INTRODUCTION TO ECONOMICS

ECON 1011

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Chapter One: Basics of Economics

1.1 Definition of Economics

- The word "**Economics**" is originated from the ancient Greek word "**oeconomicus**" equivalent phrase "**household management**" or "**management of family affairs**".
- There is **no universally accepted definition of economics** (its definition is controversial).
- Economic can be defined from different perspectives.

1) Wealth Definition: Adam Smith (1723-90)

- The formal definition of Economics can be traced back to the days of Adam Smith, a Scottish Economist, generally known as " **father of economics**".
- Wrote a book entitled "An Inquiry into the Nature and Causes of Wealth of Nations", in the year **1776**.
- Economics as a distinct subject started with his book.
- Economics is **a science of wealth** which studies the **process of production**, **distribution**, **consumption** and **accumulation of wealth**.

- ✓ According to Smith: **the great object of the political economy of every country is to increase the riches and power of that country**.
- ✓ In **a market economy**, the way in which production and distribution of wealth will take place is through the Smithian '**invisible hand**' mechanism or the '**price system**'
- ✓ In general, economics is regarded by Smith as "**the science of wealth**".

However, the Smithian wealth definition **did not served last long** and got criticisms by other group of economist(mainly by **Alfred Marshal**).

Critiques

- ✓ **The definition is too narrow**: Does not considered the major problems faced by a society, is condemned as '**the bread-and-butter science**'.
- ✓ **Emphasize on the material aspect of human life**, i.e., generation of wealth; ignored the non-material aspect of human life. Above all, as

2) Welfare Definition: Alfred Marshal (1842-1924)

- Alfred Marshall in his book '**Principles of Economics**" published in **1890** placed emphasis on **human activities or human welfare rather than on wealth**. In UNDP perspective, human welfare is primarily a matter of **education**, **health** and **income**, as reflected in the HDI, a composite of **three social welfare variables** (a **long and healthy life**, **acquisition of knowledge** and **a decent standard of living**)).
- Marshall defines economics as "**a study of peoples' activities/actions to achieve human welfare**." OR "**a study of men as they live and move and think in the ordinary business of life** (economic activities carried out by peoples in order to exist)."
- He argued that economics, on one side, is **a study of wealth** and, on the other side, is **a study of man**.
- **Economics is a study of mankind in the ordinary business of life**; it examines that part of individual and social action

- According to Marshall, **wealth is not an end in itself** as was thought by classical authors; **it is a means to an end—**the end of human welfare.

From his definition:

i. Economics **is a social science since** it studies the actions of human beings.
ii. Economics studies the **'ordinary business of life'** since it takes into account the money-earning and money-spending activities of man.
iii. Economics studies only **the 'material' part of human welfare** which is measurable in terms of the measuring rod of money. **It neglects other activities of human welfare not quantifiable in terms of money.**
iv. **Welfare of mankind**, rather than acquisition of wealth, **is the primary objet of importance**.

Critiques

- The definition **focus on the material welfare**, **ignores the non**

- Robbins argued that Marshall **could not establish a link between economic activities of human beings and human welfare**. There are various economic activities that are detrimental to human welfare. The production of **war materials**, **wine**, etc., are economic activities but **do not promote welfare of any society**.
- **Measuring welfare in terms of money is not valid,** as welfare is **abstract** and **subjective concept**.
- "Marshall's welfare definition gives economics **a normative character**. However, Robbins argues Economics must be free from making value judgments, **Economics is a positive science** not a normative science."
- Ignores the fundamental concepts/problems of **scarcity** and **choice**.

3) Scarcity definition: Lionel Robbins(1898-1984)

- Robbins defined Economics **in terms of allocation of scarce resources to satisfy human wants** in his book entitled **"An Essay on the Nature and Significance of Economics Science"** in **1932**.

- ❖ According to Robbins, **neither wealth nor human welfare should be considered as the subject-matter of economics.**
- ❖ His definition runs in terms of scarcity: "**Economics is the science which studies human behaviour as a relationship between ends** (outcomes, goals, destinations) and **scarce means** (resources) which have alternative uses."
- ❖ Economics is **fundamentally the study of scarcity and the problems to which scarcity gives rise.** Thus, the central focus of economics is on **opportunity cost** and **optimization.**
- ❖ By considering the basic economic problem, which is scarcity, Robbins brought Economics to nearer science and his definition is **the most accepted definition of Economics.**

However, the scarcity definition of Robbins is also not free of criticism.

- ✓ Argue Economics to be **as positive Economics**.
- ✓ Gave **less emphasis** to **wealth** and **welfare**

❖Other contemporary Economists also defined Economics in their own way.

4) Growth Definition: Paul A. Samuelson(1915-2009)

❖ **Paul Samuelson, an American economist** defined Economics as " **a science of how men and society choose, with or with out money, to employ scarce productive resources which could have alternative uses, to produce various commodities over time, and distribute them for consumption, now and in the near future, among various people and groups in society.**"

- Samuelson regards economics as a social science which emphasized the problem of scarce resources and **the idea of alternative uses of resources**.
- He emphasized on the consumption and distribution of various commodities **for the present and future economic growth** thereby highlighting the study of macroeconomics.

- Thus, the definition varies as the nature and scope of the subject grow over time.
- Despite all these, however, the formal and commonly accepted definition is as follow.
- *"**Economics** is a social science which studies about **efficient allocation of scarce resources** so as to attain **the maximum fulfillment of unlimited human needs**. It is **a science of choice making**, it studies how people choose to use scarce or limited productive resources (land, labour, equipment, technical knowledge and the like) to produce various commodities."*

❖**From the above definition.**

- ✓Economics studies **about scarce resources**;
- ✓It studies about **allocation of resources**;
- ✓Allocation should be **efficient**: resources allocated according to their highest value use.
- ✓Human **needs** and **wants** are **unlimited.**
- ✓The aim (objective) of economics is to study **how to satisfy the unlimited human needs** up **to the maximum possible degree** by allocating the resources **efficiently**.

1.2 The Rationales of Economics

There are two fundamental facts

1) Human (society‘s) **material wants are unlimited**. **wants multiply—luxuries become necessities**.

2) Economic **resources** are **limited** (scarce).

- **Scarcity of resources is the fundamental economic problem to any society. In return, scarcity gives rise to the problem of choice.**
- **Therefore,** the basic economic problem is about **scarcity** and **choice** since there are only limited amount of resources available to produce the unlimited amount of goods and services we desire.
- Thus, **economics is the study of how human beings make choices to use scarce resources as they seek to satisfy their unlimited wants**. Therefore, **choice is at the heart of all decision-making**.
- As an individual, family, and nation, we confront difficult choices about how to use limited resources to meet our needs and wants.
- **Economists** study how these choices are made in various settings; evaluate the outcomes in terms of criteria such as

1.3 Scope and Method of Analysis in Economics

1.3.1 Scope of Economics

- The field and scope of economics is **expanding rapidly** and has come to include a vast range of topics and issues.
- In the recent past, many new branches of the subject have developed, including **development economics**, **industrial economics**, **transport economics**, **welfare economics**, **environmental economics**, and so on.
- **However,** the core of modern economics is formed by its two major branches: **microeconomics** and **macroeconomics**. That means economics can be analyzed at micro and macro level.

A. Microeconomics: is concerned with the economic behavior of individual decision making units such as **households**, **firms**, **markets** and **industries**. In other words, it deals with **how households and firms make decisions** and how they **interact in specific markets.**

B. Macroeconomics: is a branch of economics that deals with the effects and consequences of **the aggregate behaviour of all decision making units** in a certain economy. In other words, it is an aggregative economics that examines the **interrelations among various aggregates**, their determination and the causes of fluctuations in them.

❖It looks at the economy as a whole and discusses about the economy wide phenomena

Microeconomics	Macroeconomics
✓ Studies individual economic units of an economy	✓ Studies an economy as a whole and its aggregates.
✓ Deals with individual (income, prices, outputs, etc.) economic variables.	✓ Deals with **national income** and output and general price level

Microeconomics	Macroeconomics
✓ Its central problem is **price determination** and **allocation of resources.**	✓ Its central problem is determination of level of **income** and **employment.**
✓ Its main tools are the DD and SS of **particular commodities and factors**.	✓ Its main tools are aggregate DD and aggregate SS of an economy as a whole.
✓ It helps to solve the central problem of what, how and for whom to produce in an economy so as to maximize profits	✓ Helps to solve the central problem of **full employment of resources** in the economy.
✓ Discusses how the equilibrium of a consumer, a producer or an industry is attained **Examples:** Individual income, individual **savings**, individual prices, an individual firm's **output**,	✓ Concerned and determination of equilibrium levels of income and employment at aggregate level **Examples:** national income, national savings, general price level, national output, aggregate

1.3.2 Method of Analysis: Positive and Normative Economics

A) Positive economics

- it is concerned with analysis of facts and attempts to describe the world as it is. It tries to answer the questions **what was**; **what is**; or **what will be?** It does not judge a system as good or bad, better or worse.

Examples:

- ✓The food inflation for March 2020 inflation rate in Ethiopia is 26.90 percent
- ✓Poverty and unemployment are the biggest problems in Ethiopia.
- ✓The life expectancy at birth in Ethiopia is rising.

These statements are all **concerned with real facts and information**. Any disagreement on positive statements can be checked by looking in to facts.

B) Normative Economics:

- ✓ It deals with the questions like, **what ought to be? Or what the economy should be?** It evaluates the **desirability of alternative outcomes** based on one's value judgments about what is good or what is bad. In this situation, what is good for one may not be the case for the other.

Normative analysis is a matter of opinion (subjective in nature) which cannot be proved or rejected with reference to facts.

Examples:

- ✓ Government should subsidize small scale enterprises, unemployment schemes/compensations.
- ✓ Government should set a minimum wage rate
- ✓ The poor should pay no taxes.
- ✓ There is a need for intervention of government in the economy.
- ✓ Females ought to be given a priority of job opportunity.

1.3.3 Inductive and deductive reasoning in economics

- The fundamental objective of economics, like any science, is the **establishment of valid generalizations about certain aspects of human behaviour**. Those generalizations are known as **theories**.
- **A theory** is **a simplified picture of reality**. Economic theory provides the basis for economic analysis which uses **logical reasoning**.
- There are two methods of logical reasoning: inductive and deductive.

A) Inductive reasoning: is a logical method of reaching at a correct general statement or theory based on several independent and specific correct statements.

- ✓ In short, it is the process of deriving a principle or theory by moving **from facts to theories** and **from particular to general economic analysis.**

- Inductive method involves the following steps.
  1. Selecting problem for analysis
  2. Collection, classification, and analysis of data
  3. Establishing cause and effect relationship between economic phenomena

B) Deductive Reasoning: is a logical way of arriving at a particular or specific correct statement starting from **a correct general statement.** In short, it deals with conclusions about economic phenomenon from certain fundamental assumptions or truths or axioms through a process of logical arguments.

- The theory may agree or disagree with the real world and we should check the validity of the theory to facts by moving from general to particular.

- Major steps in the deductive approach include:
    1) Problem identification
    2) Specification of the assumptions
    3) Formulating hypotheses
    4) Testing the validity of the hypotheses

1.4 Scarcity, choice, opportunity cost and production possibilities frontier(PPF/PPC)

A) Scarcity

- The fundamental economic problem that any human society faces is the problem of scarcity.
- **Scarcity** refers to the fact that all economic resources that a society needs to produce goods and services are **finite** or **limited** in supply. But their being limited should be expressed **in relation to human wants.**
- **Thus, the term scarcity** reflects the **imbalance between our wants and the means to satisfy those wants.**

❖ Resources can be:

1) **Free resources:** if the amount available to a society is greater than the amount people desire at zero price. **Example:** sunshine
2) **Scarce (Economic) resources:** if the amount available to a society is less than what people want to have at zero price.

Examples:

- ✓ All types of **human resources**: **manual, intellectual, skilled and specialized labor**;
- ✓ **Most natural resources** like **land** (especially, fertile land), **minerals, clean water, forests** and **wild - animals**;
- ✓ All types of **capital resources** (like **machines, intermediate goods, infrastructure**); and
- ✓ All types of **entrepreneurial resources**

✓ **Economic resources** are usually classified into **four categories**.

1) **Labour:** refers to the **physical** as well as **mental efforts** of human beings in the production and distribution of goods and services. The reward for labour is called **wage**.

2) **Land:** refers to the **natural resources** or all the **free gifts of nature** usable in the production of goods and services. The reward for the services of land is known as **rent**.

3) **Capital:** refers to **all the manufactured inputs** that can be used to produce other goods and services. **Example: equipment**, **machinery**, **transport and communication facilities**, etc. The reward for the services of capital is called **interest**.

4) **Entrepreneurship:** refers to a special type of human talent that helps to organize and manage other factors of

Note: Scarcity does not mean **shortage**. Scarcity occurs if the amount available is less than the amount people wish to have **at zero price** while **shortage** of goods and services is when people are unable to get the amount they want **at the prevailing** or **on going price**.

- ✓ **Shortage** is **a specific and short term problem** but **scarcity** is a **universal and everlasting problem**.

2) Choice: If resources are scarce, then output will be limited. If output is limited, then we cannot satisfy all of our wants. Thus, choice must be made.

- ✓ **Due to the problem of scarcity, individuals**, **firms** and **government** are forced to choose as to **what output to produce**, **in what quantity**, and what output not to produce.
- ✓ In short, **scarcity implies choice**. **Choice, in turn, implies cost**.

3) Opportunity Cost: is **the amount or value of the next best alternative** that must be sacrificed (forgone) **in order to obtain one more unit of a product**.

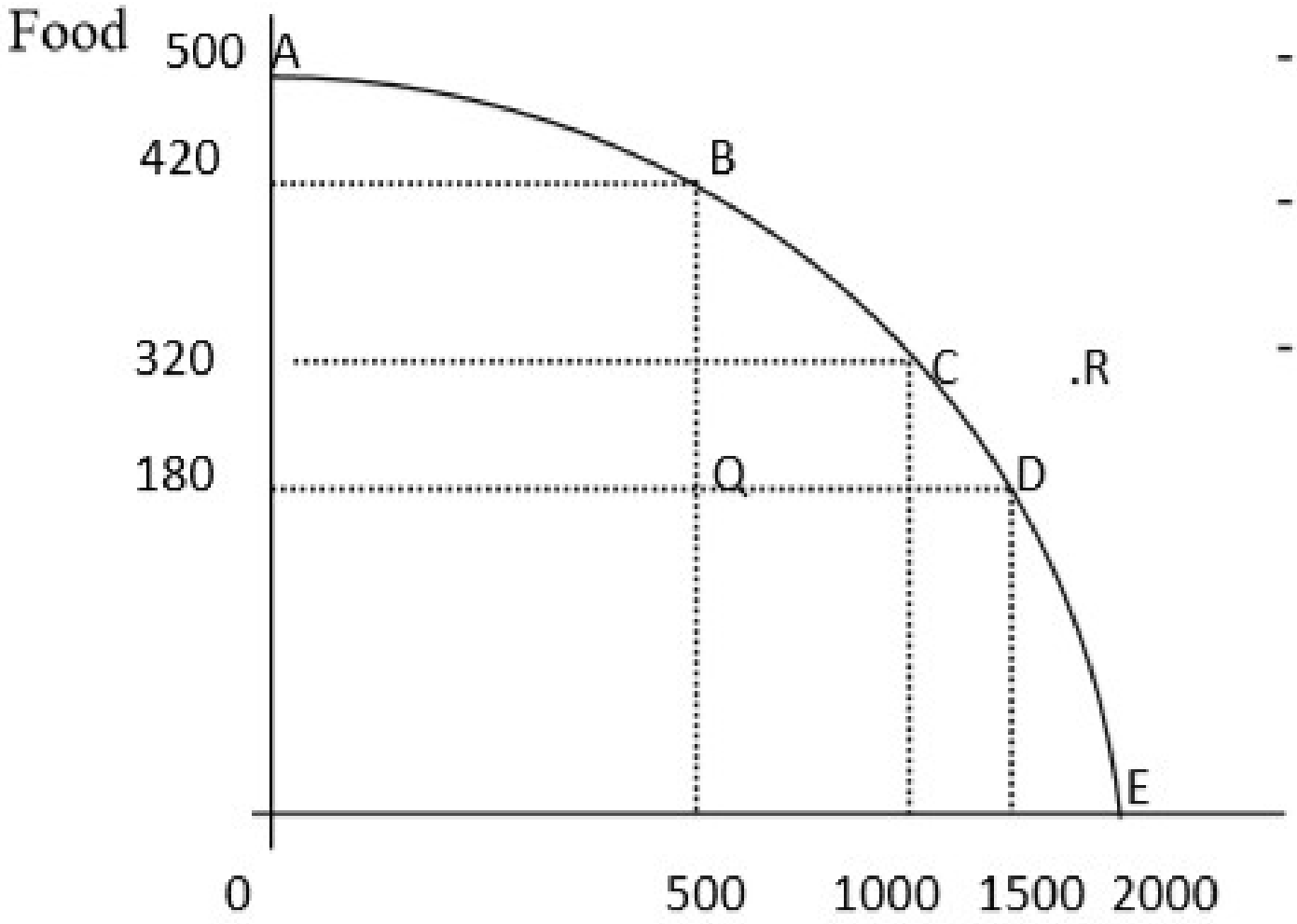
- ✓ When opportunity cost of an activity increases people substitute other activities in its place

Scarcity → choice → opportunity cost

4) The Production Possibilities Frontier or Curve (PPF/ PPC)

- ✓ **PPF/PPC** is a curve that shows the various possible combinations of goods and services that the society can produce given **its resources and technology**
- ✓ d
- co e
- te

Types of Product	Unit (Measurement)	Production Alternatives				
		A	B	C	D	E
Food	Metric tones	500	420	320	180	0
Computer	Number	0	500	1000	1500	2000



- All points on the PPF are attainable and efficient
- Point Q is attainable but inefficient
- Point R is unattainable

Figure 1.1: Production Possibilities Frontier

- ✓ The PPF describes **three important concepts**:

i) **The concepts of scarcity**: - the society cannot have unlimited amount of outputs even if it employs all of its resources and utilizes them in the best possible way.

ii) **The concept of choice:** - any movement along the curve indicates the change in choice.

- ✓ **The concept of opportunity cost**: - when the economy produces on the PPF, **production of more of one good requires sacrificing some of another product** which is **reflected by the downward sloping PPF**.
- ✓ Related to the opportunity cost we have a law known as the **law of increasing opportunity cost.** This law states that as we produce more and more of a product, the opportunity cost per unit of the additional output increases.
- ✓ This makes the shape of the PPF **concave to the origin**.

Opportunity Cost =

Example: Referring to **table 1.1** or Figure 1.1 above, if the economy is initially operating at point B, **what is the opportunity cost of producing one more unit of computer?**

Solution: Moving from production alternative **B** to **C** we have:

Opportunity Cost(OP) = = = 0.2, Implying, the economy gives up 0.2 metric tons of food per computer.

5) Economic Growth and PPF/PPC

- **Economic growth** or an increase in the **total output level** occurs when one or both of the following conditions occur.
  - ✓ **Increase in the quantity or/and quality of economic resources**
  - ✓ **Advances in technology**

Economic growth is represented by outward shift of the PPF.

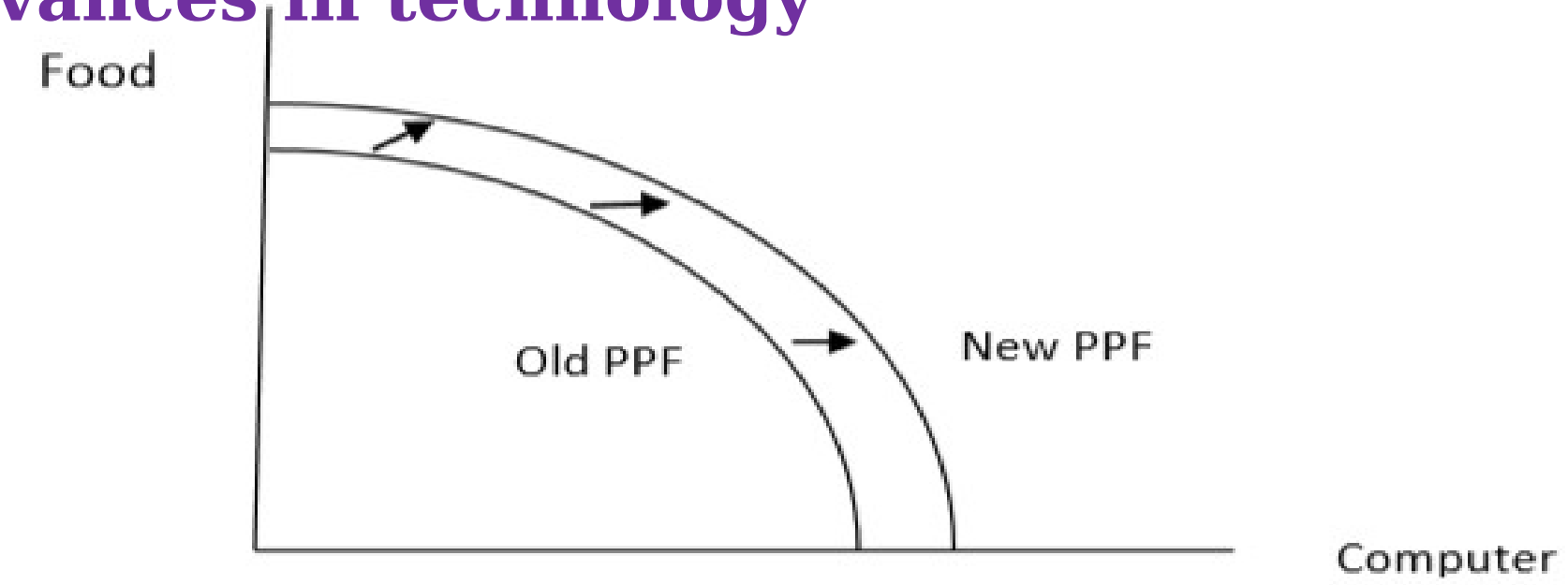


Figure 1.2: Economic growths with a new PPC

- ✓ An economy can grow because of an increase in productivity in **one sector of the economy.** **For example,** an improvement in technology applied to either food or computer would be illustrated by a shift of the PPF along the Y- axis or X-axis **(Asymmetric Growth).**

1.5 Basic Economic Questions

- ✓ **Economic problems** faced by an economic system **due to scarcity** of resources are known as **basic economic problems.**
- ✓ These problems **are common to all economic systems**.
- ✓ They are also known as **central problems of an economy**.
- ❖ **Therefore, any human society should answer the following three basic questions.**

What to Produce?

A) What to Produce?

- This problem is also known as the **problem of allocation of resources.** It implies that every economy must decide which goods and in what quantities are to be produced.
- The economy must make choices such as **consumption goods** versus **capital goods**, **civil goods** versus **military goods**, and **necessity goods** versus **luxury goods**.
- As economic resources are limited we must reduce the production of one type of good if we want more of another type.
- **Generally**, the final choice of any economy is **a combination of the various types of goods** but **the exact nature of the combination depends upon the**

B) How to Produce?

- This problem is also known as the **problem of choice of technique:** Choosing between alternative methods or techniques of production.
- **For example**, **cotton cloth** can be produced with **hand looms**, **power looms**, or **automatic looms**.
- Similarly, wheat can be grown with primitive tools and manual labour, or with modern machinery and little labour.
- **Broadly speaking,** the various techniques of production can be classified into two groups: **labor-intensive** techniques and **capital-intensive** techniques.
- The choice between different techniques depends **on the available supplies of different factors of production and their relative prices.**

C) For Whom to Produce

- ❖ This problem is also known as the problem of **distribution of national product.** It relates to how **a material product** is to be distributed among the members of a society.
- ❖ The economy must decide, **for example,** whether to produce for the benefit of the few rich people or for the large number of poor people.
- ❖ An economy that wants to benefit the maximum number of persons would first try to produce **the necessities** of the whole population and then to proceed to the production of **luxury goods.**

- ✓ **All these and other fundamental economic problems center around human needs and wants.** Many human efforts in society are directed towards the production of goods and services to satisfy human needs and wants.
- ✓ These human efforts result in **economic activities** that

1.6 Economic systems

- The way a society tries to answer the above fundamental questions is summarized by a concept known as **economic system.**
- ✓ **An economic system** is a **set of organizational** and **institutional arrangements** established **to answer the basic economic questions**.
- ✓ Customarily, we can identify **three types of economic system**.

These are:

Capitalism Economy
Command Economy and
Mixed Economy

1.7 Decision making units and the circular flow model

- ✓ There are **three decision making units** in **a closed economy**. These are **households**, **firms** and **the government**.

i) Household: A household can be one person or more who live under one roof and **make joint financial decisions**.

- ✓ Households make two decisions.
  - **a) Selling** of their resources, and
  - **b) Buying** of goods and services

ii) Firm: A firm is a **production unit** that uses economic resources to produce goods and services.

- ✓ Firms also make two decisions:
  - **a) Buying** of economic resources
  - **b) Selling** of their products

iii) **Government:** A government is **an organization** that **has legal** and **political power** to control or influence households, firms and markets.

- ✓ provides some types of goods and services known as **public goods** and **services** for the society
- ✓ Purchase factors of production, goods and service from HH and Firms, respectively.
- ✓ Collects Tax from HH and Firms

❖ The three economic agents interact in two markets:

A) **Product market:** it is a market where goods and services are transacted/ exchanged. That is, a market where households and governments buy goods and services from business firms.

B) **Factor market (input market):** it is a market where economic units transact/exchange factors of production

- The **circular-flow diagram** is **a visual model of the economy** that shows **how** **money (Birr), economic resources** and **goods and services** flows through markets among the decision making units.
- In the circular flow model, **Firms**, by selling goods and services to households, receive money in the form of **revenue** while **HHs** by supplying their resources to firms receive **income/Revenue.**
- The **gov't** to provide public services purchase goods and services from business firms through the product market with a given amount of expenditure(**G**). While it also needs resources required for the provision of the services. This resource is purchased from the factor market by making payments to the resource owners (**HHs**).
- The **main source of revenue** to the government is the **tax**

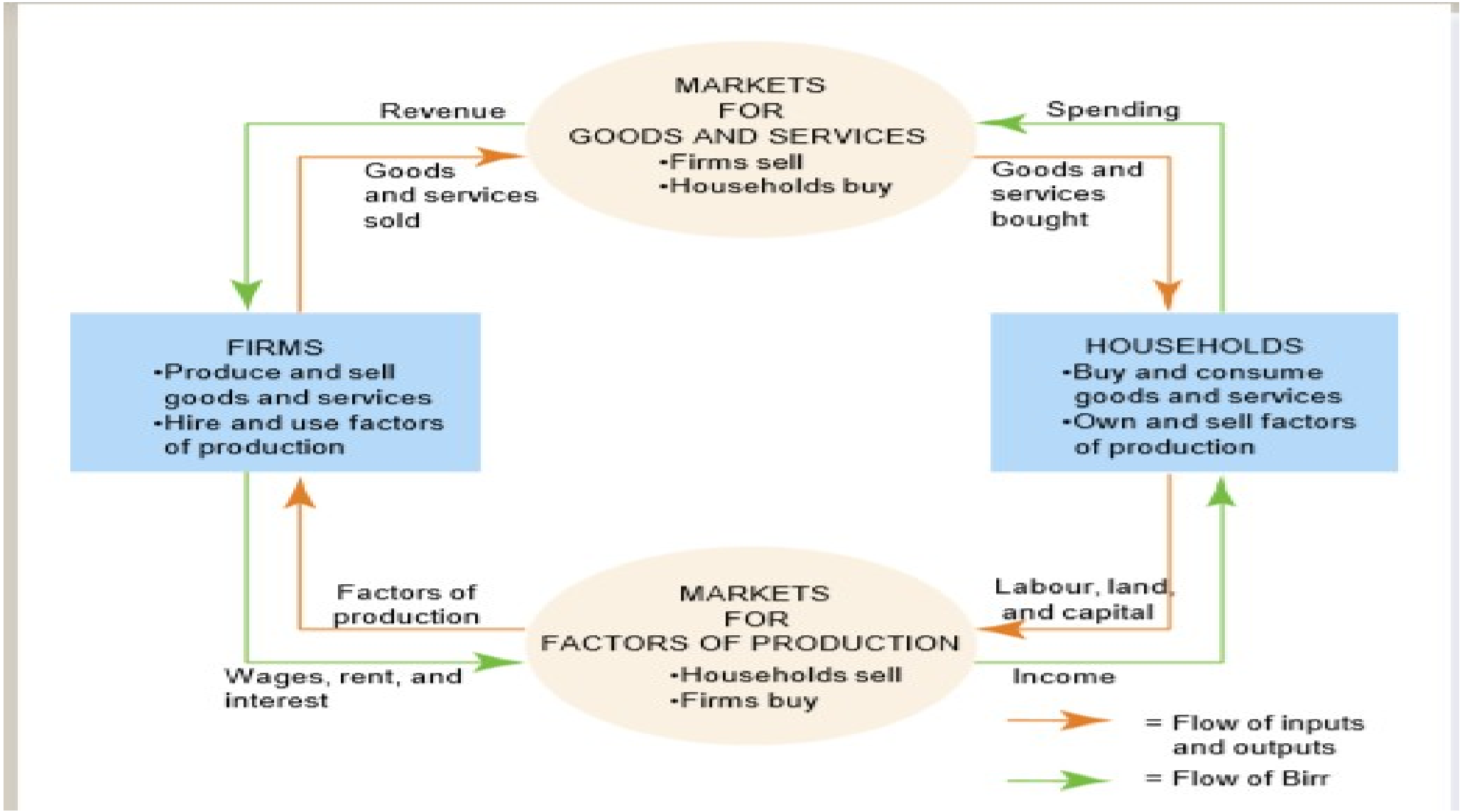


Fig 1.3 Two Sector

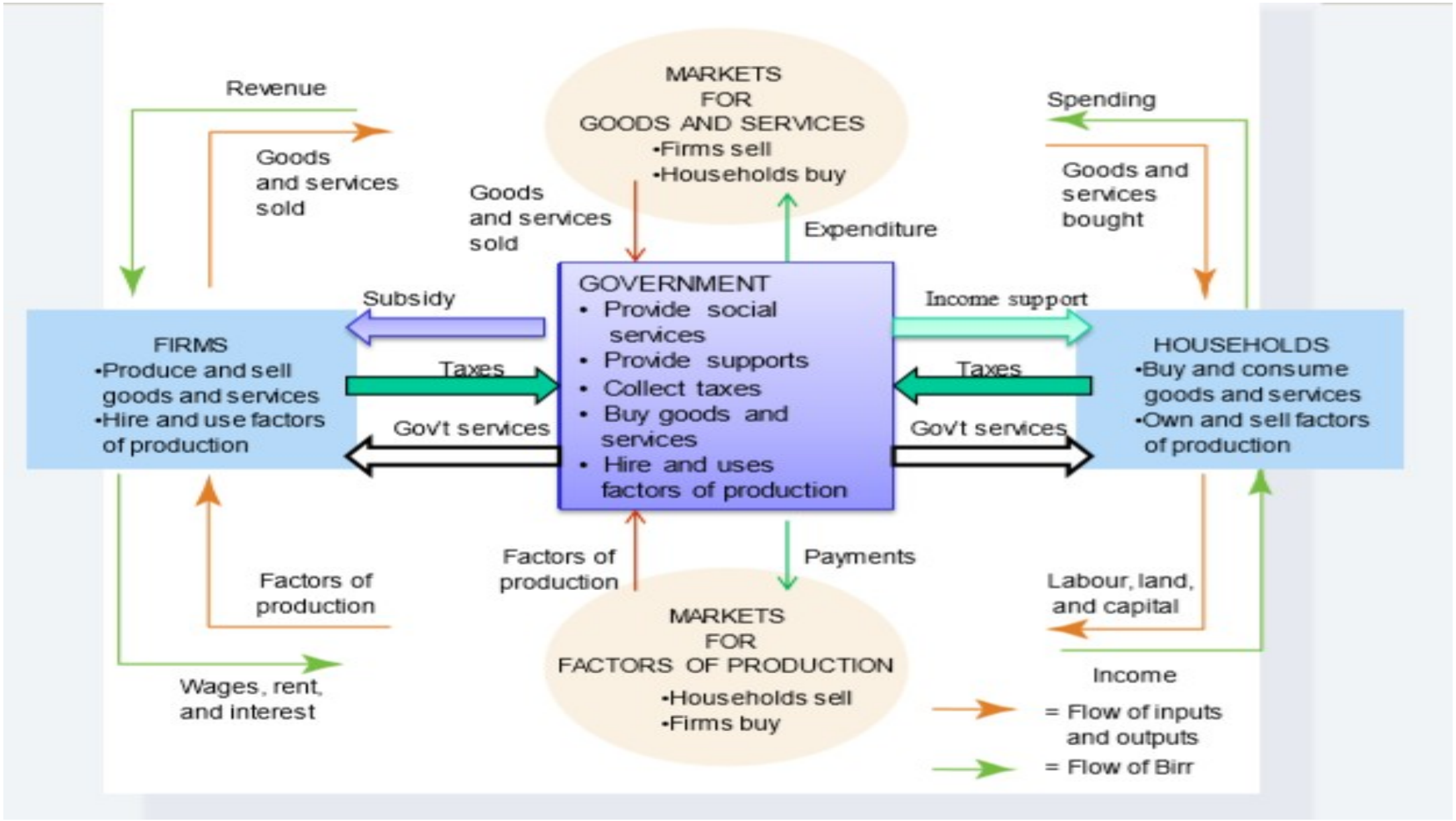


Fig 1.4 Three Sector