes the government would like to implement must rely on information about personal attributes which individuals must either report or reveal indirectly through their actions. Lump-sum taxes are incentive incompatible when at least one individual who understands how the information that is reported will be used, chooses to report falsely. We have already argued in Chapter 7 that there can be incentive problems in implementing optimal lump-sum taxes. What we now wish to demonstrate is that these problems are fundamental ones and will always afflict any attempt to implement optimal lump-sum taxes. The argument will show that optimal lump-sum taxes are not incentive compatible. This does not mean that lump-sum taxes cannot be used - for instance all individuals could be taxed the same amount - but only that the existence of private information places limits on the extent to which taxes can be differentiated before incentives for the false revelation of information come into play.

In conclusion, lump-sum taxes can achieve the optimal allocation of resources provided all information is public. If some of the characteristics which are relevant for taxation are private information then the optimal lump-sum taxes are not incentive compatible. Information limitations therefore place a limit upon the extent to which redistribution can be undertaken using lump-sum taxation

1.4 RATIONALE FOR STATE INTERVENTION

'Government (State) Intervention' is used here as shorthand for "government intervention in the operation of the economy". Since the economy is one of the mechanisms by which a society moves to satisfy its objectives, intervention is usually triggered by dissatisfaction with the way the economy is performing in this regard. To identify all the categories of

justifications for intervention, and to specify the dimensions across which the impact of interventions should be judged, it is necessary to contemplate that subset of social objectives whose degree of satisfaction is susceptible to plausible differences in the way the economy operates.

1.4.1 What are the main reasons for government intervention in markets?

The main reasons for policy intervention by the government are:

- 1) To correct for market failures
- 2) To achieve a more equitable distribution of income and wealth
- 3) To improve the performance of the economy.

1.4.2 The rationale for State intervention in the economy:

Government economic policy, measures by which a government attempts to influence the economy. The national budget generally reflects the economic policy of a government, and it is partly through the budget that the government exercises its three principal methods of establishing control: the allocative function, the stabilization function, and the distributive function.

Richard Musgrave, in his classic treatise ‘The Theory of Public Finance’ (1959), introduced the three branch taxonomy of the role of government in a market economy. Musgrave believed that, for conceptual purposes, the functions of government are to be separated into three, namely, resource allocation, (efficiency), incomedistribution (fairness) and macroeconomic stabilization. The allocation and distribution functions are primarily microeconomic functions, while stabilization is a macroeconomic function. The allocation function aims to correct the sources of inefficiency in the economic system while the distribution role ensures that the distribution of wealth and income is fair. Monetary and fiscal policy, the problems of macroeconomic stability, maintenance of high levels of employment and price stability etc fall under the stabilization function.

In the absence of specific market failures, competitive markets deliver the efficient amount of all goods and services. Efficiency in this context refers to efficiency in allocating resources. (**Allocative efficiency**) – making the best use of scarce resources to meet people’s needs and preferences. The term market failure refers specifically to the *causes* of the market’s failure to deliver an efficient allocation – that is problems with the mechanisms through which the market works, not the *consequences* of the failure to deliver a certain outcome. Only public sector interventions to improve equity or social justice are made to rectify an outcome of the market which is seen to be undesirable by elected and accountable politicians, rather than to rectify market failure.

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Rational government intervene for social or equity reasons. Such interventions are based on the subjective decisions and judgments of democratically accountable politicians, but a market failure framework should still be used to inform decisions and to ensure the desired outcome is achieved in the most efficient and effective way. State intervene for social or equity objectives and a rationale for public sector intervention framework will help how the government can intervene successfully to achieve social aims Govt. should only intervene in the economy when markets are not efficient and when the intervention would improve efficiency. The first condition for State intervention is the existence of a market failure which makes the market inefficient. This is a necessary condition for intervention, but it is not sufficient on its own to justify public sector intervention. The second condition is that the intervention will make an improvement. The state should only intervene when there is a market failure and when intervention is likely to be effective.

1) Provision of Public good, Merit Goods and Government intervention:

Public good refers to a commodity or service that is made available to all members of society. Some examples of public goods include law enforcement, national defense, and the rule of law. Public goods also refer to more basic goods, such as access to clean air and drinking water. The two main criteria that distinguish a public good are that it must be non-rivalries and non-excludable. Non-rivalries means that the goods do not dwindle in supply as more people consume them; non-excludability means that the good is available to all citizens. An important issue that is related to public goods is referred to as the free-rider problem.

Merit goods are the goods that are provided generally by the government to certain sections of the society. Unlike in the case of pure public goods, the merit goods are not provided to the entire society; rather they are given to certain targeted people. The government here believe that the deserving people may under-consume such goods and hence provides these to them at low cost or no cost. Merit goods are not provided based on consumers' preferences. Rather, they are given by the government to its preferences. Merit goods are given by the government to a particular section of society. But in the case of public goods, they are provided to all sections of the society. Merit goods produce social benefits by directly benefiting the sections that receive those goods. When primary education is provided to poor sections, it benefits the nation. Merit goods produce positive externalities. This means that as a result of merit goods supply, the receivers give back some related benefits to society. Merit goods are

aimed for personal consumption and not for the consumption of all. Some examples of merit goods include primary education, basic health care, and life insurance for poor people etc.

2) Externalities, Market failure and Government intervention:

Externality, a term used in economics, refers to the costs incurred or the benefits received by a third party, wherein such a third party does not have control over the generation of the costs or benefits. An externality is a cost or benefit caused by a producer that is not financially incurred or received by that producer. An externality can either be both positive and negative and can stem from either the production or consumption of a good or service. Externalities arise when there is a difference between the private costs/benefits and the total social or collective cost/benefit of the activity faced by society as a whole. Since an individual looks only at the private costs and benefits, his decisions are not collectively the most efficient. Where the activity imposes an external cost to others there will be too much of the activity – individuals do not bear the full costs so they engage in excessive amounts of the activity. These are referred to as negative externalities. A common example is river pollution caused by industrial production, which affects other users of the river such as anglers or water companies. The industrial company may decide to increase production without considering the effects of this on fish stocks, the enjoyment of local anglers, or the extra costs imposed on water companies for water treatment. Where the activity imposes an external benefit there will be too little of the activity – individuals do not retain all of the benefits so they under-invest in the activity. These are referred to as positive externalities. An example is investment in improving a derelict house in a terrace which may have additional positive benefits to the saleable value of other houses in the terrace. In this way, some positive externalities are similar to public goods – the benefits extend beyond those who pay for the activity. Goods which have positive externalities for society and would be under-supplied by the market are sometimes referred to as merit goods.

The activities with negative externalities (those that pollute the environment) impose costs on the society that are not paid for by the provider and hence the market oversupplies those goods from a social point of view. Government can curb negative externalities through regulation or taxation. The inefficiencies associated with technical externalities constitute a form of “market failure.” Private market-based decision making fails to yield efficient outcomes from a general welfare perspective. These economists recommended government intervention to correct for the effects of externalities. In *The Economics of Welfare*, British economist Arthur Pigou suggested that governments tax polluters an amount equivalent to the cost of the harm to others. Such a tax would yield the market outcome that would have prevailed with adequate internalization of all costs by polluters. By the same logic, governments should subsidize those who generate positive externalities, in the amount that others benefit. Market-based corrective solutions, government intervention is often required to ensure that benefits and costs are fully internalized.

In some circumstance the market can resolve the problem of externalities:

- Through mergers of the parties involved so that one new larger party ‘internalizes the externality’ (so using the example above this would involve merging the industrial producer and the water company).
- Through negotiation if there are clear and enforceable property rights. Both of these methods of resolving the externality are more effective when there are relatively few parties involved.
- An important intervention by government in overcoming externalities is the definition of property rights and a mechanism for the enforcement of those rights. Other interventions to encourage provision of positive externalities, or to prevent excessive amounts of negative externalities, are only necessary where:
- Property rights are not enforceable (for example the provision of clean air).
- There would be so many people involved that the transaction costs of enforcement are too high (an example of this maybe traffic congestion).
- An example of a positive externality is preventative health care such as vaccinations which stop the spread of infectious diseases. Similarly, investment in early year’s education is likely to have positive externalities for a country’s social cohesion and competitiveness.

3) Government Intervention for Equity consideration

Adjustment of the distribution of income and wealth to assure conformance with what society considers a ‘fair’ or ‘just’ state of distribution. The distribution of income and wealth determined by the market forces and laws of inheritance involves a substantial degree of inequality. Tax transfer policies of the government play an important role in reducing the inequalities in income and wealth in the economy. State intervention to improve equity or distributional outcomes may be to:

- Improve the distribution of market outcomes between rich and poor, for example through taxes and income support – vertical equity.
- Ensure people in similar circumstances are treated equally, for example have equal access to services – horizontal equity.
- Consider the needs and outcomes for future generations, for example ensure that future generations are not made worse off by the activities of the present generation.

Summary, Government rational intervention should aim to try and help markets work more efficiently rather than to supplant them altogether. This is increasingly being recognized by governments and others.

1.5 MARKET FAILURE

Market economy provides private goods efficiently. The markets are characterized by imperfect competition, production is subject to decreasing cost. Consumers are forced with advertisement. Market failure occurs when the free market fails to allocate resources efficiently or equitably. Allocative efficiency is achieved when it is impossible to change the allocation of resources in the economy in a way that will increase the welfare of society. This occurs when marginal social benefit is equal to marginal social cost where marginal social benefit is the sum of marginal private benefit and marginal external benefit and marginal social cost is the sum of marginal private cost and marginal external cost. External costs and benefits, or externalities, are costs and benefits of consumption or production experienced by society other than the producers or the consumers.

1.5.1 Definition of Market Failure:

“Market Failure means do not act in a manner which it tends to encourage competition and bring about efficiency.”

1.5.2 Causes (Sources) of Market Failures:

Market failure refers to the inefficient distribution of goods and services in the free market. Market failure may occur in the market for several reasons,

1) Market Power:

Monopoly leads to imbalance of power in market- monopolist restrict Quantity supplied and increase prices in market to make super profit. Market monopolies can lead to under-production and higher price than would exist under conditions of competition, cause consumer welfare to be damaged. Dominance of market share and high price of goods /services at less than the level of optimization. Non-existence of Market despite need for the product or service for the purposes of competition policy, the most relevant of these is the existence of market power, or the absence of perfect competition. Market failure occurs when the conditions for perfect competition are not met. If the market fails, then government intervention designed to correct the market failure may bring benefits to society. However, government intervention may fail to secure these benefits, it can make matters worse and it can be the reason why there is market failure. This is known as government failure.

2) Externality and Market Failures :

The concept of market failure in the presence of externality is due to the fact that prices undervalue social costs. An externality refers to a cost or benefit resulting from a transaction that affects a third party that did not decide to be associated with the benefit or cost. It can be positive or negative. Externalities can arise between producers, between consumers, or between consumer and producers. An externality occurs if a person's

activity, such as consumption or production, affects the well-being of some other person or group of persons, for which she (he) or the group has not been compensated. The term externality comes from the fact that someone external to the action or transaction is affected by the production or consumption of the good.

A negative externality occurs if an activity creates costs (harm or discomfort) for uninvolved people. Examples of negative externalities: Cars and factories generate air pollution that affect people's health. Negative externality leads to the occurrence of additional costs, which the agent causing it fails to realize. As a result, in the presence of negative externality there is over-generation of the activity causing negative externality.

A positive externality occurs if an activity creates benefits for uninvolved people. Examples of positive externalities include, people who get vaccinations against a communicable disease reduce other people's chances of getting the disease. Positive externality, agents creating it fail to recognize the additional benefits generated by the activity and hence under-generate it. A positive externality provides a positive effect on the third party. For example, providing good public education mainly benefits the students, but the benefits of this public good will spill over to the whole society. On the other hand, a negative externality is a negative effect resulting from the consumption of a product, and that results in a negative impact on a third party. For example, even though cigarette smoking is primarily harmful to a smoker, it also causes a negative health impact on people around the smoker. We conclude that in the presence of positive externality, the market allocation is under-produced than the social optimal and hence market allocation is called as inefficient and hence we see that in the presence of externality market fails.

3) Public goods and Market Failure:

Public goods are goods that are consumed by a large number of the population, and their cost does not increase with the increase in the number of consumers. Public goods are both non-rivalrous as well as non-excludable. Non-rivalries consumption means that the goods are allocated efficiently to the whole population if provided at zero cost, while non-excludable consumption means that the public goods cannot exclude non-payers from its consumption. Provision of public good is often faced with the free-rider problem. Free rider problem occurs in non-excludable goods case. Since the provision of public goods is where sum of marginal benefits equals to the marginal cost of providing the good, the individuals tend to free ride, that is, they tend to make use of the public good without making payment for that good. Free riding is one of the biggest challenges in the provision of public good, as it is very difficult to judge the true valuation of the public good to the individuals. Public goods create market failures if a section of the population that consumes the goods fails to pay but continues using the good as actual payers. For example, police service is a public good that every citizen is entitled to enjoy, regardless of whether or not they pay taxes to the government.

4) Asymmetric information and Market Failure:

Transactions where one party has access to more or better information than the other and chooses not to share it with others. Two forms of market failure associated with information asymmetry are: This creates an imbalance of power in market which can lead to market failures. One Moral hazard and second Adverse Selection. Imperfect information is any information that is missing, incomplete, or inaccurate. Asymmetric information is a specific type of imperfect information, where one party has more information than the other party. This can lead to a number of problems. For example, in the market for used cars, sellers often know more about the quality of the cars they are selling than buyers do. This is because sellers know the history of the car, while buyers can only see the current condition of the car.

Asymmetric / Imperfect information or information failure means that merit goods are under-produced while demerit goods are over-produced or over-consumed. Market failure may also result from the lack of appropriate information among the buyers or sellers. This means that the price of demand or supply does not reflect all the benefits or opportunity cost of a good. The lack of information on the buyer's side may mean that the buyer may be willing to pay a higher or lower price for the product because they don't know its actual benefits. On the other hand, inadequate information on the seller's side may mean that they may be willing to accept a higher or lower price for the product than the actual opportunity cost of producing it. Asymmetric information exists when in a two-party trade one party has greater information than the other party. It leads to market failure with one reaching an inefficient allocation of resources. Such an inefficient solution results due to adverse selection that arises when there exist asymmetric information. In adverse selection the high quality goods or worker leave the market and market essentially consists of low quality goods or workers. Examples of markets suffering from asymmetric information are— market for used cars, health insurance market, market for credit, market for labour, etc. There is deadweight loss to the society in the presence of asymmetric information, as efficient allocation of resources is not happening.

1.5.3 Solutions to Market Failures (Government intervention correct for Market Failure)

Market failure occurs when the market fails to give efficient allocation of resources, due to non-fulfilment of any of above conditions. It is a scenario where individual pursuit of self-interest leads to inefficient results – which can be improved upon from societal point of view. Government can play a crucial role to improve the inefficient market outcomes. Market Failure Thus Provides Economic Rationale for Following Government Interventions

1) To correct market imperfections:

Government regulation and measures will be needed to secure the conditions necessary for the functioning of market mechanism. Government has an important role at correcting market failures arising from imperfect information, imperfect competition, externalities and scarcity of public goods. In the case of imperfect competitions, firms use their market power to raise prices and reduce output. Imperfect information can lead to inefficient functioning of product and labour markets. The private sector in a free-markets cannot profitably supply to consumers public goods that are needed to meet people's needs and wants.

2) Provision of goods and services (public goods, merit goods:

Even if the legal structure is provided and barriers to competition are removed, the production or consumption characteristics of certain goods like public goods and merit goods are such that they cannot be provided through the market. As a consequence the market fails in the provision of public goods. Thus, government has to ensure their provision.

3) Legislations defining property rights and responsibilities :

Defining individual property rights for the appropriate economic resource. Cleaning up a polluted lake, for instance, involves a free-rider problem if no one owns the lake. If there is an owner, however, that person can charge higher prices to fishermen, boaters, recreational users, and others who benefit from the lake. The possibility of overcoming the inefficiencies from externalities through bargaining among affected parties was first discussed by Ronald Coase (1960)—among the work that earned him a Nobel Prize in economics in 1991. For bargaining solutions to be feasible, property rights must be well defined, bargaining transaction costs must be low, and there must be no uncertainty or asymmetric information, when one side knows more than the other about the transaction

4) To correct the problems arising from externalities:

There will arise problems of "externalities" which lead to "market failure". This requires correction by the government either by way of budgetary provisions, subsidy or taxation. In the case of goods with positive externalities (like research) the firms produce too little of goods and in the case of goods with negative externalities (such as that generate pollution) the firms produce too much of goods. Governments can subsidize the production of goods with positive externalities.

Summary, Government regulation and measures will be needed to secure the conditions necessary for the functioning of market mechanism. Government has an important role at correcting market failures arising from imperfect information, imperfect competition, externalities and scarcity of public goods. In the case of imperfect competitions, firms use their market power to raise prices and reduce output. Imperfect

information can lead to inefficient functioning of product and labour markets

1.6 EXTERNALITIES

The British economist A. C. Pigou was the first to deal with externalities systematically. Pigou argued that in the presence of externalities we do not achieve a Pareto optimum even under perfect competition. If the externalities are present, the social benefit or cost resulting from the production of goods becomes a combination of private and external benefits or costs. An externality is a link between economic agents that lies outside the pricesystem of the economy. An externality has already been described as an effect upon one agent caused by another. This section expresses this description as a formal definition and then uses this to classify the various forms of externality. The way of representing these forms of externalities in economic models is then introduced. There have been several attempts at defining externalities, and of providing classifications of various types of externalities. Everyday examples include the pollution from a factory which harms a local fishery and the envy that is felt when a neighbor proudly displays a new car. Such externalities are not controlled directly by price - the fishery cannot choose to buy less pollution nor can you choose to buy your neighbor a worse car.

1.6.1 Definition of Externalities:

In economics, an externality is the cost or benefit that affects a party who did not choose to incur that cost or benefit. The following definition is the most commonly adopted.

‘An externality is present whenever some economic agent’s welfare (utility or profit) is directly affected by the action of another agent (consumer or producer) in the economy.’

Markets deliver an efficient quantity of goods and services when producers and consumers bear the full costs and benefits of their activity. Externalities occur when producers or consumers do not bear the full costs and benefits of an activity. When a firm or individual undertakes an activity which has effects or implications for third parties these effects are called externalities. More specifically, externalities occur when the action of one agent imposes a cost or benefit on another agent but that agent is not charged or compensated for it. The market is inefficient because these extra costs or extra benefits are not taken into consideration when the firm or individual decides how much of the activity to undertake.

1.6.2 Categories (Types) of Externality:

The definition of externality implicitly distinguishes between two broad categories of externality. a) **Production externality** occurs when the effect of the externality is upon a profit relationship and a b) **consumption externality** whenever a utility level is affected. Clearly, an externality can be both a consumption and a production externality simultaneously. For

example, pollution from a factory may affect the profit of a commercial fishery and the utility of leisure anglers. An externality can either be both positive and negative and can stem from either the production or consumption of a good or service.

A negative externality (also called "external cost" or "external diseconomy") is an action of product on consumers that imposes a negative effect on a third party; it is "external cost".

Positive externality: Where the activity imposes an external benefit there will be too little of the activity – individuals do not retain all of the benefits so they under-invest in the activity. These are referred to as positive externalities. An example is investment in improving a derelict house in a terrace which may have additional positive benefits to the saleable value of other houses in the terrace. In this way, some positive externalities are similar to public goods – the benefits extend beyond those who pay for the activity. Goods which have positive externalities for society and would be under-supplied by the market are sometimes referred to as merit goods. Examples of positive externalities (beneficial externality, external benefit, external economy, or Merit goods). An individual who maintains an attractive house may confer benefits to neighbors in the form of increased market values for their properties. An individual buying a product that is interconnected in a network (e.g., a video cell phone) will increase the usefulness of such phones to other people who have a video cell phone. When each new user of a product increases the value of the same product owned by others, the phenomenon is called a network externality or a network effect. Network externalities often have "tipping points" where, suddenly, the product reaches general acceptance and near-universal usage. An individual receiving a vaccination for a communicable disease not only decreases the likelihood of the individual's own infection, but also decreases the likelihood of others becoming infected through contact with the individual

A) Consumption externality:

- **Positive Externality in Consumption:**

An example of this is vaccination. The welfare of any person in a particular neighborhood depends not only on whether he is vaccinated but also on whether the people in the said neighborhood have been vaccinated so that the contagious diseases are not spread.

- **Negative Externality in Consumption:**

The welfare of any person in a particular neighborhood depends not only on his avoidance of riding a noisy motorcycle but also on other people's avoidance of doing this. Many negative externalities are related to the environmental consequences of production and use.

B) Production externality

• Positive Externality in Production:

The example which is often cited here is that of the production of honey. Beekeepers try to put their beehives on farms because nectar from the plants increases the production of honey. The farmers also receive advantages from the beehives because the bees help pollinate the plants.

• Negative Externality in Production:

A very suitable example is that of a paper mill that produces paper and the waste is dumped into a river. The riverside residents and the fish are hurt by the waste. These are referred to as negative externalities. A common example is river pollution caused by industrial production, which affects other users of the river such as anglers or water companies. The industrial company may decide to increase production without considering the effects of this on fish stocks, the enjoyment of local anglers, or the extra costs imposed on water companies for water treatment.

Example:

- Air pollution from burning fossil fuels causes damages to crops, (historic) buildings and public health. The most extensive and integrated effort to quantify and monetize these impacts was in the European external project series.
- Anthropogenic climate change is attributed to greenhouse gas emissions from burning oil, gas, and coal.
- Water pollution by industries that adds effluent, which harms plants, animals, and humans. Noise pollution which may be mentally and psychologically disruptive.
- The harvesting by one fishing company in the ocean depletes the stock of available fish for the other companies and overfishing may be the result. The stock fish is an example of a common property resource, and that, in the absence of appropriate environmental governance, is vulnerable to the Tragedy of the commons

1.7 CONCLUSION

Externalities are a prevalent feature of economic life and their existence can lead to inefficiency in an unregulated competitive economy. An important intervention by government in overcoming externalities is the definition of property rights and a mechanism for the enforcement of those rights. Other interventions to encourage provision of positive externalities, or to prevent excessive amounts of negative externalities.

1.8 QUESTIONS

- 1) Examine the first theorems of welfare economics
- 2) Briefly explain the second theorems of welfare economics
- 3) Comment the Lump Sum Taxes and Transfers
- 4) Examine the rationale for State intervention in the economy
- 5) Justify the Rationale for State Intervention.
- 6) Discuss the concept of Market Failure
- 7) Analyze the causes of Market Failure.
- 8) Comment the Government intervention correct for Market Failure
- 9) Describe the concept of Externalities.

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GOVERNMENT IN A MARKET ECONOMY – II

Unit Structure

- 2.0 Objectives
- 2.1 Introduction
- 2.2 Tax, Regulation and Distribution
- 2.3 Social Choice
- 2.4 Voting Rules
- 2.5 Arrow's Impossibility Theorem
- 2.6 Conclusion
- 2.7 Questions

2.0 OBJECTIVES

After studying this unit, learners will be able to,

- Know the about the tax and regulation, distribution.
- Analyze the social choice and voting rules.
- Examine the Arrow impossibility theorem.

2.1 INTRODUCTION

Taxation and income transfers to the poorest segment of society are the most direct way to keep inequality in check and reduce poverty in the short term. These instruments are particularly appropriate when the benefits of growth fail to reach the poor. Income redistribution will lower poverty by reducing inequality, if done properly. Redistribution of income and wealth is the transfer of income and wealth (including physical property) from some individuals to others through a social mechanism such as taxation, welfare. The term typically refers to redistribution on an economy-wide basis rather than between selected individuals.

2.2 TAX, REGULATION AND DISTRIBUTION

The tax system in every economy is what makes everyone follow the principles of equity, efficiency, simplicity, transparency and accountability. This ensures that tax is not generated as a source of revenue but also contributes towards economic goals by promoting fairness in wealth distribution while being effective at achieving its objectives.

2.2.1 Tax:

The most important objective of taxation is to raise required revenues to meet expenditures. Apart from raising revenue, taxes are considered as instruments of control and regulation with the aim of influencing the pattern of consumption, production and distribution. Taxes thus affect an economy in various ways, although the effects of taxes may not necessarily be good.

Tax is defined as a compulsory contribution or charge levied by any government upon an individual or an organization to collect revenue for public welfare. The consumers of goods and services must pay indirect taxes regardless of their financial capacity. However, because direct taxes are assessed on income or profits rather than on goods or services, they are less burdensome for the general public than indirect taxes. Because the amount of taxes increases in proportion to the decline in demand for goods and services, the indirect tax is also known as a regressive tax. The gap between the wealthy and the poor grows as a result of excessive reliance on indirect taxes. More equitable revenue and asset distribution are made possible by direct taxes. Indirect taxes can occasionally help with equitable division by being levied on luxuries and exempted from being applied to necessities. Alternative strategies for accomplishing any specific redistribution of income and wealth include both direct and indirect taxes. Taxation aids in reducing revenue and wealth disparities.

2.2.2 Regulation and Taxation:

Regulation and taxation are used by governments to influence behavior, raise revenue, and carry out the administrative processes necessary for governing. To some extent, regulation and taxation are substitutes. Clean water, better gasoline mileage, redistribution of income, and other social goals can be accomplished by either regulation or taxation. The reason is that regulation is likely to have more negative consequences for development by reducing specialization and the accumulation of human capital.

Government approaches to regulation and taxation are not limited in their impact on product markets. They also play a big part in the quality of a country's financial system and its infrastructure. One of the functions of regulation is to perform distributive and allocative chores usually associated with the taxing or financial branch of government. The effects of taxation on the distribution of income and wealth among the different sections of the society. The effects of taxation cover all the changes in the economy, resulting from the imposition of tax system. Imposing of taxation has certain inputs on the production, consumption investment, employment. Taxation can be used as an instrument to regulate consumption and Production. The composition and structure of production can be regulated and planned by using the instrument of taxation. For example, if the government wants to curb the production of a particular commodity, heavy taxation is desirable. Likewise, to stimulate production of certain commodities, tax exemptions and concessions can be given

accordingly. A reduction in taxation during depression helps to increase the level of economic activity and employment. Hence, the objective of taxation during depression should be to increase the purchasing power of the people by utilizing the tax revenue for the creation of development activities which are employment generating and income generating in character.

The way governments regulate and tax firms and transactions both within and at their borders plays a big role in shaping the investment climate. Sound regulation addresses market failures that inhibit productive investment and reconciles the interests of firms with those of society. Sound taxation generates the revenues to finance public services that improve the investment climate and meet other social goals. The challenge all governments struggle with is how to meet these objectives without undermining the opportunities and incentives for firms to invest productively, create jobs, and thereby contribute to growth and poverty reduction. Regulation improves social welfare and the investment climate when it responds to a market failure cost effectively. This requires an assessment of market failures and government failures, and the extent to which the proposed regulatory strategy reflects a good fit with local conditions.

Regulating firms Governments regulate firms in many ways for many reasons. They regulate to restrict who may participate in a market, where firms may locate, the production process used, the quality or other parameters of the goods and services produced, and the way products are marketed and distributed. Indeed, it is hard to find any aspect of a firm's business and investment decisions that is not affected in some way by regulation.

The usual rationale for regulation is market failure, the three most common of which are externalities, information problems, and monopoly. Externalities arise when producing or consuming a product imposes costs (negative externalities) or confers benefits (positive externalities) on others. Pollution is a classic negative externality: a firm that releases pollution into a river can impose costs on its neighbors farther downstream. If the firm fails to take account of the effect of its pollution on others, it will generate more than is socially optimal. Governments can reconcile the firm's incentives with those of the wider community by restricting pollution. They may do this through traditional command-and-control regulation, such as prohibiting certain activities or establishing standards for acceptable effluent levels, or they might fully assign property rights or tax the product that causes the negative externality.

Information problems arise when contracting parties have unequal access to information about the good or service in question. For example, consumers may lack reliable information about the quality or safety of a product, or the qualifications of a service provider. Regulation may address these concerns in several ways. Over and above prohibiting fraudulent conduct, governments may require firms to disclose certain information about their products (as through product labeling), require the

safety of products to be independently verified (as with drugs in many countries), or simply ban the sale of hazardous products.

Monopoly arises when a firm (or group of firms acting in concert) has enough market power to raise prices above the competitive level and thereby extract higher profits at the expense of consumers and economic efficiency. In assessing market power, competitive pressure is not limited to direct head-to-head competition between existing firms offering identical products. It can also come from the threat of entry by new firms, as well as from products that may be effective substitutes. Governments can address monopoly by removing unjustified regulatory barriers to competition, by dealing with anticompetitive behavior by firms through competition law, or in extreme cases by regulating the price and quality of the goods or services provided.

Regulation and public finance are ordinarily considered unrelated activities. Occasionally the language of one laps over to the other, and we speak of a monopolist "taxing" his customers, redistributing wealth from them to him, by charging a price cost.

2.2.3 Taxation and Distribution:

An argument for government intervention can also be made if the economy has widespread inequality of income, opportunity or wealth. Such inequalities can occur even if the economy is efficient in a narrow economic sense. In such circumstances, the level of economic welfare may be raised by the redistribution of resources to alleviate these inequalities. The main tool of wealth distribution is *tax collection*. Redistribution means *taking income from those with higher incomes and providing income to those with lower incomes*. Governments can play a role in increasing or reducing income inequality through taxes (e.g. tax exemptions) and transfers (e.g. allowances or subsidies). The redistribution of income might achieve not only greater equality but also *faster growth and, for developing economies, faster poverty reduction*. Taxation has both favorable and unfavorable effects on the distribution of income and wealth. Whether taxes reduce or increase income inequality depends on the nature of taxes. A steeply progressive taxation system tends to reduce income inequality since the burden of such taxes falls heavily on the richer persons. But a regressive tax system increases the inequality of income. Further, taxes imposed heavily on luxuries and nonessential goods tend to have a favourable impact on income distribution. But taxes imposed on necessary articles may have regressive effect on income distribution. However, we often find some conflicting role of taxes on output and distribution. A progressive system of taxation has favourable effect on income distribution but it has disincentive effects on output. A high dose of income tax will reduce inequalities but such will produce some unfavourable effects on the ability to work, save, investment and, finally, output. Both the goals the equitable income distribution and larger output cannot be attained simultaneously.

Distributional Aspect of Taxation:

The effects of taxation on the distribution of income and wealth among the different sections of the society, depends upon two important factors. They are as below: a) Nature of Taxation and b) Kinds of Taxes.

- a) **Nature of Taxation** The nature of taxation influences the distribution of income and wealth among the different sections of the society. 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 and hence widens the gap between the rich and the poor. 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. In this way, the burden of taxation falls more heavily upon the poor than on the rich. 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.
- b) **Kinds of Taxes** the effects of taxation depend upon the kinds of taxes. 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 favorable distributional effects. 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 necessities are exempted from taxation or levied on low tax rates, and luxuries are subjected to higher rates of taxes.

Summary, today, income redistribution occurs in some form in most democratic countries. In a progressive income tax system, a high income earner will pay a higher tax rate than a low income earner. Another taxation-based method of redistributing income is the negative income tax. Two other common types of governmental redistribution of income are subsidies and vouchers (such as food stamps). These transfer payment programs are funded through general taxation, but benefit the poor, who pay fewer or no taxes. While the persons receiving transfers from such programs may prefer to be directly given cash, these programs may be more palatable to society than cash assistance, as they give society some measure of control over how the funds are spent

2.3 SOCIAL CHOICE

Social / Public choice is an integral part of the field of public economics, because it is the mechanism through which government policies are made in cases where market failures or distributional concerns require government intervention in the economy. Public choice theory is the application of economics to the study of political science and government decision-making. As a unique branch of economics, it developed from the study of taxation and public spending. Social choice theory is the study of collective decision procedures and mechanisms. It is not a single theory, but a cluster of models and results concerning the aggregation of individual inputs (e.g., votes, preferences, judgments, welfare) into collective outputs (e.g., collective decisions, preferences, judgments, and welfare).

2.3.1 Meaning of Social/ Public Choice:

“Public choice can be defined as the economic study of nonmarket decision making“, “Application of economics to political science” (Mueller, 2009).

Public choice is defined by Dennis Mueller as “the economic study of non-market decision making or simply the application of economics to political science

Public-choice theory is that branch of economics which is concerned with the application of economics to the analysis of "non-market" decision making. It is an economic analysis of politics in the words of Samuelson and Nordhaus, "Public-choice theory, is the branch of economics that studies the way that government makes decision. Here we ask how government decides on the level of taxes and public consumption and on the size of transfer payments"" Tullock says that public choice is "the invasion of politics by economics."

Joseph Schumpeter was the pioneer in public-choice theory area. The land-mark study in this area was that of Anthony Downs He advanced the new theory that as consumers in the private sector tend to maximize utility and producers maximize profit, so politicians set economic policies in order to be re-elected He further showed that political parties tend to move towards the Centre of the political stage The concept of voting paradox was also introduced by him. Voting paradox holds that it is irrational for people to vote because one individual can hardly affect the outcome of voting. This theory was further advanced by J.M. Buchanan. He is the leader of the new institutional economists in applying the economic way of thinking to the political process. In 1962 J.M. Buchanan and Gordon Tullock wrote "The Calculus of Consent. In this book the authors adopted an approach to politics different from traditional political theory. They write that the traditional analysis of political choice has often been grounded on the implicit assumption that the representative individual seeks not to maximize his own utility, but to find the "public interest" or "common good that the shift of an activity from the realm of private to

that of social choice involved the replacement of the motive of private gain by that of social good. Buchanan and the other new institutional economists believe that people do not change when they move from their own private realm to that of politics. Individual citizens as well as government officials are guided by the rational pursuit of self-interest. They advocated the use of unanimity in political decisions.

This they based on the argument that unanimous decisions do not correct anyone and so impose no costs. But unanimity is likely to preserve the status quo. Virtually all decisions are based on majority rule. Public choice is the process by which preferences of individuals are combined into collective decisions. In democratic societies, importance is attached to individual values and tastes while making aggregation.

2.3.2 Main features of Public Choice Theory:

- It is an anti-bureaucratic approach.
- It is a critique of the bureaucratic model of administration.
- It encourages institutional pluralism in the provision of public services.
- Plurality of governments and public agencies is supported on the ground of consumer's preferences.
- Public Choice theory is the application of economics to the study of public administration. It applies economic logic to the problems of public services distribution.
- It stands for diverse decision making centers.
- More competition in the delivery of public services.
- Privatization or contracting out to reduce wastage.
- Dissemination of more information for public benefit about the availability of alternatives to public services offered on a competitive basis and at competitive costs. Thus, Public Choice Theory questions the hegemony of bureaucracy and criticizes the hierarchical administration.

2.4 VOTING RULES

Voting mechanisms are simpler affairs but essentially pose the same issues as social choice. Voting is the most commonly employed method of resolving a diversity of views or eliciting expressions of preference. It is used to determine the outcome of elections from local to supra-national level. Voting is a universal tool that is encountered in all spheres of life. The prevalence of voting, its use in electing governments, and its use by those governments elected to reach decisions, is the basis for the considerable interest in the properties of voting.

Voting is an example of common choice. It is the process through which a group (or collective) reaches a decision. A significant issue of collective choice is 'stability' by which is meant the tendency of the decision-making process to eventually reach a settled conclusion not fluctuating between alternatives. The role of 'stability' can be understood by the fractured verdicts thrown up by our electoral system when no single party gets a clear majority. A coalition may provide a stable government which

is but a collective choice (from among the several choices) expressed by electing leaders with diverse opinions for common in social goal. So it is stable but not necessarily desirable for all the same way since stability is forcing some of the participants to remain with unwanted choices.

2.4.1 Collective Decision Making:

Collective decision-making rule helps us in deciding which good is to be provided in the public sector and what taxes to be imposed. Such a decision affects the individual's welfare (W) which depends on the distribution of utilities in the community. This, in turn, depends on the allocation of resources, goods and services. How much goods and services to be produced depends on the allocation of factors while how much goods should be consumed depends on the relative price of the goods. Different individuals have different views on the best or most equitable distribution with there being no logical basis by which one should give more weight to one individual's preference over another. The collective choice theory provides a basis of aggregating welfare functions of all individuals into a social welfare function.

The natural question to ask of voting is whether it is a good method of making decisions. There are two major properties to look for in a good method. First is the success or failure of the method in achieving a clear-cut decision. Second is the issue of whether voting always produces an outcome that is efficient. Voting would be of limited value if it frequently left the choice of outcome unresolved or lead to a choice that was clearly inferior to other alternatives. Whether voting satisfies these properties is shown to be somewhat dependent upon the precise method of voting adopted. Ordinary majority voting is very familiar but it is only one amongst a number of ways of voting. Several of these methods of voting will be introduced and analyzed alongside the standard form of majority voting.

2.4.2 Majority Voting Rule:

In any situation involving only two options, majority rule simply requires that the option with the majority of votes is chosen. Unless unanimity is possible, asking that the few gives way to the many is a very natural alternative to dictatorship. The process of majority voting is now placed into context and its implications determined.

An intermediate result of the theory of social choice is provided by the Arrow's Impossibility Theorem. The theorem says that there is no way to devise a collective decision-making process that satisfies a few common sense requirements and works in all circumstances. If there are only two options, majority voting works just fine, but with more than two we can get into trouble? The situation is like a two party system throwing up a decisive winner and a multi-party system in which too many parties have to come together with a common minimum programme to form a coalition. To illustrate this, we can consider three voters and three preferences with every voter having a preference over three options which are transitive. Preferences of the voters are shown in Table 2.1

Table no.2.1 Majority Voting with Three Preferences

Voter-1	Voter-2	Voter-3
A	C	B
B	A	C
C	B	A

If we use majority rule to select one of the options, we see that two out of three voters prefer 'A' to 'B' while two out of three prefer 'B' to 'C' and two out of three prefer 'C' to 'A'. At the collective level, there is a cycle in preference and thus no decision is possible. Such preferences are said to be 'intransitive', meaning that the preference for 'A' over 'B' and for 'B' over 'C' does not imply 'A' is preferred to 'C'. The generation of social intransitivity based on individual transitivity is called the Condorcet Paradox. When there are only two options, majority rule is a compelling and straightforward method for social choice. When there are more than two options to be considered at a time, we can still apply the principle of majority voting by using binary agendas which allows us to reduce the problem of choosing among many options to a sequence of votes each of which is binary. The most famous pair-wise voting method is called the Condorcet method. It consists of a complete round-robin of majority votes, posing each option against all others. The option which defeats all others in pair-wise majority voting is called a Condorcet winner (named after Condorcet who suggested that such an option should be declared the winner).

1) Median Voter Theorem:

The existence of a Condorcet winner requires very special configurations of individual preferences. For instance, if the preferences throw up a Condorcet paradox, there will be no Condorcet winner. A natural question to ask therefore is: under what conditions does a Condorcet winner exist? The 'median voting theorem' gives us an answer to this. The theorem states that a 'majority rule voting' system will select the outcome most preferred by the median voter under two assumptions (or conditions). One is that voters can place all election alternatives in a one-dimensional spectrum and, two, the voters' preferences are single-peaked (i.e. voters have one alternative that they favour more than any other). In one of its other version, an additional assumption of 'single crossing preference' is also made. Both the conditions give the same conclusion that the median position is a Condorcet winner.

As an example of single-peaked preferences, consider a population of consumers who are located at equally-spaced positions along a straight road where a bus stop is to be located. It is assumed that all consumers would prefer this to be located as close as possible to their location. The location of the bus stop is to be determined by majority voting. When there is an odd number of house owners, the answer to this question is clear-cut i.e. since given any pair of alternatives, the households will vote for that which is closest to their location, the location that is the closest

choice for the most number of voters will receive majority votes. But if we consider a voting process in which votes are taken over every possible pair of alternatives, depending on the number of alternatives, there would be many rounds of voting and the process will rapidly become impractical. But if we put aside this difficulty, it can be seen that this process will lead to the intermediate outcome being the chosen alternative. Expressed differently, the location preferred by the median voter (i.e. the voter in the centre) will be chosen where at least half the population will also vote for (or prefer). In other words, if the number of voters are in odd numbers, and the policy space is one-dimensional (i.e. voters can clearly place political candidates on a left to right continuum which is the same as saying 'options can be put in a transitive order'), and so long as the voters have single-peaked preferences, then the median of the distribution of voters' preferred options is a Condorcet winner.

Although a robust result, the Median Voter Theorem have significant drawbacks. The first is that the application of the theorem requires an odd number of voters as this ensures that there is a majority for the median. When there is an even number of voters, there will be a tie between the two central voters with the theorem being silent on which of these locations will eventually be chosen even though there is a median tendency. The second and most significant drawback is that the theorem is applicable only when the decision over which voting is taking place has a single dimension (i.e. one dimensional).

In the single crossing version of the median voter theorem, we not only assume that the policy space is transitively ordered (from left to right) but also assume that voters too are transitively ordered (from left to right) of the political spectrum. This assumption is known as the single crossing assumption i.e. half of the voters are to the left of the median voter and the other half is to his right. Suppose there is an odd number of voters and that the policy space is one-dimensional. According to the single crossing property, for any two options 'a' and 'b', with $a < b$, if a median voter prefers 'a', then all the voters to the left of him should prefer 'a', and all the voter to the right of him must prefer 'b'. Similarly, if a median voter prefers 'b' then all the voters to the right of he should prefer 'b'. So there is always a majority of the voters who agree with the median voter and the option chosen by the median voter is Condorcet winner. Thus, single-peaked or unique crossing preference both give us the same result that median voter's preferred option is Condorcet winner

Although a powerful result, the Median Voter Theorem does have significant drawbacks. The first is that the literal application of the theorem requires that there is an odd number of voters. This condition ensures that there is a majority for the median. When there is an even number of voters, there will be a tie in voting over all locations between the two central voters. The theorem is then silent on which of these locations will eventually be chosen. In this case, though, there is a median tendency. The second, and most significant drawback, is that the Median Voter Theorem is applicable only when the decision over which voting is taking place has a single dimension. This point will be

investigated in the next section. Before doing that let us consider the single-crossing version of the Median Voter Theorem. The single-crossing version of the Median Voter Theorem assumes not only that the policy space is transitively ordered, say from left to right (and thus one-dimensional), but also that the voters can be transitively ordered, say from left to right in the political spectrum. The interpretation is that voters at the left prefer left options more than voters at the right. This second assumption is called the single-crossing property of preferences.

Having seen how the Median Voter Theorem leads to a clearly predicted outcome, we can now enquire whether this outcome is efficient. The chosen outcome reflects the preferences of the median voter, so the efficient choice will only be made if this is the most preferred alternative for the median voter. Obviously, there is no reason why this should be the case. Therefore the Median Voter Theorem will not in general produce an efficient choice. In addition, without knowing the precise details, it is not possible to predict whether majority voting will lead, via the Median Voter Theorem, to a choice that lies to the left or to the right of the efficient choice. A further problem with the Median Voter Theorem is its limited applicability. It always works when policy choices can be reduced to one dimension but only works in restricted circumstances when there is more than dimension.

2.5 ARROW'S IMPOSSIBILITY THEOREM

Arrow's impossibility theorem (Arrow 1950) is one of the most fundamental results in the theory of collective choice. Arrow's Impossibility Theorem shows that when trying to combine individual votes to create a majority preference, it is impossible for the outcome to be fair and rational. The central result of the theory of social choice, Arrow's Impossibility Theorem, says that there is no way to devise a collective decision-making process that satisfies a few commonsense requirements and works in all circumstances. If there are only two options, majority voting works just fine, but with more than two we can get into trouble? Despite all the talk about the "will of the people", it is not easy - in fact the theorem proves it impossible to always determine what that will is. This is the remarkable fact of Arrow's Impossibility Theorem.

Before presenting the theorem, a taste of it can be obtained with the simplest case of three voters with the following (conflicting) rankings over three options. Let us now take the case when there are three public goods, namely, school building (a), hospital (b), and houses for the poor (c) We assume further that the same amount is to be spent on them. There are three voter- 1, voter- 2 and voter- 3 whose preferences for the three goods are presented in table no. 2.1

Table 2.1 Condorcet Paradox

Voter	Ist Choice	IInd Choice	IIIrd Choice
Voter- 1	a	b	c
Voter-2	c	a	b
Voter-3	b	c	a

Every voter has preferences over the three options which are transitive. Voter 1 prefers a to b to c, and therefore a to c. As individuals, the voters are entirely self-consistent in their preferences. Now suppose we use majority rule to select one of these options. We see that two out of three voters prefer a to b, while two out of three prefer 'b' to 'c', and two out of three prefer 'c' to 'a'. At the collective level there is a cycle in preference and no decision is possible. We say that such preferences are intransitive, meaning that the preference for a over b and for b over c does not imply 'a' is preferred to 'c'. As the example shows, intransitivity of group preferences can arise even when individual preferences are transitive. This generation of social intransitivity from individual transitivity is called the Condorcet Paradox.

Kenneth Arrow has gone deep into this problem and tried to know whether any way out of the cyclical majority problem can be found. He concludes that no majority rule exists which can help in attaining Pareto optimum based on individual voter preferences without running into the quagmire of cyclical voting. It is known as Arrow Theorem.

The general problem addressed by Arrow was to seek a way of aggregating individual rankings over options into a collective ranking. In doing so, difficulties such as the Condorcet paradox had to be avoided. Arrow's approach was to start from a set of requirements that a collective ranking must satisfy and then consider if any ranking could be found that met them all.

Arrow Theorem conditions:

Arrow Theorem is based on the following four minimal conditions which social choice must meet.

- Collective choices must be consistent (transitive) in the sense that if A is preferred to B and B to C, then C cannot be preferred to A.
- Collective choice cannot be dictated by anyone outside the community or by any one individual in the community.
- Collective choice cannot go in the direction opposite to individual voter choices. If an alternative is chosen by the society (majority group), it cannot be rejected only because some individuals (minority group) come to regard it unfavourably.
- A Collective decision as between two alternatives must not change so long as no individual in the community changes the order of his preferences.

Summary, these requirements are appropriate for democratic decision-making. But Arrow says that they are not simple. He has demonstrated that it is impossible to choose among different alternatives placed before the voters without violating at least one of these four criteria. Thus collective choices must be inconsistent or undemocratic. This negative result is the central theorem of Arrow, known as Arrow Theorem. The implication of Arrow's Impossibility Theorem is that any search for a "perfect" method of collective decision-making is doomed to failure.

2.6 CONSOLATION

Voting is one of the most common methods used to make collective decisions. Despite its practical popularity, it is not without its shortcomings. The theory of voting that we have described carefully catalogues the strengths and weaknesses of voting procedures. The major result is that there is no perfect voting system. Although there are many alternative systems of voting none can always deliver in every circumstance. Voting is important, but we should never forget its limitations.

2.7 QUESTIONS

- 1) Comment on the Tax, Regulation and Distribution.
- 2) Briefly explain the concept of Social Choice.
- 3) Analyze the Majority Voting Rule.
- 4) Examine the Median Voter Theorem
- 5) Evaluate the Arrow's Impossibility Theorem

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PUBLIC EXPENDITURE: RATIONALE AND EVALUATION

Unit Structure

- 3.0 Objectives
- 3.1 Introduction
- 3.2 Classification of Goods: Based on Excludability and Rivalry
- 3.3 Optimal Provision of Public Goods: Pure and Local
- 3.4 Merit goods
- 3.5 Lindahl's Voluntary Exchange Approach
- 3.6 Conclusion
- 3.7 Questions
- 3.8 References

3.0 OBJECTIVES

After studying this unit, learners will be able to:

1. Understand and define public goods, private goods, club goods, and merit goods, and identify their key characteristics.
2. Analyse various methods and strategies for the effective provision of public goods.
3. Examine Lindahl's Voluntary Exchange Approach and evaluate its relevance to the provision of public goods.

3.1 INTRODUCTION

In any economic system, regardless of its ideological leanings, the government assumes a pivotal role in fostering social well-being by ensuring the provision of public goods. These goods, typically financed through government budgets that reflect the preferences and needs of the population, are distinguished by their **non-excludable** and **non-rivalrous** nature. This means that once provided, it's challenging to prevent anyone from benefiting from them, and one person's consumption doesn't diminish their availability to others (Stiglitz, 1999).

The provision of public goods, however, is not without its challenges. “A central issue is the “free-rider problem,” wherein individuals can enjoy the benefits of a public good without contributing to its cost” (Samuelson, 1954). This can lead to under-provision or even complete absence of these goods if left solely to market forces.

This unit delves deeper into the multifaceted world of public economics. It explores the diverse categorization of goods, spanning private goods, club goods, common goods, and public goods. A particular emphasis is placed on understanding the optimal provision of pure and local public goods, taking into account their distinct characteristics. Additionally, the unit examines the concept of **merit goods**, those deemed essential for societal well-being and thus provided by the government to ensure equitable access, irrespective of individual ability to pay (Musgrave, 1959). Finally, we will analyse **Lindahl's approach**, which proposes a voluntary exchange mechanism for financing public goods, offering an alternative perspective to traditional taxation-based models (Lindahl, 1919).

3.2 CLASSIFICATION OF GOODS: BASED ON EXCLUDABILITY AND RIVALRY

In economics, goods can be classified based on two key characteristics: excludability and rivalry. This framework helps us understand how different goods function in the market, their consumption patterns, and the implications for their efficient provision and pricing (Cowen & Tabarrok, 2010). These characteristics play a crucial role in determining resource allocation, identifying market failures, and understanding the potential need for government intervention (Mankiw, 2014).

3.2.1. Excludability

Excludability pertains to the ability to prevent individuals who haven't paid for a good from consuming it. Goods are classified as either excludable or non-excludable based on this attribute.

- **Excludable Goods:** These goods can be effectively restricted to paying consumers. This is often achieved through legal mechanisms (like property rights), physical barriers (like fences), or technological means (like passwords).
 - *Examples:* Cinema tickets, private property, toll roads, and subscription services like Netflix. Their accessibility is restricted to those who pay for them (Mankiw, 2014).
- **Non-Excludable Goods:** These goods are challenging or impossible to restrict to paying consumers. Once provided, it's difficult to prevent non-payers (free-riders) from benefiting.
 - *Examples:* National defence, public parks, clean air, and street lighting. Once provided, it is impossible to prevent any citizen from benefiting from it (Stiglitz, 1999). Similarly public goods like public parks, clean air initiatives, and street lighting, which,

once established, benefit the entire community indiscriminately (Mankiw, 2014).

3.2.2. Rivalry

Rivalry refers to whether one person's consumption of a good diminishes its availability for others. Goods are categorized as rival or non-rival based on this characteristic.

- **Rival Goods:** When one person consumes a rival good, it reduces the amount available for others. These goods are subject to scarcity, as they cannot be consumed simultaneously by multiple individuals without diminishing the total supply.
 - *Examples:* Food items, clothing, cars, and houses. A sandwich exemplifies a rival good because its consumption by one individual prevents others from consuming the same sandwich (Mankiw, 2014). This characteristic of rivalry in consumption applies to most physical goods, such as clothing, cars, and houses.
- **Non-Rival Goods:** The consumption of a non-rival good by one person does not reduce its availability for others. Many people can enjoy the good simultaneously without diminishing its utility.
 - *Examples:* Television broadcasts, radio programs, and public information. A television broadcast exemplifies a non-rival good as its consumption by one individual does not diminish its availability or quality for others (Mankiw, 2014). Similarly, goods like software and online courses, public goods like lighthouse's signal, can be enjoyed concurrently without reducing their utility for anyone (Cowen & Tabarrok, 2010).

Understanding these characteristics allows us to analyse different goods and their implications for market efficiency and the role of the government in providing them.

3.2.3. Types of Goods Based on Excludability and Rivalry

In economics, we can classify goods into four distinct categories by considering two key characteristics: excludability and rivalry (Mankiw, 2014). Excludability refers to the ability to prevent individuals who haven't paid for a good from consuming it. Rivalry refers to whether one person's consumption of a good diminishes its availability for others (Cowen & Tabarrok, 2010). This categorization helps us understand how different goods function in the market, their consumption patterns, and their implications for efficient provision and pricing.

Table No. 3.1

	Excludable	Non-excludable
Rival	Private Goods	Common Goods
	Food, clothing, personal electronics, bottled water, housing	Fisheries, forests, clean water, grazing land, coal
Non-Rival	Club Goods	Public Goods
	Cinemas, private parks, Netflix, satellite TV, gym memberships, toll roads, subscription services	Air, National defence, street lighting, public broadcasts, public parks

Private Goods: Defined by Excludability and Rivalry

Private goods are those that are both excludable and rivalrous in consumption. Excludability means that it's possible to prevent people from using the good if they haven't paid for it. Rivalry means that one person's consumption of the good reduces the amount available for others (Mankiw, 2014).

In essence, private goods are those that can be owned and consumed by individuals, with their use directly impacting the availability for others.

Characteristics:

- **Excludable:** Access to private goods can be restricted through mechanisms like price, ownership, or physical barriers.
- **Rivalrous:** The consumption of a private good by one person diminishes its availability or utility for others.
- **Ownership:** Private goods can be owned and transferred between individuals.

Examples:

- **Food:** If you buy and eat an apple, no one else can consume that same apple.
- **Clothing:** When you purchase a shirt, it's yours, and others can't wear it without your permission.

- **Personal Electronics:** Devices like smartphones and laptops are typically owned by individuals, and their use is limited to the owner.

Public Goods: Characteristics and Examples

Definition:

Public goods are resources or services characterized by their non-excludability and non-rivalry in consumption (Mankiw, 2014). Non-excludability implies that it is difficult, if not impossible, to prevent individuals from benefiting from the good once it is provided. Non-rivalry means that one person's consumption of the good does not diminish its availability or utility for others.

Key Characteristics:

- **Non-excludable:** It is challenging to exclude individuals from consuming a public good, even if they haven't contributed to its provision. This often leads to the "free-rider problem," where people benefit without paying, which can make it difficult for private markets to efficiently provide these goods (Stiglitz, 1999).
- **Non-rival:** One person's consumption of a public good does not reduce the amount or quality available for others. This implies that the marginal cost of providing the good to an additional person is zero.

Examples: National Defence, Street Lighting, Public Broadcasts, whose benefits to all citizens are available equally.

Distinctive Features of Public Goods

Public goods possess unique attributes that set them apart from other types of goods, impacting their provision and consumption dynamics. Let's delve deeper into these characteristics:

1. Non-Excludability

Once a public good is provided, it's inherently challenging, if not impossible, to prevent anyone from using it, regardless of whether they contributed to its cost (Stiglitz, 1999). This open access nature leads to the "free-rider problem," where individuals can benefit without paying, potentially undermining the incentive for private provision (Samuelson, 1954).

Example: Street lighting benefits everyone in the area, regardless of their contribution to its installation or maintenance.

2. Non-Rivalry

One person's consumption of a public good doesn't diminish its availability or value for others. This means multiple people can enjoy the good simultaneously without reducing its benefits (Mankiw, 2014).

Example: National defence protects all citizens equally; one person's safety doesn't compromise the safety of others.

3. Free-Rider Problem

The non-excludability of public goods creates the free-rider problem, where individuals may choose to benefit from the good without paying for it, relying on others to bear the cost. This can result in under-provision or even the complete absence of public goods in a free market (Cowen & Tabarrok, 2010).

Example: Individuals may enjoy clean air without actively contributing to pollution control efforts, hoping others will take on the responsibility.

4. Government Provision

Due to the free-rider problem and the resulting market failure, public goods are often provided by the government and financed through taxation. This ensures that everyone can benefit from the good, even if they don't directly contribute to its cost (Stiglitz, 1999).

Example: Public parks and libraries are funded by the government to ensure universal access.

5. Social Efficiency

Public goods enhance overall societal welfare and efficiency by providing benefits that are shared broadly across the population (Mankiw, 2014).

Example: Public health initiatives, like vaccination programs, protect the entire population, leading to a healthier and more productive society.

6. Market Failure

The free-rider problem often results in market failure for public goods. Private markets may underprovide or completely fail to provide them because it's not profitable to exclude non-payers (Cowen & Tabarrok, 2010).

Example: Building and maintaining a lighthouse is unlikely to be profitable for a private company as it would be challenging to charge ships for its use.

7. Positive Externalities

Public goods frequently generate positive externalities, meaning they create benefits for society beyond those directly enjoyed by their users (Mankiw, 2014).

Example: Public education not only benefits the students who receive it but also contributes to a more educated and productive workforce, benefiting society as a whole.

Mumbai, a densely populated megacity with over 20 million inhabitants, relies significantly on its public transportation network. The local trains, buses, and metro system serve as critical public goods, offering affordable and accessible mobility to millions of commuters each day. While the system has numerous successes, it also faces several challenges in providing this essential service (Kundu, 2007).

Challenges

1. **Overcrowding and Capacity Constraints:** The sheer volume of daily passengers often strains the system, resulting in overcrowding, delays, and safety concerns. Expanding capacity within the limitations of land scarcity and budgetary constraints poses an ongoing challenge.
2. **Maintenance and Infrastructure:** The aging infrastructure and inadequate maintenance practices present substantial hurdles. Frequent breakdowns and service disruptions negatively affect reliability and the overall passenger experience (FICCI, 2018).
3. **Financial Sustainability:** Balancing the need for affordable fares with the necessity of covering operational and maintenance costs is a complex task. Government subsidies and innovative financing models are crucial to maintaining the system's financial viability.
4. **Environmental Impact:** Although public transport is inherently more environmentally friendly than private vehicles, efforts to minimize its carbon footprint and mitigate pollution remain a priority. (Guttikunda& Goel, 2013).
5. **Accessibility and Inclusivity:** Providing seamless access for individuals with disabilities, the elderly, and other vulnerable groups necessitates continuous infrastructure upgrades and thoughtful service design.

Successes

1. **Extensive Network:** Mumbai's public transportation network is vast, connecting various parts of the city and its suburbs. This broad reach is a lifeline for millions who depend on it for their daily commutes.
2. **Affordability:** Public transportation in Mumbai remains relatively affordable compared to private options, making it accessible to a wide range of socioeconomic groups.
3. **Reduced Congestion and Pollution:** By promoting mass transit, the public transportation system helps alleviate traffic congestion and air pollution, contributing to a healthier and more liveable city (Guttikunda& Goel, 2013).

4. **Economic Productivity:** Efficient public transportation bolsters economic productivity by enabling people to reach jobs, educational institutions, and other opportunities throughout the city.
5. **Technological Advancements:** The adoption of smart cards, mobile ticketing, and real-time information systems has enhanced the passenger experience and improved operational efficiency (FICCI, 2018).

Conclusion

Mumbai's public transportation system reflects the complexities and triumphs of providing a vital public good. Despite grappling with issues such as overcrowding, infrastructure limitations, and financial sustainability, the system has achieved remarkable success in delivering affordable and accessible transportation to millions.

Ongoing investment in infrastructure development, technological innovation, and sustainable practices is essential to ensure the long-term viability and effectiveness of Mumbai's public transportation network. The system serves as a testament to the vital role of public goods in promoting a dynamic and inclusive urban environment.

Common Goods (Non-Excludable and Rival)

Meaning: Common goods are resources that are accessible to everyone. They are non-excludable, meaning no one can be prevented from using them, but they are rival, meaning one person's use diminishes their availability for others.

Characteristics: Common goods are non-excludable but rival. These resources are accessible to everyone, but one person's use diminishes the availability for others. This often leads to overconsumption and depletion, a situation known as the "tragedy of the commons."

Examples: Fisheries, Forests, Clean Water- While these are available to all, but excessive consumption by one reduced its availability for others.

Club Goods (Excludable and Non-Rival)

Meaning: Club goods are items that are accessible only to paying customers or members. They are excludable, meaning people can be prevented from using them if they do not pay, but non-rival, meaning one person's use does not reduce their availability to others.

Characteristics: Club goods are excludable but non-rival. These goods are accessible only to paying customers or members, but within that group, one person's use does not diminish availability for others.

Examples: Subscription Services like Netflix, Private Parks, Toll Roads - where one person's consumption or use does not affect the availability other subscribers.

3.2.4. Implications for Market Efficiency and Policy

The classification of goods based on excludability and rivalry has significant implications for market efficiency and the role of government in the economy.

- **Private Goods:** These are typically provided efficiently by markets since the price mechanism works well in allocating resources for excludable and rival goods.
- **Public Goods:** The non-excludable and non-rival nature of public goods often leads to market failures, requiring government intervention to provide these goods through taxation and public policies.
- **Common Goods:** Due to the risk of overuse and depletion, common goods often require regulation or collective management to ensure sustainable use.
- **Club Goods:** These goods are often provided by private firms or associations, but the exclusion of non-payers ensures that the resources are used efficiently without leading to overconsumption.

Conclusion

Understanding the classification of goods based on excludability and rivalry is essential for analysing market behaviour, determining the efficient provision of goods, and designing appropriate economic policies. This classification helps economists and policymakers address issues related to market failures, resource allocation, and the optimal role of government in the economy.

3.3 OPTIMAL PROVISION OF PUBLIC GOODS: PURE AND LOCAL

1. Positive Externalities and Free-Rider Problem:

- **Public goods** generate **positive externalities**, meaning they provide benefits to individuals beyond those directly involved in their production. For example, street lighting benefits everyone in a neighbourhood, not just those who pay for it.
- Because public goods are **non-excludable**, individuals can enjoy these benefits without paying, which is the essence of the **free-rider problem**.
- When too many people free-ride, producers don't receive sufficient compensation, and this leads to **under-provision** of the good. In extreme cases, the good may not be provided at all by the market, as private firms will have no financial incentive to produce it. This leads to a **market failure**.

2. Role of Government:

- **Government intervention** becomes necessary to ensure that public goods are provided at levels that meet societal needs. However, determining the **optimal provision** of public goods is challenging.
- The government faces several difficulties:
 - **Measuring demand:** Since public goods are non-excludable and individuals can understate their true preferences to avoid paying (free-riding), it's difficult to gauge how much of a public good is genuinely needed or desired.
 - **Deciding on type and quality:** Determining what kind of public goods should be provided (e.g., parks, roads, public healthcare) and at what quality levels is a complex task. People may have diverse preferences, making it hard to achieve a balance that satisfies all.
 - **Cost-sharing and taxation:** Governments must figure out **how much each individual should pay** to finance the public good. Taxation schemes can vary, but finding an equitable and efficient way to distribute the costs remains a major challenge.

3. Optimal Provision:

- According to the **Samuelson Rule**, the optimal provision of public goods occurs when the sum of individual marginal benefits (or willingness to pay) equals the marginal cost of providing the good. However, as mentioned, collecting accurate information about individual preferences is difficult due to strategic behaviour like free-riding.
- One approach to approximate optimal provision is using **public choice mechanisms**, like **voting** on public goods or allowing individuals to "vote with their feet" by choosing communities that match their preferences for local public goods, as proposed by the **Tiebout model**.

Optional Provisioning for Public Goods using Samuelson Rule:

Pure public goods are characterized by two key features:

- **Non-excludability:**
- **Non-rivalry:**

The **Samuelson Condition** for the optimal provision of a public good is that the sum of the marginal rates of substitution (or the sum of the marginal benefits) of all individuals should equal the marginal cost of providing the good. In graphical terms, the optimal provision is where the aggregate demand curve intersects the marginal cost curve.

Graphical Representation:

The demand for public goods is typically represented using a **Samuelson Rule**, which illustrates the aggregate demand curve for public goods. The key idea behind this graphical representation is that, because public goods are non-rivalrous, the total willingness to pay (WTP) of all individuals for each unit of the good should be summed vertically, rather than horizontally as in private goods.

Graphical Representation of Demand for Public Goods:

1. Individual Demand Curves:

- Each individual has their own demand curve for a public good. This curve shows their willingness to pay for each quantity of the good.
- For a private good, we would sum individual demand curves horizontally (i.e., at each price level, we add the quantity each individual is willing to buy).
- For a public good, since everyone consumes the same quantity, we sum individual willingness to pay at each level of the public good provided.

2. Vertical Summation of Demand Curves:

- To get the aggregate or collective demand for the public good, we sum each individual's WTP vertically.
- At any given quantity of the public good, the sum of individual demand curves shows the total WTP for that quantity.

Key Graph Elements:

1. **X-axis:** Represents the quantity of the public good.
2. **Y-axis:** Represents the price or marginal willingness to pay (WTP).
3. **Individual Demand Curves:** Each individual has a downward-sloping demand curve showing diminishing marginal utility for the public good.
4. **Aggregate Demand Curve:** This is derived by summing individual WTP at each quantity level (vertical summation).

Example Graph:

- The individual demand curves for both **Individual A** and **Individual B** are shown.
- The **aggregate demand curve** is the vertical summation of their willingness to pay (WTP) at each quantity level, represented by the dashed red line.
- This graph illustrates how the demand for public goods is summed vertically, rather than horizontally as it would be for private goods.

- **Y-axis:** Price/WTP.
- **Individual demand curves:** Downward sloping.
- **Aggregate demand curve:** Vertical summation of individual demand curves.

Let's say there are two individuals, A and B, with their respective demand curves. Here's how you can construct the aggregate demand for a public good:

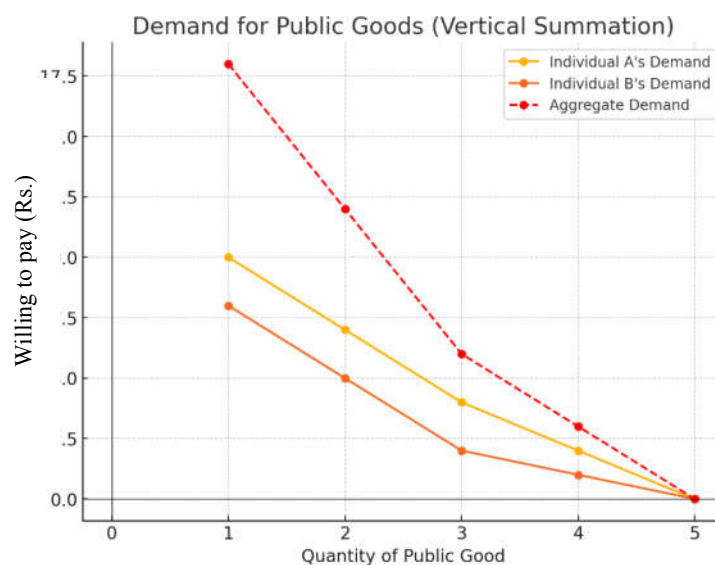
- **Individual A's Demand:** For each unit of the public good, person A is willing to pay, say, Rs.10 for the first unit, Rs.7 for the second, Rs.4 for the third, and so on.
- **Individual B's Demand:** Person B is willing to pay Rs.8 for the first unit, Rs.5 for the second, and Rs.2 for the third.

The aggregate demand curve is found by summing these values vertically at each quantity level:

- For the first unit of the public good, the total WTP is Rs.10 + Rs.8 = Rs.18.
- For the second unit, it's Rs.7 + Rs.5 = Rs.12.
- For the third unit, it's Rs.4 + Rs.2 = Rs.6.

The resulting aggregate demand curve reflects the total societal willingness to pay for each unit of the public good.

Figure No. 3.1



Optimal provision: Occurs where the aggregate demand curve intersects the marginal cost curve of providing the public good.

Scenarios of Provision:

Governments use **cost-benefit analysis** to evaluate whether providing a public good is justified. This involves comparing the **marginal benefit - MB** (the additional benefit derived from producing one more unit of the good) and the **marginal cost - MC** (the cost of producing one more unit of the good). Upon comparing MB and MC following three scenarios emerge:

1. Under-Allocation ($MB > MC$):

- If the **marginal benefit** of a public good is greater than its **marginal cost**, it means the good is providing more value to society than it costs to produce.
- This suggests that there is an **under-allocation** of the public good: not enough of the good is being provided relative to societal demand. More of the good should be produced because the social gains outweigh the costs.

2. Over-Allocation ($MC > MB$):

- If the **marginal cost** exceeds the **marginal benefit**, it means the cost of producing an additional unit of the good is higher than the benefit society derives from it.
- In this case, there is an **over-allocation** of the public good: too much is being produced, and resources are being wasted. The government should reduce the quantity of the good provided to avoid inefficiency.

3. Optimal Allocation ($MB = MC$):

- The **optimal allocation** occurs when the **marginal benefit** equals the **marginal cost**. This is the point at which the total welfare of society is maximized. Every unit of the public good provides exactly as much value to society as it costs to produce.
- At this point, there is neither over- nor under-allocation; the right amount of the public good is being provided, ensuring efficiency.

Optimum Provision for Local Public Goods

Local public goods are those that benefit only the residents of a particular community, such as public schools, parks, and local beaches. These goods are different from national public goods because their use and enjoyment are confined to a specific geographical area. **Charles Tiebout (1956)** introduced a theory addressing the provision of these local public goods. He argued that many public goods are funded through local expenditures, and individuals reveal their preferences for these goods by choosing the community in which they reside. This is akin to how people express their preferences for private goods by making purchases in the marketplace.

In Tiebout's model, if there is a wide array of communities to choose from, individuals will select the one that best aligns with their preferences for public goods. As a result, communities become populated with individuals who share similar tastes, minimizing conflicts over public goods provision. Tiebout's idea presents a market-like solution to the issue of under-provision of public goods, suggesting that competition among communities can lead to more efficient outcomes. This model implies that the "invisible hand" can address the challenges of providing local public goods (Tiebout, 1956).

Local public goods are characterized by the potential for exclusion based on geographical proximity. For instance, while schools can easily exclude individuals living far away, parks present more challenges in excluding non-residents. However, these are still considered local public goods because the benefits are typically confined to the nearby population. Few people, for example, would travel long distances just to visit a local park.

Tiebout's theory also suggests that neighbourhoods will naturally evolve based on residents' preferences for public goods. For example, some neighbourhoods may have higher taxes but offer better schools, extensive parks, frequent public services, and strong safety measures. In contrast, others may have lower taxes and a more modest level of public services. As people move to the neighbourhoods that best match their preferences, this self-selection process leads to communities with relatively homogeneous preferences for public goods, making the voting process for such goods more efficient.

According to Tiebout, this system not only ensures the efficient provision of local public goods but also applies to certain private goods, such as garbage collection and schooling, when provided at the local level. The diversity of localities offering a broad range of services further enhances efficiency (Tiebout, 1956).

Key Challenges in Provision

- **Free-Rider Problem:** For both pure and local public goods, non-excludability can lead to free-riding.
- **Coordination and Collective Action:** For local public goods, coordination among local governments may be needed, especially for goods that spill over into neighbouring areas (e.g., regional environmental protection).
- **Equity vs. Efficiency:** While efficiency is achieved by equating MSB to MSC, equity concerns can arise when deciding how to fund public goods (e.g., through progressive taxation, flat fees, etc.).

In both cases (pure public and local public goods), **optimal provision** depends on designing institutions and policies that balance efficiency ($MB = MC$) with practical implementation constraints such as taxation, local governance, and coordination challenges.

We've categorized goods as private or public based on their consumption characteristics: goods with a high degree of collective consumption are typically provided by the public sector, while those with a low degree are supplied by the private sector. However, there are exceptions. Sometimes, the government actively participates in allocating goods that are essentially private—rival and excludable—because they generate significant social benefits. These are called merit goods.

What are Merit Goods?

Merit goods are those goods and services that the government believes everyone in society should consume to a certain level, regardless of their ability to pay. The government also believes that if left solely to the private sector, these goods will be underprovided. Examples include education, healthcare, job training programs, and public libraries.

The concept of merit goods was developed by R. A. Musgrave in 1959. He labelled goods and services provided by the public sector, even though they could be efficiently provided by the private sector, as merit goods because of the normative consideration that everyone should benefit from them (Musgrave, 1959).

Characteristics:

1. **Positive Externalities:** Merit goods often generate positive externalities, meaning their consumption benefits not only the individual but also others in society. For example, education.
2. **Underconsumption:** People tend to undervalue the benefits of merit goods, leading to lower consumption levels than what is socially optimal. For instance, individuals might not get vaccinated because they underestimate the health benefits.
3. **Government Intervention:** Due to their positive externalities and underconsumption, governments often intervene to ensure an adequate supply of merit goods. This can be done through subsidies, public provision, or regulation.

Examples:

1. **Education:** It provides personal benefits such as better job prospects and higher earnings, and societal benefits like reduced crime rates and increased civic participation.
2. **Healthcare:** Healthcare services, including vaccinations and preventive care. They improve individual health and reduce the spread of diseases, benefiting society as a whole.
3. **Public Libraries:** Public libraries offer access to knowledge and information, promoting literacy and lifelong learning, which are beneficial to both individuals and the community.

Why Merit Goods are Underprovided in the Free Market

Merit goods are under-consumed in a free market due to:

1. **Positive Externalities:**
2. **Imperfect Information:** People might not fully understand the long-term benefits of merit goods, leading to under-consumption. Education is a long-term investment with future benefits that might not be fully appreciated in the present.
3. **Equity Concerns:** Low-income families might not be able to afford merit goods even if they understand their benefits. Government intervention through subsidies or free provision helps ensure access for all.

Market Failure and the Need for Public Provision

Reasons for Market Failure:

1. **Information Failure:** Individuals may not have complete information about the benefits of merit goods. For example, people might not be fully aware of the long-term health benefits of regular medical check-ups.
2. **Short-Term Focus:** People often focus on short-term costs rather than long-term benefits. For instance, the immediate cost of education might deter individuals from pursuing higher education, despite its long-term benefits.
3. **Income Constraints:** Lower-income individuals might not be able to afford merit goods, even if they recognize their benefits. This leads to underconsumption among those who might benefit the most.
4. **Externalities:** The positive externalities associated with merit goods mean that the social benefits exceed the private benefits. As a result, individuals may not consume these goods at a level that is socially optimal.

Need for Public Provision:

1. **Addressing Underconsumption:** Public provision ensures that merit goods are available to everyone, regardless of their ability to pay. This helps address the issue of underconsumption.
2. **Promoting Equity:** By providing merit goods publicly, governments can reduce inequalities and ensure that all individuals have access to essential services like education and healthcare.
3. **Enhancing Public Welfare:** Public provision of merit goods can lead to improved overall welfare by ensuring that the positive externalities of these goods are fully realized.

4. **Economic Efficiency:** Government intervention can correct market failures and ensure that merit goods are consumed at socially optimal levels, leading to better economic outcomes.

Government Policies:

1. **Subsidies:** Governments may provide subsidies to reduce the cost of merit goods, making them more affordable and encouraging consumption.
2. **Public Provision:** In some cases, the government may directly provide merit goods, such as public schools and hospitals, to ensure universal access.
3. **Regulation:** Regulations can mandate the provision or consumption of merit goods, such as compulsory education laws or vaccination requirements.

In summary, merit goods are essential for the well-being of individuals and society. Government intervention is often necessary to ensure their adequate provision and consumption, thereby addressing market failures and promoting social welfare.

3.5 LINDAHL'S VOLUNTARY EXCHANGE APPROACH

The theory of public expenditure was first clearly formulated by economists Knut Wicksell and Erik Lindahl. Their **Voluntary Exchange Approach** analyses the provision of public goods, aiming to establish conditions under which these goods can be provided based on unanimous agreement within society. In this model, tax levels are determined in proportion to the benefits that individuals receive from government services, implying that those who benefit the most from public goods should contribute the most in taxes.

Contributions of Knut Wicksell

Knut Wicksell initially proposed the idea that each public good should be financed by a distinct, identifiable tax. He argued that unanimous agreement among all members of society should be required to determine the amount of a public good to be supplied. This approach ensures that public goods are funded in a manner that reflects the preferences and consent of all individuals in society (Musgrave, 1959).

Erik Lindahl's Influence and Model

Erik Lindahl, a Swedish economist and advisor to the government, expanded on Wicksell's ideas. He developed a model for financing public goods that aligns with the benefits individuals derive from those goods. The Lindahl model requires that the quantity of a public good be provided at a level where the total marginal benefit equals the marginal cost of production. Lindahl's theory emphasizes that, since people have different preferences, they should each pay a different tax based on the benefits they receive from the public good. This system of taxation, known as the

Lindahl Tax, ensures that each individual's tax contribution reflects their marginal benefit from the public good (Lindahl, 1919).

For example, if one person highly values a public park, they might be willing to pay Ra.20 per day for its use, whereas another individual who seldom visits might only agree to pay Re.1. This approach aligns the cost burden with individual preferences, thereby addressing the challenge of supplying public goods at optimal levels.

Lindahl's Model and Public Finance

Lindahl's model addresses three critical issues in public finance:

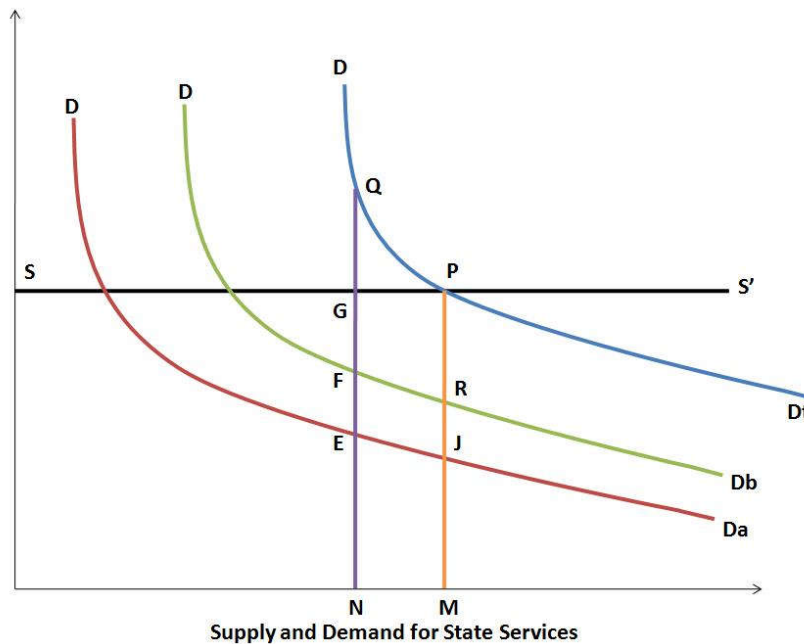
1. **Extent of State Activity:**
2. **Allocation of Total Expenditure:**
3. **Allocation of Tax Burden:**

Through this approach, Lindahl aimed to solve the problem of how to finance public goods in a manner that reflects individual preferences, making the provision of these goods more efficient and equitable.

Key Concepts of Lindahl's Approach

1. **Personalized Prices:** Under Lindahl's framework, each individual is charged a personalized price for the public good, reflecting their marginal benefit or willingness to pay. This means that people who derive more benefit from the public good will pay more and vice versa.
2. **Lindahl Equilibrium:** A Lindahl equilibrium occurs when the sum of all individuals' contributions equals the total cost of providing the public good, and each individual's contribution reflects their willingness to pay. At this equilibrium, the public good is provided efficiently because the total provision reflects the sum of individual demands.
3. **Voluntary Exchange:** Lindahl's approach is based on the idea of voluntary exchange, where individuals voluntarily agree to pay for the public good based on their valuation of it. The process involves negotiation until a consensus is reached on the quantity of the public good to be provided and the share of the cost that each individual will pay.
4. **Pareto Efficiency:** The Lindahl solution is considered Pareto efficient because, at equilibrium, no one can be made better off without making someone else worse off..

Figure No. 3.2



In the Lindahl Model, the aggregate marginal benefit curve, denoted as D_t , represents the combined marginal benefits of the two individuals in the economy, D_a and D_b . The Lindahl equilibrium occurs where the social marginal benefit curve intersects with the marginal cost curve, determining the optimal quantity of the public good (at point P). In this equilibrium, each individual's Lindahl tax rate corresponds to their respective marginal benefit curve. Specifically, individual B pays a tax rate at price level R, while individual A contributes at price level J.

Lindahl's Equilibrium and Pareto Optimality

At Lindahl equilibrium, the sum of individuals' marginal benefits equals the marginal cost of providing a public good, leading to Pareto optimality. Lindahl equilibrium achieves Pareto optimality by aligning individual preferences with the public good's cost, ensuring efficient production and equitable cost distribution.

Graphical Representation

In a two person (P_1 & P_2) community,

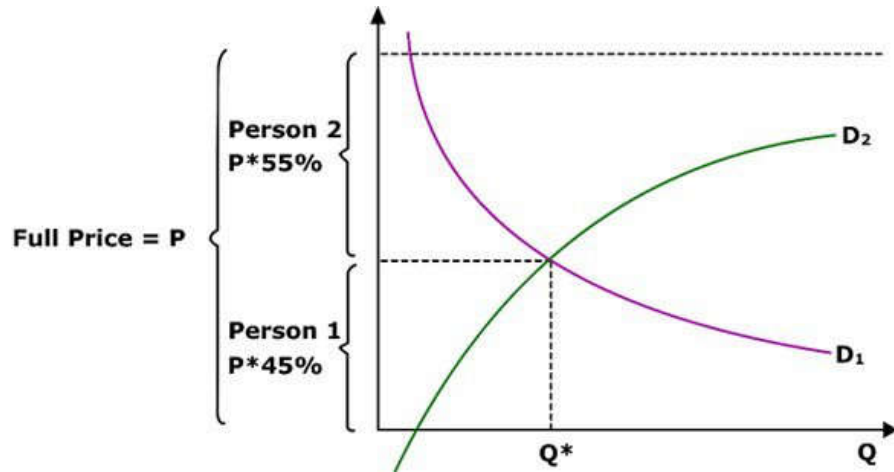
X Axis: represents the price of the public good.

Y Axis: represents Quantity of public goods produced

D1 & D2: represent the amount of the good P_1 & P_2 will wish to demand respectively at different levels of their tax share.

Equilibrium: In Lindahl's equilibrium involves producing Q^* quantity of public goods with 45:55 split in the share of taxes or price of the public goods between Person 1 & 2.

Figure No. 3.3



Limitations of Lindahl's Approach

1. **Practicality:** Accurately determining each individual's willingness to pay is challenging, as individuals may have incentives to understate their valuation to reduce their payment, leading to strategic behaviour and free-riding.
2. **Information Requirements:** The approach requires detailed information about individual preferences, which is often unavailable or costly to obtain. This makes it difficult for governments or public institutions to accurately determine personalized prices.
3. **Coordination:** It requires coordination and consensus among all individuals in society, which can be impractical, especially in large and diverse populations.

3.6 CONCLUSION

This chapter focuses on the classification of goods in Public Economics, emphasizing the provision of public goods and the application of Lindahl's Voluntary Exchange Approach. Goods in Public Economics are categorized into four types, based on the attributes of excludability and non-excludability. Additionally, the chapter introduces merit goods, which can be supplied by both private and public entities. The provision of public goods presents a significant challenge for governments, yet it is crucial for achieving social welfare maximization. The optimal quantity of a public good is reached when net benefits are maximized, which occurs when the marginal benefit equals the marginal cost (Samuelson, 1954). The chapter also provides a detailed exploration of the Voluntary Exchange Approach, which seeks to establish the conditions under which public goods can be supplied through unanimous agreement among individuals. Lindahl's theory addresses the complexities involved in the

provision of public goods by determining the appropriate level of government intervention, distributing total expenditure among various goods and services, and ensuring an equitable allocation of the tax burden (Lindahl, 1919). In addition to Lindahl's approach, the chapter discusses Tiebout's solution to the provision of local public goods, which underscores the role of individual preferences in determining public goods allocation at the local level (Tiebout, 1956).

3.7 QUESTIONS

- Q.1. Please elaborate on the various classifications of goods studied in Public Economics.
- Q.2. Define "Public goods" and outline their key distinguishing features.
- Q.3. Explain how the optimal provision of Pure Public Goods differs from that of Local Public Goods.
- Q.4. Illustrate the process of determining the optimal level of provision for Public Goods.
- Q.5. Define "Merit goods" and discuss the rationale for their provision by the public sector.
- Q.6. Critically analyze Lindahl's Voluntary Exchange Approach to the provision of public goods.
- Q.7. Explain the concept of the Lindahl tax and describe how it leads to Lindahl's equilibrium in the provision of public goods.
- Q.8. Choose a specific public good (e.g., national parks, public transportation, clean air) and analyze the challenges and successes associated with its provision.

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EVALUATION OF PUBLIC EXPENDITURE

Unit Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Preference Revelation Mechanism
- 4.3 Private Provision of Public Goods
- 4.4 Evaluation of Government Expenditure: Cost Benefit Analysis
- 4.5 Conclusion
- 4.5 Questions
- 4.6 References

4.0 OBJECTIVES

After studying this unit, learners will be able to:

1. Analyze and understand the mechanisms used to reveal individual preferences in the context of public choice.
2. Evaluate the conditions under which private provision of public goods is feasible and understand its implications.
3. Apply Cost-Benefit Analysis effectively to assess and evaluate government expenditure projects.

4.1 INTRODUCTION

To ensure the efficient supply of public goods, it is essential for planners to have an understanding of individual preference functions. In democratic nations, the government considers public preferences when determining the provision of public goods. By allocating productive resources towards the production of these goods, the government can ensure their adequate supply. This approach facilitates the rational allocation and utilization of resources, ultimately contributing to the maximization of social welfare through the consumption of the provided public goods.

Public Economics provides a framework for understanding this process, particularly through theories related to public choice or social choice. These theories, notably those developed by Knut Wicksell and Kenneth Arrow, offer insights into the decision-making processes behind public goods provision. Additionally, the private sector's role in providing public

goods and the government's evaluation of expenditure through cost-benefit analysis are crucial aspects of this analysis.

For example, Wicksell's approach emphasizes the importance of unanimous consent in collective decision-making to align public expenditure with individual preferences, while Arrow's Impossibility Theorem highlights the challenges of aggregating individual preferences into a coherent collective decision. These foundational theories form the basis of modern discussions on the provision of public goods and the role of government intervention (Wicksell, 1896; Arrow, 1951).

4.2 PREFERENCE REVELATION MECHANISM

In social choice theory, preference revelation is a key area of study focused on determining the demand for public goods. Some economists argue that without a complete understanding of individual preference functions, government planners may either underprovide or overprovide public goods. The conditions necessary for the provision of public goods at a Pareto-efficient level are well-documented in the economic literature, with Paul Samuelson being among the first to formalize them (1954, 1955). These conditions, assuming non-distortionary taxation, require that the public good be provided at a level where the sum of the marginal rates of substitution (MRS) between the public good and a private good numeraire equals the marginal rate of transformation (MRT) between the two goods:

$$\sum_i \text{MRS}_{gx} = \text{MRT}_{gx}$$

In this equation, MRS represents the marginal rate of substitution between the public good g and a private good x , and MRT refers to the marginal rate of transformation between the two goods. The sum accounts for all i consumers of the public good.

In any type of economy, governments aim to maximize social welfare. However, to do so effectively, they must understand the public's preferences for specific public goods. Citizens need to express their preferences for the public goods they value. In democratic nations, governments typically consider these preferences when allocating resources for the production of public goods. This process facilitates the efficient allocation and utilization of productive resources, ultimately contributing to social welfare maximization. These concepts are thoroughly explored within the theories of public economics, particularly in the areas of public choice and social choice theory (Arrow, 1951; Buchanan & Tullock, 1962).

Preference Revelation and Public Good Provision

In the realm of social choice theory, understanding individual preferences for public goods is crucial for their efficient provision. As economists have noted, the absence of "full knowledge of individual preference functions" by government planners can lead to either under-supply or over-supply of these goods (Stiglitz, 1999).

The seminal work of Samuelson (1954, 1955) established the conditions necessary for achieving Pareto efficiency in public good provision. Assuming non-distortionary taxation, the optimal level of provision occurs when the sum of individuals' marginal rates of substitution between the public good and a private good equals the marginal rate of transformation between the two goods.

In any economic system, governments strive to maximize social welfare. To achieve this, they need to be aware of the public's preferences for public goods (Mueller, 2003). In democracies, this involves considering the choices and preferences expressed by the people, allowing for a rational allocation of productive resources towards the production of those public goods. This, in turn, enables social welfare maximization through the consumption of these goods.

The theoretical underpinnings of this process are explored in public economics through the lens of public choice or social choice theory.

Wicksell's Approach to Public Goods Provision

Knut Wicksell, a prominent Swedish economist, made significant contributions to public finance theory, particularly concerning the provision of public goods. His approach, often referred to as the "Wicksellian approach" or "benefit principle," centres on the notion of voluntary exchange and unanimity in decision-making regarding public expenditure and taxation (Musgrave & Peacock, 1958).

Key Principles

1. **Unanimity Rule:** Wicksell argued that public goods should only be provided if there is unanimous agreement among individuals within society. This implies that each individual must perceive the benefits of the public good to outweigh their individual tax burden (Lindahl, 1919).
2. **Benefit Taxation:** Wicksell advocated for a system of benefit taxation, where individuals are taxed in proportion to the benefits they receive from public goods. This ensures that those who benefit more from the public good contribute more to its provision, fostering a sense of fairness and aligning individual contributions with perceived benefits (Musgrave, 1959).
3. **Marginal Cost Pricing:** Wicksell also emphasized the importance of marginal cost pricing for public goods. This implies that the price individuals pay for a public good should reflect the additional cost of providing it to them. This principle promotes efficiency by ensuring that resources are allocated optimally (Musgrave & Peacock, 1958).

Challenges and Limitations:

While Wicksell's approach provides valuable insights into the provision of public goods, it faces practical challenges:

1. **Preference Revelation:** Unanimous agreement is difficult due to the free-rider problem, where individuals may misrepresent preferences to avoid paying for public goods.
2. **Measuring Benefits:** Accurately quantifying individual benefits from public goods complicates the implementation of a fair benefit taxation system.
3. **Transaction Costs:** Reaching unanimous agreement can be time-consuming and costly, particularly in large, diverse societies.

Despite these limitations, Wicksell's approach highlights the importance of considering individual preferences and benefits in the provision of public goods. It serves as a theoretical benchmark against which practical policy measures can be evaluated.

Wicksell's Approach to Public Choice

In democratic governments, public goods are allocated through political processes, where citizens express their preferences via voting. Economist Knut Wicksell pioneered a framework for addressing how public preferences for public goods are revealed. His approach consists of two main concepts: the Absolute Unanimity and Relative Unanimity Approaches.

The Absolute Unanimity Approach

Wicksell proposed that, for the provision of public goods to be fair and efficient, the decision should be made unanimously by all individuals in society. Under the Absolute Unanimity Approach, every person must agree on both the provision of the public good and the corresponding tax policy. Wicksell argued that this method ensures that no individual is forced to contribute to a public good from which they do not benefit, preventing unjust taxation (Wicksell, 1896).

However, while this approach guarantees fairness, it is extremely difficult to implement in practice. Achieving 100% consensus in a large and diverse population is almost impossible, making it impractical for real-world policy decisions. If even one person opposes the provision of a public good, the government cannot proceed with the fiscal decision, which significantly hampers the decision-making process. Despite its theoretical appeal, the Absolute Unanimity Approach is rarely feasible in democratic societies due to the inherent difficulty of achieving complete agreement.

The Relative Unanimity Approach

Recognizing the limitations of the Absolute Unanimity Approach, Wicksell introduced an alternative method known as the Relative Unanimity Approach, or Qualified Majority Voting. This approach allows for decisions to be made based on a supermajority rather than complete unanimity. For example, a budget policy could be approved with a majority of two-thirds, three-fourths, or even five-sixths of the voters,

depending on the specific rules adopted. This approach strikes a balance between achieving broad consensus and maintaining the ability to make collective decisions efficiently.

The Relative Unanimity Approach also addresses the issue of "voter externality costs," which arise when a simple majority imposes costs on a minority who did not support the decision. By requiring a higher threshold for approval, this approach reduces the likelihood of significant externalities affecting those who oppose the public good provision. Moreover, it prevents a single dissenting voter from blocking the supply of a public good that has broad support, thereby ensuring that the government can proceed with public goods provision while minimizing the potential for exploitation (Musgrave & Peacock, 1958).

Marginal Benefit and Marginal Cost

In line with his preference for voluntary exchange in public goods provision, Wicksell argued that the marginal benefit from public expenditure should be aligned with the marginal tax cost of providing the good. This principle ensures that the provision of public goods is efficient, as resources are allocated in a way that maximizes the net benefit to society. The application of the Relative Unanimity Approach further reinforces this by ensuring that government decisions are made with a broad consensus, reflecting the preferences of a majority of the population (Buchanan & Tullock, 1962).

Criticisms of Wicksell's Approach

Despite its theoretical significance, Wicksell's approach to public choice has been criticized on several grounds:

1. **Practical Implementation:** In democratic countries, the decision regarding which public goods to provide and in what quantities is often made before public preferences are fully known. The government typically determines public expenditure based on broader policy goals rather than direct preference revelation (Musgrave, 1959).
2. **Taxation and Public Expenditure:** Critics argue that governments cannot realistically impose taxes on individuals in proportion to the specific public goods they receive. In practice, tax systems are designed to be broad-based and often do not correspond directly to individual preferences for public goods.
3. **Revenue and Expenditure Decisions:** Wicksell's theory assumes that governments first gather preferences for public goods and then make expenditure decisions. However, in reality, governments often estimate their expenditure needs first and then work to raise the necessary revenue. This discrepancy limits the applicability of Wicksell's approach in practical decision-making (Musgrave, 1959).

4. **Limited Public Understanding:** Not all citizens fully understand or are aware of the public goods being provided by the government. This can lead to an uneven representation of preferences, with only a subset of the population actively participating in the decision-making process.
5. **Government Decision-Making in Practice:** In practice, governments often prioritize political and economic factors over public preferences when deciding on public goods provision, limiting the practical application of Wicksell's approach in real-world policymaking.

Conclusion

Wicksell's approach to public choice significantly impacted Public Economics by emphasizing fairness and consensus in providing public goods. While his Absolute Unanimity Approach is impractical, the Relative Unanimity Approach offers a more feasible decision-making model for democracies. However, his theories face criticism for the challenges in applying them to taxation, spending, and government operations.

Arrow's Impossibility Theorem of Public Choice

Kenneth Arrow's Impossibility Theorem, from his 1951 book *Social Choice and Individual Values*, highlights the difficulties in aggregating individual preferences into a collective decision. The theorem shows that no voting system can meet all fairness criteria with three or more options, revealing the limitations of democratic decision-making. This section will explain the theorem with a table, diagram, and text to illustrate key concepts.

The Conditions of a Fair Voting System

Arrow identified five essential conditions that any fair and democratic voting system should meet:

1. **Unrestricted Domain (Universality):** The system must handle all possible sets of individual preferences.
2. **Non-Dictatorship:** No single individual should have the power to dictate the outcome.
3. **Pareto Efficiency (Unanimity):** If everyone prefers one option over another, the system should reflect this preference.
4. **Independence of Irrelevant Alternatives:** The ranking between two options should not be affected by other irrelevant alternatives.
5. **Transitivity (Collective Rationality):** The group's preferences should be consistent. If the group prefers A to B and B to C, then it should also prefer A to C.

The impossibility result states that no voting system can meet all these conditions simultaneously. To better understand this concept, let's look at an example.

Example: Voting Preferences for Three Alternatives

Consider three voters and three alternatives: A, B, and C. The table below illustrates the individual preferences of these voters:

Table No: 4.1

Voter	1st Preference	2nd Preference	3rd Preference
Voter 1	A	B	C
Voter 2	B	C	A
Voter 3	C	A	B

In this scenario:

- **Voter 1** prefers A over B, and B over C.
- **Voter 2** prefers B over C, and C over A.
- **Voter 3** prefers C over A, and A over B.

If we try to aggregate these preferences into a collective decision, we quickly encounter difficulties. Let's analyze this using a pairwise comparison of options.

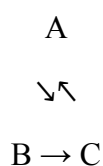
- **A vs. B:** Voter 1 and Voter 3 prefer A, while Voter 2 prefers B. So, A wins over B.
- **B vs. C:** Voter 1 and Voter 2 prefer B, while Voter 3 prefers C. So, B wins over C.
- **C vs. A:** Voter 2 and Voter 3 prefer C, while Voter 1 prefers A. So, C wins over A.

This creates a circular situation, known as *Condorcet's paradox*, where no clear winner emerges. A is preferred to B, B is preferred to C, and yet C is preferred to A. This violates the principle of transitivity, illustrating the problem Arrow highlighted: it is impossible to aggregate these individual preferences into a consistent collective decision.

Diagram: The Voting Paradox

The diagram below visually represents this circular preference situation:

Diagram: 4.1



In the diagram 4.1:

- **A** beats **B**,
- **B** beats **C**,
- **C** beats **A**.

This cycle shows that no alternative is the clear winner, which highlights the inconsistency in collective preferences. This is a practical illustration of Arrow's Impossibility Theorem.

Implications for Public Choice

Arrow's theorem has profound implications for public choice theory, particularly in the context of voting and decision-making regarding public goods. Since no voting system can perfectly aggregate individual preferences while satisfying all fairness conditions, policymakers must navigate the inherent trade-offs when designing decision-making processes. Arrow's work suggests that collective decision-making in democratic systems will always involve some level of compromise, and that achieving a perfectly fair outcome is mathematically impossible (Arrow, 1951).

Conclusion

Arrow's Impossibility Theorem reveals the challenges of creating a fair and consistent voting system for public choice. Through the example and diagram above, it is evident that even a seemingly straightforward voting scenario can result in contradictory outcomes. This theorem continues to shape the understanding of democratic decision-making and underscores the complexities of aggregating individual preferences into collective choices.

4.3 PRIVATE PROVISION OF PUBLIC GOODS

Private provision of public goods refers to the scenario where individuals or private entities voluntarily fund and supply goods that are typically public in nature. Examples of private provision include community-funded parks, charitable health clinics, and privately supported libraries.

However, private provision presents several challenges. One significant issue is free-riding, where individuals benefit from the public good without contributing to its cost. Ensuring consistent funding and equitable access also poses difficulties. For instance, if a community decides to build a public park with a total cost of Rs. 500,000 and has 10 residents, each resident would need to contribute Rs. 50,000 if costs were evenly distributed. If not, all residents contribute, those who do must cover the shortfall. For example, if only 7 out of 10 residents contribute, each would need to pay approximately Rs. 71,428 to meet the total cost, leaving the 3 non-contributors to benefit without bearing any of the expense.

The effectiveness of private provision hinges on aligning contributions with the community's preferences. Free-riding can undermine efficiency and fairness, as contributors end up shouldering more of the cost while non-contributors still benefit. To mitigate these issues, potential solutions include publicly recognizing contributors, securing matching funds from larger donors, or formalizing community agreements to ensure fair contributions. Overall, while private provision can be effective, it requires careful management to address the inherent challenges and ensure equitable and sustainable funding.

4.4 EVALUATION OF GOVERNMENT EXPENDITURE: COST BENEFIT ANALYSIS

Government spending plays a crucial role in shaping public policy, directly impacting economic growth, social welfare, and overall development. To ensure that public resources are utilized effectively and yield the intended outcomes, assessing the efficiency of this expenditure is vital. One of the most commonly applied tools for this purpose is Cost-Benefit Analysis (CBA). CBA offers a structured approach to evaluating the economic value of government initiatives by weighing the costs against the benefits they produce.

What is Cost-Benefit Analysis?

Cost-Benefit Analysis is a quantitative technique used to assess the viability of a project or policy by comparing its costs and benefits in monetary terms. The primary goal of CBA is to determine whether the benefits outweigh the costs, thereby justifying the investment of resources. This approach is especially valuable when analyzing public sector projects, where the aim is often to enhance social welfare rather than merely generate financial gains.

Application of CBA in Government Expenditure

1. **Project Selection and Evaluation:** Governments use CBA to assess and prioritize projects that provide public goods and services. By comparing costs (financial, social, environmental) with benefits (economic growth, improved health, social welfare), projects offering the highest net social benefit are selected.
2. **Resource Allocation:** In resource-constrained economies, CBA ensures optimal allocation by directing funds to projects with the highest social return on investment. It maximizes the difference between the present value of benefits and costs for efficient public spending.
3. **Efficiency Measurement:** CBA helps measure the efficiency of government spending by determining if public expenditure delivers maximum societal benefits. It highlights areas where resource reallocation could yield better outcomes.

Marginal Social Benefits vs. Marginal Social Costs

A crucial aspect of CBA is the comparison of Marginal Social Benefits (MSB) and Marginal Social Costs (MSC). MSB represents the additional benefits to society from government expenditure, while MSC represents the opportunity cost of diverting resources from the private sector to the public sector.

- **Optimal Government Activity:** The ideal level of government activity is achieved when MSB equals MSC. This balance ensures that each rupee spent by the government provides the maximum possible benefit to society, without unnecessarily diverting resources from other productive uses.
- **Equalizing MSB Across Sectors:** For efficient resource allocation, the MSB of different public activities (e.g., education, defence, healthcare) should be equalized. This means that the last rupee spent on each activity should generate the same level of benefit for society.

General Conditions for Conducting Cost-Benefit Analysis When Evaluating Government Expenditure

When conducting a Cost-Benefit Analysis (CBA) for government spending, several conditions must be met to ensure a reliable evaluation. These are:

1. **Comprehensive Scope:** The analysis must include all direct and indirect costs (e.g., capital, operational) and benefits (e.g., economic growth, social welfare) to provide a complete picture of the expenditure's impact.
2. **Accurate Valuation:** Costs and benefits should be quantified in monetary terms where possible, using alternative methods (e.g., contingent valuation) when necessary to ensure transparency.
3. **Appropriate Discount Rate:** A proper discount rate must be selected to account for the time value of money, reflecting societal preferences for immediate benefits.
4. **Distributional Impacts:** The CBA should assess how costs and benefits are distributed among different groups, ensuring that the project promotes equity and social justice.
5. **Risk and Uncertainty:** Risks and uncertainties should be addressed using sensitivity or scenario analysis to understand potential outcomes.
6. **Long-Term Perspective:** The CBA must consider the entire project lifecycle, ensuring long-term benefits and costs are adequately captured.
7. **Stakeholder Involvement:** Engaging relevant stakeholders ensures a comprehensive analysis and improves legitimacy and acceptance of the results.

8. **Transparency and Documentation:** The process, assumptions, and results should be thoroughly documented to ensure transparency and enable review or replication.
9. **Alignment with Policy Objectives:** The CBA must align with broader government goals, ensuring the expenditure supports strategic policy priorities.
10. **Flexibility and Adaptability:** The CBA should be adaptable to changes in project scope, economic conditions, or policy shifts, allowing updates as new information arises.

Quantitative Approaches for Evaluating Cost-Benefit Analysis Without Time Factor

When evaluating CBA without considering the time factor, we focus on methods that exclude discounting or time-based adjustments. These approaches offer insights into the cost-effectiveness and viability of government projects, especially in cases where time is not a key element or when a simple, quick analysis is needed.

Here are some key approaches:

1. Simple Benefit-Cost Ratio (BCR)

Formula:

$$BCR = \frac{\text{Total Benefits}}{\text{Total Costs}}$$

The **Benefit-Cost Ratio (BCR)** compares a project's total benefits to its total costs without considering the time value of money. A BCR greater than 1 means benefits exceed costs, making the project favourable.

2. Total Net Benefit

Formula: $\text{Total Net Benefit} = \text{Total Benefits} - \text{Total Costs}$

The Total Net Benefit approach simply subtracts total costs from total benefits to show the net gain or loss. A positive result indicates the project is worthwhile as its benefits outweigh its costs.

3. Cost-Effectiveness Analysis (CEA)

Formula: $CEA = \frac{\text{Total Cost}}{\text{Effectiveness Measure}}$

Cost-Effectiveness Analysis (CEA) is used when the benefits of a project cannot be easily monetized. Instead, it measures the cost required to achieve a specific outcome or effectiveness measure (e.g., cost per unit of health improvement, cost per life saved). The lower the CEA ratio, the more cost-effective the project is.

4. Simple Payback Period

Formula: $\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Annual Benefits}}$

The **Simple Payback Period** calculates the time it takes for a project to recover its initial investment based on annual benefits. While this method does not account for the time value of money, it is useful for understanding the basic financial risk and how quickly the investment will be recouped.

5. Break-Even Analysis

Formula: $\text{Break Even Point} = \frac{\text{Fixed Costs}}{(\text{Price per Unit} - \text{Variable Cost per Unit})}$

Break-Even Analysis determines the point at which total costs and total revenues are equal, meaning the project neither makes a profit nor incurs a loss. This approach helps to identify the minimum performance level needed for a project to be financially sustainable.

6. Marginal Analysis

Formula: $\text{Marginal Benefit} = \frac{\Delta \text{Benefit}}{\Delta \text{Output}}$ $\text{Marginal Cost} = \frac{\Delta \text{Cost}}{\Delta \text{Output}}$

Marginal Analysis evaluates the additional (marginal) benefits and costs of a project for each additional unit of output or activity. By comparing marginal benefits to marginal costs, policymakers can determine the optimal level of resource allocation without considering time.

Quantitative Approaches for Evaluating Cost-Benefit Analysis Without Time Factor

When evaluating Cost-Benefit Analysis (CBA) with the consideration of the time factor, the analysis incorporates the time value of money, recognizing that benefits and costs occurring at different times need to be adjusted to their present value. Here are the key quantitative approaches that include the time factor:

1. Net Present Value (NPV)

Net Present Value (NPV) calculates the difference between the present value of a project's benefits and its costs, including initial outlay, operating, and maintenance expenses. It accounts for the time value of money by discounting future benefits and costs. A positive NPV indicates the project is economically viable, as benefits outweigh costs.

NPV Calculation:

- NPV = Present value of benefits - Present value of costs

Formula: $NPV = \sum \left[\frac{B_t}{(1+r)^t} \right] - \sum \left[\frac{C_t}{(1+r)^t} \right]$

Where:

- B_t = Benefits in year t
- C_t = Costs in year t
- r = Discount rate
- t = Time period (year)

If $NPV > 0$, the project is considered socially profitable. In case of mutually exclusive projects, the one with the highest NPV is typically chosen.

Using the NPV criteria only projects with a present value of benefits exceeding the present value of costs should be selected. In other words, the ratio of present value of benefits to present value of costs should be greater than 1.

However, NPV doesn't explicitly account for a project's time horizon. Since capital investments often yield benefits over time, future costs and benefits must be discounted to their present value. This reflects society's preference for immediate gratification over future rewards.

Example: Let's evaluate a hypothetical government project for building a public library. The project involves an initial investment, annual maintenance costs, and will generate annual benefits over a 10-year period. We'll use NPV to determine if the project is economically viable.

Project Details

- **Initial Investment (Year 0):** INR 100 million
- **Annual Maintenance Costs:** INR 5 million per year for 10 years
- **Annual Benefits:** INR 20 million per year for 10 years
- **Discount Rate:** 7% per annum

Steps to Calculate NPV

Step 1. Calculate the Present Value of Each Year's Net Cash Flow

Net cash flow each year is calculated as:

$$\text{Net Cash Flow}_t = \text{Benefits}_t - \text{Maintenance Costs}_t$$

Then, we discount these net cash flows to their present value using the formula:

$$PV_t = \frac{\text{Net Cash Flow}_t}{(1 + r)^t}$$

Where:

- Net Cash Flow t = Benefits in year t - Maintenance Costs in year t
- r = Discount rate (7% or 0.07)
- t = Time period (year)

Step 2. Calculate the Present Value of Each Year's Net Cash Flow

Net Cash Flow = 20,000,000 - 5,000,000 = 15,000,000 INR

Present Value of Net Cash Flow (PV): The Present Value for each year is calculated using the formula:

$$PV_n = \frac{\text{Net Cash Flow}}{(1 + r)^n}$$

Where:

- $r = 7\% = 0.07$
- n = year number

Step-by-Step Breakdown of Calculations:

Year 1:

$$PV_1 = \frac{15,000,000}{(1 + 0.07)^1} = \frac{15,000,000}{1.07} = 14,018,691.59 \text{ INR}$$

Year 2:

$$PV_2 = \frac{15,000,000}{(1 + 0.07)^2} = \frac{15,000,000}{1.1449} = 13,039,641.43 \text{ INR}$$

Year 3:

$$PV_3 = \frac{15,000,000}{(1 + 0.07)^3} = \frac{15,000,000}{1.2250} = 12,244,892.72 \text{ INR}$$

Year 4:

$$PV_4 = \frac{15,000,000}{(1 + 0.07)^4} = \frac{15,000,000}{1.3108} = 11,564,981.88 \text{ INR}$$

Year 5:

$$PV_5 = \frac{15,000,000}{(1 + 0.07)^5} = \frac{15,000,000}{1.4026} = 10,986,865.39 \text{ INR}$$

Year 6:

$$PV_6 = \frac{15,000,000}{(1 + 0.07)^6} = \frac{15,000,000}{1.5036} = 10,508,891.23 \text{ INR}$$

Year 7:

$$PV_7 = \frac{15,000,000}{(1 + 0.07)^7} = \frac{15,000,000}{1.6116} = 10,129,339.68 \text{ INR}$$

Year 8:

$$PV_8 = \frac{15,000,000}{(1 + 0.07)^8} = \frac{15,000,000}{1.7271} = 9,847,021.97 \text{ INR}$$

Year 9:

$$PV_9 = \frac{15,000,000}{(1 + 0.07)^9} = \frac{15,000,000}{1.8508} = 9,649,859.10 \text{ INR}$$

Year 10:

$$PV_{10} = \frac{15,000,000}{(1 + 0.07)^{10}} = \frac{15,000,000}{1.9836} = 7,558,771.73 \text{ INR}$$

Step 3. Calculate Total Present Value of Benefits

Total PV=14,018,691.59+13,039,641.43+12,244,892.72+11,564,981.88+10,986,865.39+10,508,891.23+10,129,339.68+9,847,021.97+9,649,859.10+7,558,771.73

Total PV=117,478,085.90

4. Calculate NPV

The NPV is computed by subtracting the initial investment from the total present value of benefits:

NPV=Total PV–Initial Investment

NPV=117,478,085.90–100,000,000

NPV=17,478,085.90

The NPV of INR 17,478,085.90 shows that the benefits of constructing and maintaining the library exceed the costs, indicating the project's financial viability.

2. Internal Rate of Return (IRR) is the discount rate that makes a project's NPV zero, representing its expected annualized return. It assesses the profitability and efficiency of government projects, aiding in comparing and determining if a project meets the required rate of return. The IRR is the rate r that satisfies the following equation:

$$NPV = \sum_n = \frac{Ct}{(1+r)^t} = 0$$

Where:

- C_t = Net cash flow in year t (Benefits - Costs)
- r = Internal Rate of Return
- t = Time period (year)
- n = Project duration

Calculation of IRR: IRR is calculated through iterative methods, as it cannot be solved algebraically. It can be computed using financial calculators or software like Excel's IRR function. The steps are:

1. **Estimate Cash Flows:** Identify expected cash flows, including initial investment, annual benefits, and ongoing costs.
2. **Set Up Equation:** Set up the equation where NPV equals zero using the cash flows.
3. **Solve for IRR:** Use financial tools or software to find the discount rate that makes the NPV zero.

Below is a comparative table showing NPV and IRR for evaluating government projects.

Table no 2: Comparison of NPV & IRR

Criteria	Net Present Value (NPV)	Internal Rate of Return (IRR)
Definition	Measures the difference between the present value of cash inflows and outflows.	The discount rate at which the NPV of cash flows equals zero.
Objective	Determines the absolute value of a project.	Determines the percentage return expected from the project.
Decision Rule	NPV > 0: Project is considered acceptable. NPV < 0: Project is considered unacceptable.	IRR > Benchmark Rate: Project is acceptable. IRR < Benchmark Rate: Project is unacceptable.
Measurement Unit	Monetary value (e.g., INR).	Percentage (e.g., 12%).
Cash Flow Assumption	Assumes reinvestment of intermediate cash flows at the discount rate used in the NPV	Assumes reinvestment of intermediate cash flows at the IRR itself.

Criteria	Net Present Value (NPV)	Internal Rate of Return (IRR)
	calculation.	
Sensitivity to Discount Rate	Directly influenced by changes in the discount rate.	IRR is independent of discount rate but sensitive to the cash flow pattern.
Multiple IRRs	No issue of multiple values; one NPV value.	Can result in multiple IRRs if cash flows are non-conventional.
Scale of Investment	Provides information on the absolute value of the project.	Provides information on the rate of return, which may not reflect the scale of the project.
Comparison of Projects	Useful for comparing projects of different sizes by evaluating their net monetary gain.	More useful for comparing projects with similar scale but does not indicate the absolute value.
Complex Cash Flows	Handles conventional cash flows well and provides a clear financial benefit value.	May become complex with non-conventional cash flows and may have multiple IRRs.
Decision Criteria	NPV focuses on creating value; higher NPV implies better value creation.	IRR focuses on the rate of return; higher IRR implies higher profitability.
Decision Making	Directly indicates how much value the project adds.	Indicates the efficiency or return rate of the investment.
Appropriateness for Government Projects	Ideal for evaluating the total value added by the project and accounting for government budgets.	Useful for understanding the rate of return and comparing with benchmark rates or other investment options.

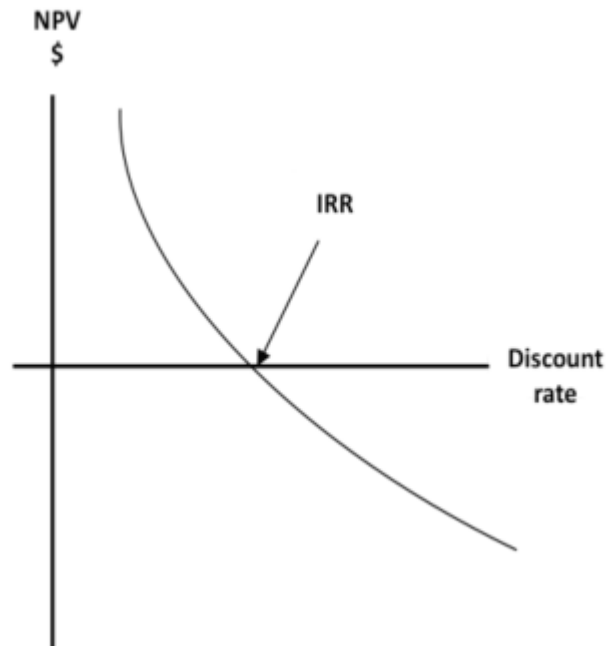
NPV is often preferred for evaluating government expenditure as it provides a clear monetary measure of value added and assesses the overall financial impact, especially when project scales differ. It helps maximize societal monetary benefits.

IRR is useful for understanding the rate of return and comparing project efficiency. However, it may be less reliable with unconventional cash flows or varying project scales.

Using both NPV and IRR together offers a more comprehensive evaluation.

Below graph can illustrate how changes in the discount rate affect NPV, showing profitability at different rates.

Figure No. 4.1



The **NPV Curve** starts high on the Y-axis (positive NPV) at low discount rates and decreases as the rate increases. It crosses the X-axis at the IRR, where NPV equals zero. When the discount rate exceeds the IRR, NPV becomes negative.

- **NPV > 0:** When the discount rate is below the IRR, the project generates positive net value.
- **NPV < 0:** When the discount rate is above the IRR, the project results in a negative net value.
- **IRR:** The point where NPV = 0, indicating the breakeven rate of return.

3. Social Rate of Discount (SRD) is a key concept in evaluating government spending, especially in cost-benefit analysis for public projects. It reflects the rate at which society values present versus future benefits, guiding policymakers in deciding if long-term benefits justify immediate costs.

Key Points on Social Rate of Discount (SRD):

1. **Purpose:** The SRD discounts future benefits and costs to present value, allowing governments to compare benefits across time periods and balance future benefits against current expenditures.

2. Determining the Rate:

- Opportunity Cost of Capital: The SRD can be based on the return society forgoes by investing in a public project rather than elsewhere.
- Social Time Preference Rate (STPR): This reflects society's preference for current consumption over future consumption, including time preference and expected growth in consumption.
- Market Rates: The SRD may also align with market interest rates, adjusted for social preferences or project-specific risks.

3. Implications for Policy:

- Higher SRD: Favors projects with immediate benefits, potentially leading to underinvestment in long-term projects like infrastructure or environmental conservation.
- Lower SRD: Values future benefits more, supporting long-term projects that promote sustainable development and intergenerational equity.

Limitations of Cost-Benefit Analysis (CBA):

1. Difficulty in Quantifying Non-Monetary Factors: Many benefits, like public health or environmental improvements, are hard to express in monetary terms, leading to subjective and inconsistent valuations.

2. Distributional Issues: CBA focuses on efficiency, not equity, and may ignore social justice, potentially exacerbating inequalities by overlooking how benefits are distributed.

3. Discounting Future Benefits: The choice of discount rate can undervalue long-term benefits, raising concerns about intergenerational equity, particularly in projects like climate change.

4. Uncertainty and Risk: Long-term predictions are uncertain, and CBA results can vary significantly based on assumptions, making outcomes less reliable.

5. Potential for Bias: CBA may be influenced by political or institutional interests, and selective inclusion of costs/benefits can undermine objectivity.

6. Time and Resource Intensive: CBA is complex, costly, and time-consuming, which can lead to oversimplifications or omissions, especially in urgent decisions.

Conclusion:

While Cost-Benefit Analysis is a valuable tool for evaluating government expenditure, its limitations must be carefully considered. Policymakers should be aware of these challenges and supplement CBA with other decision-making tools and frameworks, such as multi-criteria analysis, stakeholder consultations, and considerations of social equity and justice, to ensure that government spending decisions are both efficient and equitable.

4.6 CONCLUSIONS

This chapter focuses on the theory of public choice and the application of Cost-Benefit Analysis (CBA) in evaluating government expenditure. The mechanisms for revealing individual preferences in collective decision-making are examined through two key social choice theories: Wicksell's Approach and Arrow's Impossibility Theorem. Both theories highlight the challenges in accurately capturing public preferences for public goods, which are central to public choice theory.

The chapter also explores the private provision of public goods, addressing the circumstances under which it can effectively mitigate the free-rider problem. Furthermore, an in-depth discussion of Cost-Benefit Analysis is provided, including its role as a widely used framework in public expenditure decisions, alongside a consideration of its limitations.

4.6 QUESTIONS

1. Describe Wicksell's approach within the context of public choice theory.
2. Explain Arrow's Impossibility Theorem and its implications for social choice.
3. What is the Preference Revelation Mechanism? Discuss how Wicksell's approach addresses public choice through this mechanism.
4. Discuss the private provision of public goods and explain how it can address the free rider problem.
5. Analyze the concept and application of Cost-Benefit Analysis in public expenditure.
6. What are the key criteria used in Cost-Benefit Analysis?
7. How can government expenditure projects be assessed using Cost-Benefit Analysis? Provide a detailed discussion.
8. Identify and discuss the limitations of Cost-Benefit Analysis in evaluating public projects.

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TAXATION- I

Unit Structure

- 5.0 Objectives
- 5.1 Introduction to Public Revenue
- 5.2 Understanding Public Revenue Sources
- 5.3 Definition and Scope of Taxation
- 5.4 Key Characteristics of a Tax System
- 5.5 Aims and Goals of Taxation
- 5.6 Foundations of Taxation: Principles and Canons
- 5.7 Exploring Tax Theory
- 5.8 Chapter Summary
- 5.9 Review Questions

5.0 OBJECTIVES

After completing this unit, you will be able to;

- Grasp the concept of taxation, along with the features and objectives of a tax system.
- Identify and understand the various sources of public revenue.
- Comprehend the foundational principles or canons of taxation.
- Explain the different theories underlying taxation.

5.1 INTRODUCTION TO PUBLIC REVENUE

The government's role in the socio-economic development of a nation is increasingly significant, as public sector expenditure is crucial in both developed and developing economies. According to Wagner's Law, as an economy progresses, the size of public expenditure tends to increase. To meet these expenditure requirements, governments continuously seek to enhance their revenue sources. The three primary sources of government revenue are taxes, charges/fees, and borrowings.

In India, the Union Finance Minister announced the central budget on February 1, 2024, with a total budgetary provision of ₹45 lakh crore. Of

this amount, approximately ₹30 lakh crore was expected to be collected from tax revenue, non-tax revenue, and non-debt capital receipts. The remaining ₹15 lakh crore was projected to be raised through borrowings to meet public expenditure needs. The budget emphasized that tax revenue continues to be the largest source of income for the government.

In the current economic climate, governments worldwide are striving to increase tax revenue to expand public expenditure. This has led to various reforms in taxation systems and increased tax rates to generate more revenue. In India, service tax was first introduced in 1995, recognizing the growing contribution of the service sector to national income. Since 2017, the Goods and Services Tax (GST) has been implemented, incorporating most services under its ambit.

For the fiscal year 2023-24, the Union Budget projected total expenditure of ₹45 lakh crore, with tax revenue expected to contribute significantly to this amount. The government's focus remains on broadening the tax base and improving compliance to sustain public expenditure growth.

5.2 UNDERSTANDING PUBLIC REVENUE SOURCES

It is important to understand that how governments finance their operations and services. Public revenue is generated through various channels, including taxes, fees, and profits from public enterprises. These sources collectively support public expenditure and contribute to economic stability and development.

1. Tax Revenue

Taxes are the primary source of revenue for governments, consisting of compulsory contributions levied on individuals and businesses. Taxes can be classified into direct taxes, such as income tax and corporation tax, and indirect taxes, like goods and services tax (GST) and excise duties. These funds are used to finance government activities and public services, such as education, healthcare, and infrastructure development. Tax revenue is critical for redistributing wealth and achieving economic and social objectives.

2. Non-Tax Revenue

Non-tax revenue includes income that the government generates from sources other than taxes. This can include profits from public sector enterprises, dividends from government investments, fees for services (such as passport fees or utility charges), fines, and penalties. Non-tax revenue helps diversify government income streams and can provide a more stable revenue base, especially when tax revenues fluctuate due to economic conditions.

3. Borrowings

When tax and non-tax revenues are insufficient to meet public expenditure, governments resort to borrowings. This can be done

domestically through government bonds or externally from international financial institutions and foreign governments. Borrowing allows the government to finance large-scale infrastructure projects and other long-term investments but also creates future obligations to repay the debt with interest.

4. Grants and Aid

Grants and aid are transfers of money or resources from other governments, international organizations, or non-governmental organizations, usually provided without the expectation of repayment. These funds are often designated for specific purposes, such as disaster relief, poverty alleviation, or development projects. Grants and aid can supplement domestic resources, but reliance on them may also expose a country to external influence.

5. Revenue from Public Enterprises

Governments often own and operate enterprises in various sectors, such as transportation, energy, and telecommunications. Revenue generated from these enterprises, through the sale of goods and services, contributes to public revenue. Successful public enterprises can provide a significant revenue stream while supporting economic development and job creation.

6. Fees and Charges

Fees and charges are collected by the government for providing specific services or permissions, such as licensing fees, registration charges, and tolls. These payments are usually related to the cost of providing the service and are an essential source of revenue for local governments. By charging for services, governments can allocate resources more efficiently and encourage responsible usage of public goods.

7. Property Income

This includes income earned from the government's ownership of land and property. Rental income from leasing government-owned land, buildings, and other assets contributes to public revenue. Property income allows governments to leverage their assets to generate financial resources, which can be reinvested in maintaining and improving public infrastructure and services.

5.3 DEFINITION AND SCOPE OF TAXATION

Tax is the amount of income which is to pay honestly to the government by citizens without any expectation to refund it. It may be levied on property, income, at the time of purchasing any goods and services, selling goods and services. Tax is a compulsory payment to the government by people without any expectation of some return. If the person denies to pay tax it will be punished in the court of law.

According to Adam Smith, “A tax is a contribution from citizens for the support of the state”.

Prof. Seligman: “A tax is a compulsory payment from a person to the government to defray the expenses incurred in the common interests of all without reference to special benefits conferred”.

Taussing: “The essence of a tax as distinguished from other charges by government in the absence of a direct quid pro qua between the tax payer and public authority”.

Bastable: “Tax is a compulsory contribution of the wealth of a person or body of persons for the service of the powers”.

Dr. Dalton: “A tax is a compulsory contribution imposed by a public authority irrespective of the exact amount of service rendered to the taxpayer in return and not imposed as penalty for any legal offence”.

Findlay Shiras: Taxes are compulsory contribution to public authorities to meet the general expenses of the government which have been incurred for the public good and without reference to special benefits.”

Economists have defined the definition of tax. From the above definitions we can conclude that the taxes are in compulsory nature not voluntary nature. It reduces the expendable income of the tax payer and the purchasing power of the public. In the other side public authority expend the income to promote productive activities from collected through imposing taxes. To levy tax on public, it has also some goal to attain in the economy like to increase employment opportunities, to reduce poverty, to expand infrastructural facilities, to reduce income and regional inequalities etc. The government tries to promote economic stability and growth in the economy through collection of tax.

Scope of Taxation:

1. Revenue Generation

The primary scope of taxation is to generate revenue for the government, which is essential for funding public goods and services, including education, healthcare, infrastructure, and defense.

2. Economic Regulation

Taxation serves as a tool for economic regulation by influencing consumer behavior, investment decisions, and business practices. It can be used to encourage or discourage certain economic activities, such as promoting investment in renewable energy through tax incentives.

3. Income Redistribution

Taxes play a role in redistributing income and wealth within society, aiming to reduce economic inequality. Progressive tax systems, where higher income individuals pay a larger percentage of their income in taxes, are designed to achieve this redistribution.

4. Economic Stabilization

Tax policies can be used to stabilize the economy by controlling inflation and managing economic cycles. For example, during economic downturns, governments might reduce taxes to stimulate spending and investment.

5. Public Accountability

The scope of taxation also includes ensuring public accountability and transparency in how tax revenues are collected and spent. Effective tax systems promote trust in government by ensuring that tax funds are used efficiently and equitably.

6. Compliance and Enforcement

Taxation encompasses the mechanisms for ensuring compliance with tax laws and regulations. This includes the establishment of tax authorities, auditing processes, and enforcement measures to address tax evasion and avoidance.

7. Global Integration

In a globalized economy, the scope of taxation extends to international considerations, including tax treaties, cross-border taxation issues, and efforts to prevent tax avoidance and evasion on a global scale. Governments coordinate with international bodies to address these challenges and ensure fair tax practices.

5.4 KEY CHARACTERISTICS OF A TAX SYSTEM

The important characteristics of tax systems are as follows:

1. Tax as a Payment to Public Authority

Taxes are financial contributions imposed by public authorities, specifically the government, on individuals and entities. Unlike voluntary payments such as donations to social welfare organizations, taxes are compulsory. Payments made to charitable organizations are considered donations and do not constitute taxes. Taxes are mandated by law and are directed towards funding government functions and public services.

2. Compulsory Nature of Taxes

Taxes are compulsory payments that individuals and businesses must make to the government according to established tax rates and regulations. For instance, if the government sets an income tax rate of 10% on earnings exceeding ₹5 lakh per annum, individuals earning above this threshold are required to pay tax on the amount exceeding ₹5 lakh. The obligation to pay taxes is enforced by law, with exceptions only granted under specific circumstances as determined by the government.

3. Sacrifice of Income

Paying taxes involves a legal obligation to transfer a portion of one's income to the government. This represents a sacrifice of income, as individuals must allocate part of their earnings to fulfill their tax liabilities. Additionally, indirect taxes, such as sales tax or VAT, increase the cost of goods and services, leading consumers to spend more and effectively sacrificing part of their income in the form of higher prices.

4. Independence of Benefits and Taxes

The payment of taxes does not necessarily guarantee direct benefits or services to the taxpayer. Taxes are collected to fund public expenditure and government initiatives aimed at general public welfare. While the benefits of government spending—such as infrastructure, healthcare, and education—contribute to societal well-being, they are not exclusively available to those who have paid taxes. The principle underlying taxation is that it supports collective needs rather than providing individual returns.

5. Types of Taxes

Taxes are categorized into various types, primarily divided into direct and indirect taxes. Direct taxes are levied directly on individuals' or entities' income and wealth, such as income tax, property tax, and wealth tax. Indirect taxes are applied to transactions and the consumption of goods and services, including goods and services tax (GST), service tax, excise duty, and sales tax. Each type of tax serves different purposes and impacts individuals and businesses in varying ways.

6. Public Welfare as the Primary Aim of Taxes

The primary aim of levying taxes is to fund public welfare and support the government's fiscal policy. Taxes are essential for financing various public services and infrastructure projects that benefit society as a whole. Government spending funded by taxes addresses critical areas such as healthcare, education, and public safety, which contribute to the overall well-being and development of the nation.

7. Legal Sanction and Enforcement

Once a tax is established by law, it gains legal authority and must be complied with by all eligible taxpayers. Failure to pay taxes as required can lead to legal consequences, including penalties and sanctions. The legal framework surrounding taxation ensures that the government has the authority to enforce tax laws and pursue defaulters, maintaining the integrity and effectiveness of the tax system.

5.5 AIMS AND GOALS OF TAXATION

The main aims and goals of taxation are as follows.

1. Revenue Generation:

The most fundamental purpose of taxation is to provide governments with the revenue needed to fund essential public services. This includes a wide range of services such as education, which ensures a skilled workforce; healthcare, which maintains public health standards; defense, which protects national security; and infrastructure, which supports the economy. By generating this revenue, governments can maintain and improve the quality of life for their citizens. Taxes are collected at various levels—local, state, and federal—to ensure that different aspects of public welfare are adequately funded.

2. Wealth Redistribution:

One of the primary social goals of taxation is to address economic inequality. Progressive tax systems, where higher income levels are taxed at higher rates, are designed to redistribute wealth from the wealthy to the less affluent. This redistribution can help reduce the gap between rich and poor, fostering a more equitable society. Tax revenues fund social programs like healthcare, education, and welfare, which provide support to lower-income individuals and families. By redistributing wealth, taxation helps to level the playing field, providing more equal opportunities for all citizens.

3. Economic Stability:

Taxes play a crucial role in maintaining economic stability by influencing the overall level of demand in the economy. During periods of inflation, higher taxes can help reduce excess demand and cool down the economy. Conversely, in a recession, tax cuts can stimulate demand by putting more money in the hands of consumers and businesses. This countercyclical fiscal policy helps to smooth out the economic cycle, minimizing the extremes of booms and busts. By adjusting tax rates in response to economic conditions, governments can work towards maintaining stable economic growth.

4. Resource Allocation:

Taxation can guide the allocation of resources by incentivizing or discouraging certain behaviors and investments. For instance, tax credits for renewable energy investments can encourage businesses and individuals to adopt cleaner technologies. Similarly, higher taxes on harmful goods, like tobacco and alcohol, can discourage consumption and promote public health. By influencing the behavior of businesses and consumers, taxes help to ensure that resources are used in ways that align with societal goals, such as sustainability and innovation.

5. Social Welfare:

Taxation is vital for funding social welfare programs that provide a safety net for vulnerable populations. Programs such as unemployment benefits, social security, and healthcare subsidies are funded by tax revenues and are essential for supporting those who are unable to support themselves due to circumstances such as job loss, disability, or old age. By ensuring that basic needs are met, social welfare programs contribute to social stability and cohesion, reducing poverty and the associated negative impacts on society.

6. Public Infrastructure:

Taxes are a critical source of funding for the development and maintenance of infrastructure, including roads, bridges, public transportation, and utilities. These infrastructure investments are essential for facilitating economic activity, connecting markets, and enhancing productivity. Well-maintained infrastructure attracts businesses and fosters economic growth, as it lowers transportation costs, improves efficiency, and enhances the quality of life for residents. By investing in infrastructure, governments lay the groundwork for long-term economic development and competitiveness.

7. Environmental Protection:

Environmental taxes, such as carbon taxes and pollution levies, are used to internalize the environmental costs of economic activities. By taxing activities that harm the environment, governments can incentivize companies and individuals to reduce their carbon footprint and adopt sustainable practices. These taxes generate revenue that can be reinvested in environmental conservation and renewable energy projects, further promoting sustainability. By aligning economic incentives with environmental goals, taxation plays a crucial role in mitigating climate change and preserving natural resources for future generations.

8. Promoting Economic Growth:

Tax policy can be used strategically to stimulate economic growth by encouraging investment and entrepreneurship. Tax incentives, such as deductions and credits for research and development, can promote innovation and technological advancement. Lower corporate tax rates can attract foreign investment, boosting job creation and economic activity. By creating a favorable tax environment, governments can encourage businesses to expand and innovate, leading to increased productivity and higher standards of living.

5.6 FOUNDATIONS OF TAXATION: PRINCIPLES AND CANONS

Taxation is a fundamental source of public revenue for every government in the modern era. An increase in taxes typically results in increased government revenue, while a decrease leads to a reduction. Governments

are required to expand their expenditures to meet public needs and drive national development. However, the additional tax burden on taxpayers can adversely affect the productivity of producers, who are the taxpayers themselves. Therefore, it is incumbent upon governments to consider the condition of taxpayers when imposing taxes and to levy taxes that are reasonable and accessible. As emphasized in the objectives of taxation, taxes should not negatively impact the efficiency and productivity of taxpayers.

A crucial question faced by policymakers is how taxes should be levied and what pattern they should follow. Each time a new tax is imposed, it is essential to consider the taxpayers' capacity to pay, ensure nondiscrimination, and evaluate the positive impact on the economy. Economists have proposed various principles or canons of taxation to guide the formulation of sound taxation policy. While there are no exact canons of taxation, several key principles have been suggested over time.

Adam Smith's Canons of Taxation

Findlay Shiras lauded Adam Smith's contribution to the field of taxation by stating, "No genius, however, has succeeded in considering the principles into such clear and simple canons as has Adam Smith." Smith was the first to provide a detailed and comprehensive statement of the canons of taxation, which have been universally accepted. He outlined four key canons:

1. Canon of Equality:

The Canon of Equality forms the basis of a good tax system. According to this principle, a good tax is one that is based on the principle of equality, meaning that it should be levied according to an individual's ability to pay. Adam Smith articulated this as, "The subjects of every state ought to contribute towards the support of the government as nearly as possible, in proportion to their respective abilities, that is, in proportion to the revenue which they respectively enjoy under the protection of the state." This principle asserts that wealthier individuals should be subjected to higher taxation compared to those with lesser means. In essence, Smith emphasized that everyone should pay according to their capacity, ensuring equitable sacrifice. This is based on the understanding that the rich experience lower marginal utility from money compared to the poor, who derive greater marginal utility from it.

2. Canon of Certainty:

According to the Canon of Certainty, there should be no ambiguity regarding tax payments. Smith stated, "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, all ought to be clear and plain to the contributor of the tax." This means that taxpayers should have clarity regarding the timing, amount, method, and place of payment, as well as the authority to whom the tax is paid. Certainty in taxation fosters confidence among taxpayers and facilitates easier tax management and compliance.

3. Canon of Convenience:

Smith emphasized, “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.” Taxes should be collected in a manner that is most convenient for the taxpayer, minimizing inconvenience. For example, income tax from salaried individuals should be collected at the time of salary disbursement, while land revenue should be collected post-harvest when it is convenient for the taxpayer. This approach not only benefits taxpayers but also the tax collection authorities by ensuring efficient collection with minimal effort.

4. Canon of Economy:

The Canon of Economy dictates that the cost of tax collection should be minimized, ensuring that the maximum amount of collected taxes is deposited in the government treasury. Additional expenses in the collection process should be avoided to fulfill the objectives of taxation effectively. In other words, tax collection should be maximized with minimal expenditure, thereby enhancing the productivity of taxes.

These canons of taxation are significant and hold an important place in every financial structure. As Professor Shiras noted, “Today Adam Smith’s canons continue to be regarded as almost an essential part of the study of finance and they have had a considerable effect on practical finances.”

A. Other Canon of Taxation:

Other than Adam Smith canon of taxation there is other canon of taxation as following.

- 1) Canon of Productivity.
- 2) Canon of Elasticity.
- 3) Canon of Simplicity.
- 4) Canon of Neutrality.
- 5) Canon of Variety.
- 6) Canon of Expediency.
- 7) Canon of Co-ordination.

1. Canon of Productivity:

According to Professor Bastable, “The canon of taxation must be based on productive lines. Taxation is believed to accumulate enough money for the government to run its administration efficiently. It must be enough to enable the government to secure enough facilities for the people.” Productive taxes enable the government to generate substantial revenue with minimal expenditure on collection, without adversely affecting the savings potential of individuals. This principle ensures that taxation is a

sustainable source of government funding while supporting economic growth.

2. Canon of Elasticity:

The Canon of Elasticity dictates that taxes should be flexible, allowing adjustments according to economic conditions. When taxes become burdensome for taxpayers, they should be reduced. Conversely, in times of fiscal emergency or adverse circumstances, the government should be able to increase taxes to meet urgent needs. This flexibility ensures that taxation remains responsive to the economic environment and societal needs.

3. Canon of Simplicity:

A tax system should be straightforward, easy to understand, and accessible to the general public. Complex tax systems force taxpayers to seek assistance from tax experts, leading to additional expenses. Therefore, governments should strive to implement simple rules and regulations to facilitate compliance and minimize administrative costs. A simple tax system enhances transparency and reduces the potential for errors and fraud.

4. Canon of Neutrality:

Taxes should be neutral in their impact, meaning they should not exert inflationary or deflationary effects on the economy. The tax system should neither distort economic decisions nor hinder market efficiency. By maintaining neutrality, taxes can support stable economic conditions and promote sustainable growth.

5. Canon of Variety:

A diverse mix of direct and indirect taxes is essential for an equitable tax system. The tax burden should not be concentrated on a single group; instead, it should be distributed across different segments of society according to individuals' ability to pay. This variety ensures a balanced approach that minimizes economic disparities and promotes fairness.

6. Canon of Expediency:

Taxpayers should perceive taxes as desirable and justified. When imposing taxes, it is crucial to consider their social, economic, and political effects, evaluating both favorable and unfavorable impacts. A tax policy aligned with societal values and priorities is more likely to gain public acceptance and compliance.

7. Canon of Coordination:

There should be effective coordination between various taxes and the authorities responsible for their implementation. Without coordination, taxpayers may face overlapping or double taxation, leading to unnecessary complications and inconvenience. Harmonizing tax policies across

different levels of government ensures consistency and efficiency.

Taxation- I

A good taxation policy requires the implementation of these canons to achieve optimal outcomes. While no country fully adheres to all these principles, striving for a tax system with maximum positive effects and minimal negative impacts on the economy and taxpayers is essential.

5.7 EXPLORING TAX THEORY

Ability to Pay:

The principle of ability to pay is widely accepted as a means of ensuring equity and justice in taxation. According to this principle, individuals should pay taxes in accordance with their ability to do so, based on their income and property. Those with greater income and wealth should contribute more, while those with less should contribute less. The Italian economist Antonio Gramsci was among the first to present the progressive tax principle on the basis of the ability to pay. This concept has been endorsed by several notable thinkers, including Jean Bodin, Sismondi, John Stuart Mill, Jean-Jacques Rousseau, Adolph Wagner, Franklin D. Roosevelt, and Adam Smith.

The ability to pay theory suggests that individuals should be taxed according to their capacity to bear the financial burden. If an individual has a greater ability to pay, they should contribute more; conversely, if their ability is less, they should pay less. This principle operates in conjunction with the theory of diminishing marginal utility of money. For wealthy individuals, the marginal utility of money is lower, so they can contribute more without experiencing significant sacrifice. In contrast, poorer individuals experience a higher marginal utility of money, meaning that while they contribute less in absolute terms, the relative sacrifice is greater.

The ability to pay principle is grounded in three key concepts:

a. Equal Sacrifice:

As articulated by J.S. Mill, "What would be more equitable than a situation under which each person's contribution to the support of government resulted in equal sacrifice for all?" This implies that the financial sacrifice made by each taxpayer should be equivalent, ensuring fairness across different income levels.

b. Law of Diminishing Marginal Utility of Income:

According to this law, as an individual's income increases, the marginal utility of additional income decreases. Conversely, as income decreases, the marginal utility of money increases. To ensure an equitable tax burden, wealthier individuals should be taxed more heavily than poorer individuals. Those who are absolutely impoverished should be exempt from taxation. This concept of diminishing marginal utility is derived from the general law of diminishing marginal utility, which states that the

satisfaction gained from consuming additional units of a good decreases as consumption increases.

c. Interpretation of Faculty:

Professor John Hobson describes "economic surplus" as the portion of income that can bear the tax burden. With increasing faculty, or capacity, the economic surplus also increases, inviting a larger tax contribution proportional to the increase in income and wealth. Once basic needs are met, individuals tend to have a surplus of resources, known as economic surplus, which enhances their ability to pay more in taxes.

The ability to pay principle emphasizes the importance of aligning tax burdens with an individual's financial capacity, promoting fairness and justice in the taxation system. By considering factors such as equal sacrifice, diminishing marginal utility, and economic surplus, this principle provides a comprehensive framework for equitable taxation.

Determinants of Ability to pay:

The ability to pay principle in taxation is influenced by several key determinants, each of which plays a role in assessing an individual's capacity to contribute to public revenue. These determinants include property, income, family size, and consumption expenditure.

1. Property:

Property is one of the primary determinants of an individual's ability to pay taxes. Generally, individuals with more property are perceived to have a greater ability to pay. Property serves as an important source of income; however, not all types of property generate consistent income. There are several variables associated with property: income from property does not always flow continuously, and it can vary significantly depending on the location and type of property. Taxing property based solely on its capital value can be unfair, especially if the property does not yield income. Therefore, while property is a significant factor in determining ability to pay, it is not the primary index but rather a supplementary one.

2. Income:

Income, as opposed to property or wealth, is a flow concept rather than a stock concept. The ability to pay taxes is based primarily on this flow concept, making income the main determinant of one's taxpaying capacity. An individual with higher income has a greater ability to pay taxes, while those with lower income have less ability to contribute. Subsistence income, or the income required to maintain a basic standard of living, should be exempt from taxation. The net income above this subsistence level is the key determinant of an individual's ability to pay taxes.

3. Size of the Family:

The size of a family significantly impacts a taxpayer's ability to pay. A larger family with a fixed income has a reduced ability to pay taxes

compared to a smaller family with the same income. Consequently, family size should be considered when levying taxes according to the ability to pay principle. However, despite its relevance, this factor is often not fully implemented in practice.

4. Consumption Expenditure:

Professor Nicholas Kaldor suggests that "consumption rather than income should be the basis of taxation." Consumption effectively measures the extent to which an individual withdraws resources from the economy for personal use. Some developing countries have adopted this approach by imposing expenditure taxes, while others apply higher taxes on luxury goods. This approach reflects the belief that taxation should target personal consumption as a more accurate reflection of economic impact.

Subjective Approach to Measures of Ability to Pay Taxes: There are three interpretations of equal sacrifice as follow.

- a. Equal Absolute Sacrifice.
- b. Equal Proportional Sacrifice.
- c. Equal Marginal Sacrifice.

a. Equal Absolute Sacrifice:

Equal absolute sacrifice means that the total loss of utility from taxation should be the same for all taxpayers, regardless of their income levels. In this approach, wealthier individuals pay higher taxes, while poorer individuals pay less. This is because tax rates are based on the marginal utility of income, which decreases as income rises. A progressive tax system implements this principle by imposing higher rates on higher income brackets. A.C. Pigou argued that greater progressivity is justified for higher income groups to ensure a fair distribution of the tax burden.

With the help of formula;

$$\{U(Y) - U(Y - T)\}R = \{U(Y) - U(Y - T)\}P$$

Whereas;

U = Utility of Income Y = Income

T = Tax

R = Person first

P = Person Second

The absolute amount of utility of money lost as a result of tax payment should be equal to everybody. If we assume there are two persons paying tax in the community R and P, equal amount of sacrifice though both are different income group.

b. Equal Proportional Sacrifice:

Equal proportional sacrifice suggests that the utility loss from taxation should be proportional to the taxpayer's total income. Under this approach, individuals in higher income groups pay more in absolute terms, but the ratio of sacrifice to income remains the same across all income groups. This principle can be mathematically expressed as:

$$\text{Rate of Tax} = \text{Sacrifice of tax payer X} / \text{Total Income of X} = \text{Sacrifice of tax payer Y} / \text{Total Income of Y}$$

This is achievable through progressive taxes, where the proportional sacrifice is equal across different income levels.

c. Equal Marginal Sacrifice:

According to Musgrave, equal marginal sacrifice is "the ultimate principle of taxation." Also known as the "least aggregate sacrifice principle," this approach aims to minimize the total sacrifice across all taxpayers. The goal is to distribute the tax burden so that the marginal sacrifice (the additional sacrifice for each unit of income) is equal for everyone, thereby minimizing the total utility loss.

Explanation with the help of formula as;

$$Mu (Y-T)_R = Mu (Y - T)_P$$

Formula shows;

Mu = Marginal Utility of Income R = One tax payer

P = Second tax payer Y = Income

T = Tax

It shows the marginal sacrifice for the different tax-payers should be the same. Aggregate sacrifice for the all-income groups of the community should be the least.

Limitations of Subjective Approach:

1. Difficulty in Measuring Equality of Marginal Sacrifice: Determining equality in marginal sacrifice across all income groups is challenging due to individual differences in taste, temperament, and attitudes towards paying taxes.
2. Subjective Nature of Sacrifice: Sacrifice is inherently subjective, making it difficult for tax authorities to measure it accurately.
3. Impracticality of Measuring Declining Marginal Utility: In practice, it is impossible to accurately measure the declining marginal utility of income.
4. Variation in Marginal Utility by Income Type: The marginal utility of income varies depending on its source. For example, the marginal

utility of income from property is often less than that from personal labor.

5. **Idealistic Nature of the Subjective Approach:** The subjective approach to utility and sacrifice is largely theoretical and does not account for the complexities of real life.
6. **Lack of Operational Feasibility:** Professor Musgrave noted that "it remains to be seen whether a workable and reasonably meaningful measure of utility can be developed in time and whether, thereby, the subjective concept of ability to pay can be given an operational meaning."

Given these difficulties with the subjective approach, some economists advocate for an alternative objective approach to assess taxpayers' ability to pay. Professor Seligman introduced the term "faculty" to define ability to pay in objective terms. However, this approach also has limitations, as it is based on the principle of a regressive tax pattern.

Merits of Ability to Pay Theory:

Merits of ability to theory are as following;

1. Fairness and Equity:

The ability to pay theory promotes fairness by ensuring that individuals contribute to taxes based on their financial capacity. Wealthier individuals pay more, while those with lower incomes contribute less, reflecting their varying abilities to bear the tax burden.

2. Progressivity in Taxation:

This theory supports a progressive tax system, where higher income groups are taxed at higher rates. This helps in redistributing wealth and reducing income inequality, making the tax system more equitable.

3. Consideration of Marginal Utility:

By aligning tax payments with the marginal utility of income, the theory ensures that the tax burden is distributed in a way that minimizes the relative sacrifice for all taxpayers. This means that wealthier individuals, who experience lower marginal utility from additional income, are taxed more without feeling a significant loss.

4. Aligns with Social Justice:

The ability to pay theory aligns with principles of social justice by recognizing that individuals with greater resources should contribute more to the public finances. This supports the social contract by ensuring that those who benefit more from societal services and infrastructure contribute proportionally.

5. Flexibility in Application:

The theory allows for flexibility in designing tax policies that can be adjusted based on changing economic conditions and individual circumstances. This adaptability helps in addressing both short-term and long-term fiscal needs while maintaining fairness.

Demerits of Ability to Pay:

1. Difficulty in Measuring Ability:

Accurately assessing an individual's ability to pay taxes can be challenging due to variations in income sources, financial conditions, and personal circumstances. This difficulty can lead to inefficiencies and inequities in tax assessments.

2. Potential for Disincentives:

High tax rates on higher income groups, intended to reflect their greater ability to pay, might create disincentives for earning additional income. This could potentially reduce economic productivity and investment.

3. Neglect of Consumption Patterns:

The theory primarily focuses on income rather than consumption. Individuals with high incomes might save a substantial portion of their earnings, meaning that their actual consumption—and therefore their ability to pay taxes based on consumption—might be lower than their income suggests.

4. Administrative Complexity:

Implementing a tax system based on the ability to pay requires complex administrative processes to evaluate and adjust tax liabilities accurately. This complexity can lead to higher administrative costs and potential errors.

5. Subjective Nature of Sacrifice:

The theory's reliance on subjective assessments of sacrifice can lead to disagreements and inconsistencies. Different individuals may perceive the impact of taxation differently, making it difficult to achieve a universally accepted measure of fairness.

5.8 CHAPTER SUMMARY

This chapter provides a comprehensive overview of public revenue and taxation. It begins by defining public revenue as the funds collected by governments to support public services and infrastructure, highlighting its essential role in sustaining government functions and fostering economic growth. The sources of public revenue are examined, with a focus on the primary role of taxes, supplemented by non-tax revenues such as fees, fines, and borrowing.

Taxation is explained as a compulsory financial charge imposed by the government on individuals and businesses, encompassing various types including income, property, and sales taxes. The chapter then outlines the key characteristics of an effective tax system, such as equity, efficiency, certainty, convenience, and economy, which ensure fairness, ease of compliance, and minimal administrative costs.

The aims of taxation are discussed, including revenue generation, wealth redistribution, and economic influence, demonstrating how taxes can be used to achieve specific social and economic objectives. The foundational principles of taxation, including the ability to pay and the canons proposed by economists like Adam Smith, are explored to show how they guide the design of fair and efficient tax systems.

The chapter also covers different tax theories, examining both subjective and objective approaches to taxation and their implications for tax policy and administration. The chapter provides a thorough understanding of the principles and practices that underpin public revenue and taxation.

5.9 QUESTIONS

1. What are the sources of public revenue?
2. Write the definition of Tax and Explain the Characteristics of tax system.
3. What is tax? Discuss its Aims and Goals.
4. Examine the canons of taxation given by Adam Smith?
5. Explain canons of taxation other than Adam Smith?
6. What do you mean by ability to pay approach? Explain its determinant.
7. Elaborate the merits and demerits of the Ability to pay theory.

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TAXATION- II

Unit Structure

- 6.0 Objectives
- 6.1 Introduction to Taxation
- 6.2 Direct and Indirect Taxes: An Overview
- 6.3 Deciding Between Direct and Indirect Taxes
- 6.4 The Impact of Taxation on Labour Supply
- 6.5 Concepts of Horizontal and Vertical Equity
- 6.6 Balancing Equity and Efficiency
- 6.7 Pricing in the Public Sector
- 6.8 Income Tax: Structure and Implications
- 6.9 Corporation Tax: Analysis and Impact
- 6.10 Expenditure Tax: Theory and Application
- 6.11 Commodity Taxation: Approaches and Challenges
- 6.12 Tax Evasion and Avoidance: Issues and Implications
- 6.13 Consequences of Tax Avoidance and Evasion
- 6.14 Legal Penalties for Tax Evasion and Avoidance
- 6.15 Summary
- 6.16 Questions

6.0 OBJECTIVES

After completing this unit, you will be able to;

- Understand the concepts and differences between direct and indirect taxes.
- Explore various tax types, including income tax, corporation tax, expenditure tax, and commodity taxation.
- Differentiate between tax evasion and tax avoidance and analyze their effects.
- Examine the principles of horizontal and vertical equity in taxation.

6.1 INTRODUCTION TO TAXATION

Taxes are levied in various forms across different countries, and even within a single country, multiple taxes are imposed by tax authorities to fulfill the canons of taxation. Taxes are generally categorized into two main types: direct and indirect taxes. Direct taxes include income taxes, which are paid directly by individuals or entities based on their earnings. Indirect taxes encompass commodity taxes, which are levied on goods and services and typically passed on to consumers.

Each type of tax has distinct positive and negative impacts on individuals, society, and different sectors of the economy. This section will discuss the various types of taxes, their implications in India, and their effects on different economic sectors.

6.2 DIRECT AND INDIRECT TAXES: AN OVERVIEW

According to Prof. Dalton, a direct tax is paid by the person on whom it is legally imposed, whereas an indirect tax is imposed on one person but is partially or wholly paid by another due to changes in contractual terms or bargaining dynamics. Essentially, direct taxes cannot be shifted to others, whereas indirect taxes can be transferred through pricing adjustments. Examples of direct taxes include income tax and property tax, which are paid directly by the individuals or entities upon whom they are imposed. In contrast, indirect taxes such as excise duties, sales tax, and GST are initially imposed on businesses or sellers but are ultimately paid by consumers as part of the cost of goods and services.

J.S. Mill further clarifies this distinction, stating that direct taxes are those demanded from the person who is intended to pay them, whereas indirect taxes are demanded from one person with the expectation that they will pass the cost onto another. Therefore, direct taxes are borne by the individual directly liable for them, such as in the case of income and property taxes. In contrast, indirect taxes, such as excise duties, sales tax, and GST, are initially levied on one party but ultimately paid by another party, typically the consumer. The burden of indirect taxes is often shifted from manufacturers or sellers to consumers.

Prof. D. Macro adds that direct taxes affect the taxpayer's income when it is received, whereas indirect taxes influence consumption and property transfer. Indirect taxes impact individuals when they purchase goods, affecting their expenditure rather than their income directly.

6.2.1 Direct Taxes:

A direct tax is one that is paid directly by the individual or institution to the entity that imposes it. This type of tax is borne by the taxpayer who is legally responsible for its payment. According to Prof. Dalton, "A direct tax is a tax that is genuinely paid by the individual or entity on whom it is legally imposed, without the possibility of passing the burden onto someone else."

In essence, direct taxes are not transferable; they are the financial responsibility of the person or organization directly subject to the tax. These taxes are levied directly on the income, wealth, or property of the taxpayer, and the obligation to pay them cannot be shifted to another party. Examples of direct taxes include income tax, which is assessed based on an individual's earnings, and property tax, which is based on the value of property owned. Since the liability for these taxes rests solely with the person or entity directly assessed, they reflect a straightforward approach to taxation where the impact is felt directly by the taxpayer.

Merits of Direct Taxes:

Following are the merits of direct tax;

- 1. Cost-Effective Collection:** Direct taxes are generally more economical to collect. The administrative costs associated with assessing and collecting these taxes are relatively lower compared to indirect taxes, which often involve complex transactions and multiple stages.
- 2. Progressivity:** Direct taxes can be designed to adhere to the progressive principle, which is aligned with the principle of equity. This means that individuals with higher incomes pay a higher percentage of their income in taxes, ensuring a fairer distribution of the tax burden.
- 3. Reduction of Income Inequality:** By taxing higher incomes at higher rates, direct taxes help to reduce income inequality within the economy. This progressive approach aims to redistribute wealth and address disparities between different income groups.
- 4. Certainty:** Direct taxes meet the principle of certainty, as both the amount and timing of payment are clear and predictable for taxpayers. This clarity helps individuals and institutions plan their finances with greater confidence.
- 5. Elasticity:** Direct taxes exhibit elasticity, meaning that as the tax rate increases, the tax revenue also increases correspondingly. If an individual's income rises, their tax liability rises proportionately, reflecting the canon of elasticity.
- 6. Public Awareness:** Taxpayers are generally more aware of direct taxes, such as income tax and property tax, compared to indirect taxes. This increased awareness fosters a greater understanding of tax obligations and civic duties.
- 7. Simplicity:** Direct taxes are straightforward and easy to understand, even for individuals with limited financial knowledge. This simplicity reduces the need for extensive tax advice and makes compliance more manageable.
- 8. Civic Consciousness:** Direct taxes can enhance civic consciousness among the population. As individuals see the direct impact of their contributions on public services, they become more aware of their rights and responsibilities within the society.

Demerits of Direct Taxes:

Following are the demerits of direct taxes.

- 1. Unpopularity:** Direct taxes are often perceived as burdensome by taxpayers since they are deducted directly from their income or property. This direct impact can make them unpopular among the public, who may view them as a significant financial strain.
- 2. Administrative Inconvenience:** Direct taxes often involve complex accounting and extensive paperwork, making the compliance process cumbersome for taxpayers. The need for detailed record-keeping and formalities adds to the inconvenience associated with direct taxation.
- 3. High Collection Costs:** The administrative costs of collecting direct taxes can be high, especially when the number of taxpayers is large but their incomes are relatively low. This requires more resources, including staff and machinery, leading to inefficiencies and increased costs for the tax authority.
- 4. Risk of Tax Evasion:** Direct taxes may encourage tax evasion, as taxpayers are directly aware of the financial sacrifice involved. Individuals may be more inclined to evade taxes to avoid the perceived loss of income, particularly if they feel the tax burden is too heavy.
- 5. Uncertainty:** There can be uncertainty in direct taxes due to frequent changes in tax laws and rates. For example, shifting thresholds and rates, such as those seen in India where income tax rates vary based on income brackets, can create confusion and unpredictability for taxpayers.
- 6. Impediment to Capital Formation:** High direct taxes can negatively impact capital formation, particularly in developing economies. Heavy tax burdens on individuals and businesses can reduce savings and investments, which are crucial for economic growth and development.
- 7. Limited Scope:** Direct taxes are often levied only on certain income groups, which may not foster widespread civic consciousness. This limitation means that not all segments of society feel the impact or benefits of direct taxation equally.
- 8. Political Motivations:** Governments may impose heavy direct taxes on the wealthy while offering exemptions to poorer individuals to garner political support. This practice can be driven by political interests rather than economic efficiency or fairness, potentially leading to imbalanced tax policies.

6.2.2 Indirect Taxes:

According to A. R. Prest, indirect taxes encompass various forms of taxation, such as customs duties, excise duties, and stamp duties. These taxes are classified as indirect because they are initially levied on one party but are ultimately paid by another. This characteristic differentiates them from direct taxes, where the burden of the tax is directly borne by the individual or entity on whom it is imposed.

J.S. Mill further elucidates this concept by defining indirect taxes as those "which are demanded from one person with the expectation and intention that he shall shift the burden onto another." In essence, indirect taxes are designed to be paid by individuals or businesses who then pass on the cost to consumers or other entities. This shifting mechanism means that while the tax is collected from one party, the financial impact is ultimately felt by another.

In other words, indirect taxes are taxes collected indirectly from the taxpayer. They are imposed on businesses or individuals but are generally passed on to consumers in the form of higher prices for goods and services. For example, a manufacturer might pay an excise duty on the production of goods, but this cost is usually transferred to consumers through increased prices. Similarly, customs duties are applied to imported goods and are often included in the final price paid by the purchaser. This shifting nature of indirect taxes means that the initial taxpayer and the ultimate bearer of the tax burden are not always the same.

Merits of Indirect Taxes:

There are some merits of indirect taxes explained as following:

- 1) Ease of Collection:** Indirect taxes are often easier to collect than direct taxes. They are typically included in the price of goods and services, allowing for efficient collection at the point of sale. This streamlined process reduces administrative burdens and costs associated with tax collection.
- 2) Broader Tax Base:** Indirect taxes can reach a wider segment of the population, including those who might not have a substantial income but consume goods and services. This broader base helps to distribute the tax burden more evenly across different income groups.
- 3) Encouragement of Savings and Investment:** Since indirect taxes are levied on consumption rather than income, they do not directly affect savings or investment decisions. This can encourage individuals to save and invest more, potentially leading to greater economic growth.
- 4) Flexibility in Taxation:** Indirect taxes can be adjusted more easily to respond to economic conditions. For example, changes in tax rates on goods and services can be implemented swiftly to manage inflation or influence consumer behavior without extensive legislative changes.
- 5) Invisibility of Tax Burden:** The indirect nature of these taxes often makes them less visible to consumers compared to direct taxes. This can reduce resistance to taxation, as the cost is embedded in the price of goods and services rather than being a separate, visible charge.
- 6) Promotion of Equity:** Indirect taxes can be designed to target luxury or non-essential goods, which can be an equitable way to impose taxes on higher-income individuals who are more likely to purchase such items. This can help align tax policy with the principle of equity.

7) Economic Efficiency: Indirect taxes can be less disruptive to economic activities compared to direct taxes. Since they are based on consumption rather than income, they do not directly affect earnings or work incentives, potentially leading to less economic distortion.

Demerits of Indirect Taxes:

Following are the demerits of indirect taxes found in reality these are as:

1) Regressive Nature: Indirect taxes can disproportionately affect lower-income individuals, as they are levied on goods and services consumed by everyone regardless of income level. Consequently, lower-income individuals spend a larger proportion of their income on taxed goods, which can exacerbate income inequality.

2) Impact on Consumption: By increasing the price of goods and services, indirect taxes can reduce consumer spending and affect demand. This reduction in consumption can have a negative impact on businesses and overall economic activity, especially in sectors heavily reliant on consumer purchases.

3) Complexity in Administration: Although the collection of indirect taxes can be straightforward, the administration can become complex due to varying rates and exemptions across different products and services. This complexity can lead to compliance issues and increased administrative costs for both businesses and tax authorities.

4) Possibility of Tax Evasion: Indirect taxes can be evaded through various means, such as underreporting sales or smuggling. The invisibility of these taxes to the end consumer can make it more challenging to detect and prevent tax evasion effectively.

5) Economic Distortion: Indirect taxes can create economic distortions by altering consumer behavior. For example, high taxes on certain goods can lead consumers to substitute taxed goods with untaxed alternatives, potentially distorting market dynamics and reducing the effectiveness of the tax policy.

6) Burden on Essential Goods: Indirect taxes on essential goods and services can disproportionately burden lower-income households. While some countries mitigate this issue through exemptions or lower rates on essentials, the overall impact can still be significant, reducing the affordability of necessary items for poorer individuals.

7) Difficulty in Measuring Equity: Unlike direct taxes, which can be adjusted based on income levels, indirect taxes are less capable of addressing the varying ability to pay among consumers. This makes it challenging to design a tax system that aligns with principles of fairness and equity, as the tax burden does not always correlate with an individual's ability to bear it.

6.3 DECIDING BETWEEN DIRECT AND INDIRECT TAXES

When determining the optimal tax strategy, policymakers face the critical decision of choosing between direct and indirect taxes. This decision involves evaluating various factors such as equity, administrative efficiency, economic impact, and revenue stability. Direct taxes, such as income and property taxes, are levied directly on individuals or businesses based on their ability to pay, often reflecting a more progressive approach to taxation. Conversely, indirect taxes, such as sales and excise taxes, are embedded in the prices of goods and services, influencing consumption patterns and potentially offering greater ease of administration. Balancing these considerations is essential for crafting a tax system that aligns with economic goals, ensures fairness, and meets revenue requirements effectively.

- 1. Equity and Fairness:** Direct taxes are often preferred when the goal is to achieve equity and fairness, as they can be designed to align with the taxpayer's ability to pay. In contrast, indirect taxes can be regressive, affecting lower-income individuals more severely relative to their income. Deciding between the two involves considering which tax type better aligns with equity goals.
- 2. Administrative Efficiency:** Indirect taxes are generally easier and less costly to administer, as they are collected at the point of sale and integrated into the price of goods and services. Direct taxes require more detailed accounting and tracking of individual incomes, which can increase administrative complexity and costs.
- 3. Economic Impact:** Direct taxes can directly affect economic behavior by altering disposable income, potentially influencing savings, investment, and work incentives. Indirect taxes impact consumption and can lead to reduced spending on taxed goods. Decision-makers must weigh the economic consequences of each tax type on consumer behavior and economic growth.
- 4. Revenue Stability:** Indirect taxes often provide a more stable and predictable revenue stream, as they are based on consumption patterns that are relatively consistent. Direct taxes, which are tied to individual income levels, may fluctuate more significantly with economic cycles and income changes, affecting revenue stability.
- 5. Visibility and Public Acceptance:** Direct taxes are usually more visible and can lead to greater public awareness of the tax burden. Indirect taxes, being embedded in the price of goods and services, may be less noticeable to consumers, potentially affecting public acceptance and perceptions of fairness.
- 6. Policy Objectives:** The choice between direct and indirect taxes should align with specific policy objectives. For instance, if the goal is to address income inequality, direct taxes may be more suitable.

Conversely, if the aim is to generate revenue with minimal impact on economic activity, indirect taxes might be preferred.

7. **Flexibility and Adaptability:** Indirect taxes offer more flexibility to adjust rates and targets to respond to economic conditions and fiscal needs. They can be varied across different goods and services to manage consumption and economic behavior. Direct taxes, while more precise, may require more extensive legislative changes to adjust rates and policies.

6.4 THE IMPACT OF TAXATION ON LABOR SUPPLY

6.4.1 Taxation and supply of Resource:

Taxation plays a significant role in influencing the supply and allocation of resources within an economy. Its effects can be multifaceted, impacting both the behavior of individuals and the operations of businesses. Here's an overview of how taxation interacts with the supply of resources:

1. **Impact on Investment:** Taxes can affect the level of investment in an economy. High taxes on corporate profits or capital gains may reduce the incentive for businesses to invest in new projects or expand operations. Conversely, favorable tax policies, such as tax credits or deductions for capital expenditures, can encourage investment and lead to an increased supply of resources in sectors targeted by these incentives.
2. **Labor Supply and Productivity:** Income taxes and payroll taxes directly impact the disposable income of individuals. Higher taxes may reduce the incentive for individuals to work more hours or pursue higher-paying jobs, potentially leading to a decrease in labor supply. However, well-designed tax policies that include benefits for education and training can enhance labor productivity and the overall skill level of the workforce, positively influencing the supply of skilled resources.
3. **Resource Allocation:** Taxes can influence how resources are allocated across different sectors of the economy. For example, excise taxes on certain goods, such as tobacco or alcohol, can discourage consumption and shift resources away from these areas. On the other hand, subsidies and tax incentives for sectors like renewable energy or technology can attract resources and drive growth in these fields.
4. **Economic Efficiency:** The efficiency of resource use can be affected by the type and structure of taxes. Taxes that distort market prices or create inefficiencies in resource allocation can lead to suboptimal economic outcomes. For instance, high taxes on specific goods or services might reduce demand and lead to an underutilization of resources in those areas. Ideally, tax policies should aim to minimize distortion and promote efficient resource use.
5. **Public Goods and Services:** Taxes fund essential public goods and services that contribute to the overall supply and quality of resources in

an economy. Investments in infrastructure, education, and healthcare, financed through taxation, enhance the productive capacity of the economy and improve the availability and quality of resources.

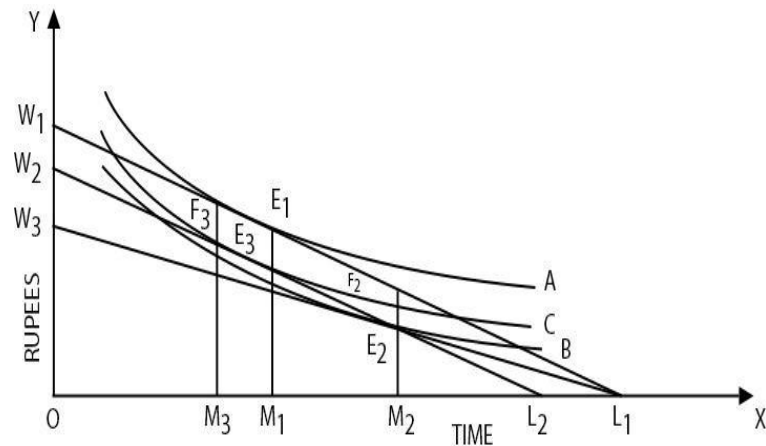
- 6. Behavioral Responses:** Individuals and businesses may adjust their behavior in response to taxation. For example, tax policies that incentivize savings or investments can lead to increased capital accumulation, while high taxes might encourage tax avoidance strategies or shifts in resource use to less taxed areas.
- 7. Redistribution Effects:** Taxation also plays a role in resource redistribution, influencing how resources are distributed among different segments of society. Progressive tax systems aim to redistribute wealth and reduce income inequality, impacting the overall supply and distribution of resources in the economy.

6.4.2 Effect of taxation on labour supply:

The effect of taxation on labor supply is examined through the lens of the choice between work and leisure available to individuals in the labor force. This analysis typically involves a theoretical model where a worker can decide the length of their workday based on their preferences for income and leisure time. The model assumes that wages are paid on a time-rate basis, meaning that the worker earns more income with longer working hours, but at the cost of having less leisure time.

In this model, taxation affects the worker's decision-making process by altering the trade-off between work and leisure. When taxes are imposed on wages, the after-tax income decreases, which can influence the worker's choice regarding how many hours to work. Higher taxes reduce the marginal benefit of working additional hours since the additional income earned is partially offset by the tax. As a result, the worker might choose to reduce their work hours to enjoy more leisure time, given the reduced return on their additional labor.

Conversely, if taxes are lowered, the after-tax income increases, potentially making working longer hours more attractive. The worker might opt to work more hours, as the increased income could outweigh the value of additional leisure time. Therefore, changes in taxation can shift the balance between work and leisure, impacting overall labor supply and individual work patterns. Choice of our assumed worker between work and leisure has been presented in the diagram 6.1

Figure No. 6.1

Hours of leisure and work have been measured along horizontal OX axis and the earnings measured along vertical axis OY. The per hour wage rate is Rs. $OW_1/OL_1 = OW_1/24$ per hour. Indifference curves have been drawn with leisure and income/work. The workers choose any one combination on the earning opportunity line W_1L_1 . There is an equilibrium point at E_1 where the earning opportunity line connects to the indifference curve A. There are leisure OM_1 hours, and work is E_1L_1 and daily income of this supply of labour is Rs. E_1M_1 . At the time of no taxes, the marginal rate of substitution between leisure and earnings is equal to the wage rate at equilibrium E_1 point.

6.4.3 Specific tax and Supply of Labour:

When the government imposes a specific tax such as a poll tax on workers' income, it significantly impacts their decision-making regarding work and leisure. A poll tax, being a fixed amount, does not vary with the worker's income level, which distinguishes it from proportional or progressive income taxes. As a result, workers must adjust their behavior to cover this fixed tax expense while maintaining their desired level of income. To achieve this, workers may choose to reduce their leisure time and increase their working hours. This adjustment is made to offset the reduction in net income caused by the tax, enabling them to meet their financial obligations.

The imposition of a poll tax effectively shifts the worker's budget constraint, altering the trade-off between work and leisure. Before the tax, workers balanced their working hours with their leisure time based on their income needs and personal preferences. However, with the introduction of the poll tax, the worker faces a new constraint that necessitates working more hours to cover the fixed tax amount. This results in a new equilibrium where workers work longer hours and enjoy less leisure compared to their pre-tax situation.

The effects of this tax on labor supply and leisure choices can be illustrated through a diagram, typically depicting the worker's budget

constraint and indifference curves. The introduction of the poll tax shifts the budget constraint, leading to increased work hours and decreased leisure. The poll tax compels workers to adjust their work-leisure balance by working more to cover the fixed tax, thus impacting their overall leisure time and income maintenance. The diagram 6.2 introduces about the effects of tax on choice of leisure and earning hours.

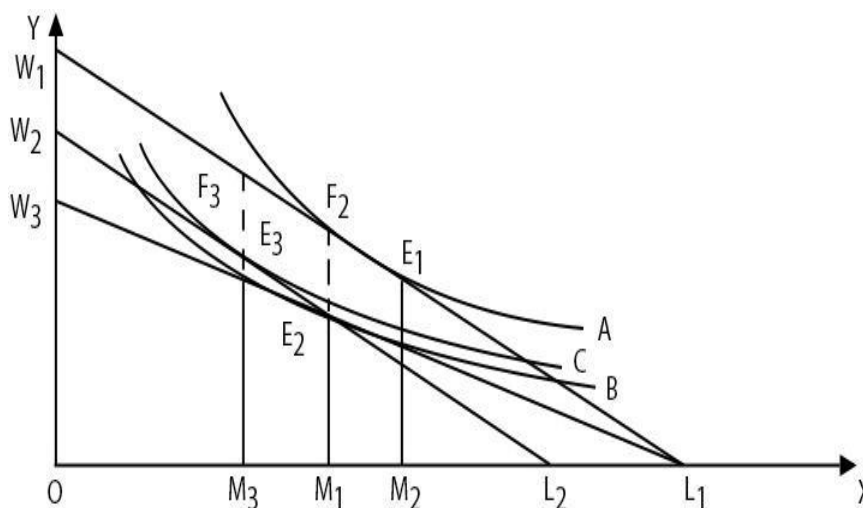


Figure No. 6.2

In the diagram 6.2 earning opportunity line shifts from W_1L_1 to W_2L_2 which shows reduction of earnings of worker. The worker reduces its leisure from OM_1 to OM_3 it results increase of working hours from M_1L_1 to M_3L_1 . Now worker out of his total earning F_3 M_1 he pays F_3E_3 for tax.

6.4.4 Progressive Income Tax and Labour Supply;

"A progressive tax system is characterized by increasing tax rates as individuals' marginal and average incomes rise. While such a system aims to ensure equity, it can have an adverse effect on labor supply. Specifically, when workers anticipate higher taxes on increased earnings, they may prefer to substitute labor with leisure, effectively reducing their work hours. This phenomenon is driven by the disincentive to earn additional income, as the marginal benefit of higher wages is diminished by the corresponding increase in tax liability. Consequently, even when wage rates rise under a progressive tax regime, workers may choose to work fewer hours to avoid higher tax burdens, opting instead for more leisure time."

6.4.5 Proportional Income Tax and Labour Supply:

"A proportional tax is a tax system where all income groups are taxed at the same rate. This type of tax structure can lead to both substitution and income effects. The substitution effect arises because leisure becomes relatively cheaper compared to the now less attractive after-tax earnings,

which may lead individuals to increase their leisure time and decrease their labor supply. Under a proportional tax system, the labor-leisure equilibrium may shift to a new point, denoted as E2 in the accompanying diagram."

6.4.6 Indirect Taxes and Supply of Labour:

"Indirect taxes are typically incorporated into the price of goods and services. While these taxes do not directly impact workers' monetary earnings, they affect individuals' real income. When the government imposes or increases indirect taxes, it reduces the real income of workers. To maintain their previous level of consumption expenditure, workers may respond by increasing their work hours and decreasing their leisure time, particularly if automatic adjustments in earnings are not feasible.

Increases in indirect taxes can adversely affect workers' consumption patterns. Workers might shift their consumption from higher-quality goods to lower-quality alternatives or even reduce consumption altogether in favor of increased leisure. The immediate impact of direct taxes is more apparent, while the effects of indirect taxes manifest indirectly over time, influencing consumption expenditure patterns."

6.5 CONCEPTS OF HORIZONTAL AND VERTICAL EQUITY

6.5.1 Horizontal Equity:

"Horizontal equity in taxation refers to the principle that individuals with similar economic circumstances should be treated equally by the tax system. In simpler terms, individuals within the same income group should be subject to the same tax rate. For example, while income tax systems may be progressive, incorporating higher rates for higher income brackets, they should ideally adhere to the principle of horizontal equity by treating individuals with the same income equally. However, the principle of efficiency often takes precedence over horizontal equity. For instance, concessions in taxes are sometimes provided for secondary earners in a household—such as women or children—resulting in tax exemptions or reductions that are not available to the primary earner.

Authorities must strive to design a tax system that balances both efficiency and horizontal equity.

Several interpretations of horizontal equity are commonly discussed:

1. Every citizen should pay equal taxes.
2. Individuals who benefit equally from public expenditures should be taxed equally.
3. Taxes should be proportional to the ability to pay, with all taxpayers of similar ability bearing an equal tax burden.

These interpretations, however, face several challenges:

1. Operational Difficulty: In the contemporary context, implementing horizontal equity is challenging because the ability to pay is not easily quantifiable.

2. Cost of Living Variations: Differences in the cost of living between rural and urban areas, or even among different regions, complicate the application of horizontal equity, potentially disadvantaging taxpayers in more expensive areas.

3. Temporal Challenges: Achieving horizontal equity over time can be problematic, especially as income levels and economic conditions fluctuate.

4. Income Flow Discrepancies: Horizontal equity encounters difficulties when taxpayers experience uneven income flows, as tax rates that are not proportional can exacerbate inequalities.

6.5.2 Vertical Equity:

Vertical Equity pertains to the principle that individuals with differing levels of income or wealth should bear different tax burdens. It aims to address income inequality within society by ensuring that those with greater financial capacity contribute a larger share of their income in taxes. Specifically, vertical equity is based on the principle of the ability-to-pay, which asserts that individuals with higher incomes should pay more in taxes compared to those with lower incomes.

However, the application of vertical equity can have implications for economic efficiency. Typically, individuals who work more earn higher incomes. If a tax system imposes high taxes on high earners and provides exemptions or lower rates for low earners, it may discourage additional work and income generation. For example, in India, as of the fiscal year 2023-24, individuals earning above ₹5 lakh are subject to income tax, whereas those with annual incomes of ₹5 lakh or below are exempt. Specifically, a person earning ₹5,001 to ₹7,50,000 would face a 5% tax on the income exceeding ₹5 lakh, and a 10% tax on income earned beyond ₹7,50,000. This structure can lead to a situation where individuals might choose to limit their earnings to avoid higher tax brackets, thereby potentially reducing their overall income and adversely affecting national income growth.

The principle of vertical equity primarily influences the progressive tax system, where higher income individuals are taxed at higher rates. This approach contrasts with proportional taxes, which impose the same rate on all income levels, aligning more closely with horizontal equity. Proportional taxes are based on the idea of treating all individuals equally, regardless of their income levels, which is often evaluated in terms of interpersonal comparisons of utility. However, contemporary welfare economics has largely moved away from these comparisons, focusing instead on efficiency and equity considerations.

From a political perspective, vertical equity is often endorsed as it supports progressive taxation, which is seen as a mechanism to address income and wealth disparities. In societies with significant income inequality, progressive taxation is commonly accepted as a socio-political solution to ensure that the wealthier contribute a larger proportion of their income, thereby aligning tax policy with broader equity goals.

6.6 BALANCING EQUITY AND EFFICIENCY

Balancing equity and efficiency in public finance is a fundamental challenge that requires careful consideration of the trade-offs and interactions between these two principles. Equity and efficiency often stand at odds with one another; policies aimed at improving equity can sometimes reduce economic efficiency, and measures designed to enhance efficiency may increase inequality. Nevertheless, achieving a balance between these two is crucial for sustainable development, social cohesion, and overall economic well-being.

1. Understanding Equity and Efficiency

Equity in public finance relates to fairness or justice in the distribution of economic resources, opportunities, and outcomes. Equity involves ensuring that individuals and groups have fair access to public resources and that income and wealth disparities are minimized. It is often addressed through progressive taxation, social safety nets, and public services that aim to reduce poverty and provide equal opportunities for all citizens. There are two primary forms of equity:

Horizontal Equity: This principle states that individuals in similar economic circumstances should be treated equally. For instance, taxpayers with similar incomes should pay the same amount of tax.

Vertical Equity: This principle emphasizes that individuals with different abilities to pay should be taxed differently. It supports the idea that wealthier individuals should contribute a larger share of their income in taxes compared to those with lower incomes.

Efficiency in public finance refers to the optimal allocation of resources to maximize economic output and societal welfare. An efficient economy ensures that resources are used in a way that maximizes productivity, growth, and overall societal benefit. Efficiency aims to minimize waste and ensure that every dollar spent or invested produces the maximum possible benefit. Key aspects of efficiency include:

Allocative Efficiency: Resources are allocated in a way that aligns with consumer preferences, ensuring that goods and services produced match what is most desired by society.

Productive Efficiency: Goods and services are produced at the lowest possible cost, ensuring that resources are not wasted in the production process.

Dynamic Efficiency: The economy is capable of adapting to changes over time, innovating, and improving productivity.

2. Conflicts Between Equity and Efficiency

The conflict between equity and efficiency arises because policies aimed at achieving one often compromise the other:

Redistribution and Economic Incentives: Policies that aim to redistribute income, such as high progressive taxes or generous welfare programs, can lead to reduced incentives for work, savings, and investment. High taxes on income or wealth may discourage people from working harder, investing in new businesses, or saving for the future. This can reduce overall economic growth and efficiency. For example, if tax rates on high-income earners are too steep, these individuals might reduce their work efforts or find ways to avoid taxes, which diminishes the tax base and potentially slows down economic activity.

Public Goods and Externalities: The efficient provision of public goods (like national defense, infrastructure, or clean air) benefits society as a whole. However, not all groups benefit equally, which can lead to inequities. For instance, building a highway may boost economic efficiency by improving transportation but might not equally benefit all communities, particularly those not directly connected by the new infrastructure.

Administrative and Compliance Costs: Complex tax systems and social programs designed to enhance equity often come with high administrative and compliance costs. These costs reduce overall economic efficiency by diverting resources away from productive activities. Moreover, the complexity can create loopholes that allow some individuals or companies to avoid taxes, undermining both equity and efficiency.

Regressive vs. Progressive Policies: While progressive taxation aims to redistribute wealth and enhance equity, some argue that it may also discourage high earners from engaging in productive economic activities. Conversely, regressive taxes (like sales taxes) can be more efficient in raising revenue with minimal economic distortion but are often seen as unfair since they disproportionately burden lower-income households.

3. Strategies for Balancing Equity and Efficiency

Achieving a balance between equity and efficiency requires innovative policy design and a nuanced understanding of economic behavior. Some strategies include:

Targeted Social Programs: Designing social programs that are targeted specifically at the most vulnerable populations can enhance equity without imposing large economic burdens. For example, means-tested benefits ensure that only those who genuinely need support receive it, reducing costs and minimizing economic disincentives. These programs can be combined with work requirements or incentives that encourage recipients

to participate in the labor market, thus promoting both equity and efficiency.

Progressive Taxation with Balanced Incentives: A well-designed progressive tax system can promote equity by ensuring that higher-income individuals pay a larger share of their income in taxes. However, to maintain efficiency, these systems can include incentives for investments, research, and development. Tax credits for innovation, education, or retirement savings can encourage productive economic activities even within a progressive framework, balancing equity and efficiency.

Investment in Human Capital: Investing in education, healthcare, and skills training can promote both equity and efficiency. A healthy, educated workforce is more productive and can contribute more to the economy. By providing equal access to quality education and healthcare, governments can reduce inequalities and ensure that everyone has the opportunity to succeed, thus enhancing both fairness and economic performance.

Universal Basic Services: Providing universal access to basic services such as healthcare, education, and housing can ensure a minimum standard of living for all citizens. These services can be funded in a way that minimizes economic distortions, for example, through broad-based taxes that do not heavily penalize productive economic activities. Universal basic services can help reduce poverty and inequality while supporting a stable and productive society.

Efficient Public Spending: Governments should focus on efficient public spending that maximizes the impact of every dollar spent. This involves rigorous cost-benefit analysis and ensuring that public funds are used for projects that provide the highest return to society. Transparent and accountable governance can help ensure that public resources are used effectively, supporting both equity and efficiency.

Gradual Reforms and Pilot Programs: Implementing reforms gradually or through pilot programs can help assess the impact on equity and efficiency before widespread adoption. This approach allows policymakers to make adjustments based on empirical evidence, ensuring that the balance between equity and efficiency is maintained.

Tax and Transfer Systems: An effective tax and transfer system can ensure that income redistribution does not excessively discourage productivity. Taxes should be broad-based with low rates to minimize distortions, while transfers should be well-targeted to support those in need without creating dependency. Tax credits for low-income workers can encourage participation in the labor market, promoting both equity and economic efficiency.

Encouraging Inclusive Growth: Policies that promote inclusive economic growth ensure that the benefits of growth are widely shared across society. This includes support for small and medium-sized enterprises, which are often key drivers of employment and innovation. By fostering an environment where businesses of all sizes can thrive, governments can promote both equity and efficiency.

Balancing equity and efficiency in public finance is a dynamic and complex challenge that requires a multifaceted approach. Policymakers must carefully design policies that recognize and address the inherent trade-offs between these two objectives. By implementing targeted interventions, investing in human capital, and ensuring efficient public spending, it is possible to create a public finance system that supports both a fair and efficient society. Achieving this balance is crucial for sustainable development, economic stability, and social cohesion. Through thoughtful and evidence-based policy-making, it is possible to ensure that public finance contributes to both economic prosperity and social justice.

6.7 PRICING IN THE PUBLIC SECTOR

The public sector in a nation or state provides various goods and services aimed at enhancing social welfare, such as transportation, postal services, telecommunications, and core industrial products. Unlike private sector entities, which primarily seek to maximize profit, the government's objective in providing these services is to maximize social welfare, even if it entails bearing some financial losses. Consequently, the pricing of these public sector goods and services is subject to numerous considerations and criteria to balance the goal of social welfare with the necessity of generating revenue.

Wear and Friedman have noted, "The great bulk of older established research on pricing principles is incompatible with the actual practice of public sector pricing." The British White Paper on nationalized industries, for instance, recommended marginal cost pricing as a principle for setting prices. However, this approach has had minimal impact on the actual prices charged by these industries. There is limited evidence that governments have significantly integrated contemporary research and advanced pricing principles into their pricing strategies for public sector goods and services.

Thus, while the theoretical foundations of public sector pricing emphasize marginal cost pricing and other welfare-maximizing principles, practical implementation often diverges from these recommendations, reflecting the complex realities of public sector operations and policy constraints.

Principles of public sector pricing as;

The maximization of social welfare serves as the foundational principle for public sector pricing. This principle is based on several theoretical assumptions. It assumes the absence of rivalry and significant transaction costs, meaning that the provision of public sector goods does not involve competitive exclusion or substantial costs associated with exchanging goods and services. According to this framework, prices should ideally reflect the marginal cost of providing these goods and services, ensuring that resources are allocated efficiently.

In this context, equity is achieved not through price adjustments but through income redistribution. The goal is to maintain efficiency by setting prices at the point where the demand curve intersects with the short-run

marginal cost curve. This pricing approach aims to maximize social welfare by aligning the provision of public services with the marginal costs of their provision, thereby promoting efficient resource use and ensuring that public sector services are accessible without undue economic distortion.

6.8 INCOME TAX: STRUCTURE AND IMPLICATIONS

Income tax falls under the category of direct taxes and holds a significant position, particularly in developing countries such as India. The income tax system in India was first introduced by Sir James Wilson in 1860. Initially, it served as a central revenue source, but its jurisdiction was later divided between the central and state governments to ensure vertical equity between these levels of administration. Income tax was reintroduced in 1869, after being discontinued in 1865.

The Income Tax Act of 1922 established a framework for administering income tax, determining the mechanism for assessing income and the applicable tax rates. This Act remained in effect, with several amendments, until 1961. Following recommendations from the Law Commission and the Direct Taxes Administration Enquiry Committee, the Income Tax Act of 1961 was enacted. Prior to 1939, income tax was implemented using a step system, but the amendment of the Income Tax Act in 1939 introduced a slab system, which has since been continuously revised.

Income tax is underpinned by three main concepts:

Concept of Economic Gains: This refers to the taxability of income derived from economic activities.

Concept of Service Flow: This involves taxing income based on the flow of services rendered.

Concept of Net Accretion: This pertains to the taxation of net increases in wealth or assets.

These concepts guide the procedures and methods for levying income tax.

The primary objectives of income tax are to promote vertical and horizontal equity. It is based on the ability-to-pay principle, meaning that individuals are taxed according to their financial capacity. Income tax is generally progressive, imposing higher rates on higher income groups and lower rates on those with less income. This system is designed to exempt poorer individuals from taxation, thereby aiming to achieve a fair distribution of the tax burden.

Merits of Income tax:

1. **Progressive Nature:** Income tax is typically structured to be progressive, meaning that higher income individuals pay a larger percentage of their income in taxes compared to lower-income individuals. This approach helps to reduce income inequality by

redistributing wealth and ensuring that those with greater financial resources contribute more to public finances.

2. **Equity:** Income tax promotes vertical and horizontal equity. Vertical equity ensures that individuals with higher incomes pay more in taxes relative to their income, while horizontal equity ensures that individuals with similar incomes are taxed equally. This alignment with the ability-to-pay principle helps to create a fairer tax system.
3. **Revenue Generation:** Income tax is a significant source of revenue for governments. The funds collected through income tax are crucial for financing public services and infrastructure, such as education, healthcare, and transportation. This revenue helps to support the functioning and development of a country.
4. **Economic Stabilization:** Income tax can be used as a tool for economic stabilization. During periods of economic growth, higher income taxes can help cool down the economy by reducing disposable income and consumption. Conversely, during economic downturns, adjustments in tax rates or tax relief can stimulate economic activity by increasing disposable income.
5. **Encourages Fairness in Taxation:** By taxing individuals based on their income level, income tax ensures that those who have a greater ability to contribute to the public budget do so, which can lead to a more equitable distribution of the tax burden. This contrasts with regressive taxes, where lower-income individuals might bear a higher relative burden.
6. **Promotes Social Welfare:** Income tax revenue is often used to fund social welfare programs, such as unemployment benefits, pensions, and public health initiatives. These programs aim to support vulnerable populations, reduce poverty, and enhance overall social welfare.
7. **Incentivizes Productive Employment:** Income tax systems often include deductions, credits, or allowances that can incentivize certain behaviors, such as investing in education or contributing to retirement savings. This can lead to increased investment in human capital and long-term economic growth.

Current scenario of Income Tax and its Rules:

In India, income tax applies to all individuals, whether resident or nonresident, who earn income from sources other than agriculture. This tax is imposed on the income received by any individual, Hindu undivided family, or any taxpayer other than companies and farmers. Specifically, income tax is levied on earnings from salary, house property, capital gains, business and profession, and other sources.

For the assessment year 2024-25, taxpayers in India have the option to choose between the old and new income tax regimes. Both regimes offer

different income tax slabs. Senior citizens and super senior citizens continue to benefit from certain exemptions on their income. However, the exemption for women, which existed before 2014, was removed by the government elected in that year.

Income Tax Scenario in India for Financial Year 2024-25 Key Points: Two Tax Regimes: Individuals and Hindu Undivided Families (HUFs) can choose between the old and new tax regimes. New Tax Regime: Offers lower tax rates but with fewer deductions and exemptions. Old Tax Regime: Higher tax rates but allows for various deductions and exemptions. Tax Slabs: The tax rates differ between the old and new regimes. Exemptions and Deductions: The availability of exemptions and deductions varies significantly between the two regimes.

Tax Slabs for Individuals (Old Regime)

Income Slab	Tax Rate
Up to ₹2.5 lakh	Nil
₹2.5 lakh - ₹5 lakh	5%
₹5 lakh - ₹7.5 lakh	10%
₹7.5 lakh - ₹10 lakh	15%
₹10 lakh - ₹12.5 lakh	20%
₹12.5 lakh - ₹15 lakh	25%
Above ₹15 lakh	30%

Tax Slabs for Individuals (New Regime)

Income Slab	Tax Rate
Up to ₹3 lakh	Nil
₹3 lakh - ₹6 lakh	5%
₹6 lakh - ₹9 lakh	10%
₹9 lakh - ₹12 lakh	15%
₹12 lakh - ₹15 lakh	20%
Above ₹15 lakh	30%

Surcharge and Cess Surcharge: An additional 10% surcharge applies on total income above ₹50 lakh and 15% on total income above ₹1 crore. Health and Education Cess: 4% cess is levied on total income after deduction of tax and surcharge. Other Important Considerations Filing of Returns: Individuals with taxable income above the basic exemption limit must file their income tax returns by July 31st of the following assessment year. Advance Tax: If your estimated tax liability for the year exceeds ₹10,000, you must pay advance tax in installments. TDS: Tax is deducted at source (TDS) on certain types of income, such as salary, interest, and rent.

6.9 CORPORATION TAX: ANALYSIS AND IMPACT

Corporation tax is a direct tax imposed on the income earned by corporate entities. It is calculated on the taxable net profit generated by corporations

during a financial year. After the corporation tax is paid, the remaining profit is distributed among shareholders. Prior to 1960, companies were subject to a super tax, which was referred to as corporation tax. From 1960-61 onwards, income tax on companies was incorporated into the corporation tax, and by 1965, these taxes were unified under the single term "Corporation Tax."

Important characteristics of corporation tax include:

- 1) Corporation tax is levied at a flat rate as determined by the Finance Act.
- 2) Certain concessions are granted to companies for the payment of corporation tax.
- 3) New manufacturing companies are exempt from corporation tax for the first five years of operation.
- 4) Companies are obligated to pay income tax under the corporate tax regime.
- 5) New industries established in backward regions are exempt from corporation tax for the first ten years.

6.10 EXPENDITURE TAX: THEORY AND APPLICATION

Expenditure tax is a type of direct tax imposed on the consumption expenditures of taxpayers rather than on their income. This form of taxation shifts the focus from how much a person earns to how much they spend, thereby targeting their consumption patterns. The idea behind this tax is that it more accurately reflects an individual's ability to contribute to public revenue, as expenditure often correlates with a person's financial capacity and lifestyle choices.

Prominent economists such as J.S. Mill, Alfred Marshall, A.C. Pigou, and Irving Fisher have argued in favor of expenditure tax, citing its potential for promoting equity and administrative efficiency. They contend that since expenditure reflects the use of economic resources, it is a more equitable measure of a person's taxable capacity. By taxing expenditure, the system avoids penalizing savings and investments, thereby encouraging wealth accumulation and economic growth.

Professor Nicholas Kaldor, a notable advocate for expenditure tax, argued that this form of taxation is conceptually simpler and more satisfying than income tax. According to Kaldor, "The expenditure tax is conceptually simpler and more satisfying than an income tax. It is more favorable to work, savings, risk supply and will lead to a much greater rate of economic progress." He believed that by taxing only what individuals consume, rather than what they earn, the tax system could avoid discouraging productivity and savings. This, in turn, could lead to greater economic progress and stability, as individuals would be incentivized to save and invest more, leading to higher levels of capital formation.

In contrast to expenditure tax, other direct taxes such as death duties,

wealth tax, and capital gains tax also play significant roles in the income taxation system. These taxes, while categorized under direct taxation, are primarily focused on specific financial events or assets. For instance, death duties, or inheritance taxes, are levied on the transfer of wealth upon an individual's death, targeting the distribution of accumulated assets. Wealth tax is imposed on the net wealth of an individual, often targeting high-net-worth individuals to reduce wealth inequality. Capital gains tax is levied on the profit realized from the sale of assets, such as stocks or real estate, and is considered an essential tool for taxing investment income.

While the expenditure tax is a distinctive and theoretically appealing alternative to income tax, its implementation requires careful consideration of economic behaviors and administrative capabilities. The debate over the relative merits of expenditure versus income taxation continues, with implications for economic policy and social equity.

6.11 COMMODITY TAXATION: APPROACHES AND CHALLENGES

Commodity taxes are those imposed on goods at the time of production or during the production process. These taxes are designed to generate revenue from the consumption of goods, and they are applied before the products reach the market. In India, both the central and state governments levy commodity taxes, reflecting the federal structure of the country's tax system.

At the central government level, two primary types of commodity taxes are excise duty and customs duty. Excise duty is levied on goods manufactured within the country, meaning it is a domestic tax on production. This tax is typically included in the price of the product, and consumers indirectly pay it when they purchase the goods. On the other hand, customs duty is imposed on goods that are imported into India. It serves as a tariff on foreign goods and is intended to protect domestic industries while also generating revenue for the government.

State governments in India also impose their own taxes on commodities, often in the form of value-added tax (VAT) or state-specific duties on products like alcohol and petroleum. These state-level taxes contribute to the overall tax burden on commodities, influencing their final retail prices.

Together, these various forms of commodity taxes play a crucial role in the Indian taxation system, balancing the need for government revenue with economic policies aimed at protecting domestic industries and regulating consumption.

6.11.1 Excise Duty:

Excise duty is a tax levied on the production of goods before they reach the consumer. According to the Constitution of India, the central government holds the authority to impose excise duties on nearly all commodities produced within the country, with the exception of alcoholic liquors, opium, and other narcotics. These excluded products fall under the

purview of state governments, which levy their own excise duties. Excise duty has historically been one of the most crucial sources of revenue for the Union Government of India. The Constitution also provides for the transfer of a portion of central excise duties to state governments, as recommended by the Finance Commission of India.

Excise duty was not widely applied until the 1930s. Early instances included excise duties on motor spirit in 1917, kerosene in 1922, and silver in 1922, with an excise duty on cotton yarn introduced in 1924 but later abolished in 1934. From 1934 onward, additional commodities such as sugar, steel ingots, and matches were brought under the excise duty regime. During the Second World War, the need for increased revenue led the government to expand the range of commodities subject to excise duty. In 1949, excise duty was re-imposed on mill-made cloth as part of these efforts.

The Taxation Enquiry Commission of 1953 recommended not only an increase in the number of commodities subject to excise duty but also an increase in the existing rates on items like tea, cloth, kerosene, matches, and sugar. In 1957, state governments agreed to abolish sales tax on textiles, sugar, and tobacco, leading the central government to impose additional excise duties on these products. Over the years, the scope of excise duty has been expanded and adjusted by the government to meet changing economic needs.

In recent years, significant changes have occurred with the introduction of the Goods and Services Tax (GST) in 2017, which subsumed most central and state indirect taxes, including excise duty on many goods. However, excise duty continues to be levied on certain products, primarily petroleum and tobacco products, which are not covered under the GST regime. The revenue generated from these duties remains an important source for both central and state governments, with provisions under Article 272 allowing for the sharing of these revenues between the center and the states. This evolution reflects the government's ongoing efforts to balance fiscal needs with the demands of a dynamic economy.

Union Excise Duty Share to State recommended by Finance Commission:

(In percentage)

Finance Commission	Share to the States
First Finance Commission	40%
Second Finance Commission	25%
Third Finance Commission	20%
Fourth Finance Commission	20%
Fifth Finance Commission	40%
Seventh Finance Commission	40%

Eight Finance Commission	45%
Ninth Finance Commission	45%
Tenth Finance Commission	47.5%
Eleventh Finance Commission	29%
Twelfth Finance Commission	30.05%
Thirteenth Finance Commission	32%
Fourteenth Finance Commission	42%
Fifteenth Finance Commission	41%

Thus, Union Excise Duties are vital not only for central tax revenue but also for the revenue shared with states. As an indirect tax, excise duty is levied on the production of commodities, and producers often pass on some or all of this cost to consumers through the price of the goods.

6.11.2 Custom Duties:

Taxes imposed on international trade are known as customs duties. Customs duties are categorized primarily into two types: import duties and export duties. Historically, customs duties have been a significant source of revenue for the Indian government; however, their contribution has substantially diminished since the Second World War.

Customs duties serve four principal objectives:

- 1. Protection of Domestic Industries:** Customs duties are used to shield domestic industries from competition posed by foreign goods. By imposing higher tariffs on imports, the government aims to protect local manufacturers from being undercut by cheaper international products.
- 2. Enhancement of Domestic Industry Productivity:** By regulating imports, customs duties encourage domestic industries to increase their efficiency and productivity. The reduced competition from foreign goods provides local industries with the opportunity to grow and improve their operations.
- 3. Revenue Generation:** Customs duties are a crucial mechanism for raising government revenue. They contribute to the public treasury, which can be used to fund various government initiatives and services.
- 4. Ensuring Adequate Supply of Essential Goods:** Customs duties help manage the availability of essential goods within the country. By controlling imports and exports, the government can ensure that necessary goods are sufficiently available domestically.

6.11.2.1 Import Duties:

Import duties are imposed on imported goods based on their value, typically assessed ad valorem. These duties are regulated under Schedule I and Schedule II of the Indian Tariff Act, 1934, with periodic updates and revisions. The primary objective of import duties is to restrict imports and protect domestic markets and industries by making imported goods more expensive. This, in turn, helps to increase government revenue and provides a competitive advantage to domestic producers by reducing the demand for foreign products.

Import duties are collected by the government when goods enter the country. By raising the price of imported commodities, import duties align with the law of demand, leading to a reduction in the consumption of such goods by domestic consumers and thus offering protection to local producers.

Historically, import duties began to be imposed in India in 1929 as part of a broader foreign policy strategy, following the recommendations of the Fiscal Commission of 1929. On August 20, 1965, the Finance Act of 1965 brought significant changes to import duty rates. Under this act, import duties were set at 40 percent ad valorem on raw materials, 60 percent on semi-processed and intermediate goods, and 100 percent on finished consumer goods.

In subsequent years, the need for reform in import duties was recognized. A committee chaired by L.K. Jha proposed changes aimed at adjusting import duties to better support domestic industry. The committee's recommendations included reducing the rates of import duties on various inputs and machinery to encourage industrial growth and to dissuade the import of finished goods.

More recently, the introduction of the Goods and Services Tax (GST) in 2017 has impacted the structure of indirect taxation in India, including aspects related to import duties. The GST framework subsumed several previous tax structures but left customs duties largely intact, particularly for goods not covered under GST. Recent updates have focused on revising customs duty rates to reflect new economic realities and trade agreements, aiming to balance protection for domestic industries with the need for economic liberalization and international trade compliance.

These ongoing adjustments reflect the evolving nature of trade policy in India, aiming to protect domestic interests while adapting to global economic trends and trade dynamics.

6.11.2.2 Export Duty:

Export duty is a tax imposed by the government on commodities at the time of their export from the country. During the colonial period, the British government implemented export duties on Indian exports in the mid-19th century to augment its revenue. However, export duties were abolished during the First World War and subsequently reintroduced.

Post-independence, export duties were levied extensively with objectives beyond mere revenue generation. The primary goals of export duties included stabilizing domestic prices, curbing the export of raw materials, and promoting self-reliance in essential goods. For instance, in the Budget for 1986-87, export duties were applied to various items such as coffee, tobacco, hides, skins, leather, black pepper, and mica. These measures aimed to support domestic industries and ensure the availability of essential goods within the country.

In more recent times, the Indian government has continually adjusted export duties as part of its broader trade and economic policies. The focus has shifted towards enhancing exports and aligning with global trade practices. Adjustments in export duties have been part of broader initiatives to improve export competitiveness and adapt to changing international market conditions.

Currently, India's tax system has undergone significant changes with the implementation of the Goods and Services Tax (GST) starting from July 1, 2017. GST represents a major shift from the previous tax structure, consolidating various indirect taxes into a unified framework. Under GST, the revenue is shared between the central and state governments on a 50:50 basis, streamlining the tax system and enhancing compliance. This change aims to simplify the tax structure, reduce tax cascading, and support economic growth by providing a more efficient and transparent taxation mechanism.

While commodity taxes such as excise and export duties continue to play a role in India's fiscal policy, the introduction of GST has transformed the landscape of indirect taxation, facilitating a more integrated and balanced approach to revenue generation and economic management.

6.11.3 Optimal Commodity Taxation:

Optimal tax refers to the design and implementation of a tax system that maximizes social welfare. Social welfare is often represented by a social welfare function, which is typically a function of the utilities of individuals within an economy. The goal of optimal taxation is to enhance overall social welfare by maximizing the aggregate utility of all individuals.

Important aspects of optimal taxation include:

- 1. Utility Maximization:** The social welfare function aims to maximize the total or aggregate utility of individuals. This involves considering how tax policies impact individual well-being and making adjustments to ensure that the collective benefit is as high as possible.
- 2. Efficiency and Equity:** Optimal tax design seeks to balance efficiency and equity. An efficient tax system minimizes distortions in economic behavior, while an equitable system ensures a fair distribution of the tax burden. Achieving this balance is crucial for enhancing social welfare.

- 3. Incentive Compatibility:** Optimal tax policies should be designed to align individual incentives with social goals. This means that taxes should not overly discourage work, savings, or investment, as such distortions can reduce overall economic welfare.
- 4. Revenue Generation:** While maximizing social welfare is the primary goal, optimal taxation also needs to ensure sufficient revenue for government expenditures. The tax system must be designed to provide the necessary funds while minimizing negative impacts on economic activity.
- 5. Consideration of Externalities:** Optimal taxation can also involve addressing externalities, where taxes are used to correct market failures and improve social outcomes. For example, taxes on pollution can internalize environmental costs and contribute to social welfare.

Optimal tax theory focuses on creating a tax system that maximizes the aggregate utility of individuals, considering both the efficiency and equity of the tax structure. This involves carefully designing tax policies to balance revenue needs with the goal of enhancing overall social welfare.

6.12 TAX EVASION AND AVOIDANCE: ISSUES AND IMPLICATIONS

6.12.1 Tax Evasion:

Tax evasion and tax avoidance are pervasive issues affecting nearly all countries. The Royal Commission on Income Tax, in the early 1920s, highlighted that income tax evasion was a significant problem of that era, a situation that persists today. Many citizens fail to meet their tax obligations, leading to ongoing problems with non-payment and underreporting of income. This challenge is not confined to any single country; even developed nations such as the USA and France face similar issues.

In India, tax evasion continues to be a significant concern, with many individuals not paying taxes honestly. Tax evasion is defined as any activity aimed at concealing, understating, or inaccurately reporting income to reduce tax liability. Essentially, it involves not paying the full amount of tax owed or avoiding tax payments altogether. Tax evasion is a criminal offense in India and carries legal penalties.

This practice contributes to the creation of black money, which has severe economic consequences. It affects inflation and has a detrimental impact on various segments of society, particularly the disadvantaged. Tax evasion also undermines the productive capacity of the economy by depriving the government of essential tax revenue needed for developmental activities. The Wanchoo Committee on Direct Taxes stated, "It is no exaggeration to say that black money and tax evasion are like a cancerous growth in the country's economy which, if not checked in time, is sure to lead to its ruination."

Tax evasion involves illegal methods to avoid tax liability, while tax avoidance exploits legal loopholes to reduce tax payments. Both practices undermine the integrity of the tax system and harm the economic health of a country.

Estimates of Tax Evasion:

Tax evasion has been assessed periodically by various committees in India, revealing significant concerns over time. The Taxation Enquiry Commission initially estimated tax evasion at approximately ₹50 crore. During the assessment year 1953-54, Professor Kaldor estimated that between ₹200 crore and ₹300 crore in taxes were evaded. Rangnekar's analysis indicated that black money grew from 6.9 percent to 13.3 percent between 1961-62 and 1969-70. According to the Wanchoo Committee, income tax evasion amounted to ₹470 crore in 1968-69. S. M. Prasad's estimates showed a dramatic increase in tax evasion, rising from ₹701 crore in 1953-54 to ₹12,611 crore in 1979-80.

This increasing trend in tax evasion has been a persistent issue within the Indian economy. Recent updates continue to reflect concerns about tax evasion. According to the Economic Survey 2022-23, efforts to curb tax evasion have included enhanced digital surveillance and stricter enforcement of tax laws. However, challenges remain, with the Central Board of Direct Taxes (CBDT) reporting that significant gaps still exist in tax compliance. Efforts to address these issues include increased use of technology and data analytics to detect and prevent tax evasion.

The ongoing concern with tax evasion highlights the need for continuous reforms and effective measures to improve tax compliance and address the economic impact of black money.

Causes of tax evasion:

- 1. Complex Tax Regulations:** The complexity of tax laws and regulations can significantly contribute to tax evasion. When tax codes are intricate and difficult to interpret, both individuals and businesses may struggle to understand their obligations. This complexity can lead to errors in tax reporting or intentional avoidance, as taxpayers may exploit ambiguities or misunderstandings to minimize their tax liabilities.
- 2. High Tax Rates:** High tax rates can create strong incentives for tax evasion. When taxpayers perceive the tax burden as excessively high, they may be motivated to evade taxes to reduce their financial liability. The higher the tax rate, the greater the potential savings from evasion, which can drive individuals and businesses to seek ways to avoid paying taxes.
- 3. Lack of Enforcement:** Ineffective enforcement of tax laws is a major factor contributing to tax evasion. If tax authorities are unable to adequately monitor and enforce compliance, taxpayers may feel they can evade taxes without facing significant consequences. Weak

enforcement mechanisms, insufficient audits, and low penalties for evasion can all encourage non-compliance.

- 4. Inefficiency in Tax Administration:** Inefficiencies within tax administration can exacerbate tax evasion. Outdated technology, insufficient resources, and poor management practices can hinder the ability of tax authorities to detect and address evasion effectively. When tax systems are not streamlined or well-resourced, it becomes more challenging to track and manage tax compliance.
- 5. Corruption and Bribery:** Corruption and bribery within tax administrations can severely undermine the tax system. If tax officials are corrupt or willing to accept bribes, they may overlook instances of tax evasion or offer favorable treatment to those who pay bribes. This corruption can perpetuate a cycle of non-compliance and diminish trust in the tax system.
- 6. Cultural Attitudes:** Cultural attitudes towards taxation and compliance can influence the prevalence of tax evasion. In some cultures, there may be a widespread acceptance or tolerance of tax evasion, viewing it as a normal practice rather than a serious offense. Such cultural attitudes can lead to higher rates of tax evasion, as individuals and businesses may perceive evasion as acceptable or even a form of resistance against perceived injustices in the tax system.
- 7. Economic Factors:** Economic conditions can impact tax evasion. During periods of economic instability, high inflation, or economic downturns, individuals and businesses may face financial pressures that increase the temptation to evade taxes. Economic hardships can lead to a greater willingness to engage in tax evasion as a coping mechanism to alleviate financial strain.

6.12.2 Tax Avoidance:

Tax avoidance refers to the practice of minimizing tax liability by exploiting loopholes in tax laws. Taxpayers take advantage of these legal gaps to reduce the amount of taxes they owe, often paying significantly less than they would otherwise. This practice, although legal, raises ethical concerns as it undermines the intent of tax regulations. It is often observed that taxpayers seek to minimize their tax burden by utilizing the concessions and deductions available under the law. This approach has evolved into what is now commonly referred to as tax planning.

According to economist Joseph Stiglitz, there are three key principles of tax avoidance:

Postponement of Taxes: Delaying tax payments to a future period, thereby taking advantage of the time value of money.

Tax Arbitrage Across Individuals Facing Different Tax Brackets: Shifting income or deductions between individuals in different tax brackets to minimize overall tax liability.

Tax Arbitrage Across Income Streams Facing Different Tax Treatment: Structuring income in a way that it falls under more favorable tax categories, thereby reducing the tax burden.

To combat tax avoidance, governments around the world have implemented various anti-avoidance legislations. These measures can be broadly categorized into two types:

General Anti-Avoidance Rules (GAAR): GAAR is a set of broad, generic rules aimed at preventing tax avoidance schemes that comply with the letter of the law but violate its spirit. GAAR empowers tax authorities to scrutinize and challenge transactions that are primarily aimed at avoiding taxes, even if they technically comply with legal provisions.

Specific Anti-Avoidance Rules (SAAR): Unlike GAAR, SAAR targets specific tax avoidance strategies or techniques. These rules are designed to address particular areas where tax avoidance is prevalent, closing loopholes and ensuring that certain transactions are taxed appropriately.

In recent years, many countries have strengthened their anti-avoidance measures in response to the growing sophistication of tax avoidance schemes. In India, the implementation of GAAR in 2017 marked a significant step towards curbing aggressive tax planning strategies. These rules provide tax authorities with the power to invalidate arrangements that are primarily designed to obtain tax benefits without any substantial commercial purpose. Additionally, India's tax authorities have introduced various SAAR provisions targeting specific transactions, such as transfer pricing adjustments and treaty shopping, to further close potential loopholes.

The ongoing global focus on tax avoidance has also led to increased international cooperation, with initiatives like the OECD's Base Erosion and Profit Shifting (BEPS) framework, which aims to align tax laws across countries and reduce opportunities for tax avoidance on a multinational scale. These developments underscore the evolving landscape of tax regulation and the continuous efforts by governments to ensure fair taxation.

6.13 CONSEQUENCES OF TAX AVOIDANCE AND EVASION

Tax avoidance and evasion have significant consequences for economies, governments, and societies. These practices undermine the integrity of tax systems and can lead to various negative outcomes:

1. Revenue Loss for Governments:

Tax avoidance and evasion result in substantial revenue losses for governments. This shortfall in tax revenue limits the government's ability to fund essential public services such as healthcare, education, infrastructure, and social welfare programs. The reduction in available resources can lead to budget deficits, increasing the need for borrowing or raising taxes on compliant taxpayers.

2. Increased Tax Burden on Compliant Taxpayers:

When some individuals or corporations avoid or evade taxes, the government may respond by raising taxes on those who do comply with tax laws. This increases the tax burden on honest taxpayers, which can be perceived as unfair and may lead to reduced tax compliance over time, creating a vicious cycle.

3. Economic Distortions:

Tax avoidance and evasion can create distortions in the economy. Businesses and individuals may make investment or consumption decisions based on tax considerations rather than economic merit. This misallocation of resources can hinder economic growth and reduce overall efficiency in the economy.

4. Undermining Social Equity:

These practices can exacerbate income inequality. Wealthy individuals and large corporations, with access to sophisticated tax planning strategies, are often better positioned to avoid taxes than lower-income individuals or small businesses. This can lead to a perception of injustice and erode trust in the fairness of the tax system.

5. Encouragement of Black Economy:

Tax evasion, in particular, is closely associated with the growth of the underground or black economy. When individuals and businesses operate outside the formal economy to evade taxes, it can lead to a parallel economy that is unregulated and untaxed. This not only deprives the government of revenue but also creates unfair competition for businesses that operate legally.

6. Legal and Reputational Risks:

Tax evasion is illegal and can result in severe legal consequences, including fines, penalties, and imprisonment for individuals and companies involved. Even though tax avoidance is legal, it can carry significant reputational risks. Companies and individuals found engaging in aggressive tax avoidance strategies may face public backlash, damaging their reputation and customer trust.

7. Weakening of Institutional Integrity:

Widespread tax avoidance and evasion can erode the integrity of tax institutions. If citizens and businesses perceive that tax laws are easily circumvented, it can weaken the authority of tax agencies and reduce voluntary compliance. This can lead to a culture of non-compliance, making it increasingly difficult for tax authorities to enforce tax laws effectively.

8. Global Implications:

In the context of globalization, tax avoidance, particularly by multinational corporations, can lead to a “race to the bottom,” where countries compete to offer lower tax rates to attract businesses, thereby eroding the global tax base. This has led to international efforts, such as the OECD’s BEPS project, to harmonize tax regulations and reduce opportunities for cross-border tax avoidance.

9. Impact on Government Policy and Trust:

Tax avoidance and evasion can influence government policy in undesirable ways. Governments may be forced to introduce more stringent tax laws and regulations, which can increase compliance costs for businesses and individuals. Moreover, the perception of widespread tax evasion can undermine public trust in government and its institutions, weakening the social contract between the state and its citizens.

These consequences highlight the need for robust tax policies, effective enforcement mechanisms, and international cooperation to address tax avoidance and evasion, ensuring that tax systems are fair, efficient, and capable of supporting sustainable economic development.

6.14 LEGAL PENALTIES FOR TAX EVASION AND AVOIDANCE

Legal penalties for tax evasion and avoidance play a critical role in maintaining the integrity of tax systems worldwide. These penalties are designed to deter illegal and unethical practices that undermine government revenues and societal fairness. Although tax evasion and tax avoidance are distinct in nature—one being illegal and the other legally dubious—both carry serious consequences. This expanded discussion delves into the various penalties, their implications, and the broader context in which they operate.

Tax Evasion Penalties

Tax evasion involves the illegal concealment or misrepresentation of income, deductions, or other financial information to reduce or eliminate tax liability. Given its criminal nature, tax evasion is met with severe penalties, including:

1. Fines and Financial Penalties:

Individuals or businesses caught evading taxes can face hefty fines. These fines are often proportional to the amount of tax evaded and can include additional penalties for fraud or willful misconduct. The penalties can significantly exceed the amount of tax originally due, serving as both a punishment and a deterrent.

2. Imprisonment:

Tax evasion is a criminal offense in many countries, and those convicted can face imprisonment. The length of the sentence can vary depending on the scale of evasion, the jurisdiction, and whether the offender is a repeat violator. In some cases, imprisonment can extend for several years, reflecting the seriousness with which tax authorities view evasion.

3. Seizure and Forfeiture of Assets:

Governments have the authority to seize assets equivalent to the amount of tax evaded. This can include bank accounts, properties, vehicles, and other valuable assets. Asset seizure serves not only to recover unpaid taxes but also as a powerful deterrent against future evasion.

4. Criminal Record:

A conviction for tax evasion results in a criminal record, which can have long-term repercussions. A criminal record can hinder an individual's ability to secure employment, travel internationally, or access credit. For businesses, a criminal conviction can damage the company's reputation and limit its ability to secure contracts, especially with public sector entities.

5. Professional Disqualification:

In many jurisdictions, individuals convicted of tax evasion may be disqualified from holding certain professional licenses or public office. This disqualification can extend to directorships in companies, practicing law, or other regulated professions, effectively ending careers in these fields.

6. Reputational Damage:

Beyond legal penalties, tax evasion can severely damage an individual's or company's reputation. Publicized cases of tax evasion can lead to loss of consumer trust, investor confidence, and business opportunities. The stigma of being labeled a tax evader can have long-lasting social and economic impacts.

7. Civil Penalties:

Civil penalties can be imposed. These are financial penalties intended to recover lost revenue and compensate the state for the costs of enforcement. Civil penalties often accompany criminal proceedings and can be substantial.

Tax Avoidance Penalties

While tax avoidance is not illegal, it involves the use of loopholes and ambiguities in the tax law to minimize tax liability. Over time, many countries have tightened their tax laws to address aggressive tax avoidance strategies. The penalties for tax avoidance include:

1. Monetary Penalties and Surcharges:

Tax authorities can impose fines on those who engage in aggressive tax avoidance. These fines may be calculated based on the amount of tax avoided and can be substantial. Additionally, taxpayers may be required to pay back taxes with interest, which can accumulate significantly over time.

2. Denial of Tax Benefits:

Taxpayers who engage in avoidance schemes may have their claimed tax benefits, deductions, or credits disallowed. This can lead to a reassessment of their tax liabilities, resulting in a higher tax bill and additional penalties.

3. Increased Audits and Scrutiny:

Taxpayers who are known for engaging in avoidance practices may face increased scrutiny from tax authorities. This can lead to more frequent and detailed audits, where tax authorities examine financial records with a fine-tooth comb. The cost and time involved in defending against audits can be significant.

4. Application of Anti-Avoidance Rules:

Many countries have implemented General Anti-Avoidance Rules (GAAR) and Specific Anti-Avoidance Rules (SAAR) to combat aggressive tax planning. GAAR allows tax authorities to recharacterize transactions that are primarily aimed at tax avoidance and impose taxes as if the avoidance had not occurred. This can result in large tax bills and penalties for those involved.

5. Reputational Risks and Public Backlash:

Companies and individuals engaged in aggressive tax avoidance may face significant reputational risks. In today's environment of increasing transparency and social responsibility, public exposure of tax avoidance can lead to consumer boycotts, shareholder activism, and loss of business. The reputational damage can be long-lasting, affecting both personal and corporate brands.

6. Legal Challenges and Litigation:

Tax avoidance strategies that are challenged by tax authorities can lead to lengthy and costly legal battles. Taxpayers may find themselves in court, defending their tax practices against allegations of avoidance. Even if they eventually win, the legal costs and negative publicity can be damaging.

7. Regulatory Changes and Retrospective Legislation:

In response to widespread tax avoidance, governments may introduce new regulations or amend existing laws to close loopholes. In some cases, these changes can be applied retrospectively, leading to unexpected tax liabilities for those who engaged in avoidance strategies before the changes were made.

8. Impact on Corporate Governance and Investor Relations:

For publicly traded companies, aggressive tax avoidance practices can lead to tensions with investors and corporate governance issues. Institutional investors, who are increasingly focused on Environmental, Social, and Governance (ESG) criteria, may pressure companies to adopt more ethical tax practices. Failure to do so can result in divestment or negative proxy voting.

Recent Developments and Global Trends

In recent years, the global landscape for tax evasion and avoidance has changed dramatically, with several key developments:

- **International Cooperation and Information Sharing:**

Countries are increasingly cooperating to combat tax evasion and avoidance. The OECD's Common Reporting Standard (CRS) and the Automatic Exchange of Information (AEOI) initiatives have made it harder for individuals and companies to hide income and assets offshore. Tax authorities now have access to a wealth of data, enabling them to track down evaders and challenge avoidance schemes.

- **BEPS Initiative:**

The OECD's Base Erosion and Profit Shifting (BEPS) initiative has introduced measures to close gaps in international tax rules that allow corporate profits to be shifted to low or no-tax jurisdictions. These measures include country-by-country reporting, transfer pricing rules, and the introduction of anti-abuse provisions in tax treaties.

- **Digital Economy and Taxation:**

With the rise of the digital economy, governments are introducing new taxes and regulations to address the tax challenges posed by digital businesses. This includes the implementation of Digital Services Taxes (DST) and discussions at the international level on how to fairly tax the profits of multinational tech companies.

- **Strengthening Domestic Anti-Avoidance Measures:**

Many countries are tightening domestic laws to combat tax avoidance. For example, the introduction of mandatory disclosure rules requires taxpayers and their advisors to report aggressive tax planning schemes to tax authorities, allowing them to take action before revenue is lost.

- **Focus on Ethical Tax Practices:**

There is a growing emphasis on ethical tax practices, driven by public demand for greater corporate responsibility. Companies are increasingly being judged not just on their financial performance, but also on how they contribute to society through their tax payments. This shift is leading to greater transparency and voluntary compliance with tax laws.

These developments indicate a strong global trend towards reducing opportunities for tax evasion and avoidance, ensuring that tax systems are fair, efficient, and capable of supporting the economic and social needs of nations. As the legal environment continues to evolve, both individuals and corporations must stay informed and compliant to avoid the severe penalties associated with these practices.

6.15 SUMMARY

This chapter explores the complex relationship between taxation and society, highlighting the inherent tension between the government's reliance on taxes for revenue and the public's general aversion to them. The term "citizen" is used instead of "taxpayer" because taxation affects everyone, regardless of their economic status. While some individuals contribute through direct taxes, such as income tax, others may only pay indirect taxes included in the cost of goods and services.

Indirect taxes, in particular, impact every segment of society, whether one belongs to an affluent group or an economically disadvantaged one. The universal nature of taxation ensures that it remains a crucial subject of study, not only for academic purposes but also for understanding its impact on daily life. For students, this subject offers valuable insights into the mechanics of taxation, preparing them for future engagement with economic policies and personal financial decisions. Understanding taxes and their implications fosters a more informed citizenry, capable of contributing to discussions on fiscal responsibility and social equity.

6.16 QUESTIONS

1. Explain the merits and demerits of direct taxes.
2. Explain the merits and demerits of indirect taxes.
3. Explain the relationship between taxation and labour supply
4. Write not on
 - i) Horizontal equity
 - ii) Vertical equity
 - iii) Income taxation
 - iv) Corporation tax
 - v) Expenditure tax
 - vi) Exicse Duty
 - vii)Custom Duty
 - viii) Tax Evasion
 - ix) Tax Avoidance

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REFORMS AND GOVERNMENT PART- I

Unit Structure

- 7.0 Objectives
- 7.1 Introduction
- 7.2 Fiscal Rules
- 7.3 Fiscal Rule: International Experiences
- 7.4 Fiscal Rule: Indian Experience
- 7.5 Fiscal Decentralization
- 7.6 The Decentralization Theorem
- 7.7 Conclusion
- 7.8 Questions

7.0 OBJECTIVES

After studying this unit, learners will be able to,

- Knowledge about concept of Fiscal Rules.
- Identify the various types of Fiscal Rule
- Evaluate the Fiscal Rules for Rationale, International and Indian Experience.
- Know the concept of Fiscal Decentralization
- Examine the Decentralization Theorem.

7.1 INTRODUCTION

Fiscal policy is an important part of public finance. The fiscal policy is concerned with the revenue and expenditure policies of the government. The objective of fiscal policy is to use the same as the principal instrument to promote the aggregate demand for goods and services in the economy. The important fiscal instruments are taxes, government expenditure, public debt and subsidies. We are aware that government expenditure in several sectors of the economy. The government will be effectively aided if the revenues generated by the government are able to establish a healthy balance with its expenditure obligations involved in providing different services. The term 'reforms' refers to strong rectification measures needed

for restoring the balance in any situation which ordinarily does not respond to ‘normal measures’. ‘Fiscal reforms’, thus, refers to the changes in the fiscal sphere brought about by the fiscal policies of the government. In the context of fiscal reforms for establishing macroeconomic stabilization, controlling key deficit variables assumes importance

7.2 FISCAL RULES

Fiscal rules have become increasingly popular around the world in recent decades. The latest count by the International Monetary Fund (IMF) found that around 105 countries had at least one fiscal rule (IMF, 2022). In one way or another, these rules are supposed to constrain the discretion of governments. Fiscal rules have attracted increasing attention and many countries have adopted some rules.

7.2.1 What are Fiscal Rules?

According to OECD budgeting practices and procedures, ‘A fiscal rule is a long-term constraint on fiscal policy through numerical limits on the budgetary aggregates.

7.2.2 Features of the Fiscal Rules:

- 1) Fiscal rules typically aim at correcting distorted incentives and containing pressures to overspend, particularly in good times, so as to ensure fiscal responsibility and debt sustainability.
- 2) A fiscal rule is a limit or restriction adopted by governments to constrain their decisions around taxes and public spending (Institute for Government). Such rules have generally been self-imposed, but they could easily be set by an independent body. They typically apply to a measure of the fiscal deficit (the gap between public expenditure and tax revenues in a given year), the public debt (the total amount borrowed to finance past deficits) or public spending (in aggregate or a subset) relative to GDP.
- 3) Fiscal rules are used to prevent excessive deficits that would arise under unconstrained policy discretion.
- 4) Fiscal rules are the instrument of choice to correct excessive deficits.
- 5) Numerical fiscal rules are lasting constraints on fiscal policy through predetermined limits on aggregate fiscal indicators. Rules are generally defined as fixed numerical limits (floors or ceilings) on fiscal variables set in legislation and binding for at least three years. Numerical rules differ from “procedural rules” that set standards on how the annual budget should be prepared and executed—for instance, by setting and enforcing expenditure ceilings at the ministry level.
- 6) Fiscal rules thus define a perimeter within which fiscal aggregates can freely evolve and policy discretion can be exerted.⁴ Fiscal rules impose constraints on fiscal variables, but these constraints are not targets, and, therefore, are not expected to be binding in every year.

7) Fiscal rules can promote fiscal discipline and limit the “deficit bias.” The main objective of fiscal rules is to contain the tendency of governments to run excessive deficits.

7.2.4 Rationale for Fiscal Rules:

The rationale for fiscal policy rules needs to be examined mainly against the widespread deterioration in public finances, moderated by some attempts to reverse this trend through discretionary fiscal policy. The traditional rationale for fiscal policy rules is macroeconomic stability. In several Western European countries and Japan, the current budget balance rule was largely enacted to support the postwar macroeconomic stabilization; as this goal was accomplished, the rules were relaxed or abandoned. Although applied to a less comprehensive indicator of fiscal imbalance, limits or prohibition on government borrowing from all domestic sources (as in Indonesia) and particularly from the central bank (especially useful in some developing and transition economies) was seen as contributing to stability by removing a major source of base-money creation and thus of inflationary pressures. Against this consideration, there is concern that a rule, especially in the form of a strict balanced-budget requirement, might impair the short-run stabilization and tax-smoothing roles of fiscal policy. In this sense, a judicious mix of discretionary fiscal and monetary policies guided by targets for macroeconomic performance—namely, low inflation and external balance—can be viewed as conceptually superior to fiscal rules. As noted earlier, however, the superiority of discretionary fiscal policy has not always been corroborated in practice. Moreover, often the lack of adequate fiscal discipline has reduced the countercyclical role of fiscal policy to the point of rendering it procyclical.²⁰ If applied flexibly, fiscal rules may be seen as restoring at least a moderate countercyclical role through the operation of automatic stabilizers, rather than as constraining fiscal policymaking. In these circumstances, given the politically induced deficit bias of many governments, appropriate fiscal rules constitute a second-best solution.

Much of the recent interest in fiscal rules has been prompted by the need to achieve or maintain long-run fiscal sustainability. In fact, the main objective of fiscal rules introduced in New Zealand and proposed in Switzerland and Japan has been to consolidate gains from earlier discretionary adjustment and to prevent a potential future increase in public indebtedness associated, for instance, with the prospective aging of the population. Similarly, rules intended for containing the public debt—possibly including a measure of unfunded contingent liabilities—relative to GDP under a certain threshold can contribute to a fair distribution of fiscal benefits and burdens across generations. More immediately, such rules should help moderate real interest rates in financial markets, ease crowding out of private investment, and reduce income redistribution from wage earners to interest earners.

Historically, fiscal rules have been utilized at various levels of government for the avoidance of negative spillovers within a federation, confederation, or currency area. A fiscal rule restraining subnational government deficits

prevents externalities from fiscal misbehavior in one jurisdiction from being transmitted, through credit downgrading and concomitantly higher interest charges, to other subnational jurisdictions and to the national government with the stabilization function generally to be exercised at the national or federal level. A fiscal rule can be useful for ensuring the credibility of government policy over time. Stated differently, a major advantage of rules-based policies over a discretionary approach is time consistency. Fiscal rules can help reduce or remove the influence of short-run political expediency that leads to a deficit bias, especially in an environment where policymakers are exposed periodically (especially before elections) to strong, often conflicting, pressures to relax the fiscal stance.

7.2.5 What should fiscal rules aim?

Main purpose of fiscal rule To contain pressures to overspend, so as to ensure fiscal responsibility and debt sustainability To be effective, fiscal rules should have six main properties or aim;

- 1) Simplicity: The rule should be understood by decision-makers and the public.
- 2) Sustainability- Compliance with the rule should suffice to ensure long-term sustainability.
- 3) Stabilization -Following the rule should contribute to macroeconomic stability, or at least not add to volatility.
- 4) Operational Guidance- It should be possible to translate the rule into clear guidance in the annual budget process.
- 5) Resilience- To build credibility, a rule should last and not be abandoned after a shock.
- 6) Verification -It should be possible to verify if the government has complied with the rule

7.2.6 Four Main Types of Fiscal Rules:

Four main types of fiscal rules can be distinguished based on the type of budgetary aggregate that they seek to constrain. The rules have different properties with regard to the objectives, operational guidance, and transparency

1) Debt Rules (DR):

Debt rules set an explicit limit or target for public debt in percent of GDP. This type of rule is, by definition, the most effective in terms of ensuring convergence to a debt target and is relatively easy to communicate. However, debt levels take time to be impacted by budgetary measures and therefore do not provide clear short-term guidance for policy makers.

2) Budget Balance Rules (BBR):

Budget balance rules constrain the variable that primarily influences the debt ratio and are largely under the control of policy makers. Thereby, such rules provide clear operational guidance and can help ensure debt sustainability. Budget balance rules can be specified as overall balance, structural or cyclically adjusted balance, and balance “over the cycle.”

3) Expenditure Rules(ER):

Expenditure rules set limits on total, primary, or current spending. Such limits are typically set in absolute terms or growth rates, and occasionally in percent of GDP with a time horizon ranging often between three to five years

4) Revenue Rules (RR):

Revenue rules set ceilings or floors on revenues and are aimed at boosting revenue collection and/or preventing an excessive tax burden. Most of these rules are not directly linked to the control of public debt, as they do not constrain spending.

When have fiscal rules been more successful or less successful?

1) More successful

- Under stable/good economic conditions (but not pre EU-crisis)
- For controlling local government finances
- When exiting from fiscal crisis: seen in some case (although they could be a case of mistaken causality)

2) Less successful

- With lack of societal support
- During severe economic crisis
- In coping with all economic circumstances
- When they bite: induce avoidance/creative accounting.

By improving fiscal performance, well-designed rules help build and preserve fiscal space while allowing its sensible use. Good rules encourage building buffers in good times and allow fiscal policy to support the economy in bad times. This implies letting automatic stabilizers operate symmetrically over the cycle and including escape clauses that allow discretionary fiscal support when needed. By supporting a credible commitment to fiscal sustainability, rules can also create space in the budget for financing growth-enhancing reforms and inclusive policies.

The use of fiscal rules varies internationally; Budget balance rules and debt rules are most frequently used and often in combination. Fiscal rules can take on many forms depending on countries' choices and priorities. An effective fiscal rule must reconcile fiscal policy with other macroeconomic policies. Fiscal rules can have different national legal foundations, and may be enshrined in constitutions, or primary or secondary legislation. Other countries may stipulate fiscal rules in public political commitments or in internal rules set out by the ministries of finance. Australia is an interesting example as it has in place all four kinds of rules. The legal basis for three of them is the Budget Honesty Act, which is a strong political commitment; in the case of the debt rule, it is founded in legislation. Japan and Korea have only expenditure rules, in both cases as internal rules and policies.

Over the past two decades, fiscal rules have spread worldwide. In 1990, only five countries- Germany, Indonesia, Japan, Luxembourg, and the United States had fiscal rules in place that covered at least the central government level. In Japan and Germany, fiscal rules have a long tradition dating back to as early as 1947 and 1969, respectively, though adherence to the rule was weak for most years. Over the next two decades, the number of countries with national and/or supranational fiscal rules surged to 76 by end-March 2012

Advanced economies were the frontrunners, but about a decade later rules were adopted also in a number of emerging economies, while they are only used by a few low-income countries. Factors that motivated their adoption range from reigning in debt excesses that resulted from banking and economic crises in the early 1990s (e.g., Finland, Sweden) and debt crises in Latin American countries (e.g., Brazil, Peru), consolidation needs to qualify for the euro area (e.g., Belgium), and more generally attempts to reduce trends of rising deficits and debts (e.g., the Netherlands, Switzerland). In some cases, the introduction of the rules coincided with large fiscal adjustments, in others (e.g., in Finland) it followed an improvement in fiscal positions to ensure continued fiscal discipline after the crisis.

1) In European Union (EU) member states, this comprises the 3 percent of GDP deficit and 60 percent of GDP debt ceilings included in the Maastricht Treaty in 1992 and the Stability and Growth Pact (SGP) in 1997. Moreover, the SGP also includes a provision that countries should pursue country-specific medium-term objectives (MTOs), defined in structural budget balance terms.

2) Switzerland and Germany

The constitutional rule adopted by Germany in 2009, is due to be fully implemented in 2016. It is closely patterned after the Swiss “debt brake” that was adopted and written into the constitution in 2000 and came into force in 2000. The debt brake is a rule, with an escape clause that involves

the Parliament. In the Swiss version, the rule specifies that the overall federal budget must be balanced over the cycle.

3) Chile

Chile is an early fiscal rule adopter. Adoption came at the end of a long period during which the public debt was reduced from 165% in 1985 to 20% of GDP by 2000. The intention was to solidify and codify the emerging fiscal discipline tradition.. Maybe because of its pioneering aspect, the rule is technically complex (for non-economists) and not quite complete. Initially introduced informally, the rule has been written into law in 2006 (Fiscal Responsibility Law).

Chile – 2006 Fiscal Responsibility Act: Fiscal Rule: Structural balance, Established various funds including a pension and stabilization fund, Increased fiscal reporting of contingent liabilities.

4) Britain's Office for Budget Responsibility:

In 1997, the British Chancellor of the Exchequer adopted two fiscal rules: 1) the budget deficit may only finance public investment (a golden rule); 2) the debt to GDP ratio may not exceed 40%. The rule was to be monitored by the Chancellor himself, based on forecasts by HM Treasury. The Treasury was also requested to produce long-run forecasts (40 years) to gauge long-run sustainability.

5) Canada:

In Canada, a spending limit was adopted at the federal level from 1992 to 1996. During this period six provinces adopted balanced budget rules that remain in effect.

6) Ireland – 2012 Fiscal Responsibility Act

Fiscal Rules: General budget balance and debt rules, consistent with Stability and Growth Pact; includes corrective mechanisms and sanctions. Set out medium-term budgetary objectives Increased fiscal reporting Established a fiscal council

7) Thailand – 2018 Fiscal Responsibility Act

Fiscal rule on public investment, Set up the National Fiscal Policy Board, Required a medium-term fiscal framework, Established process rules including on varmint and setting of debt limits, featured transparency and accountability requirements.

8) Peru – 2013 Fiscal Responsibility and Transparency Law

Fiscal rules: Structural balance rule and debt rules, including sanctions, required a medium-term macroeconomic framework, Set out a fiscal stabilization fund for national government established a Fiscal Council.

Country	Type of Rule	Year of Adoption
France	Revenue	2006
Germany	Budget balance	1969, 2009
Poland	Debt	2004
Spain	Budget balance, debt, expenditure	2011
Switzerland	Budget balance	2003

Sources: National authorities; and IMF staff assessment.

Note: Includes only rules that took effect by end-March 2012. Other countries that have adopted fiscal rules in their constitution but operational details are still being determined or include a long transition path until implementation are Italy, Hungary, and Spain. For the latter the expenditure rule has already taken effect, while the structural budget balance rule takes effect from 2020.

In the past decade, many countries have sought to improve fiscal management and fiscal outcomes through the use of fiscal rules. The specifics of the rules, as well as the relative emphasis on procedural versus numerical rules, vary significantly across countries reflecting the country-specific structure of fiscal institutions, the budget, and the economy

Finally, some countries must also ascribe to fiscal rules fixed in international law. In the case of countries in the European Union, for instance, the Maastricht Treaty establishes a debt and two budget balance rules. As a result of the new Fiscal Compact and the – Six Pack – measures for fiscal consolidation, EU authorities have requested to raise fiscal rules to constitutional status as a way of increasing the political costs of non-compliance. Ten countries (Austria, Belgium, the Czech Republic, Germany, Hungary, Italy, Poland the Slovak Republic, Spain and Switzerland) have fiscal rules stipulated in their constitutions.

7.4 FISCAL RULE: INDIAN EXPERIENCE

India adopted rules- based fiscal framework, the Fiscal Responsibility and Budget Management Act (FRBMA), in 2003. The FRBMA's stated objective is to ensure inter-generational equity in fiscal management and the fiscal sustainability necessary for long-term macro-economic stability. India's states were given incentives by the Twelfth Finance Commission (TFC) to implement their own fiscal responsibility laws (FRLs) in the form of conditional debt restructuring and interest rate relief.² With the FRBMA and FRLs only setting out targets until March 2009, the Thirteenth Finance Commission is currently reviewing India's fiscal rules framework.

7.4.1 The Fiscal Responsibility and Budget Management (FRBM) Act, 2003:

The Fiscal Responsibility and Budget Management Bill (FRBM Bill) was introduced in India by the then Finance Minister of India, Mr. Yashwant Sinha in December 2000. The provisions provided in the initial versions of the bill were too drastic. After much discussions, a watered-down version of the bill was passed in 2003 to become the FRBM Act. The FRBM Rules came into force from July 5, 2004.

India's experience with fiscal rules has been mixed. The FRBMA strengthened India's fiscal policy framework. The implementation of the FRBMA initiated in the 2004/05 budget period also coincided with a decline in India's central government fiscal deficit.

The procedural rules of the FRBMA specify the principles of transparency and accountability in designing, implementing and assessing fiscal policy.

The FRBMA and the associated rules set out fiscal targets in a multiyear context. The Act includes a single, medium-term, zero-current-balance target for the central government to be achieved by March 2008.

The FRBM Act set targets for fiscal deficit and revenue deficit: (Initial FRBM Targets (to be met by 2008-09) :

- 1) **Revenue Deficit Target:** revenue deficit should be completely eliminated by March 31, 2009. The minimum annual reduction target was 0.5% of GDP.
- 2) **Fiscal Deficit Target:** fiscal deficit should be reduced to 3% of GDP by March 31, 2009. The minimum annual reduction target was 0.3% of GDP.
- 3) **Contingent Liabilities:** The Central Government shall not give incremental guarantees aggregating an amount exceeding 0.5 per cent of GDP in any financial year beginning 2004-05.
- 4) **Additional Liabilities:** Additional liabilities (including external debt at current exchange rate) should be reduced to 9% of the GDP by 2004-05. The minimum annual reduction target in each subsequent year to be 1% of GDP.
- 5) **RBI purchase of government bonds:** to cease from 1 April 2006. This indicates the government not to borrow directly from the RBI.

India's current FRBMA is in line with well-designed FRLs around the world in highlighting the importance of sound procedural rules. The strength of the FRBMA lies predominantly in the adoption of important procedural rules including: a) A medium-term fiscal framework, and b) Enhanced transparency requirements that supplement the existing constitutional procedures governing budget processes¹⁷. These rules have similarities with the frameworks of advanced countries, such as New

Zealand, the EU and Canada, and have contributed to improving fiscal management in India.

Amendments in the FRBM Act

Amendments in the FRBM Act: In 2012 and 2015, notable amendments were made, resulting in relaxation of target realization year. A new concept called Effective Revenue Deficit (E.R.D) was also introduced. The requirement of Medium Term.

Expenditure Framework Statement was also added via amendment in FRBMA.

FRBM Targets after Amendment to FRBM Act in 2012 (to be achieved by 2015)

- **Revenue Deficit Target** : revenue deficit should be completely eliminated by March 31, 2015. The minimum annual reduction target was 0.5% of GDP.
- **Fiscal Deficit Target** : fiscal deficit should be reduced to 3% of GDP by March 31, 2015. The minimum annual reduction target was 0.3% of GDP.

FRBM Targets after Amendment to FRBM Act in 2015 (to be achieved by 2018)

- **Revenue Deficit Target** : revenue deficit should be completely eliminated by March 31, 2018. The minimum annual reduction target was 0.5% of GDP.
- **Fiscal Deficit Target** : fiscal deficit should be reduced to 3% of GDP by March 31, 2018. The minimum annual reduction target was 0.3% of GDP

Recommendations of FRBM Review Committee headed by NK Singh:

The government believed the targets were too rigid. In May 2016, the government set up a committee under NK Singh to review the FRBM Act. The committee recommended that the government should target a fiscal deficit of 3 per cent of the GDP in years up to March 31, 2020, cut it to 2.8 per cent in 2020-21 and to 2.5 per cent by 2023. The Committee suggested using debt as the primary target for fiscal policy. This ratio was 70% in 2017. These are the targets set by NK Singh:

- **Debt to GDP ratio** : The review committee advocated for a Debt to GDP ratio of 60% to be targeted with a 40% limit for the centre and 20% limit for the states.
- **Revenue Deficit Target** : revenue deficit should be reduced to 0.8% of GDP by March 31, 2023. The minimum annual reduction target was 0.5% of GDP.

- **Fiscal Deficit Target** : fiscal deficit should be reduced to 2.5% of GDP by March 31, 2023. The minimum annual reduction target was 0.3% of GDP.

Latest FRBM Targets: The latest provisions of the FRBM act requires the government to limit the fiscal deficit to 3% of the GDP by March 31, 2021, and the debt of the central government to 40% of the GDP by 2024-25, among others.

7.4.2 Fiscal Rules: India's States Experiences

Fiscal Responsibility Legislation by States

Sr.No	State & FRL Year	Sr.No.	State & FRL Year
1	Center's FRBM Act, 2003	17	MN, Aug-05
2	KA, Sep-2002	18	CG, Sep-05
3	TN, May-03	19	AS, Sep-05
4	KE, Aug-03	20	UK, Oct-05
5	PJ, Oct-03	21	ARP, Mar-06
6	UP Feb 4	22	ME, Mar-06
7	GJ, Mar-05	23	BH, Apr-06
8	MH, Apr-05	24	GA, May-06
9	HP, Apr-05	25	JK, Aug-06
10	RJ, May-05	26	MZ, Oct-06
11	MP, May-05	27	BH, Apr-06
12	AP, Jun-05	28	GA, May-06
14	OR, Jun-05	29	JK, Aug-06
15	TR, Jun-05	30	MZ, Oct-06
16	HR, Jul-05	31	JH, May-07

Source: Fiscal Rules: Lessons from the States chapter -6, Page no-116

Economic Survey, 2016-17 Government of India

The variation in the timing of enactment of FRLs across India's states can be used to investigate whether there is a relationship between the adoption of fiscal rules and the observed fiscal adjustment. The variation in the design of FRLs across India's states allows an examination of whether certain design features of the fiscal rules are correlated with better fiscal performance.

Namely, some states have adopted a specific target for their outstanding debt as a share of GSDP for a pre-specified date in the future; some states have adopted some rules on expenditure. States also differ in the frequency with which compliance with the fiscal rules is supposed to be examined. Some states require quarterly review of expenditure and receipts against budget estimates, while others require half-yearly or annual review of compliance.

Constructed indicators of whether the state law includes (i) a debt target or, (ii) expenditure rules, and (iii) whether the performance review is at least half-yearly. We then interact these state law design features with the post FRL indicator to examine whether fiscal performance after the introduction of fiscal rules varies with the presence or absence of these features. Among India's states, the disciplining effect of FRLs appears to be stronger if the fiscal rules include a specific debt target or expenditure rules. The interaction of the post-FRL indicator and the dummies for debt target or expenditure targets are negative and statistically significant, suggesting that fiscal consolidation (including in the current deficit, excluding all central transfers) was larger after the enactment of the FRL in states in which laws also included these design features. The frequency of fiscal performance review, on the other hand, is not associated with differential fiscal performance after the FRL introduction. While it is hard to pinpoint the direction of causality in these correlations given the endogenous nature of states' fiscal law characteristics, the findings provide some interesting guidance on features that could potentially increase the effectiveness of fiscal rules in the Indian setting. Most states achieved and maintained the target fiscal deficit level (3 percent of GSDP) and eliminated the revenue deficit soon after the introduction of their Fiscal Responsibility Legislation (FRL).

7.5 FISCAL DECENTRALIZATION

Decentralization is when power and decision-making shift from central authorities to local levels. Decentralization involves transferring power to local groups. Decentralization distributes decision making to local governments about things that affect their community. Decentralization is the process by which the activities of an organization, particularly those related to planning and decision-making, are distributed or delegated away from a central, authoritative location or group and given to smaller factions within it.

According to Kenneth Davey, fiscal decentralization comprises the financial aspects of devolution to regional and local government and it covers two interrelated issues: a) First is the division of spending; and b) The amount of discretion to be given to regional and local governments to determine their expenditures and revenues. Fiscal decentralization promotes economic value.

The fiscal federalism like the political concept of democracy is considered to be an optimal institutional arrangement. It has the provision of public services with cost minimization and welfare maximization. It also

combines the advantages of decentralization with the benefits from economies of scale.

Fiscal decentralization leads to good governance, by ensuring fiscal responsibility to the lower level of government that is. Local self-government. Governance values include responsiveness and accountability, diversity and political participation. Decentralization places allocation decision making close to the people. As a result, this places greater responsiveness to local officials and greater accountability to citizens. iii) Fiscal decentralization would enhance political participation at the local level. This has the potential to enhance democratic value and political stability at the local level. It provides a forum for local debate about local priorities and can be a proving ground for future political leaders. It imparts financial education to the local leaders at the grassroots levels.

The key elements that should be included in a good fiscal decentralization program are as follows: (a) an adequate enabling environment; (b) assignment of an appropriate set of functions to local governments; (c) assignment of an appropriate set of local own-source revenues to local governments; (d) the establishment of an adequate intergovernmental fiscal transfer system; and (d) the establishment of adequate access of local governments to development capital.

7.6 THE DECENTRALIZATION THEOREM

The ‘Decentralization theorem’ is central to the discussion of fiscal federalism. Whether fiscal responsibilities should be assigned to a centralized authority or be decentralized has been a long-debated issue in public economics. The decentralization theorems given by Wallace Oates (1972) states that in the absence of cost savings from centralization and inter jurisdictional externalities, responsibilities should be decentralized. This argument implicitly assumes that the center is unresponsive to preference heterogeneity and thereby is only able to implement uniform policies. More specifically individual local governments are presumably much closer to the people; they possess knowledge of both local preferences and cost conditions that a central agency is unlikely to have" (Oates, 1999, p.1123). If the geographical scope of a jurisdiction falls short of the spatial pattern of spending benefits, the optimal assignment of policy tasks is deduced by trading off the welfare costs of policy uniformity against the welfare gains from internalizing spillovers in policy-making. (Alesina and Barro (2002).

The propositions and implications of the theorem are:

- a) Centralization yields higher welfare when spillovers/externalities are sufficiently high.
- b) Centralization yields higher welfare when spatial spread is low and people’s tastes and preferences are aligned or more similar across jurisdictions.

- c) Decentralization yields higher welfare when spillovers are sufficiently low.
- d) Decentralization yields higher welfare when spatial spread is wide and people's tastes and preferences are heterogeneous across jurisdictions.

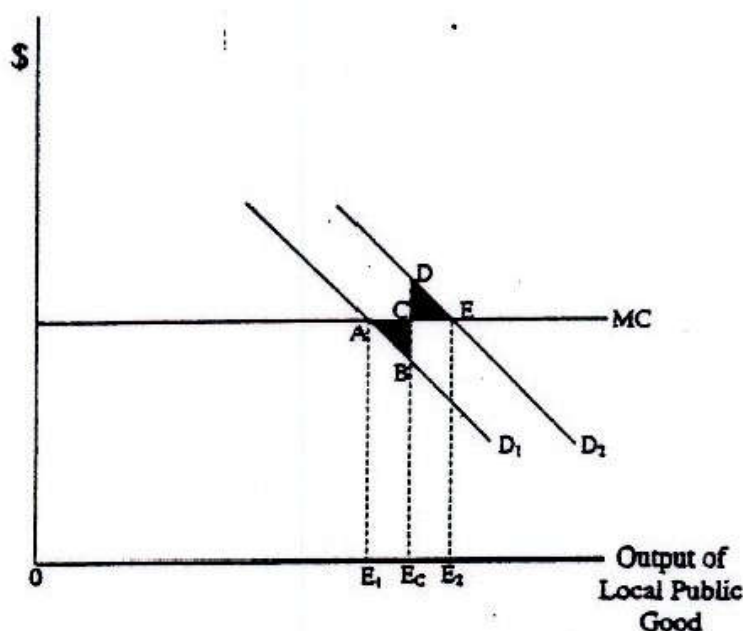
Decentralization results in welfare gains due to improved allocation of resources in the public sector. Individual/local jurisdictions/governments can adjust levels and composition of public goods and services as per the tastes, requirements and features of respective communities.

The decentralization theorem given by Wallace Oates also brings out the precise nature of these gains and the determinants of their magnitude. The discussion is divided into two parts: divergences in demand for local public goods and the issue of cost differentials across jurisdictions. A) Welfare loss from centralization and B) welfare gains from fiscal decentralization:

A) Welfare loss from centralization :

Figure no- 8 given ahead depicts the demand curves for a local public good of the representative residents of jurisdictions one and two. The assumption here is that the local public good can be provided at a constant cost per unit per resident of MC. The good is thus taken to be subject to congestion in the same way as a private good. We see in the figure that the optimal outputs of the local public good are E_1 in jurisdiction one and E_2 in jurisdiction two. (Figure no- 7.1)

Figure no- 7.1 Welfare loss from centralization



Suppose, however, that instead of this decentralized outcome, the central government determines that a uniform level of output of E_c is to be provided in all jurisdictions. It is straightforward to measure the loss in

social welfare from centralized provision: the loss is triangle *DCE* for each resident of jurisdiction two and triangle *ABC* for each resident of jurisdiction one. It is thus clear that in this setting, a uniform, centrally determined level of local public outputs will result in a lower level of social welfare than an outcome in which each local jurisdiction provides its own optimal output. This result incidentally, is the so-called Decentralization Theorem [OATES, 1972, Ch. 2].

In addition, we can see in Figure 7.1 what determines the magnitude of the gain in social welfare from fiscal decentralization. First it is clear that the greater the divergence between D_1 and D_2 , the larger will be the triangles *ABC* and *CDE*.

Fiscal decentralization is thus more important where the demand for local public goods has greater variation across jurisdictions. In countries where the population is quite homogeneous in terms of the demand for local public goods, the potential gains from fiscal decentralization are correspondingly smaller; we would thus expect the political and social forces pushing for devolution to be somewhat weaker than in countries characterized by greater divergences in demands for local outputs.

The extent of the welfare gains from fiscal decentralization depends importantly on the grouping of populations according to individual demands for local public goods. Such segregation can be facilitated to some extent by the mobility of households in response to local fiscal differentials. In the limiting case, the famous Tiebout model [1956] envisions an outcome in which perfectly mobile households locate in jurisdictions that satisfy precisely their demands for local public goods. A Tiebout equilibrium is thus one in which localities are perfectly homogeneous in terms of demands for the local public good. Figure 1 depicts such an outcome. This kind of sorting process maximizes the capacity of fiscal decentralization to promote social welfare.

b) The welfare gains from fiscal decentralization.

Figure - 7.2 also provides an insight into the determinants of the welfare gains from fiscal decentralization. The size of the welfare-gain-triangles *ABC* and *CDE* depend on the slope of the demand curves. More specifically, the steeper are the demand curves, the larger are the triangles and hence the greater is the gain in social welfare from differentiation in local outputs. This follows because where demand is less price responsive, i.e. relatively inelastic demand, individual valuations of marginal units change relatively rapidly as we move away from the optimum. Interjurisdictional cost differences and the welfare gains from fiscal decentralization:

Cost differentials across jurisdictions (as well as differences in demands) can be a source of welfare gains from fiscal decentralization. Figure 2 given below, depicts such a case. Suppose that everyone has the same demand for local public goods, namely demand curve *DD*, but that the marginal cost of providing a unit per person differs between the two jurisdictions (MC_1 , in jurisdiction one and MC_2 in jurisdiction two). In

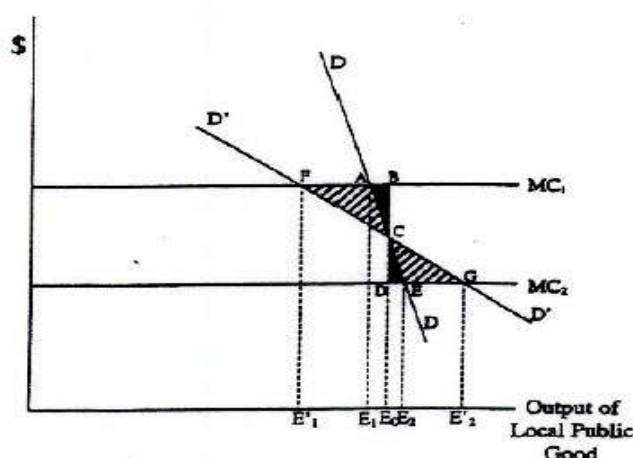
Figure 7.2 the Pareto efficient outcomes are E1 and E2 respectively. In this case, centralized provision of a uniform level of output, E results in welfare losses per resident of triangle ABC in jurisdiction one and triangle CDE in jurisdiction two.

We see two results from the diagram. First, it is obvious that the size of the welfare loss triangles vary directly with the magnitude of the inter jurisdictional cost differential. The greater the distance between MC1 and MC2 the optimal outputs in the two jurisdictions will farther diverge from one another and the larger will be the social loss in welfare from a centrally determined, uniform level of output

Figure no- 7.2 Welfare Gains from Fiscal Decentralization

On the Welfare Gains from Fiscal Decentralization

FIGURE 2



Second, in contrast to the variation in the demand case, we find that, for the case of cost differences, the welfare gain from fiscal decentralization varies *inversely* with the absolute value of the slope of the demand curve. In this case, the less steep are the demand curves (*i.e.*, the more price-responsive is the demand for local outputs), *i.e.* with relatively elastic demand, the more divergent will be the efficient outputs in the two jurisdictions and the greater the loss in social welfare associated with a centrally prescribed and uniform level of local outputs.

In Figure 7.2, we see that for the more price-elastic demand curve $D'D'$, the welfare-gain triangles from fiscal decentralization increase to CBF in jurisdiction one and CDG in jurisdiction two. So we find that the effect of the price responsiveness of demand on the potential welfare gains from fiscal decentralization depends on whether the divergence in Pareto-efficient local outputs has its source in inter jurisdictional variation in demand or variation in costs. Inter jurisdictional cost differentials can result from two different sources. First, it may simply require more of inputs to provide a given level of output in one place than another. For

example, keeping the roads clear of snow in the winter will require more effort in an area that gets lots of snow than in one with a milder winter season. Thus, the difference between MC_1 and MC_2 in figure 7. 2 may simply result from differences in the production functions such that one jurisdiction requires more inputs per unit of output than another.

7.7 CONCLUSION

These views echo the decentralization theorem (Oates, 1972), which maintains that “each public service should be provided by the jurisdiction having control over the minimum geographical area that would internalize benefits and costs of such provision.” Oates (1993) later observes that decentralization is a mechanism to make policy more responsive to local needs and to involve the local populace in processes of democratic governance. The economic case for decentralization is the enhancement of efficiency that it introduces because locally provided public goods, which are more responsive to local taste and preferences are superior to centrally determined goods. Decentralization provides for “tailoring levels of consumption to the preferences of smaller, more homogeneous groups” (Wallis and Oates 1988). The decentralization theorem argues that sub-national governments can more efficiently provide public services to identifiable recipients up to the point at which the value placed on the marginal amount of services for which recipients are willing to pay is just equal to the benefit they receive. To implement this, sub-national (local) governments must be given the authority to exercise “own source” taxation at the margin and be in a financial position to do so.

7.8 QUESTIONS

- 1) Briefly explain the concept of fiscal rules.
- 2) Analysis the various types of Fiscal Rule
- 3) Comment the Fiscal Rules: International Experience.
- 4) Evaluate the Fiscal Rules with Indian Experience
- 5) Briefly explain the concept of Fiscal Decentralization
- 6) Examine the Decentralization Theorem.

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REFORMS AND GOVERNMENT PART- II

Unit Structure

- 8.0 Objectives
- 8.1 Introduction
- 8.2 India's Federal Structure
- 8.3 Constitutional Provisions of Taxation Powers and Expenditure Responsibilities
- 8.4 Intergovernmental Fiscal Transfers in India
- 8.5 Value Added Tax (VAT)
- 8.6 Goods and Service Tax (GST)
- 8.7 Conclusion
- 8.8 Questions

8.0 OBJECTIVES

After studying this unit, learners will be able to,

- Know the India's Federal Structure system
- Evaluate the Taxation powers Expenditure responsibilities in India's Federal system
- Identify Intergovernmental fiscal transfers in India's Federal system.
- Analyze the Value added Tax (VAT) and Goods and Serves Tax (GST).

8.1 INTRODUCTION

Federalism is a mode of government that combines a general government (the central or federal government) with regional governments (provincial, state, cantonal, territorial, or other sub-unit governments) in a single political system, dividing the powers between the two. It is an institutional mechanism to accommodate two sets of politics, one at the central or national level and the second at the regional or provincial level. In a federal set up there is a two tier of Government with well assigned powers and functions.

Fiscal federalism is an area of study in which the principles of economics are applied to the functioning of the public sector in a multi-level decision making framework. The basic issues of fiscal federalism are a) assignment

of functions and sources of finance between different governmental levels, b) evolving mechanisms and policy instruments to resolve fiscal imbalances, arbitrate intergovernmental spillovers and foster harmonious and yet, competitive intergovernmental relationships. Fiscal federalism represents the polar case where federal fiscal arrangements are decided purely on economic principles. The existence or otherwise of a federal constitution is not a consideration, and the principles of fiscal federalism apply to both unitary and federal countries.

8.2 INDIA'S FEDERAL STRUCTURE

The framers of the Indian constitution wanted to build a strong united India. India has adopted federalism to actualize and uphold the values of national unity, cultural diversity, democracy, regional autonomy and rapid socioeconomic transformation through collective efforts.

The Indian Constitution sets up a dual polity with the Union at the centre and the states on the periphery.

8.3 CONSTITUTIONAL PROVISIONS OF TAXATION POWERS AND EXPENDITURE RESPONSIBILITIES

Division of powers between various levels; the division of powers between two levels of government is an important requirement of federalism. In India, the basis of political power distribution is that authority is delegated to the Centre in matters of national importance, where a uniform policy is desirable in the interests of all units, and matters of local concern remain with the states. The Indian Constitution's Articles 245 to 254 specify the respective legislative power of the Central and state governments. The Constitution's Seventh Schedule contains three lists that distribute power between the Centre and the states (Article 246) ; I) Union list, II) State list, and III) Concurrent list:

8.3.1 Constitutional Provisions of Taxation Powers:

The Indian Constitution has elaborate provisions regarding the distribution of revenues between the Union and the States. Article 268 to 293 in Part XII deal with the financial relations. The financial relations between the Union and the States can be studied under the following heads:

The Indian Constitution has elaborate provisions regarding the distribution of revenues between the Union and the States. Article 268 to 293 in Part XII deal with the financial relations.

The financial relations between the Union and the States can be studied under the following heads:

a) Taxes and duties levied by the Union, but collected and appropriated by the States:

- (i) Stamp duties are levied by the Government of India, but collected and appropriated by the States, within which such duties are leviable,

except in the Union Territories, where they are collected by the Union Government (**Art. 268**).

- (ii) The proceeds of these duties levied within any State are assigned to that State only and do not form a part of Consolidated Fund of India.
- (iii) Service tax levied by the Centre, but collected and appropriated by the Centre and the States (Article 268A): This has been **omitted after adoption of GST** through 101st constitutional amendment act.

b) Taxes levied and collected by the Union, but assigned to the States within which they are leviable (Art.269):

- (i) Succession duty in respect of property, other than agricultural land.
- (ii) Estate duty in respect of property, other than agricultural land.
- (iii) Terminal taxes on goods or passengers carried by railways, sea or air.
- (iv) Taxes on railway fares and freights taxes on transactions in Stock Exchanges.

Article 269 states that Goods and services tax on supplies in the course of inter-State trade or commerce shall be levied and collected by the Government of India and such tax shall be apportioned between the Union and the States in the manner as may be provided by Parliament by law on the recommendations of the Goods and Services Tax Council. The amount apportioned to a State under this shall not form part of the Consolidated Fund of India.

c) Taxes levied and collected by the Union and distributed between the Union and the States (Art.270): Certain taxes are levied as well as collected by the Union, but their proceeds are divided between the Union and the States in a certain proportion in order to effect an equitable distribution of the financial resources. This category includes all the taxes and duties referred to in the Union List, except the three categories mentioned above.

(Article 268, 269, 269A), any surcharge and any taxes levied for specific purposes. The manner of distribution of net proceeds of these taxes is prescribed by the President, on the recommendation of the Finance Commission.

- **Surcharge on certain taxes (Art.271):** The Parliament is, authorized to levy surcharge on the taxes mentioned in the above two categories (Art.269 and Art.270) and the proceeds of such surcharges go to the Centre exclusively and are not shareable.

d) Taxes levied and collected and retained by the states:

These are the taxes enumerated in the State List and belong to the States exclusively. This is subject to Article 386 - No law of a State shall impose, or authorize the imposition of, a tax on the supply of goods or of services or both, where such supply takes place— (a) outside the State; or (b) in the

course of the import of the goods or services or both into, or export of the goods or services or both out of, the territory of India.

Annexure I

Taxation Heads Assigned To the Union and the States in the Constitution

(As Listed in the Seventh Schedule of the Constitution)

List - I of the Seventh Schedule – Union	List - II of the Seventh Schedule - States
● Taxes on income other than agricultural income ● Duties of customs including export Duties ● Duties of excise on tobacco and other goods manufactured or produced in India except – a. Alcoholic liquors for human consumption; b. Opium, Indian hemp and other narcotic drugs and narcotics; but including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry. ● Corporation tax ● Estate duty in respect of agricultural land ● Taxes on the capital value of the assets, exclusive of agricultural land of individuals and companies; ● taxes on the capital of companies ● Estate duty in respect of property other than agricultural land. ● Terminal taxes on goods or passengers carried by railway, sea or air: taxes on railway fares and freights. ● Taxes other than stamp duties on transactions in stock exchanges and future markets ● Rates of stamp duty in respect of bills of exchange cheques promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares,	● Land revenue, including the assessment and collection of revenue, the maintenance of land records, and survey for revenue purposes. ● Taxes on agricultural income ● Duties in respect of succession of agricultural land ● Estate duty in respect of agricultural land ● Taxes on lands and buildings ● Taxes on mineral rights subject to any limitations imposed by Parliament by law relating to mineral development ● Duties of excise on the following goods manufactured or produced in the State and countervailing duties at the same or lower rates on similar goods manufactured or produced elsewhere in India: a. alcohol liquors for human consumption; b. Opium, Indian hemp and other narcotic drugs and narcotics; but not including medicinal and toilet preparations containing alcohol or any substance included in sub-paragraph (b) of this entry. ● Taxes on the entry of goods into a local area for consumption, use or sale therein. ● Taxes on the entry of goods into a local area for consumption, use or sale therein.

debentures, proxies and receipts. ● Taxes on the sale or purchase of newspapers and on advertisements published therein. ● Taxes on the sale or purchase of goods other than newspapers, where such sale or purchase takes place in the course of inter-State trade or commerce. ● Taxes on the consignment of goods (whether the consignment is to the person making it or to any other person), where such consignment takes place in the course of inter-State trade or commerce. ● Any other matter not enumerated in List II or List III including any tax not mentioned in either or both the Lists.	● Taxes on the sale or purchase of goods other than newspapers, subject to the provisions of entry 92A of List I. ● Taxes on advertisements other than advertisements published in the newspaper @@ and advertisements broadcast by radio or television ● Taxes on goods and passengers carried by road or on inland waterways. ● Taxes on vehicles, whether mechanically propelled or not, suitable for use on roads including tramcars subject to the provision of entry 35 of List III. ● Taxes on animals and boats ● Tolls ● Taxes on professions, trades, callings and employments ● Capitation taxes ● Taxes on luxuries, including taxes on entertainments, amusements, betting and gambling ● Rates of stamp duty in respect of documents other than those specified in the provision of List I with regard to rates of stamp duty.
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Source: 'Fiscal Federalism in India: Theory and Practice'- M. Govinda Rao
Tapas K. Sen

Page No. 34-35

8.3.2 Constitutional Provisions of Expenditure Responsibilities:

Legislative Relations regarding legislative relations, there is a threefold division of powers in the Constitution. We have followed a system in which there are two lists of legislative powers, one for the Centre and the other for the State, known as the Union List and the State List, respectively. An additional list called the Concurrent List has also been added. Power to legislate on all subjects not included in any of the three lists vests with the Parliament. Under certain circumstances, the Parliament can legislate on the subjects mentioned in the State List.

Union - State Legislative Relations (Arts. 245 to 255):

As per the Indian Constitution, legislative or law making powers are not vested in a single tier of government, rather they have been distributed between the Centre and the States with respect to territory and subject matter. As regards the subjects of legislation, the constitution adopts three list system from the Government of India Act, 1935.

These three lists are the **Union, State and Concurrent List** as mentioned in the VIIth Schedule of the Constitution.

- **The Union List** which consists of 97 subjects of national interest is the largest of the three lists. Some of the important subjects included in this list are: Defence, Railways, Post and Telegraph, Income Tax, Custom Duties, etc. The Parliament has the exclusive power to enact laws on the subjects included in the Union List for the entire country. The Union List contains subjects of national relevance (mentioned in the table below) over which the Parliament has an exclusive authority to formulate laws. The Union List contains subjects of national relevance (mentioned in the table below) over which the Parliament has an exclusive authority to formulate laws. This list at present has 100 subjects (originally 97 subjects).
- **The State List** consists of 66 subjects of local interest. Some of the important subjects included in this List are Trade and Commerce within the State, Police, Fisheries, Forests, Industries, etc. The State Legislatures have been empowered to make laws on the subjects included in the State List. State List includes subjects of importance to the States (mentioned in the table below), over which the State legislature has an exclusive authority to formulate laws. This list at present has 61 subjects (originally 66 subjects).
- **The Concurrent List** consists of 47 subjects of common interest to both the Union and the States. Some of the subjects included in this list are: Stamp Duties, Drugs and Poison, Electricity, Newspapers etc. Both the Parliament and the State Legislatures can make laws on the subjects included in this list. But in case of a conflict between the Union and the State law relating to the same subject, the Union law prevails over the State law. The Concurrent List containing subjects of mutual relevance over which both the Parliament and State Legislatures can legislate, but in case of conflict the Union law will prevail. This list at present has 52 subjects (originally 47 subjects).

Annexure II

Illustrative List of Developmental Subjects (Other Than Financial Subjects)

Included In Union List, State List and Concurrent List As

Per Seventh Schedule of the Constitution

A)	Union List:
	● Atomic energy and mineral resources necessary' for its production ● Railways ● Highways declared by or under law made by Parliament to be national highways ● Shipping and navigation on inland waterways, declared by Parliament by law to be national waterways, as regards mechanically propelled vessels the rule of the road on such waterways. ● Maritime shipping and navigation including shipping and navigation on tidal waters provision of education and training for the mercantile marine and regulation of such education and training provided by States and other agencies. ' ● Lighthouses, including lightships, beacons and other provision for the safety of shipping and aircraft ● Ports declared by or under law made by Parliament or existing law to be major ports, including their delimitation and the constitution and powers of port authorities therein. ● Port quarantine, including hospitals connected therewith seamen's and marine hospitals. ● Airways aircraft and air-navigation provision of aerodromes; regulation and organization of air traffic and of aerodromes; provision for aeronautical education and training and regulation of such education and training provided by States and other agencies. ● Carriage of passengers and goods by railways, sea or air, or by national waterways in mechanically propelled vessels ● Posts and telegraph: telephones, wireless, broadcasting and other like forms of communication. ● Trade and commerce with foreign countries; import and export across customs frontiers; definition of customs frontiers. : ● Inter-State trade and commerce. ● Industries, the control of which by the Union is declared by parliament by law to be expedient in the public interest. ● Regulation and development of oilfields and mineral oil resources; petroleum and petroleum products; other liquids and substances declared by Parliament by law to be dangerously

	inflammable ● Regulation of mines and mineral development to the extent which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest. ● Regulation and development of inter-State rivers and river valleys to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest. ● Fishing and fisheries beyond territorial waters. ● Union agenda and institutions for – a. professional, vocational or technical training including the training of police officers: or b. the promotion of special studies or research; or c. scientific or technical assistance in the investigation or detection of crime. ● Coordination and determination of standards in institutions for higher education or research and scientific and technical institutions. ● Survey of India, the geological, botanical, zoological and anthropological surveys of India, metrological organizations.
B)	State List
	● Local government, that is to say, the constitution and powers of municipal corporations, improvements trusts, district boards, mining settlement authorities and other local authorities for the purpose of local self- Government or village administration. ● Public health and sanitation; hospitals and dispensaries ● Relief of the disabled and unemployable. ● Communications, that is to say, roads, bridges, ferries, and other means of communication not specified in List I: municipal tramways; ropeways; inland waterways and traffic there or subject to the provisions of List I and List II with regard to such waterways; vehicles other than mechanically propelled vehicles. ● Agriculture, including agricultural education and research, protection against pests and prevention of plant diseases. ● Preservation, protection and improvement of stock and prevention of animal diseases; veterinary training and practice. ● Water, that is to say, water supplies, irrigation and canals, drainage, embankments, water storage and water power subject to the provisions of entry 56 of List I. ● Land, that is to say, rights in or over land, land tenures including the relations of landlord and tenant, and the collection of rents; transfer and alienation of agricultural land; land improvement and agricultural loans; colonization.

	● Fisheries ● Regulation of mines and mineral development subject to the provisions of List I with respect to regulation and development under the control of the Union. ● Industries subject to the provisions of entries 7 and 52 of List I. ● Gas and gas-works ● Trade and commerce within the State subjects to the provisions of entry 33 of List III. ● Production, supply and distribution of goods subject to the provisions of entry' 33 of List III ● Cooperative societies ● Works, lands and buildings vested in or in the possession of the State.
C)	Concurrent List
	● Forests ● Economic and social planning ● Population control and family planning ● Social security and social insurance; employment and unemployment ● Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I; vocational and technical training of labour. ● Relief and rehabilitation of persons displaced from their original place of residence by reasons of the setting up of the Dominions of India and Pakistan. ● Ports other than those declared by or under law made by Parliament or existing law to be major ports. ● Shipping and navigation and inland waterways as regards mechanically propelled vessels, and the rule of the road on such waterways, and the carriage of passengers and goods on inland waterways subject to the provisions of List 1 with regard to national waterways. Trade and commerce in, and the production supply and distribution of – a) the products of any industry where the control of such industry by the Union is declared by Parliament by law to be expedient in the public interest and imported goods on inland waterways subject to the provisions of List I with regard to national waterways b) food stuffs, including edible oilseeds and oils; c) cattle fodder, including oilseeds and other concentrates; d. raw cotton, where ginned or unginned and cotton seed; and e) raw jute. ● Factories ● Boilers ● Electricity

Conclusion, in our Constitution, there is a clear division of powers, so that the States and the Centre are required to enact and legislate within their sphere of activity and none violates its limits and tries to encroach upon the functions of the other. Our constitution enumerates three lists, viz. the Union, the State and the Concurrent List. The Union List consists of 97 subjects of national importance such as Defence, Railways, Post and Telegraph, etc. The State List consists of 66 subjects of local interest such as Public Health, Police etc. The Concurrent List has 47 subjects important to both the Union and the State. Such as Electricity, Trade Union, Economic and Social Planning, etc.

8.4 INTERGOVERNMENTAL FISCAL TRANSFERS IN INDIA

The relationship between governmental units, be it vertical (inter-governmental) or horizontal (inter-jurisdictional) is a complex phenomenon. Although much of the literature on federal finance emphasizes the advantages of 'co-operative' federalism. Intergovernmental transfers is one of the most visible and widely discussed aspects of federal finance. The design of inter-governmental transfers depends on the objectives they are required to sub serve. The Central transfers given to close the fiscal gap and ensure fiscal equity among the States or 'equalizing' transfers should enable every State to provide a given normative level of public services at a given tax rate. Intergovernmental transfers have played an important role in resolving vertical fiscal imbalances in India. Transfers from the Central government constitute a significant part of State finances.

The existence of vertical and horizontal fiscal imbalances is a common feature observed in all federations. Even under the most efficient assignments, these fiscal imbalances cannot be avoided. The Central government has a comparative advantage in raising revenues and sub-Central governments, in spending. Similarly, taxable capacities and unit cost of providing public services do vary across different jurisdictions due to differences in not only the resource endowments but also historical and political factors. Nor is the mere existence of fiscal imbalance in itself undesirable. What is important is to evolve appropriately designed in Indian fiscal federalism, however, shows that the Constitutional assignments as well as the execution of federal fiscal arrangements over time have severely impacted on horizontal and vertical fiscal imbalances.

A notable feature of the fiscal arrangements in the Indian federal system is the existence of multiple channels of transfers from the Centre to the States. The founding fathers of the Constitution sought to ensure that the finances of the Centre and the States are kept on an even keel. Therefore, the Constitution provided for the sharing of individual income tax and

union excise duties, and for giving grants-in-aid to the States in need of assistance and through these, vertical and horizontal imbalances were sought to be offset. To ensure an impartial and objective arrangement, the tax devolution and grants were to be made based on the recommendations of a semi-judicial body, the Finance Commission, to be set up by the President of India every five years (or earlier, if necessary), under Article 280. However, with development planning gaining emphasis, the Planning Commission became a major dispenser of funds to the States by way of both grants and loans. As there is no specific provision in the Constitution for the distribution of plan transfers, the Central government channeled the transfers under Article 282, construing it as a miscellaneous provision for giving grants.

In the initial years the plan transfers were schematic but since 1969, they have been distributed on the basis of a consensus formula decided by the National Development Council (NDC). Since then, however, various ministries at the Centre felt the need to influence States' outlays on selected items of expenditure through specific purpose transfers with or without varying matching requirements. There are two operating channels for transfer of resources from the center government to the states in India: (i) statutory transfers through the awards of the finance commission, comprised of (a) formula-based tax devolutions and (b) grants-in-aid; and (ii) discretionary transfers (central loan) by various union ministries.

At present, there are three major channels of Central transfers to States namely,

- a. Tax devolution and grants mandated by the Finance Commission,
- b. Grants and loans determined by the Planning Commission, and
- c. Transfers for several Central sector and centrally sponsored schemes devolved by various Central ministries.

8.4.1 Three major channels of Central transfers to States

A) The Finance Commission Transfers:

The terms of reference: As already mentioned, under Article 280 of the Constitution, the President of India appoints the Finance Commission every five years or earlier to make recommendations on:

- (i) the distribution between the Union and the States of the net proceeds of taxes which are to be or may be divided between them and the allocation between the States of the respective shares of such proceeds;
- (ii) the principles which should govern the grants-in-aid of the revenues of the States, out of the consolidated fund of India and the sums to be paid to the States which are in need of assistance by way of grants-in-aid of their revenues under Article 275 of the constitution; and Any other matter referred to the Commission by the President in the interest of sound finance.

Grants-in-aid. Under Article 275 of the Indian Constitution, finance commissions recommend conditional or unconditional grants-in-aid to help states provide comparable levels of services, at comparable tax rates, while ensuring a budget balance in the revenue account. There are broadly three types of grants-in-aid: (i) gap-filling grants to meet the difference between the assessed current expenditure and the projected revenue including the share of a state in central taxes, (ii) local bodies grants to supplement the resources of local bodies, and (iii) specific-purpose grants are conditional transfers given to states to (i) ensure minimum standards of certain basic services, (ii) provide grants for natural calamities, (iii) cover capital expenditure needs of states in certain sectors, and (iv) incentivize better fiscal management and planning amongst states.

Formula-based transfers; As per Article 270 and Article 280(3) (a) of the Constitution, the Finance Commission determines the percentage of the divisible pool that is to be assigned to the states (vertical distribution) and the percentages that are to be allocated to states inter-se (horizontal distribution). Once the formula with different weights to parameters is applied, no conditions can be set on the right of the state to receive such funds. In the past, indicators such as population size, area, forest cover, and infrastructure index distance (from average of top three states), per capita income distance (from the average of top three highest states), inverse income, poverty ratio, index of backwardness were considered for determining these tax devolutions. For performance incentivization, indicators measuring tax collection, tax effort (tax/gross state domestic product [GSDP]) and fiscal discipline were incorporated in various Finance Commission formulae

B) Grants and Loans determined by the Planning Commission:

Grants from the centre to states in India are an important source of fiscal transfers. The mechanism of grants-in-aid helps to coordinate the basic principles of federal finance such as independence and responsibility. Adequacy, elasticity, fiscal harmonization etc.

In India, the central government has been providing grants to state governments through three institutional processes. Finance Commission provided statutory grants and Union Ministries provide discretionary grants the states to meet their plan expenditure. In addition to these, Finance Commission also provides compensatory grants such as grants-in-lieu of railway passenger's fares to the states. Basically grants given to state in India can be classified into two broad categories) Grants under Article 275 and i) Grants under Article 282. Statutory grants under Article 275 of Indian constitution are given to state on the recommendation of the Finance Commission, which provides the set of principles governing the distribution of these grants to states. Grants under Article 282 of Indian constitution are given to meet both plan and non-plan expenditure of states. These grants are provided to the states on the recommendation of the Planning Commission and the discretion of the Union Ministry. Since the inception of planning in India.

Transfers for several Central sector and centrally sponsored schemes devolved by various Central ministries: Another major item of Central transfers to States is the assistance given to Central sector and centrally sponsored schemes.

Central Loans:

The architects of Indian constitution who made centre financially more stronger than the states felt it necessary to make provision for central loans to states and considered the central loan as one of the important balancing force that are resorted to correct fiscal imbalance as well as to meet increased expenditure of the states. Article 293 (2) of our constitution has given power to the centre to grant loans to state and also to guarantee loans borrowed by states within India. Loan assistance from the centre is given for both plan and non-plan purpose based on the recommendation of the Planning Commission and at the discretion of Union Ministry forms the major portion of the federal fiscal transfers to states in India.

Assignment between State and Local Governments:

The Constitution of India contains only two lists of taxes, the Union List and the State List. Thus local bodies did not have any separate list of taxation. The States could, however, levy some of its own taxes to the local bodies. With the constitutional amendments in 1992 roles and responsibilities of rural and urban local governments have been specified. A list of 29 functions to rural local bodies has been specified in a separate list. Another list of 18 functions has been specified for urban local bodies. These functions however, concurrent with the States. The actual assignment of specific revenue sources expenditure is dependent on the extent to which the States is willing to devolve. Each State required to appoint the State Finance Commission every five years. This commission is required to recommend the devolution of resources for carrying out the functions assigned. Apart from State transfers, Central Government too provides funds to local government order to implement Central schemes

Summary, thus, transfer of resources from the Centre to the State governments can be considered under three heads - (i) share in taxes and duties, (ii) grants, and (iii) loans. Fiscal transfers from the central government to subnational governments address the vertical imbalance by compensating subnational governments for differences between incurred expenditures and own revenues. They also address the horizontal imbalances between subnational governments to ensure national uniformity in the provision of public services to citizens across the country. However, transfers based on gap-filling approach can also cause moral hazard issues since the state governments can then afford to be fiscally profligate. This issue has been partly addressed in the past by adopting a formula-based approach for tax sharing, and with conditional grants to incentivize good performance in fiscal management and service delivery by the subnational governments.

8.5 VALUE ADDED TAX (VAT)

Indirect Tax Reforms in India: The Indirect Taxation Enquiry Committee constituted in 1976 under Shri L K Jha recommended, inter alia, converting specific rates into ad valorem rates, rate consolidation and input tax credit mechanism of value added tax at manufacturing level (MANVAT). In 1986, the recommendation of the Jha Committee on moving on to value added tax in manufacturing was partially implemented. This was called modified value added tax (MODVAT). Recommendations of the Chelliah Committee (Tax Reforms Committee) were implemented. In 1999-2000, tax rates were merged in three rates, with additional rates on a few luxury goods. In 2000-01, three rates were merged into one rate called Central Value Added Tax (CENVAT). A few commodities were subjected to special excise duty. In 2004, the input tax credit scheme for CENVAT and Service Tax was merged to permit cross utilization of credits across these taxes. A standing Committee of State Finance Ministers was constituted, as a result of meeting of the Union Finance Ministers and Chief Ministers in November, 1999, to deliberate on the design of VAT which was later made the Empowered Committee of State Finance Ministers (EC). Haryana was the first State to implement VAT, in 2003. In 2005, VAT was implemented in most of the states. India moved towards value added taxation both at Central and State level, and this process was complete by 2005. Integration of Central VAT and State VAT therefore is nothing but an inevitable consequence of the reform process. The Constitution of India envisages a federal nature of power bestowed upon both Union and States in the Constitution itself. As a natural corollary of this, any unification of the taxation system required a dual GST, levied and collected both by the Union and the States. Unification of Central VAT and State VAT was possible in form of a dual levy under the constitutional scheme. Power of taxation is assigned to either Union or States subject-wise under Schedule VII of the Constitution.

8.5.1 Introduction to VAT in India:

Ever since 1954, when the tax on value added was introduced in France it has spread to a large number of countries. Value Added Tax (VAT) is a modern and progressive form of sales tax. It is a multipoint tax with provision for granting setoff or credit of the tax paid on the purchases against the tax payable on sales. In simple terms 'value added' means the difference between the sale price and the purchase price. Goods pass through various stages in the manufacturing and the distribution chain till they reach the consumer. At each stage, some value is added. VAT works on the principle of tax on the value addition at each such stage. Value-added tax, popularly known as VAT, belongs to the family of sales taxes. A general sales tax and turnover tax can be compared with value-added tax. A general sales tax is a tax on sales transactions but it is applied at only one stage of business activity right from the manufacturer to the retailer. A turnover tax is imposed at each sale transaction. Consequently,

a turnover tax tends to increase the final sale value to the consumer cumulatively.

Introduction of the Value Added Tax (VAT) at the Central and the State level has been considered to be a major step- an important breakthrough- in the sphere of indirect tax reforms in India. The Indirect Taxation Enquiry Committee was constituted in July 1976, under the chairmanship of L.K. Jha for suggesting reforms in the indirect taxation system. The Jha Committee found that the country's indirect tax structure as a whole was progressive, but there was little integration between individual indirect taxes. According to the Jha Committee, each indirect tax was levied independently of other indirect taxes. Moreover, these taxes lacked built-in flexibility and every time when revenue collections had to be increased, upward revision in the tax rates was done. India's indirect tax structure was by and large uncertain and complex and its administration was difficult.

The Committee recommended both short-term as well as long-term measures for reforming indirect taxation system. In its opinion, ad valorem taxes are superior to specific taxes due to their higher income elasticity. The Jha Committee thus recommended introduction of ad valorem taxes as far as possible. It also favored exemption of inputs from indirect taxes. It favored integration in the indirect tax structure and suggested that the excise duties and sales tax should be replaced by a single commodity tax. It was proposed that this tax should be levied by the Central government and proceeds divided between the Centre and the States. However, this proposal did not find favour with the States as they were unwilling to surrender their power to levy a sales tax. In respect of sales tax, the States were completely autonomous and acceptance of this proposal could have meant surrender of their right to levy this tax.

However, on theoretical grounds, the Indirect Taxation Enquiry Committee argued that a value added tax (VAT) is the best of all indirect taxes. This view is echoed by many tax policy experts. According to Parthasarathi Shome, VAT is better because of two reasons, "First, the VAT has a self- monitoring mechanism which assists tax administration. Second, the VAT, if appropriately structured, eliminates distortions in decisions by producers that arise from taxation of imports. "

Moreover, since VAT collects revenue in different stages, it has a higher revenue potential. On practical (administrative) grounds, however, the imposition of VAT was considered problematic as a system of VAT requires levying of a tax on the value added at each stage of production.

Introduction of State Value Added Tax. Despite the above-mentioned administrative problems, the Empowered Committee (EC) of State Finance Ministers in its meeting held on June 18, 2004, arrived at a broad consensus to introduce VAT from April 1, 2005. Accordingly, VAT has been introduced by all States/UTs except for the UTs of Andaman and Nicobar Islands and Lakshadweep. The State level VAT being

implemented presently has replaced the erstwhile sales tax system of the States.

It may be mentioned here that since sales tax / VAT is a State subject, the role of the Central government is merely as a facilitator to ensure successful implementation of VAT. A compensation formula was worked out in consultation with the States, for providing compensation to them, during 2005-06, 2006-07 and 2007-08, for any loss on account of introduction of VAT and compensation has been released according to this formula.

Through its deliberations over the years, the Empowered Committee has finalized a design of VAT to be adopted by the States, which seeks to retain certain essential features commonly across States while, at the same time, providing a measure of flexibility to the States to enable them to meet their local requirements.

8.5.2 Salient Features of the VAT

- The rates of VAT on various commodities shall be uniform for all the States/UTs.
- There are we Basic rates of 4 per cent and 12. 5 per cent besides an exempt category and a special rate of 1 per cent for a few selected items.
- The item of basic necessities and goods of local importance (up to 10 items) have been put in the zero per cent of the exempted schedule. Gold, silver and precious stones have hem put in the per cent schedule.
- The 4 per cent rate applies to other essential items and industrial inputs.
- The 12.5 per cent rate is residual cent of VAT applicable to commodities not covered by other schedules.
- There is also a category with 20 per cent Door rate of tax, but the commodities listed in this schedule will not be VAT Table. This category covers gems like motor spirit (petrol, diesel and aviation turbine fuel, Liquor.
- There is provision for eliminating the multiplicity of taxes. In fact, several State taxes on purchase or sale of goods lieu of octroi) have been subsumed in VAT or made VA Table.
- Provision has been made for allowing "Input Tax Credit (ITC) However, since the VAT being implemented is intra-State VAT only and does not cover inter-State sale transactions, the ITC will not be available on inter-State purchases.
- States have been allowed to continue with the existing industrial incentives, without breaking the VAT chain. However, no fresh sales tax VAT-based incentives are permitted

Summary, The Indirect Taxation Enquiry Committee in its report in 1977 examined the feasibility of VAT system. It came to the conclusions that under our administrative and other circumstances, we should be cautious in adopting this tax form. It recommended its adoption, on an experimental basis, in a phased manner, to a limited number of manufacturing industries. Tax on sale within the State is a State subject. Over the period, many distortions had come in taxation due to unhealthy competition among States by giving sales tax incentives and 'tax rate war' started to attract more revenue to State. Many steps were taken to remove the distortions and rationalize the tax structure since 1999. It was decided to introduce uniform State Level VAT. It was announced that all States have agreed to introduce VAT w.e.f. 01.04.2005.

8.6 GOODS AND SERVICE TAX (GST)

The Kelkar Task Force on Fiscal Responsibility and Budget Management (FRBM) recommended in 2005 introduction of a comprehensive tax on all goods and service replacing Central level VAT and State level VATs. It recommended replacing all indirect taxes except the customs duty with value added tax on all goods and services with complete set off in all stages of making of a product.

8.6.1 Introduction of GST in India:

The introduction of GST in India was first announced in the Union Budget 2006-07. Implementation of GST finally materialized with the Parliament passing the Constitutional Amendment Act in September 2016, followed by the State Legislatures and GST was rolled out with effect from 1 July 2017 (including Jammu and Kashmir with effect from 8 July 2017).

8.6.2 Key legislations:

The Constitution (One Hundred and Twenty Second Amendment) Bill, 2016, for introduction of Goods and Services Tax in the country was passed by Rajya Sabha on 3 August 2016 and by Lok Sabha on 8 August 2016. Consequent upon this, the President of India accorded assent on 8 September 2016, and the same was notified as the Constitution (One Hundred and First Amendment) Act, 2016. The following Acts were passed for implementation of GST with effect from 1 July 2017: - • The CGST Act, 2017; • The UTGST Act, 2017, • The IGST Act, 2017; • The GST (Compensation to States) Act, 2017.

The above Acts were assented by the President of India on 12 April 2017 and enacted with effect from 1 July 2017. In addition to the above, each of the States have also passed the SGST Act. All the above Acts were further amended vide the CGST Amendment Act, 2018 and the GST (Compensation to States) Amendment Act, 2018, the IGST (Amendment) Act, 2018 and the UTGST (Amendment) Act, 2018 notified on 29 August 2018 and made effective from 1 February 2019.

8.6.3 The Design of Indian GST:

Concurrent dual model of GST: India has adopted dual GST model because of its unique federal nature. Under this model, tax is levied concurrently by the Centre as well as the States on a common base, i.e. supply of goods or services or both. There are three components of GST as follows: -

- **Central Goods and Services Tax (CGST):** Payable to the Central Government on supply of goods and services within the State/Union Territory.
- **State/Union Territory Goods and Services Tax (SGST/UTGST):** Payable to the State/Union Territory Government on supply of goods and services within the State/Union Territory.
- **Integrated Goods and Services Tax (IGST):** In case of inter-state supply of goods and services, IGST is levied by the Government of India. Equivalent. IGST is also levied on imports into India. IGST shall be apportioned between the Union and the States as per the provisions of IGST Act.
- **GST Compensation Cess:** In addition to GST, a Cess named GST Compensation Cess can be levied on notified goods and services and currently such Cess is levied on pan masala, tobacco, aerated drinks, cars and coal.

8.6.4 GST Tax Rates:

GST ushered in a tax structure in which the same good or service has been subjected to same tax rate across the States. There are four major tax slabs right now (5 per cent, 12 per cent, 18 per cent and 28 per cent tax rates). Besides, some goods and services are exempt also. Rate for precious metals and affordable housing are an exception to 'four-tax slab-rule' and the same has been fixed at 3% and 1% respectively. In addition, unworked diamonds, precious stones, etc. attracts a rate of 0.25%. Access over the peak rate of 28% on certain specified luxury and demerit goods, like tobacco and tobacco products, pan masala, aerated water, motor vehicles is imposed to compensate States for any revenue loss on account of implementation of GST.

8.6.5 Goods & Service Tax Council:

As provided for in Article 279A of the Constitution, the Goods and Services Tax Council (the Council) was notified with effect from 12.09.2016. The Council is comprised of the Union Finance Minister (who will be the Chairman of the Council), the Minister of State (Revenue) and the State Finance/Taxation Ministers as members.

8.6.6 GST Legislations:

Four Laws namely CGST Act, UTGST Act, IGST Act and GST (Compensation to States) Act were passed by the Parliament and since

been notified on 12.04.2017. All the other States (except J&K) and Union territories with legislature have passed their respective SGST Acts. The economic integration of India was completed on 08.07.2017 when the State of J&K also passed the SGST Act and the Central Government also subsequently extended the CGST Act to J&K.

8.6.6 Compensation to States:

The Goods and Services Tax (Compensation to States) Act, 2017 provides for compensation to the States for the loss of revenue arising on account of implementation of the goods and services tax.

8.6.7 GST & Indian Economy:

- GST will have a multiplier effect on the economy with benefits accruing to various sectors.
- GST will increase the competitiveness of Indian goods and services in the international market and give boost to Indian exports.
- GST has increased the threshold for GST registration for small businesses. it benefits to small traders and entrepreneurs.
- GST will give more relief to industry, trade and agriculture through a more comprehensive.
- The burden of tax on goods would, in general, fall under GST and that would benefit the consumers.
- GST will help to create a unified common national market for India, giving a boost to foreign investment and “Make in India” campaign.
- GST will help to Ease of Doing Business.

8.9 CONCLUSION

A comprehensive GST based on the Value Added Tax (VAT) principle was first suggested by the Kelkar Task Force in December 2002. The introduction of GST is truly a game changer for Indian economy as it has replaced multi-layered, complex indirect tax structure with a simple, transparent and technology-driven tax regime. GST will result in “One Nation, One Tax, and One Market.

Questions:

- 1) Discuss the India’s Federal system.
- 2) Comment the Constitutional Provisions of Taxation Powers in India’s Federal system
- 3) Examine the Constitutional Provisions of Expenditure Responsibilities in India’s Federal system.

- 4) Evaluate the Intergovernmental Fiscal Transfers in India's Federal system.
- 5) Discuss the Value Added Tax (VAT) in Indian.
- 6) Comment the Goods and Service Tax (GST) in India.

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