MEKELLE UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
DEPARTMENT OF ECONOMICS

COURSE MATERIAL FOR: PUBLIC FINANCE

Course code: Econ 3122

- Credit hours: 3 hrs /5 ECTS/, Semester II
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Mekelle

Course Outline

- **Course Description**
- Public finance deals with the financial aspects of the government and the possible role of the state in a market economy through the use of lecture, directed reading and term paper (seminar) preparation and presentation.
- The general objective of the course is to acquaint students with various concepts, theories and realities of public finance such as the rationale for state in the economy, the sources and types of revenue for the public, taxing system and types of taxes, characteristics of an efficient taxing system, criteria for evaluating public expenditure, theories of public expenditure and its impact on the economy, significance , objective and types of public budget, deficit financing and its various means, and some relevant public finance issues in the Ethiopian context.

Course Content

- ***1. Nature and Scope of Public Finance***
- 1.1. Definition of Public Finance
- 1.2. Scope of Public Finance
- 1.3. Public Finance and Private Finance
- 1.4. Significance of Public Finance
- 1.4.1. Economic Significance
- 1.4.2. Social Significance
- 1.5. Theory of public finance

Course Content

- **Chapter Two**
- 2. ***Fundamentals of Welfare Economics (5Hrs)***
- 2.1. Brief Review of Welfare Economics
- 2.2 The Efficiency of Competitive Markets
- 2.3. Perfect Competition and Pareto Optimality
- 2.4. Perfect Competition and General Economic Efficiency
- 2.5 Optimum welfare of society
- 2.5. Fundamental theorem of welfare economics
- 2.5.1 First fundamental theorem
- 2.5.2 Second fundamental theorem

Course Content

- **Chapter Three**
- 3. ***Public Expenditure (6Hrs)***
- 3.1. Meaning and nature of public expenditure
- 3.2. Public expenditure: Canons, Theories and Accountability
- 3.2.1. Canon of public expenditure
- 3.2.2. Theories of public expenditure
- 3.2.3. Control and Accountability of Public Expenditure
- 3.3. Effects of Public Expenditure of Production and Distribution
- 3.3.1. Effects on production and employment
- 3.3.2. Effects on distribution and income
- 3.4. Public Expenditure and Control of Inflation
- 3.5. Content of Development Expenditure

Course content

- **Chapter Four**
- 4. ***Public Revenue (9Hrs)***
- 4.1. Meaning and Sources of Public revenue
- 4.2. The Ratio, Bouncy and Elasticity of Taxation
- 4.2.1. Tax ratio
- 4.2.2. The base of a tax
- 4.2.3. Bouncy and elasticity of a tax
- 4.3. Adam Smith's Canon of Taxation
- 4.4. Features of Sound Taxation
- 4.4.1. Equity in the distribution of tax burden
- 4.4.2. Productivity
- 4.4.3. Rights of taxpayers
- 4.4.4. The tax system and the economy
- 4.5. The theory of Taxation

Course content

- 4.6. Theories of equitable distribution of tax burden of Taxation
- 4.6.1. Socio-political theory
- 4.6.2. Cost of service theory
- 4.6.3. Benefit received theory
- 4.6.4. The ability to pay principle theory
- 4.7. Taxable capacity
- 4.7.1 Absolute taxable capacity
- 4.7.2 Relative taxable capacity
- 4.8. Direct and Indirect Taxes
- 4.8.1. Direct and indirect taxes: a comparison
- 4.8.2. The case of direct taxes
- 4.8.3. The case of indirect taxes

Course content

- **Chapter Five**
- ***5. Public Debt (5Hrs)***
- 5.1 Nature and Kinds of Public Debt
- 5.2 Source of public borrowing
- 5.3 Classification of Public Debt
- 5.4 Effects of Public Debt
- 5.5 Burden of Public Debt and debit trap
- 5.6 Measurement of public debt burden
- 5. 6.1 Internal measurement
- 5.6.2 External measurement
- 5.7 public debit management

Course content

Chapter six

- **6. Analysis of fiscal policy and principles of federal finance**
- 6.1 Meaning of Fiscal Policy
- 6.2 Objectives of Fiscal Policy
- 6.3. Built in stabilization Fiscal Policy
- 6.4 Discretionary Fiscal Policy

Chapter Seven

- ***7. Federal finance***
- 7.1 principles allocation of resource between federal and state government
- 7.2 principle of federal finance

Module Delivery Methods

- The delivery method shall be student-centered. Students are highly expected to participate in class works at the middle and end of each session and in group discussions inside and outside of the class. Specifically the course will be delivered through the following methods:
- Lecture Method
- In-class problem solving
- Group Work
- Assignment

Assessment Methods

- Student evaluation in this module consist both formative and summative assessments including quizzes, test and final exam. Marks will be allocated according to the following grading schedule.

Assessment method	Weight
Assignment (Indiv/group)	20%
Quizzes/Tests	30%
Final Exam	50 %
Total	100%

References

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- Bailey, Stephen J. 1995. Public sector Economics: Theory, policy and practice
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- Oxford.
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- Easterly ,William , et al (eds.),1994. Public sector Deficits and macroeconomic
- performance, Oxford University Press : Oxford. Jha Raghbendra ,1998 Modern Public economics Rout ledge : London
- Musgrave ,R.A and Peggy Musgrave ,1982. Public Finance in theory and practice, 3rd edition McGraw-Hill: London.
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UNIT ONE
NATURE AND SCOPE OF PUBLIC FINANCE ECONOMICS

Introduction

- **Public finance:** is the field of economics concerned with how governments raise money, how that money is spent and the effects of these activities on the economy and the society.
- Public finance studies how governments at all levels national, states, and local- provides the public with desired services and how they secure the financial resources to pay for these services.

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- Public finance is one of those subjects that lie on the **borderline between economics and politics.**
- In olden days when monarchy was in fashion, the crown used to ***collect land revenue in order to feed the armed forces.***
- But as time passes, the function of the state has increased.
- Police state has been changed into welfare state.

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- The increasing role of the state in the economic life of the nation would involve more spending by the state for the economic betterment of the masses.
- such as railways, postal service, dams, highways, electrical projects, etc.
- Hence, in modern states the major objective of public finance is maximization of social welfare.

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- **Maximizing social advantage** is the *guiding principle* in all the activities of the modern states in raising income and in spending it (public finance).
- The state ***ensures maximum social welfare by providing housing, medical facilities, education*** and remove poverty by setting up relief funds and other security measures.

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- Now a days every state undertakes various measures to ***raise the productivity*** of the nation by providing the facilities of infrastructure such as railways, roads, power, irrigation, etc.
- It also helps in controlling ***prices of essential commodities*** *by* taking measures against ***inflation and depression.***

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- In a well-advanced countries, the governments are responsible for **maintaining the stability and expanding the level of employment** to achieve the goal of full employment, while in
- Developing countries, which are confronted with various problems, the government is committed to **achieve high economic growth, reduce high unemployment rate, reduce inequality**, avoid the **negative balance of payment problem**, etc.

Scope and coverage of P.F.

- Most of the time, contents of public finance are divisible in two broad categories
  - **public income** and
  - **public expenditure**
- But the scope of public finance is ***not only*** confined to public income and public expenditure.

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- The scope of public finance may include the following economic activities
  - Public revenue
  - Public expenditure
  - Public debt
  - Financial administration
  - Resource Allocation
  - Resource distribution
  - Stabilization
  - Economic growth

Public Finance and Private Finance

- Finance in general can be public or private finance.
- ***Similarities & differences between private and public finance***
- **Similarities**
  - **Rationality:** both kinds of finance are based on rationality i.e maximization of benefits. (private-profit & public-social welfare)
  - **Borrow Funds:** individually they cannot have enough income to cover all their expenses and fills the short fall by borrowing from others

Contd……………………

- **Common interest**: both public and private funds may go into the hands of selfish interest
- **Both the private and public sectors have limited resources at their disposal**
- **Both are engaged in production, exchange, saving, capital accumulation, investment, etc**

- **Differences**
  - **Public revenue is determined by public expenditure**: while an individual income determines its expenditure, public authority's expenditure determines its income.

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- **Welfare aspect:** the existence of the state is for the welfare of the society as a whole and not for the good of any individual or group. The private individuals or corporations think of earning profits for themselves.
- **Long term vision:** since the state is a permanent body, its life is much longer than that of an individual, and tends to see more towards the future.
- **Sources of income:** the sources of income of an individual are relatively very much limited while those of the state are relatively wide. It has the power to levy taxes

Need for Public Finance

- Our wants are unlimited while resources available to any society are limited in their ability to produce economic goods both due to qualitative and quantitative constraints.
- Scarcity of productive resources and existence of unlimited wants with in states provide the logical ground for the study of public finance.

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- **Both public as well as private sectors** of an economy may take different roles in the total set up of the country's economic activities.
- Thus, the market mechanism **alone cannot perform** all economic functions efficiently.
- Therefore, **public policy is needed to guide, correct and supplement the private sector** in certain aspects.
- This means that, the role of the government is indispensable in every economic system.

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- The forces of **supply and demand and the price** mechanism characterize **private sector** resource allocation.
- **Public sector allocation** on the other hand is accomplished through the **revenue and expenditure** activities of government budgeting.
- In reality, no economic society allocates all of its resources through a single allocation institution.

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- Instead, each economy in the world is mixed to one degree or another, between market determined and government determined resource allocation…
- if the market dominates, the system is usually referred to as **capitalist** and
- if the government dominates, it is a **socialist** economic system.
- Therefore, in the following section we will try to see the need for public finance in these economies.

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A. Capitalist (market) economic system: production is ***based on demand, not on the necessity***.

- This necessitates the **government to intervene** and promote ***equitable distribution of income*** by means of taxes, expenditure and social security laws.
- Because, the private sector under the market economy ***failed to produce certain public goods*** like public health, defense, parks, roads, bridges, etc that can be made available equally to all and which may not be sold on a profit-making basis.

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- **Negative or positive welfare effect (Externalities):**
- **Inefficiency of the market system in some sectors**: The supply of electricity, telephone services, roads, etc which require a huge capital usually is carried out most effectively if government provides the service to the community.
- **The sole motive of a private firm is profit maximization:** Thus government has to engage in those activities where profit is less but have a great economic importance to the society.

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- **B. Socialist economic System:** Production decisions are made through a central plan that sets the production targets for industries.
- ***Price policies become an important instrument of public finance.***
- **C. Mixed economic system:** Most of the developing countries, including Ethiopia are categorized under mixed economic system.

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- The concept of a mixed economic system refers to that system in which decision making process is shared between the public and the private sectors.
- All countries do not follow any uniform pattern of economic development.
- But ***in most of them, the state plays an important part in directing resources for economic development.***

The Theory of Public Finance

- The theory of public finance economics provides a ***rationale for the allocation function of public finance.***
- The private market economy could ***not allocate all goods either efficiently or equitably.***
- Moreover, the government ***does not take over*** the production and distribution of goods in most cases.
- Therefore, there is a distinction between privately and publicly allocated goods & services.

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- **Conditions that makes a good private or public**
- **Private goods :** are goods supplied by the market mechanism
- **Characteristics of private goods**
- the ***exclusion principle*** applies i.e those who do not pay the market price are excluded from their consumption.
- The exchange cannot occur without ***property rights***, and property rights require exclusion.

Conted…………………

- the existence of ***revealed preference:*** Producers in trying to maximize their profits, will produce what consumers want to buy and will try to do so at a ***least cost***.
- ***Competition*** ensures that the mix of goods produced corresponds to the consumer's preferences.
- ***consumption is rival:*** benefits are internalized and diminished by the particular consumer who pays for them. A bread eaten by individual A diminishes it and the benefit is internalized by A cannot do the same to B.
- the ***marginal cost*** of providing a private good to an extra consumer is ***positive.***

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- **Public Goods:** Goods that are provided by the public sector. The very nature of those goods and services creates difficulty, if not impossible, for markets to function efficiently.
- **Characteristics of public goods**
- consumers are **unable to exclude** others from consuming precisely the same good; or producers being unable to exclude others from consuming precisely the same good.

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- Example of such public goods are defense, public roads, and bridges, street lights, etc which cannot be divisible in consumption and if provided are equally available to all.
- ***In public goods consumption is non rival***, A's consumption does not reduce B's consumption. there for there are **free riders-** who consumes without paying.
- The ***marginal cost*** of providing a public good to an extra consumer is ***zero***.

Functions of Fiscal Operation

- ***Fiscal operations*** consists of
  - *public expenditure* (G)and
  - *Taxation (T)*
- **Functions of Fiscal Operation**
  - Allocation Function
  - Distribution function
  - Stabilization function
  - Acceleration of economic growth & development

Questions

1. What is public finance?

2, What is the difference and similarities between private finance and public finance?

3, what is the objective of public finance?

4, clearly justify the need of public finance in the three economic systems.

5, what are the characteristics of public and private goods?

CHAPTER 2: FUNDAMENTALS OF WELFARE ECONOMICS

Introduction

Welfare Economics – the branch of economic theory concerned with the study of all feasible allocations of resources for a society and the establishment of criteria for selecting among these allocations.

welfare economics includes the study of society's value of commodities under alternative resource allocations

Theory: Pure Exchange Economy

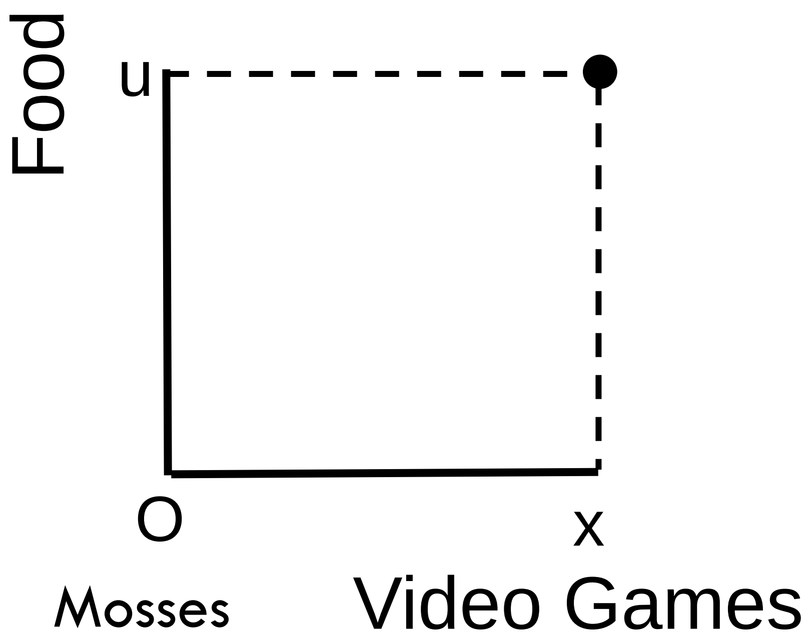
- We start with a simple model:
  - 2 people
  - 2 goods, each of fixed quantity
  - Determine good allocation
- The important results of this simple, 2-person model hold in more real-world cases of many people and many commodities

Pure Exchange Economy Example

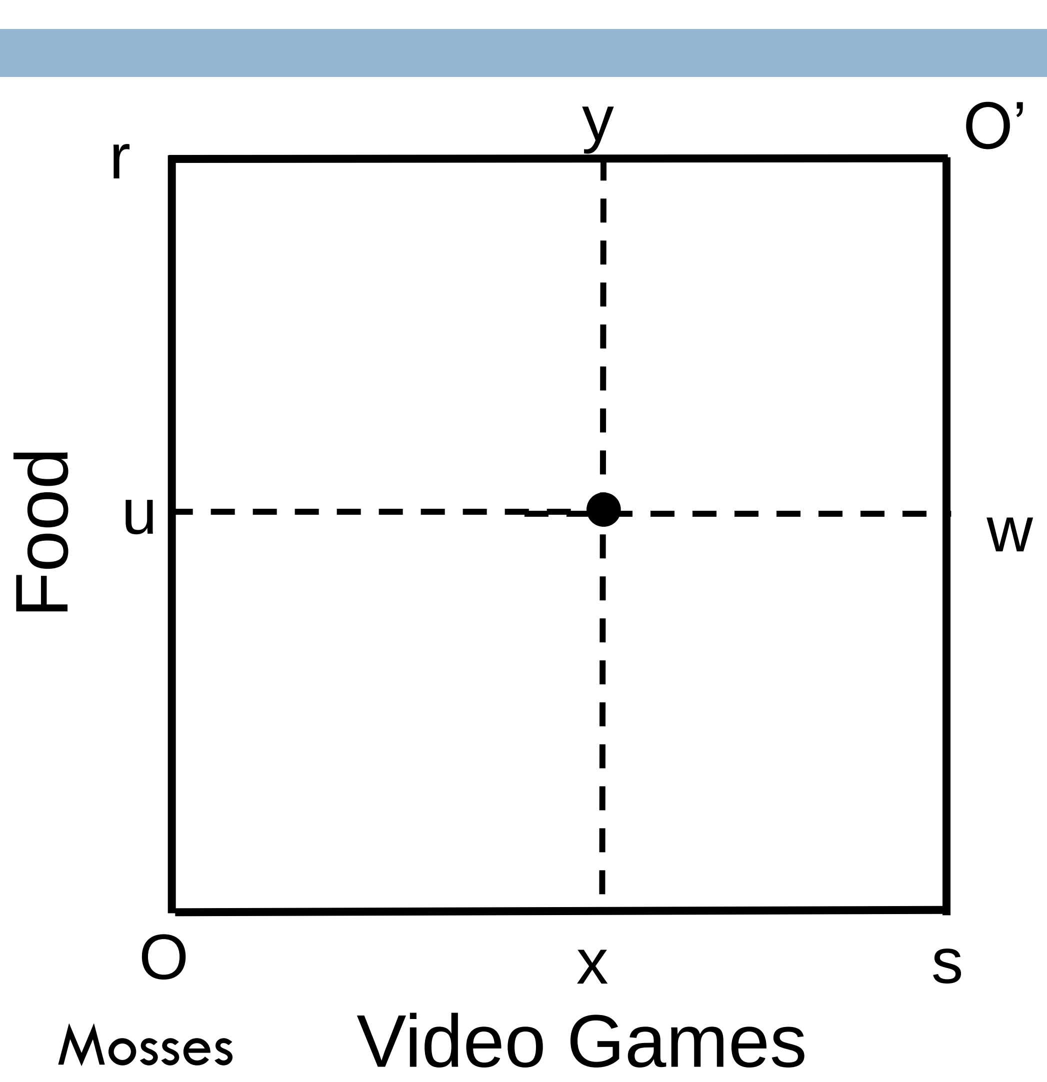
- Two people: Mosses and Susan
- Two goods: Food (f) & Video Games (V)
- We put Mosses on the origin, with the y-axis representing food and the x axis representing video games
- If we connect a “flipped” graph of Susan’s goods, we get an EDGEWORTH BOX, where y is all the food available and x is all the video games:

Mosses's Goods Graph

Ou is Mosses's food, and Ox is Mosses's Video Games



Edgeworth Box



O'w is Susan's food, and O'y is Susan's Video Games

Total food in the market is Or(=O's) and total Video Games is Os (=O'r)

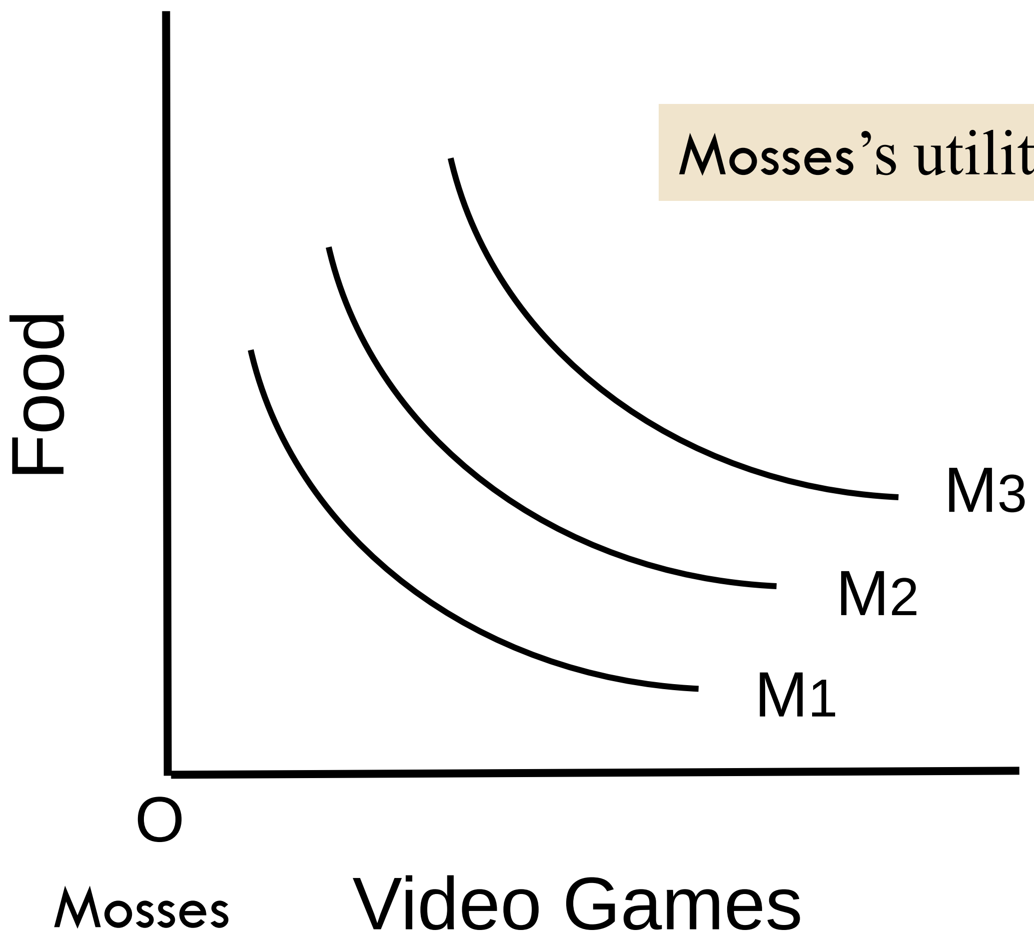
Each point in the Edgeworth Box represents one possible good allocation

Edge-Worth and Utility

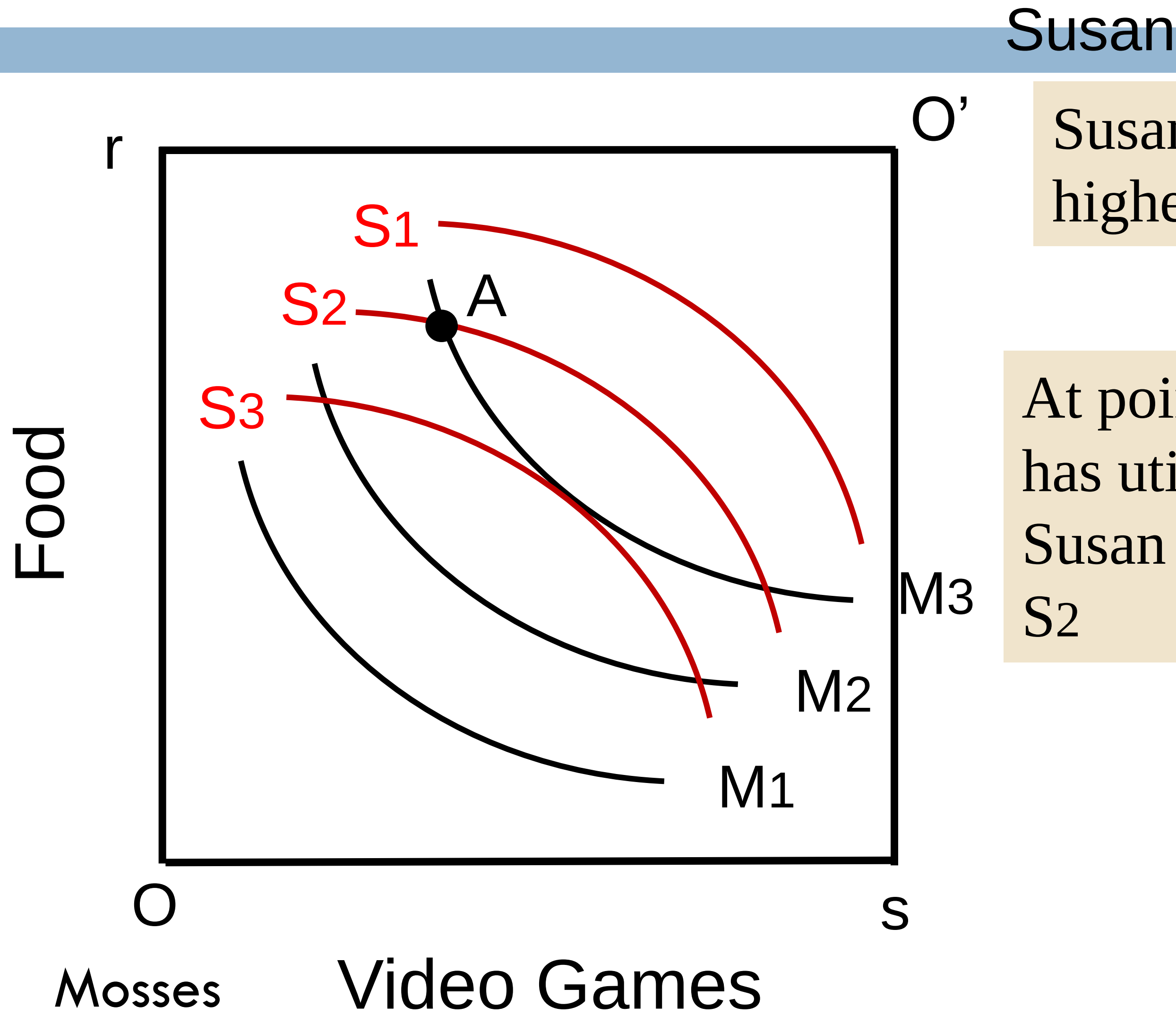
- We can then add INDIFFERENCE curves to Mosse's graph (each curve indicating all combinations of goods with the same utility)
  - Curves farther from O have a greater utility
  - (For a review of indifference curves, refer Microeconomics)
- We can then superimpose Susan's utility curves
  - Curves farther from O' have a greater utility

Mosses's Utility Curves

Mosses's utility is greatest at M3



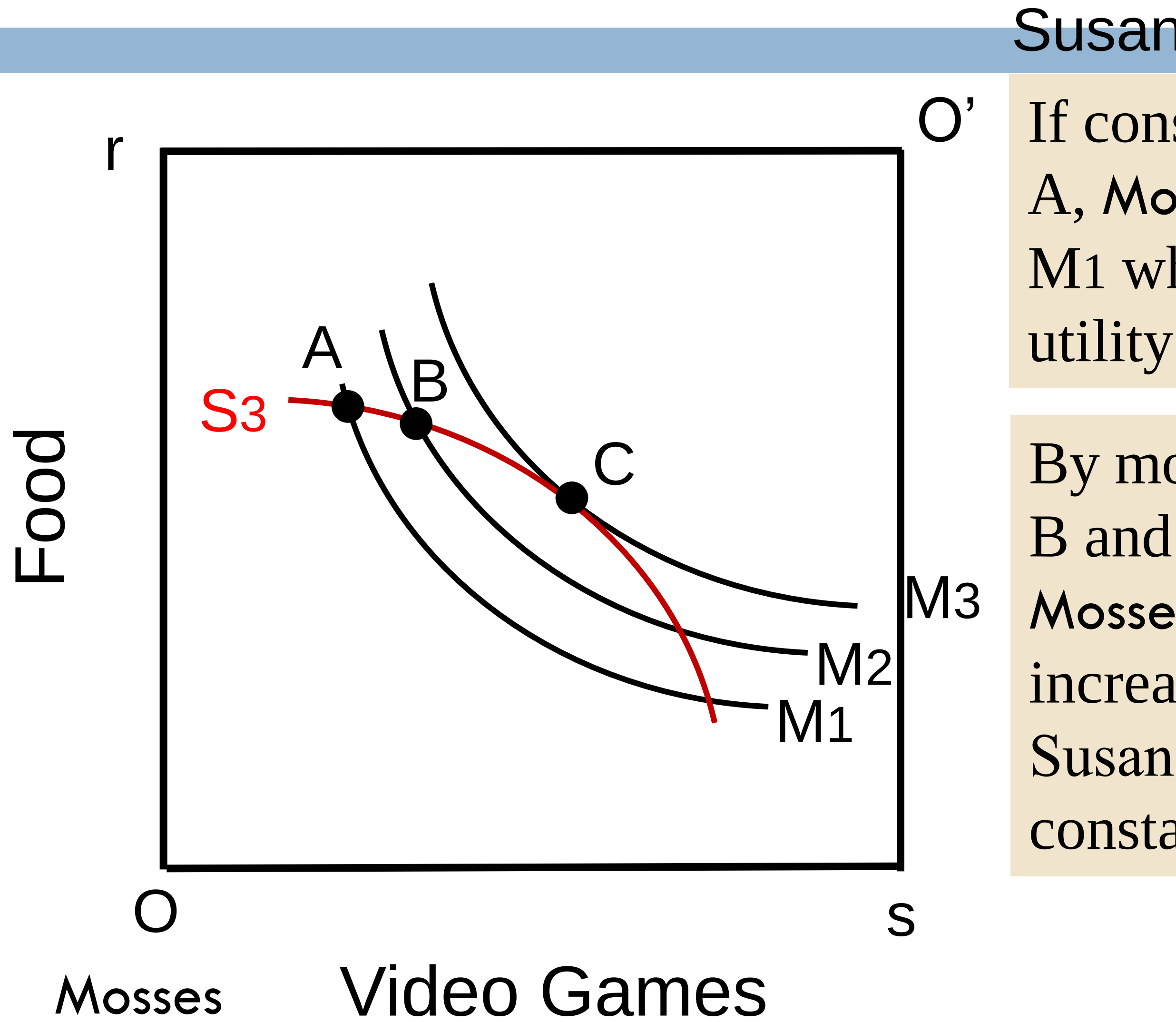
Edgeworth Box and Utility



Susan has the highest utility at S3

At point A, Mosses has utility of M3 and Susan has Utility of S2

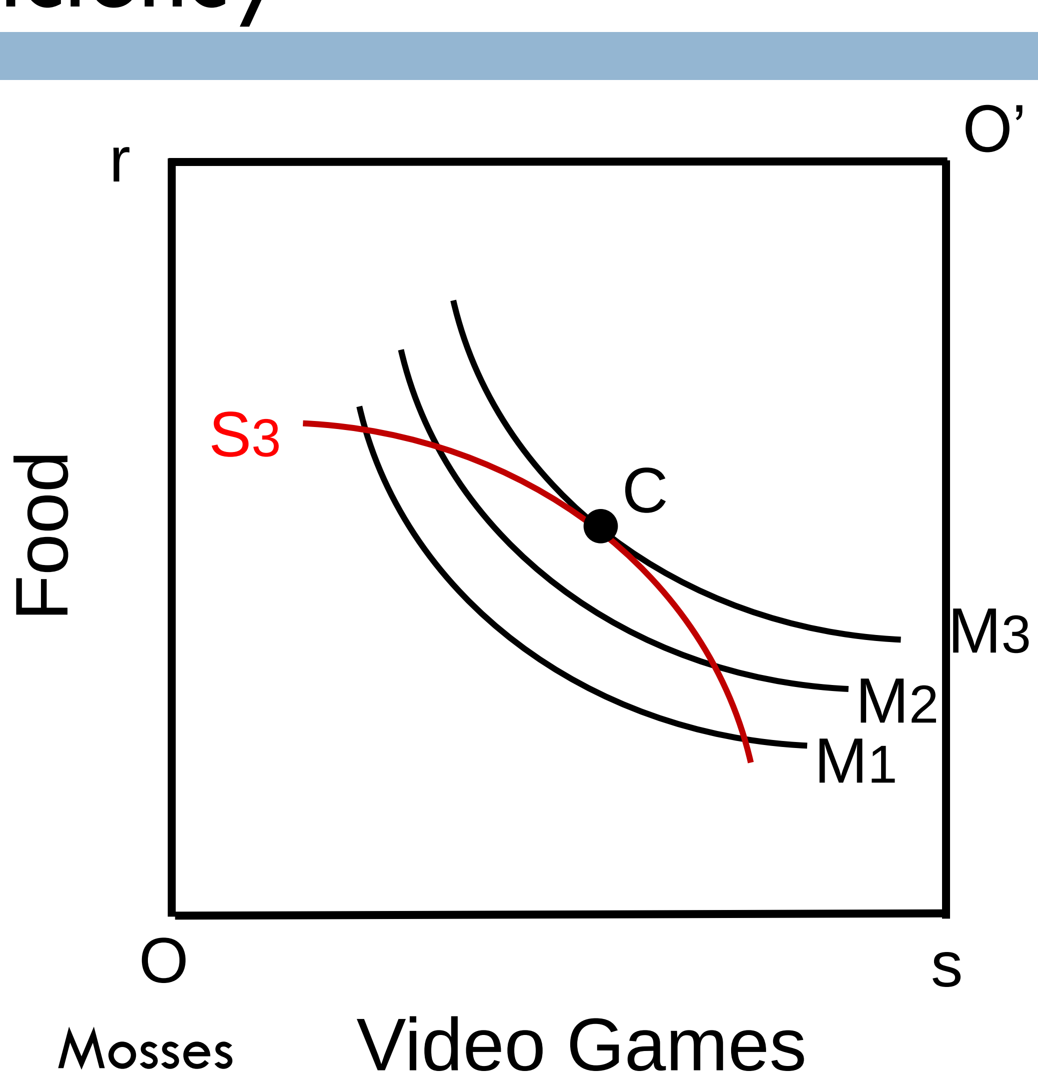
Edgeworth Box and Utility



If consumption is at A, Mosses has utility M1 while Susan has utility S3

By moving to point B and then point C, Mosses's utility increases while Susan's remains constant

Perfect competition and Pareto Efficiency

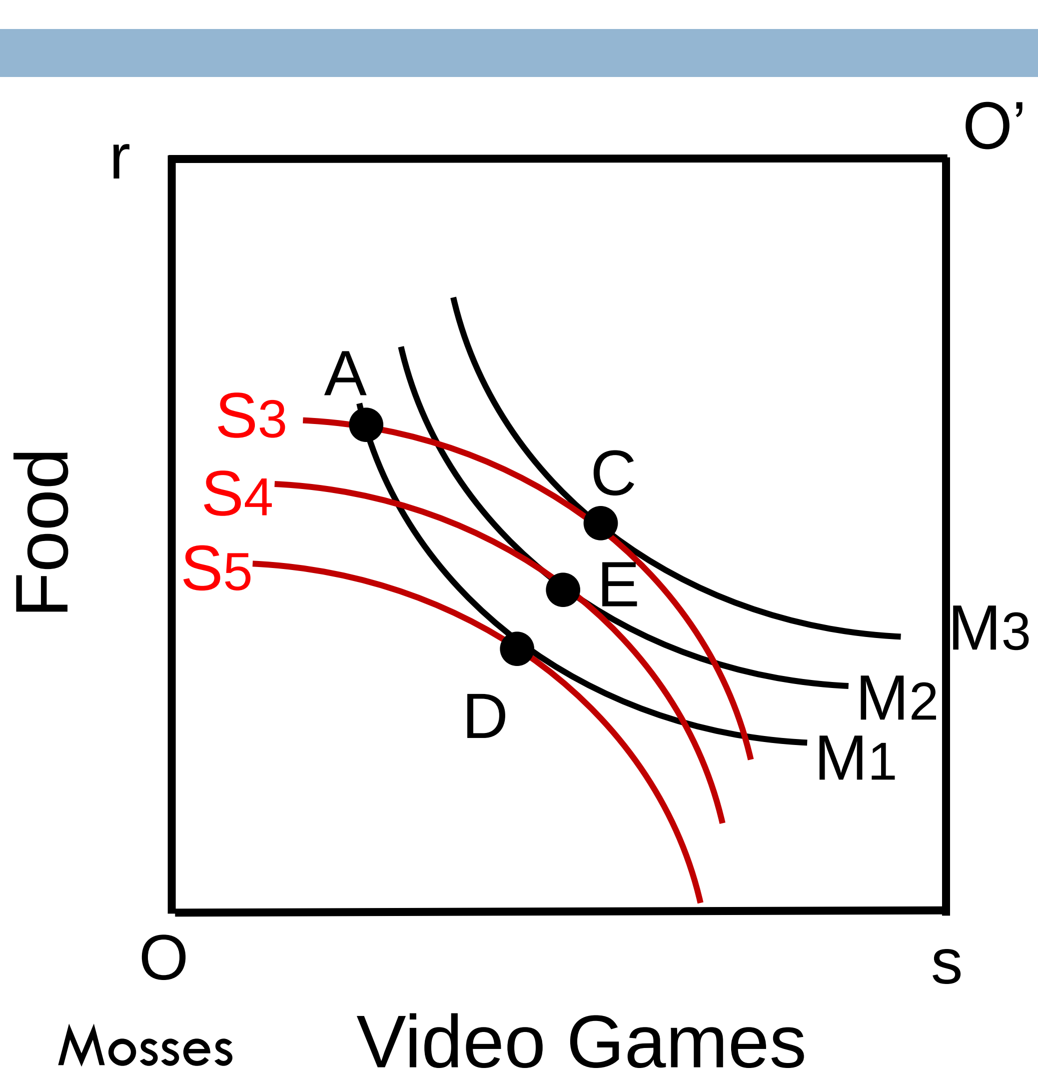


Point C, where the indifference curves barely touch is called PARETO EFFICIENT, as one person can’t be made better off without harming the other.

Pareto Efficiency

- When an allocation is NOT pareto efficient, it is wasteful (at least one person could be made better off)
  - Pareto efficiency evaluates the desirability of an allocation
- A PARETO IMPROVEMENT makes one person better off without making anyone else worth off (like the move from A to C)
- However, there may be more than one pareto improvement:

Pareto Efficiency



If we start at point A:
- -C is a pareto improvement that makes Mosses better off
- -D is a pareto improvement that makes Susan better off
- -E is a pareto improvement that makes both better off

Optimum Welfare

- Welfare of a society is optimized if the following conditions are fulfilled
  1. Efficiency in consumption is achieved
  2. Efficiency in production is achieved
  3. Efficiency in product-mix is achieved
- That is when a general equilibrium is attained in all markets.

Efficiency in Consumption

- Efficiency in consumption requires that MRS is identical for all individuals.

Marginal Rate of Substitution (MRS)

- The rate at which one commodity can be substituted for another without changing a person's utility
- NB: equals the slope of the indifference curve

$$MRS_{vf}^{Mosses} = MRS_{vf}^{Susan}$$

Pareto Efficiency Condition- Consumption efficiency

Efficiency In Production

- *Efficiency in production* requires that the combination of goods actually produced must be on the production possibility frontier (PPF).
- Efficiency in production Condition: requires that the MRTS (Marginal Rate of Technical Substitution) must be identical for all firms.

$$MRTS_{xy}^{FirmA} = MRTS_{xy}^{FirmB}$$

Efficiency in production

Marginal rate of technical substitution (MRTS):

- The rate at which one production factor can be substituted for another without changing the output of the commodity

- NB: equals the slope of the iso-quant

Efficiency in the Product Mix

- This condition concerns the interface between production and consumption.
- The absolute value of the slope of the PPF is known as the *marginal rate of transformation (MRT)*.
- *The MRT* measures the *opportunity cost* of the economy as a whole for a small increase in the amount of good x relative to good y.

Efficiency in product mix

Marginal rate of transformation (MRT)

- The rate at which the output of one commodity can be transformed into output of another commodity by a shift of a production factor from one production process to another
- NB: Equals the slope of the production possibility frontier

Theory - First Fundamental Theorem Of Welfare Economics

IF

1) All consumers and producers act as perfect competitors (no one has market power)

and

2) A market exists for each and every commodity

Then

Resource allocation is Pareto Efficient

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- If Pareto Efficiency was the only concern, competitive markets automatically achieve it and there would be very little need for government:
  - Government would exist to protect property rights
    - Laws, Courts, and National Defense
- But Pareto Efficiency doesn't consider distribution. One person could get all society's resources while everyone else starves.
- This isn't typically socially optimal.

Second Fundamental Theorem of Welfare Economics

- The SECOND FUNDAMENTAL THEOREM OF WELFARE ECONOMICS states that society can attain any Pareto efficient allocation of resources by making a suitable assignments of original endowments, and then letting people trade

- Roughly, by redistributing income, society can pick the starting point in the Edgeworth box, therefore obtaining a desired point on the Utility Possibility Frontier:

Efficient Allocation of resources

- Each of the three efficiency conditions is necessary for an efficient allocation of resources:

1. Efficiency in consumption requires that MRS is identical for all individuals.
2. Efficiency in production requires that the MRTS be identical for all firms.
3. Efficiency in the product mix requires that each consumer's MRS be identical to the economy's MRT.

- This framework considers all markets in the economy simultaneously and in equilibrium. Hence, it is known as a *general equilibrium analysis*.

Why Income Redistribution?

- Why achieve equity through income redistribution instead of taxes/penalties and subsidies/incentives?
- Taxes and penalties punish income-enhancing behavior, encouraging people to work less.
- Subsidies and incentives give an incentive to stay in a negative state to keep receiving subsidies and incentives.
- Lump sum transfers have the least distortion.

Welfare Economics Evaluation

- Welfare Economics asks 3 questions of every government action:

1) Will it have desirable distributional consequences?
2) Will it enhance efficiency?
3) Is the cost reasonable?

- Although these questions may be difficult to answer, they provide direction, and if they are *all* "no", the government shouldn't interfere

Questions

1, what is the difference between pareto Improvement and pareto efficiency?

2, what are indifference curves and what is their characteristics?

3, list and discuss the three conditions that we can say welfare of a society is optimized.

4. Discuss the difference among MRS, MRTS and MRT.

5, Discuss the theorem of welfare economics.

UNIT THREE

PUBLIC EXPENDITURE

Meaning and Nature of Public Expenditure

- Public expenditure is the expenditure incurred by public authorities' i.e central, state and local for the satisfaction of collective needs of the citizens or for promotion of economic and social welfare.
- Government plays a large role in the economy, as regulator of the private sector, as supplier of public service and many other ways. Hence, it incurs expense.

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- There are some unique features of public expenditure
  1. public expenditure determines the amount of income where as private expenditure is determined by the individual's income
  2. public expenditure is not for profit motive
  3. the target for public expenditure is a maximum return for the state as a whole,
  4. public expenditure is influenced by various political motive and social aspects

Scope of Public Expenditure in LDCs

- The scope of public expenditure in under developed countries of mixed economies, like Ethiopia, can be stated as follows.
  - The public sector produces some **important public goods,** which **the private sector cannot produce**
  - The government may **subsidize the private production** of certain partial **social goods** for increasing their output
  - In underdeveloped countries, the public sector may have to **produce certain private goods** which are considered **important** from the point of **economic development** and which **the private sector is unable to afford**

Contd……………….

- **lack of enterprise or technical knowhow** or lack of experience, these goods to have **strategic control over the economy.**
- Public expenditure may be used as a balancing factor or contra cyclical measure **to attain full employment and maintain stability.**
- Public expenditure may used to bring about **equitable distribution of income** between different sections of the community

Classification of Public Expenditure

- Different economists have given their own style of classification of public expenditure how ever they are **not mutually exclusive**
- **C.C. Plehn, Classify P. E. on the basis of benefits**
  - Public expenditure, which specially benefit certain people,
  - Public expenditure, which benefits equally to all.

Contd……………….

- **Adam Smith has classified public expenditure according to the functions of the government as:**
  - Protective,
  - commercial and
  - Development expenditure

Contd……………….

- **Nicholson on the other hand categorizes on the basis of revenue in that:**
  - **public expenditure without direct return to revenue** (example poor relief on some cases),
  - **Expenditure without direct returns but with indirect benefits to revenue** (example education expenditure with the assumption that educated people are better tax payers),
  - **Expenditure with full return or even profit** like that of post office, gas service and generally public enterprises etc

Contd……………….

- **Other important classifications includes**
  - **Productive:** expenditures on social over heads (construction of roads, schools, hospitals, telephone, electric power, etc). education, training, health, better living conditions etc, expenditure on research and expenditure made to build efficient administration, communication and other infrastructural facilities indirectly add to the health and efficiency & productivity of the economy.

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- **un productive:** expenditure for waging wars, for ceremonial purpose etc are termed as unproductive.
- **Pigou's classification of P.E.**
- **Transferable:** is a payment without corresponding receipt of goods and services by the state. For example, old age pensions and unemployment benefits.
- **non transferable expenditures:** is that by which the state pays directly for the use of goods and services. Such a use of resources by the state may be for consumption or for investment purposes. These include expenditure on defense, education, etc

Contd………………..

- The difference is that in the case of transferable expenditure the beneficiaries have the right to decide about the use of real resources, but in the case of non transferable, it is the state which uses directly
- **Generally;** this way or that way the reason for public expenditure is to **maximize the social welfare and to enhance fast economic growth**

Public expenditure: Canons, Theories and Accountability

- **Canons of public expenditure**
- Some of these canons may be regarded as principles, while others are no more than general guidelines for the public authorities to help them in their task of planning and execution of public expenditure properly.
- The following will be the canons of public expenditure:

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- ***Canon of Benefit***. Public expenditure should be so planned and implemented as to bring about the greatest possible benefit to society. Thus, all non-essential expenditures should be cut to the minimum.
- ***Canon of economy***. Public expenditure should be incurred carefully so that there is no wastage of funds. Since resources are limited in the society, they have to be most properly utilized.

Contd………………

- ***Canon of surplus.*** This canon requires that expenditure of public authorities should be kept within the limits of current revenues. If possible, the expenditure should be less than the earnings of government so that the surplus so generated can be used when there is unavoidable deficit.
- **Canon of sanction.** This canon requires that the public authorities should not be allowed to spend funds without having a previous sanction from appropriate authority for the purpose.

Contd……………….

- **Canon of elasticity.** Canon of elasticity requires that the rules of public expenditure should not be too rigid to achieve the real purpose and that it should be allowed to vary according to the needs and circumstances.
- **Canon of certainty.** This canon requires that public authorities should clearly know the purpose and extent of public expenditure. The spending unit should be certain as to the amount and objective of public expenditure.

Theories of Public Expenditure

- Economists have offered a number of theories on public expenditure. The following theories of public expenditure need special attention.
  - 1. Classical theory of Minimum expenditure.
  - 2. Principle of Maximum Social Advantage.
  - 3. Principle of Maximum Aggregate Benefit.
  - 4. Bowen's Benefit Theory of Public Expenditure.

1. Classical Theory of Minimum Expenditure

- Classical economists did not favor large public expenditure.
- The 'laissez-faire' philosophy of Adam Smith implies that individual is the best judge of himself and that he will be the best productive agent if he is left free to take his own decisions.
- They advocated the principle of sound finance, according to which budget should always be ***balanced***, i.e. public expenditure should not rise above or fall below revenue earnings.

Contd..................

- The classical theory of minimum expenditure is based on the ***assumption of full employment*** on the one hand and ***laissez-faire doctrine*** on the other.
- Since the economy operates at full employment level, it functions with maximum efficiency.
- Moreover, with the philosophy of 'laissez-faire' follows, that most of the economic activities are performed by the private sector.
- hence, the size of public expenditure is always ***small*** and the budget should always be balanced.

2. Principle of Maximum Social Advantage

- Public expenditure is made from the resources mobilized through taxation or borrowing to balance any further increase in the advantage to the community
- The principle of maximum social advantage lays down on that public expenditure should be so planned and,
- hence, revenue resources so raised so as to bring about benefit larger than sacrifice and that the surplus of aggregate satisfaction in the society is maximum.

Contd……………….

- *To judge whether the principle of maximum social advantage is secured or not, the following points have to be considered.*
  - The character and composition of public expenditure is the most important consideration.
- Large expenditure on investment means large sacrifice of tax payers. However, the ultimate benefit may be much larger than the communities' sacrifice.

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- Secondly, the method of taxation has to be judicious.
- The method should be employed which will result in least sacrifice.
  - Thirdly, tax-expenditure programme should be so structured to increase the productive capacity of the community and, hence, enhanced national income.

Contd………………..

- The principle of maximum social advantage is derived from the principle of equi-marginal returns as applied to an individual.
- Thus, if it is found that marginal utility from public expenditure on medical and public health measures is greater than the marginal utility derived from the same amount spent on provision of public parks, then the government should transfer the public funds from the park to medical account.
- This will maximize social advantage.

3. Principle of Maximum Aggregate Benefit

- "expenditure should be pushed in all directions up to the point, at which satisfactions obtained from the last money expended is equal to the satisfaction lost in respect of the last money called upon government service."
- Thus, Pigou brings in both taxation and expenditure sides of the budget determination. His theory determines the size of the budget.

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- Pigou's theory requires the application of two rules, viz.,
- (a) the principle of equi-marginal returns in such a way that marginal utility from each type of expenditure is equal and
- (b) the principle of equality between marginal social sacrifice and marginal social benefit.

4. Bowen's Model of Public Expenditure

- Since social goods, by definition, are those goods and services which are consumed equally by all.
- Hence, the cost of supplying them have to be contributed by all beneficiaries.
- However, every user cannot be asked to contribute equal amount in meeting the cost of social goods because different individuals will derive different amounts of satisfaction.

Conted……………….

- Since social goods benefit everyone, the amounts of benefit derived by different individuals are like joint products.
- Hence, it is the joint contribution of all individuals that has to meet the cost of supplying social goods.
- Suppose a public park is provided in a locality of 100 individuals.
- The benefit of public Park is consumed equally by everyone.

Contd………………..

- Hence, the cost of supplying must be raised from the aggregate contribution of 100 individuals.
- It must, however, be noted that each individual will pay an amount equal to the marginal valuation he attaches to the social good, i.e. the public park services.
- This follows from rules of economic efficiency.
- Since the capacity to enjoy benefit of the public park, as in case of anything else, is different for different persons, they will attach different marginal valuation to the benefit and will contribute different amounts for the consumption of the same public good.

Contd………………

- How much amount of social goods is to be supplied by the public authority will be determined at that level where marginal cost of supplying the social goods becomes equal to the sum of marginal utilities received by the beneficiaries.
- Assuming that there are only two individuals in society, viz., A and B and only one type of public goods, called X, the following condition will hold for the determination of public expenditure or, what it means the same thing, the amount of social goods to be supplied by the government.

Contd……………………

- $MU_A + MU_B = MCx$, Or
- $P^x\text{-}_A + P^x\text{-}_B = MCx$, Hence, $TC_x = QP^x\text{-}_A + QP^x\text{-}_B$,
- where MU stands for marginal utility derived from social goods, MC stands for marginal cost of supplying social goods, A and B are consumers, X stands for the social good supplied, P stands for price to be paid by the consumer, Q indicates quantity of social goods and TC stands for total cost of supplying the quantity.

Contd………………

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Control and Accountability of Public Expenditure

- The necessity to control public expenditure in order to check misuse of public funds and ensure their efficient utilization is obvious.
- Control of public expenditure is sought to be ensured multi-dimensionally at a number of stages. The most important means of control are
  - (a) budgetary control
  - (b) legislative control
  - (c) executive control
  - (d) audit control, and
  - (e) parliamentary control.

Contd………………

- ***Budgetary Control***. Budget preparation is the most primary stage of expenditure control. Budget is a well thought-out plan of governmental activities during the coming year and speaks of much more than a mere statement of income and expenditure of public authorities.
- It specifies the functions and objects of public expenditure.

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- ***Legislative Control.*** After the budget plan is prepared, it has to be presented in the legislature for its approval. There occurs debate in the legislature where the members seek clarification and justification of expenditure programmes.
- During the legislative scrutiny of the budget, the details of expenditure, department-wise and ministry-wise are discussed. Thus, it is a very important stage of expenditure control.

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- ***Administrative Control***. The rules and regulations ensure that no amount is spent without proper sanction or diverted to some other purpose for which it is not sanctioned.
- ***Audit Control***. The next stage is scrutiny of accounts and audit control. There is the system of both internal and external audit. Every department has its accounts section which scrutinizes all accounts of expenditure and ensures that public funds are spent according to rules of propriety, economy and efficient utilization.

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- ***Parliamentary Control.*** The last of these stages of expenditure control is the parliamentary right to enquire into any particular item of expenditure deal.
- There are two committees constituted by the parliament to go into such scrutiny.
- They are
- (i) **Public Accounts Committee** is entrusted with the responsibility of examining audit reports and appropriation accounts. They also examine profit and loss accounts of government undertakings and autonomous bodies.

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- They follow up cases of impropriety, unauthorized and illegal expenditure, misuse and misappropriation and go into further investigation if necessary.
- (ii) the Estimates Committee. locks into the financial operation of the executive and suggests measures to achieve maximum economy of expenditure consistent with maximum efficiency.
- The parliamentary committees pinpoint the erring officials, examine them and suggest follow-up measures for suitable punishment to them.

Effects of public expenditure on production and distribution

- **Effects on Production and Employment**
- Expenditure on agriculture and allied services, industries and minerals, water and power development, transport and communication and other expenditures on community and social development by the State Governments help directly to raise the level of production and employment in the country.
- the enormous expansion in expenditure by the State Governments is to boost demand for goods and services and thus to boost production.

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- The level of production and the level of employment in any country depends upon three factors, viz.,
  - Ability of the people to work, save and invest,
  - Willingness to work, save and invest, and
  - Diversion of economic resources as between different uses and localities.
- It is possible to influence all these factors through public expenditure either for the better or for the worse.

Effect of public expenditure on distribution of income

- While taxes, particularly progressive direct taxes, have the effect of reducing the incomes and wealth of the higher income groups, public expenditure has the effect of raising the incomes of the lower income groups.
- Government's expenditure on education, public health and medicine, housing, etc., is directed to help the poor and the lower income classes

Public expenditure and control of inflation

- Inflationary pressures may be considerably lessened if government expenditure is reduced.
- This may be taken as a simple and direct solution, but for the fact that, in the majority of cases, the most serious type of inflation has always been due to enormous government expenditure.
- However, the government can suitably change and adjust its expenditure during an inflationary period so that the inflationary pressure may be reduced.

Content of Development Expenditure

- ***Stimulating private initiative*** Development expenditure of the government will take the form of stimulating private initiatives and enterprises.
- **Direct stimulation** is done by the Government helping the private sector through loans, subsidies, tax concessions and exemptions and providing market and other information and research facilities.

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- ***Provision of social and economic overheads.*** Indirect stimulation of the private sector may be done by the government through the provisions of social and economic overheads -education and public health will come under the first head, and provision of power, transportation, communication, etc., will come under the second head.

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- ***Public enterprises.*** The government will have to start and run such undertakings which the private sector may be unwilling to undertake, either because profit margins are low or almost nothing, or because they require huge capital investment and a long time to yield returns.
- all the key and basic industries, development of irrigation resour-ces, electric power, etc. are some of them.

Questions

1, what is the importance of public expenditure?

2, what is canons of public expenditure?

3, how does public expenditure affect the economy?

4, what are the causes for increasing public expenditure?

5, how the government can control inflation by using public expenditure?

UNIT FOUR
PUBLIC REVENUE

INTRODUCTION

- The necessity of public revenue is due to the necessity of public expenditure.
- As the government has to perform certain functions for the welfare of the public and these functions are not performed free of cost, they involve expenditure.
- the state provides social goods and services such as defense, health services, education, streetlight, highways and other infrastructures.
- To finance them it needs income.

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- Thus the amount of public revenue to be raised is a function of necessity of public expenditure.
- The government can collect revenue from different sources .
- The income of government through all these sources is called public revenue.
- Of these various sources of government revenue taxation is the most important one.

Meaning and Source of Public Revenue

- In its wider sense, P.R. incorporates all receipts and incomes that a public authority may get during any period of time irrespective of their sources and nature and is called public receipt.
- Generally government sources of revenue are generally divided as tax revenue and non-tax revenue
- ***Tax revenue*** - In every country, the largest part of the public revenue is raised through taxation and mainly it incorporates the following three sections.

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- **Taxes on income and expenditure-** it deals with taxes that are imposed on receipts and expenditures such as corporation tax, income tax, expenditure tax, interest tax and other similar taxes.
- **Taxes on property and capital transaction-** this part includes taxes imposed on specific form of wealth and its transfer.

Example, estate duty, wealth tax, gift tax, house tax, etc

- **A tax on commodities and services** -it is concerned on taxes levied on production, sale, purchase, transport, storage and consumption of goods and services.

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- ***Non-tax revenue***: Public revenues received through administration, commercial enterprise, gifts and grants are non- tax revenue of the government.
  - **Administrative revenue**- under administration public authorities can get income in the form of
    - fees,
    - fines and penalties, and
    - special assessments.
- **Profits of state enterprise**- these are important sources of revenue these days, owing to the expansion to the public sector. These revenues are received in the form of prices paid for the government produced goods and services.

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- **Grants and Gifts**- they cover very small part of public revenue. Usually patriotic people or institutions may provide gifts to the state.
- They are voluntary contributions that are beneficial particularly during wartime and emergency.
  - Local governments obtain grants from state government and state government from the center. It is said to be ***grants - in - aid***.
  - When one country's government makes grants to another country's government, it is referred to as ***foreign aid***.

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- **Borrowings-** It has many forms. But the most important are fresh borrowings that can be categorized according to their origin and maturity.
  - **Interims of their origin**: public borrowing may be
    - external or internal.
  - **Interims of their maturity:** public borrowing may be
    - long term, medium term and short term
- **<u>Note</u>.** Income and profit from the creation of currency by government that is greater than its face value of currency over its cost of creation are also incorporated into the category of non-tax revenue.

Tax Revenue

- Fund raised through the various taxes is referred to as tax revenue.
- Taxes may be imposed on person's income or wealth, they may be direct or indirect and they may be different rates and nature.

The main characteristics of a tax are as follows

- *A tax is compulsory payment* to be paid by the citizens who are supposed to be liable to pay it. Therefore, anyone who wants to refuse to pay a tax will be punished.
- *There is no direct quid pro quo between the taxpayer and public authority*. This means a taxpayer may not receive a benefit proportional to the tax that he has paid. (Quid pro quo means something given or taken as equivalent to another.)

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- *A tax is imposed to meet public spending* incurred by the government in the general interest of the nation. It is a payment for the indirect service to be provided by the government to community as a whole.
- *A tax is not a price paid by the taxpayer* for any definite service rendered or a commodity offered by the government.
- *A tax is payable regularly and periodically* as determined by the tax authority. For instance, income taxes are usually paid annually.

The Base of a Tax

- The tax collecting authority has legally described the object on which the tax is imposed.
- The base of each tax has to be defined legally and quantified for the purpose of determining the tax liability for an individual taxpayer.
- Each taxpayer is considered as a legal entity for this purpose. According to the different tax base, an individual taxpayer may be subjected to more than one tax.

Buoyancy of a Tax

- The growth of tax base increases the tax revenue.
- This rise in tax revenue is termed as ***buoyancy of tax***.
- A buoyant tax has an inherent tendency to yield more tax revenue with the growth of its base.

Objectives of taxation

- Objectives of a tax system in an economy are mainly connected with
  - The overall economic and non- economic policies of the government
  - The non-tax components of its fiscal policy
  - Institutional and other situations faced by the economy.
- Objectives of a tax system differ significantly in between
  - Developed countries
  - Underdeveloped countries

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- The main problem affecting the developed countries is instability of income and employment. Therefore, they design their tax system to solve this problem.
- Unlike advanced nations the primary objective of taxation in underdeveloped countries is not related to instability of
  - Income and
  - Employment

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- Rather these countries, like Ethiopia, have been affected by several problems that are related with
  - Economic growth
  - Poverty
  - Inequality
  - Health
  - Chronic unemployment
  - Regional disparities etc.

Canons of Taxation

- By cannon of taxation we mean those characteristics, which a good tax should, posses. The canons of taxation are concerned with the rate, amount and method of levy and collection of a tax.
- The first set of principles developed by Adam smith is referred to as canons of taxation. These are:
  - Canon of equality
  - Canon of certainty
  - Canon of convenience
  - Canon of economy
  - Let us discuss each of these as follow.

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- **Canon of Equality:** It explains that taxation must be distributed equally in relation to the ability of the taxpayer.
- It requires that the rich should pay more taxes and the poor should bear a lesser burden.
- However, if we interpret this principle with regard to disutility which taxpayers sacrifice by paying taxes, the tax should impose equal marginal disutility up on every taxpayer.
- This situation results in two possibilities of imposing a tax.

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- On the one hand, if the marginal utility of income is constant, the rich as well as the poor people should pay a given percentage of their income in the form of tax.
- On the other hand, if we agree that the marginal utility of income decreases, equality can be approved when the rich pay larger proportion of his income as taxes and the poor pay smaller proportion of his income in the form of taxes (i.e. tax should be progressive).

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- However, it is obvious that the marginal utility of income goes on diminishing with the increase in its stock and hence the rich person feels less disutility or sacrifice in paying taxes than the poor person paying at the same rate.
- Therefore, if the canon of equity to be properly observed ,the progressive taxes must be advocated.

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- **Canon of certainty**- it indicates that taxation has to include the element of certainty to prevent the taxpayer from unnecessary harassment by tax-officials. Adam smith said that the tax that is paid by each individual should be certain and not arbitrary. This means
  - the time of payment
  - the manner of payment and the person to whom the tax is to be paid
  - the amount to be paid should be clear to the contributor and every person

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- **Canon of Convenience**- According to this canon tax should be collected in away that are convenient for the taxpayer as far as possible.
- For instance, it is convenient to collect a tax from salaried employees at the time of paying salaries.
- **Canon of Economy:** It is clear that government has incurred costs to collect taxes.
- Consequently, this principle suggests that the cost of collecting taxes should be as minimum as possible.

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- However, in view of developments in economic philosophy, economists have added a few more canons. These are
  - Canon of elasticity
  - Canon of productivity
  - Canon of Simplicity
  - Canon of diversity
- We shall briefly discuss them as follows

Contd....................

- **Canon of elasticity**- it states that taxation should be elastic in nature for the purpose of collecting more tax when income of the people increases.
- This means, it should be possible for the authorities to revise the tax structure both with respect to coverage and rates to fit it the changing requirement of the economy and the Treasury

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- **Canon of productivity**- it indicates that the tax system should be able to generate enough revenue for the treasury.
- And the government should have no need to resort to deficit financing and taxes should be levied that they do not obstruct and discourage production.

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- **Canon of simplicity**- it suggests that the tax system should not be too complex and beyond the understanding of the layman.
- Rather, it should be as simple as possible. So that the tax payer should not be confronted with accounting, administrative and other difficulties

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- **Canon of diversity**- it implies that taxes should be imposed on diverse sources because having a single tax system may be risky and inequitable.
- However, too much multiplicity of taxes should be avoided because it leads to unnecessary cost of collection and violates the canon of economy.

Features of a Good Tax System

- A good tax system does not mean a perfect tax system that contains all the taxes, which fulfill:
  - All the canons of taxation
  - Fetching adequate revenue for the public service.
  - Causing no hurt to the taxpayer.

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- Rather, a good tax system is one which
  - has predominately good taxes
  - fulfils most of the canons of taxation
  - yield sufficient revenue
  - causes minimum aggregate sacrifice to the people
  - Least obstructs the incentives for production.

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- Thus for such a good tax system to exist, the following principles must be observed:
  - It should ensure maximum social advantage –the effect that the tax produce must be considered i.e the effect on production and distribution of wealth in a society.
  - It ought to cause minimum aggregate sacrifice, i.e., the tax burden should be imposed according to the ability to pay the tax.
  - It should satisfy most of the canons of taxation

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- A good tax system should have built in flexibility, so that changes are possible according to the changing condition of the dynamic economy.
- It ought to be a balanced one. This means it should not contain just, progressive, regressive or proportional tax only but a combination of all taxes. Because all type of taxes has its own merits and demerits

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- The good tax system should be multiple, but greater multiplicity is not necessary.
- In addition, in a good tax system there should be simplicity,
- Furthermore, a good tax system should not hamper the development of trade and industry otherwise it ought to buttress the economic development of the country.

Theories of Taxation

- Economists focus on the issue of tax burden and justice for equity in its distribution.
- Accordingly tax burden can be classified as
  1. ***Money burden of taxation***: is the amount of money income transferred from the people to the government by way of various taxes.
  2. ***Real burden of taxation:*** refers to the volume of goods and services transferred from the payers to the government or the value of money raised by the government.

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- Equity on taxation refers to fairness or justice in the distribution of tax burden.
- There are two classes of equity

1. ***Horizontal equity***: implies that people in equal economic circumstance should pay equal amount of taxes.
2. ***Vertical equity:*** people who are in different economic situation should be treated differently

   The rich people should pay more taxes than others.

Theories of equitable distribution of tax burden

1. The Socio- Political Theory

- Every economic problem should be looked at its social and political context
- The main objective of taxation is the realizing socio-economic stabilization through reducing
  - income inequality
  - unemployment
  - cyclical fluctuation

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- Therefore, this principle emphasizes on that
  - the poor, religious, educational, and Charity organization should be free from tax
- because imposing tax on them may lead to social instability

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2. Cost of Service Theory (*supply side)*

- The cost incurred by the government in providing public goods and services would be regarded as the basis of taxation.
- Thus, citizens should pay a tax as per the cost of public goods enjoyed.
- In other words, government is just like a producer of social goods and services, and taxes are the price for those goods

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- **Weakness**
  - Estimating the cost of social goods and services offered to each individual is difficult
  - It violates the property of tax. Tax is not price.
  - It does not consider the essence of welfare. If cost is the base of taxation, government cannot provide free education and medical care to the poor.

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3. Benefit- Received Theory (*demand side*)

- The burden of taxes should be divided among taxpayers in relation to the benefits enjoyed from the government.
- This means those who get more benefit from public goods should pay more taxes than others

Contd.....................

- **Weakness**
  - Measuring benefits received by an individual from public goods is difficult. Benefit is ultimately subjective
  - It results in injustice. This principle recommends imposing more tax on the poor because they get more benefit from social goods and services.
  - It does not address the main objective of taxation, i.e. reducing income disparity.

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4. The ability to pay principle Theory

- The burden of taxation should be distributed among members of the society according to the principle of justice and equity.
- This means that the tax should be imposed on the taxpayer based on their relative ability to pay.
- There are two indices for measuring ability to pay.

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- **A. Objective Index of Measuring Ability to pay-** it considers the money value of the taxable capacity of each taxpayer rather than their psychology of sacrifice and feelings
- The indices used to measure the ability to pay are
  - Property (houses, farms, factories, equipments etc)
  - Consumption expenditure
  - Income etc.

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B. Subjective Index of Measuring Ability to pay:

- Taxpayers suffers a sacrifice by paying the tax.
- It supposes that taxation does not make the taxpayer feel better by the idea that he is contributing to the welfare of the society.
- Tax liability of the taxpayer s should be related to equal sacrifice principle

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- There are three alternative ways of interpreting equal sacrifice

i. ***Equal absolute sacrifice***- tax imposed on a higher income individual should cause him to lose an amount of satisfaction (utility) equal to that scarified by a lower income tax payer. In other words, higher income people should pay more tax then the other.

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i. ***Equal proportional sacrifice***- the loss of utility (satisfaction) in tax payment should be proportional to the total income of each taxpayer.

ii. ***Equal marginal sacrifice or least aggregate sacrifice*** - the marginal utility of income sacrificed by all taxpayers should be the same

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- The marginal utility of income for a higher income people is low and the marginal utility of income for lower income people is high.
- Therefore, the rich should pay more tax than the poor.
- Out of these three versions, equal marginal sacrifice is considered as the best and generally accepted principle of taxation by modern economists.

Taxable Capacities

- Economists have defined taxable capacity as the ability of the people to pay tax without adversely affecting or worsening their standard of living and efficiency
  - *i.e it is the maximum capacity of the community to bear tax without much hardship.*
- Taxation beyond the taxable capacity is over-taxation. It results in economic as well as political instability.
- Taxable capacity can be seen in **two ways**

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1. ***Absolute taxable capacity***- the amount of money or the proportion of income that can be taken away by the government from people in the form of taxes without producing unfavorable effects.

- It represents the maximum amount of tax that can be collected from the individuals of a particular country.

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- In the long period, it is bound to change through growth in savings, investment, economic growth, changes in the production pattern etc.
- Therefore, the determination of absolute taxable capacity is almost impossible.

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2. *Relative taxable capacity*- In the relative sense, the reference is to the proportion in which two or more nations or group of persons or states in a country contribute towards the common expenditure through taxation.

- It is possible to determine in advance the proportion in which two or more communities should contribute in order to meet some common expenditure in accordance with their respective abilities to pay.

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- The richer community shall be called up on to bear a greater share of such common expenditure
- The concept of the relative taxable capacity is more useful in a federal economy like Ethiopia, where different states are required to contribute towards a common expenditure.
- In other words the relative taxable capacity is the capacity of the community to contribute to some expenditure in relation to the capacities of other communities.

Factors Determining Taxable Capacity

- *The size of National Income*
- *The distribution of income*
- *Size and rate of population growth*
- *Pattern of Taxation*
- *The Stability of income*
- *Nature of public expenditure*
- *Psychology of the taxpayers*
- *Standard of living of the people*
- *Administrative efficiency*
- *Economic Situations*
- *Political conditions*

Classification of Taxation and Types of Taxes

- **Reading Assignment!**

Questions

1, What are the major source o f revenue of the government?

2, What are the qualities of good tax system?

3, Explain the canons of taxation.

4, what are the main principles of taxation?

5, distinguish between direct and indirect taxation.

6, explain the concept of equity in taxation.

UNIT FIVE
PUBLIC DEBT

INTRODUCTION

- To finance its expenditure, government collects its income from
  - tax and
  - non-tax revenues
- When government revenue is *greater than* its expenditure, there is ***budget surplus***
- If government revenue is *equal* to its expenditure, there is budget balance.
- When public expenditure exceeds its revenue there is ***budget deficit***

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- This **budget deficit** leads to the problem of public debt
- In modern times, borrowing by the government has become a normal method
- However the composition of loan is significantly different in developed and underdeveloped countries
  - Public borrowings of the less developed countries generally comprises in a very large part of the borrowings made from **abroad** while

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- in a developed country these may mainly consist of the borrowings raised **internally** from the local authorities, institutions and individuals.

- However both internal debts as well as external debt are the essential and important constituents of public debt.

Sources of Public Borrowings

- There are **two important sources** of public borrowings,
  - internal and
  - external sources.
- **Necessity of Public Borrowing**
  - To Finance War
  - To Fight Depression
  - To Meet Unexpected Emergency
  - To check Inflation
  - To Finance Economic Development

Classification of public Debt

- Generally public debt is categorized based on the
  - Source of borrowing
  - Purpose of loan
  - Time duration of loan
  - Nature of contribution of loan

1. Source of Borrowing

A. **Internal borrowing:** may be voluntary or compulsory where as external debt is voluntary in nature

Can be estimated before hand with certainty

Contd……………….

  - the availability of total resources is not increased.

2. **external debt:** is voluntary in nature.

- The realization of external borrowing is so much conditioned by the international politics' and foreign policies of the lending government
- the foreign exchange resources of the borrowing nation increases; but this foreign exchange reserve is diminished to that extent when there is repayment of such loan.
- external borrowing results in a transfer of wealth from the borrower to the lender nation that led to a decrease in the total output of the borrower country.

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2. Purpose of Borrowing:

- ***Productive debts***- debts that are invested on productive assets like railways, irrigation, dams, roads, multipurpose projects etc
- ***Unproductive debts***- those debts that don't add to the productive asset of the economy. Those are debts used to
  - financing war
  - public administration
  - relief expenditure etc are examples of unproductive debts.
- Unproductive debts are not self- liquidating. Therefore they impose a burden on the community.

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3. Time/ Duration of loan

- **short-term:** which mature within a short period of time say from 3 months to 1 year.
- **medium –term:** debts which mature in between one and ten years.
- **long- term debts:** debts which mature after a long period of time usually ten years or more.

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4. **Nature of Contribution**

- ***Funded debt*** – is that public debt for the repayment of which the government establishes a separate fund. these debts are usually long-term debt used for productive purpose.
- Used for the construction of permanent asset
- ***Unfunded debt*** –is that debt for the repayment of which the government sets up no separate fund. These are usually short-term debts used for meeting current needs.
- They are repaid from other source of income
- They have no specification of time

Effects of Public Debt

- Effects of public debt on
  - economic growth
  - inflation
  - political freedom
  - distribution of income

Burden of public Debt and Debt trap

- **Debt burden** The amount of money that a borrowing country repays in the form of principal and interest to the creditor.
- According to its source, there may be
  - **External debt burden:** The sum of money that a borrowing country repays in the form of principal and interest to the creditor measures direct money burden of external debt where as the direct real burden is measured by the loss of economic welfare in terms of consumption of goods and services foregone for the repayment .

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- The extent of the burden depends on the purpose for which the debt is incurred. External debt *rose for war expenditure or other unproductive* activities will ***increase the real burden*** to the society
- External debt incurred for ***development purpose will not be a burden but a profitable undertaking***
- However, it is recommended that there should be a ***limit for external public debt***, so that repayment does not impose heavy burden on the borrowing community.

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- Generally the incidence of external public debt can be discussed on the following headings
- **Direct Money Burden:** the debtor country has to pay to the creditor country every year large sums of money by way of payment of interest on loan and the principal amount up on maturity in terms of foreign exchange.
- In order to earn this foreign exchange, the country has to make exports

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- **Indirect money burden:** Sometimes, the debtor country has to pay interest in terms of the goods and services to the creditor country.
- In other words, the debtor country has to export goods and services on a large scale to the creditor country.

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- This inevitably results in a rise in the prices of these goods and services in the country
- As a consequence there will exist a fall in the economic welfare of the society. This fall in community's welfare shows the indirect money burden of the external public borrowing's
- **Direct real burden:** The government most of the time **imposes new taxes on the people** to pay the debt. Thus, the burden of these taxes falls more heavily on the poor rather than on the rich section of the society.

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- **Indirect real burden**: As a result of imposition of **new taxes to pay the debt, the capacity of the people to work, save and invest declines** which will have unfavorable effects on production.

Measurement of External Debt Burden

- ***The extent of external debt burden can be measured by the following ratios***

I. Debt Service Ratio = $\dfrac{\text{external debt service}}{\textit{National income (at current price)}}$

- This measure indicates the extent to which the burden of debt service has raised or declined over a given period of time.

II. Debt Service- Saving Ratio = $\dfrac{\text{external debt service}}{\text{Saving } \textit{(at current price)}}$

- It has indicated the **effect** that external **debt service** imposes **on saving** and in turn on capital formation of the country.

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III. Debt Service- Export Earnings Ratio

$$= \frac{\text{external debt service}}{\text{Export Earnings}}$$

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- It indicates how much of the **export earning is used for repaying** the interest on external loan.

IV. Debt service- Tax Revenue Ratio $= \dfrac{\text{external debt service}}{\text{total tax revenue}}$

- It indicates the **proportion of tax revenue that is directed** for repaying external debt

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- **Internal Debt Burden**
- **Direct money burden:** Internal debt is borrowed from individuals and institutions inside the country.
- As a result; it will redistribute resources without resulting any change in the total resource of the community.
- Therefore, internal debt does **not impose direct money** burden on the country because the tax collected for repaying the debt redistributes resources from one section of the society to another.

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- **Indirect money burden:** However, internal debt may result indirect money burden. When the government spends the loan on development projects, it results in the creation of demand for several commodities and services.
- As a consequence, ***the prices of these goods and services rise, imposing additional burden on the society.***

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- **Direct real burden:** Internal debt may result in a direct real burden according to the sources tax is collected to finance the debt.
- When the tax collected from the rich people is smaller, there will be a direct real burden where as if the extent of direct real burden will be lesser if the rich section of the society pays higher taxes.

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- **Indirect real burden:** In addition to this, transfer of income for serving an internal debt transfers from the active to the inactive enterprise.
- Government has imposed taxes on enterprises and earnings from productive efforts for the benefit of idle, old and inactive bond holders which penalize work and productive risk taking efforts, It adds to the net real burden of the debt.

Measurement of Internal Debt Burden

- Internal public debt indicates a financial burden on the government.
- The size of internal debt burden can be measured or estimated through the following methods.

I. Debt Service Ratio $= \dfrac{\text{annual interest payment on public debt}}{\textit{National income (at current price)}}$

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  - It indicates the extent to which government must tax national income so as to raise enough revenue to pay the interest on debt

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II. Interest Cost- Revenue Ratio $= \dfrac{\text{debt service change}}{\text{total tax revenue}}$

- It indicates the effect of public borrowing on the budget of the country

A. *Interest Cost- P. E Ratio* $= \dfrac{\text{annual interest payment}}{\text{total expenditure}}$

- It shows the proportion of revenue expenditure that is used for paying the debt service (interest of debt),

B. *Interest Cost- Profit Ratio* $= \dfrac{\text{interest payment on public debt}}{\text{profit of public enterprise}}$

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- It indicates the extent of public debt that is used for achieving production activities.
- This measure is applicable when the borrowed fund is invested on measurable productive industrial projects. But it is difficult to apply it in most of developing countries like Ethiopia where government allocates these funds on social overheads, power generation, infrastructure development etc.

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- **Debt Trap**
- Debt trap refers the situation of vicious circle of borrowing when the government must borrow so as to pay the interest charges on the previous loans and to repay the principal borrowed.
- This means, the fresh loans raised are not used for investment or capital formation rather for repaying the earlier debt incurred.

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- **Conversion-** refers to situation of converting the existing debt into a new debt prior to maturity with benefit of servicing charges.
- **Debt Redemption**
- Debt redemption is a means of repaying a loan.
- Different means are used by the government to redeem its debt. The major means adopted for redemption of public loans are

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- **Refunding** - government issues new bonds and securities so as to repay the matured debts. This process is said to be refunding.
- In this process long-term securities replace short-term securities. So the money burden, under this process, is accumulated rather than reduced because government has postponed the date of payment.

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- **Surplus budgets**- refer to the method that government repays its debt by keeping public expenditure lower than the public revenue obtained.
- However, surplus budget is a method that is used rarely because of ever- increasing public expenditure.

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- **Sinking fund-** is a method that government regularly keeps some money in such a manner that it would be enough to retire the debt at the time of maturity. For this method of debt retirement, government budget must have overall surplus.
- Perhaps it is the most systematic and best method of redemption

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- This approach is applied by a number of countries. But this method can succeed in repaying the debt only if there is substantial budget saving every year and no additional borrowing
- **Additional Taxation** - The simplest method that enables the government for debt redemption is imposing new taxes and gets the required revenue to repay the principal as well as the interest.

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- **Capital levy** - refers to a very heavy tax on property and wealth. Dalton recommended that government could repay its debt with the least real burden on the community
- **Surplus Balance of Payment-** An economy can repay its external debt only through the accumulation of foreign exchange reserve.
- This requires the creation of surplus balance of payments by the debtor nation. A nation can realize this by increasing its export and reducing its import.

Public Debt Management

- The term debt management refers to the formulation and implementation of ***debt policy*** designed to achieve certain objectives such as, *Economic stabilization, Economic growth, Employment, Overall soundness of financial system*
- According to the traditional state debt management is emphasized on keeping its interest rate to the minimum possible and repaying it as soon as possible.
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- Whereas modern welfare state; has considered debt management as a means of gaining various socio-economic developments.
- Debt management and monetary policy affect stabilization and economic growth.
- Therefore, debt management policy should be formulated harmoniously with monetary policy.

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- the debt management policy should not have any adverse effect on the economy especially on willingness and ability to work, save and invest. Moreover, during inflation it should be designed to curtail aggregate demand
- Furthermore, at the time of depression government should design its debt management policy to raise aggregate demand and thereby it can increase output and improve employment in an economy

Principles of public debt management

- **Minimum interest cost.** If the interest is low, it will impose less burden of taxation at the time of redemption
- **Satisfaction of investor's needs.** The terms of loan should attract the public to invest in government securities.

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- **Funding of short-term debt into long-term debt** Public debt management should enable the Government to convert short-term loans into long-term loans.
- **Co-ordination of public debt policy with monetary and fiscal policy.** Public debt management should not clash with monetary or fiscal policy.

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

Questions

1, what is public debt? What are the reasons for incurring public debt?

2,what are the types of public debt?

3, what are the methods of redemption of public debt?

4, list and discuss the measurements of internal debt burden

5, what do we mean by budget? Explain the objective of budget.

CHAPTER SIX

ANALYSIS OF FISCAL POLICY AND PRINCIPLE OF FEDERAL FINANCE

Introduction

- The use fullness of fiscal policy as an appropriate instrument to regulate the economy was recognized after the publication of **Keynes's** well known book "The General Theory of Employment, Interest and Money" in 1936.

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- The post Keynesian revolutionary popularity of fiscal policy has been largely due to the following **three factors.**
  - Ineffectiveness of the monetary policy as a means of removing mass unemployment in the great depression of 1930s.
  - The development of ‘ new economics “ by Keynes with its stress on the role of aggregate effective demand
  - The growing importance of government spending and taxation in relation to national income and output.

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- Today as an instrument of macroeconomic policy, fiscal policy has been very popular with modern governments to influence the size and components of national product, employment, preventing inflation, promoting rapid economic growth and encouraging long run economic stability.

Meaning and Objective of Fiscal Policy

- In the view of American Economic association “fiscal policy means the policy which concerns itself with aggregate effects of government expenditure and taxation on income, production and employment”.
- A given amount of revenue can be realized by the government in several ways by levying taxes, profits from commercial activities and by borrowing.
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- However, each method of raising revenue will affect the economy differently.
- The same is true for different types of public expenditures.
- Thus, the mix of these different fiscal instruments used in an economy depends on the general objectives that the government would like to achieve in the period.

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- As an instrument of macroeconomic policy, the goals of fiscal policy are likely to be different in different countries and in the same country in different situations.
- In the developed countries, fiscal policy aims at encouraging long run economic stability.
- In the developing economies however fiscal policy is directed towards promoting the growth of savings, investment and reducing inequalities in incomes and wealth, be sides stabilizing the economy.

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- Since the objectives are vast in these countries different objectives might come in to conflict & it needs identification of priorities.
- Thus the most important thing is designing appropriate fiscal policy instruments in order to achieve the different objectives in a proper balance according to the stetted targets.

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- Generally fiscal policy as a means of promoting economic development aims at achieving the following objectives:
  - **To increase the rate of investment**
  - **To increase employment opportunities**
  - **To promote economic stability**
  - **To increase and redistribute national income**
  - **To counter act inflation or deflations**

To counter act inflation or deflations

- Recurrent changes in the economy are caused by the fluctuations in the effective demand of the society.
- ***Depression is caused by a deficiency in effective demand*** i.e when the purchasing power of the population is lower than the supply of goods and services on the other hand ***excess demand results in a boom.***

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- A boom is characterized by higher prices and unlimited action towards economic expansion.
- Thus if the government has ***to stabilize the economy***, it has to ***regulate effective demand primarily through taxes and expenditure programs***

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- Generally there are ***two methods to achieve stability***

1. **Built in Stabilizers:** These are also known as *automatic stabilizers of the economy*. The built in stabilizers consists of taxes and expenditures, which automatically respond to changes in business conditions. A ***recession*** can be corrected in two ways by *raising expenditures* and by *lowering tax* receipts (expansionary fiscal policy).

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- Similarly, a boom can be controlled by a *budgetary surplus*, which can be derived by a ***reduction*** in government ***expenditure*** and an ***increase in tax*** receipts (contraction fiscal policy).
- They are automatic in the sense that it involves a change in government revenue or expenditure quickly and in the right direction so that it may produce stabilizing effect on aggregate demand.

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- When there is ***a fall in GNP***, the yield from some taxes like ***income tax and corporate tax automatically falls***.
- Some categories of public expenditure like *unemployment & welfare benefits automatically increase* in response to a decline in the GNP.
- Because of falling tax and rising expenditure, a *decline in the GNP pushes the budget towards deficit.*

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- Thus the *taxes and expenditure*, that exhibits *this response* and vice versa are called *automatic stabilizers*. They change in response to the change in the economic activity.
- The income tax and corporation tax have become important sources of revenue and they are also progressive in character

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2. Discretionary fiscal policy: Unlike the automatic stabilizers, *the government can change tax rates or expenditure programs* as necessary from time to time *to control the instability* in the economy. This is called discretionary fiscal policy and they are ***deliberate changes.***

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There are three principal discretionary fiscal measures

- Varying public works and other public expenditure programs
- Varying transfer expenditure programs
- Varying tax rates cyclically

Fiscal Policy and Economic Growth

- All countries, including the developed, face the problem of stagnation and even decay.
- Developed countries are confronted with the problem of maintaining a steady rate of economic growth which can help the economy to attain higher level of income and employment.

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- In the developing countries, the need to accelerate capital formation is very pressing.
- This demands that priority be given for the development of the capital goods sector and social overheads.
- However, since capital goods are capital intensive their development might go against the policy of higher employment.

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- The development of labor-intensive industries might create higher employment level but retards the process of capital formation.
- The market mechanism in the developing countries cannot generate sufficient amount of savings and investment needed for rapid economic growth.
- For this reason government budget has to play an important role in affecting savings.

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- Government budgets have more direct role to play in capital formation and economic growth in developing countries than in developed countries.
- The saving potential in a developing economy is very limited because of the following reasons.
  - Shortage of particular resources.
  - lack of adequate demand, especially for capital good
  - High cost of production.

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- This problem can overcome by a savings oriented government budget.
- Therefore the authorities to raise surplus that can be invested in building social overheads and basic and key industries can use fiscal policy.

Principles of allocation of resources between Federal and State governments

- In a federal set up, the federal-State financial relations are based on the principle of federal finance.
- Federation may be defined as a "form of political association in which two or more states constitute a political unity with a common government, but in which these member states retain a measure of internal autonomy."
- Thus, in a federation, there is constitutional divides of powers, functions and resource between the federal and the state governments.
- The two sets of governments are independent so far as their own functions and resources are concerned.

PRINCIPLES OF FEDERAL FINANCE

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

1. **Independence and responsibility:** central and state governments should be financially independent within their own sphere. Besides, each government should take the responsibilities of taxing, borrowing, and raising resources in their spheres for performing their functions.

   The authority which has a pleasing job of spending money should also do the unpleasant job of raising it. Thus, "taxing autonomy and spending autonomy should go hand in hand."

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- However, there are some who believe that, if every level of government is to raise the money that it was going to spend, then there would be great disparity in quality and quantity of public expenditure from state to state.
- State with wealthier population and richer tax resources will be able to fulfill their social obligation much better than the poor ones.
- This view intends that taxing autonomy should lie with federal government while spending autonomy with the states.

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2. Principle of Adequacy and Elasticity: the principle of adequacy means that

- the resources of the federal government and local governments should be adequate so that each layer of government can discharge its obligations laid upon it.
- Principle of elasticity means that there must be feasibility to expand its resources in response to its requirements especially during the period of internal and external crisis.

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3. Administrative Economy and Efficiency: the administrative cost of finances should be at minimum and there should be no tax evasion.

- Administrative efficiency can be achieved, if the resources are allocated properly between the centre and the state governments.

Questions

1, What do you mean by fiscal policy? Explain the major fiscal tools used to check depression and boom

2, what is the objective of fiscal policy?

3, explain the concept of federal finance.

4, what is the importance of federal finance?

5, explain and discuss the two macro economic instruments that uses for correcting the economy