

Chapter One

Basics of Economics

Introduction

- 1.1 Definition of economics
- **Economics:** is a social science which studies about efficient allocation of scarce resources so as
 - to attain the maximum fulfillment of unlimited human needs.
- 1.2 The rationales of economics
- There are two fundamental facts that provide the foundation for the field of economics.
 - 1) Human (society's) material wants are unlimited.
 - 2) Economic resources are limited (scarce).

1.3 Scope and method of analysis in economics

1.3.1 Scope of economics

- A. **Microeconomics** is concerned with the economic behavior of individual decision making units such as households, firms, markets and industries.
- B. **Macroeconomics** is a branch of economics that deals with the effects and consequences of the aggregate behavior of all decision making units in a certain economy.
- **Note:** Both microeconomics and macroeconomics are complementary to each other. That is, macroeconomics cannot be studied in isolation from microeconomics.

1.3.2 Positive and normative analysis

- **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
- **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.

1.3.3 Inductive and deductive reasoning in economics

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

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.

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

- **1. 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.
- Thus, the term scarcity reflects the imbalance between our wants and the means to satisfy those wants.

Resources

Free resources

- **Free resources:** A resource is said to be free if the amount available to a society is greater than the amount people desire at zero price. E.g. sunshine

Scarce (economic) resources:

- **Scarce (economic) resources:** A resource is said to be scarce or economic resource when the amount available to a society is less than what people want to have at zero price.

Economic resources are usually classified into four categories

- **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 labor is called **wage**.
- **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**.
- **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**.
- **Entrepreneurship:** refers to a special type of human talent that helps to organize and manage other factors of production to produce goods and services and takes risk of making losses. The reward for entrepreneurship is called **profit**.

Entrepreneurs are individuals who:

- Organize factors of production to produce goods and services.
- Make basic business policy decisions.
- Introduce new inventions and technologies into business practice.
- Look for new business opportunities.
- Take risks of making losses.

- 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.
- In short, scarcity implies choice.
- Scarcity → limited resource → limited output → we might not satisfy all our wants → choice involves costs → opportunity cost

3. Opportunity cost

- Definition: **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.

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

- The production possibilities frontier (PPF) is a curve that shows the various possible combinations of goods and services that the society can produce given its resources and technology.

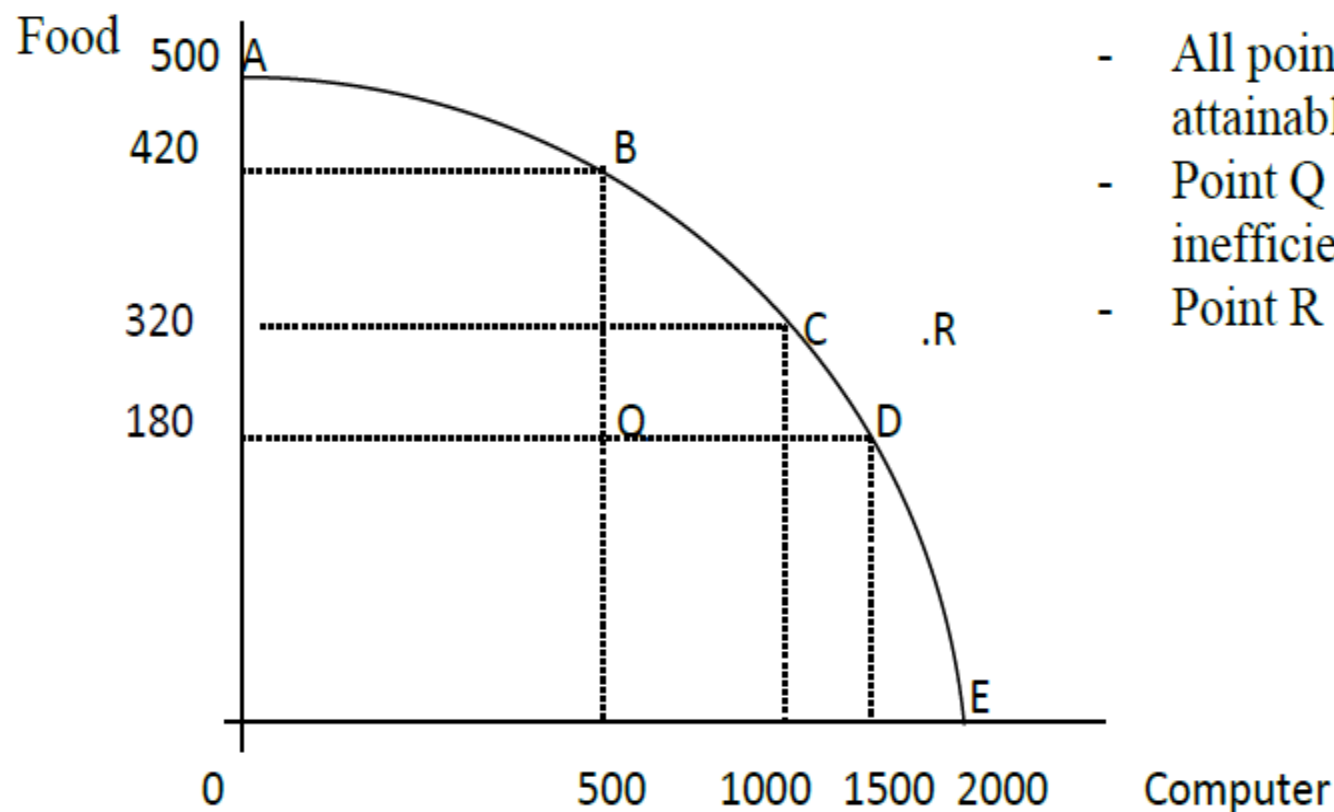
To draw the PPF we need the following assumptions.

- a. The quantity as well as quality of economic resource available for use during the year is fixed.
- b. There are two broad classes of output to be produced over the year.
- c. The economy is operating at full employment and is achieving full production (efficiency).
- d. Technology does not change during the year.
- e. Some inputs are better adapted to the production of one good than to the production of the other (specialization).

Table 1.1: Alternative production possibilities of a certain nation

Types of products	Unit	Production alternatives				
		A	B	C	D	E
Food	metric tons	500	420	320	180	0
Computer	number	0	500	1000	1500	2000

We can also display the above information with a graph.



- 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.
 - iii) **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**.

- The reason why opportunity cost increases when we produce more of one good is that economic resources are not completely adaptable to alternative uses (specialization effect).

$$\text{Opportunity cost of a good} = \frac{\text{the amount of the next best alternative sacrificed}}{\text{the amount of the good gained}}$$

- **Example:** Referring to table 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:

$$OC = \frac{320 - 420}{1000 - 500} = \left| \frac{-100}{500} \right| = \underline{\underline{0.2}} \text{ (The economy gives up 0.2 metric tons of food per computer)}$$

- **5. Economic Growth and the PPF**
- Economic growth or an increase in the total output level occurs when one or both of the following conditions occur.
 1. Increase in the quantity or/and quality of economic resources.
 2. Advances in technology. Economic growth is represented by outward shift of the PPF.

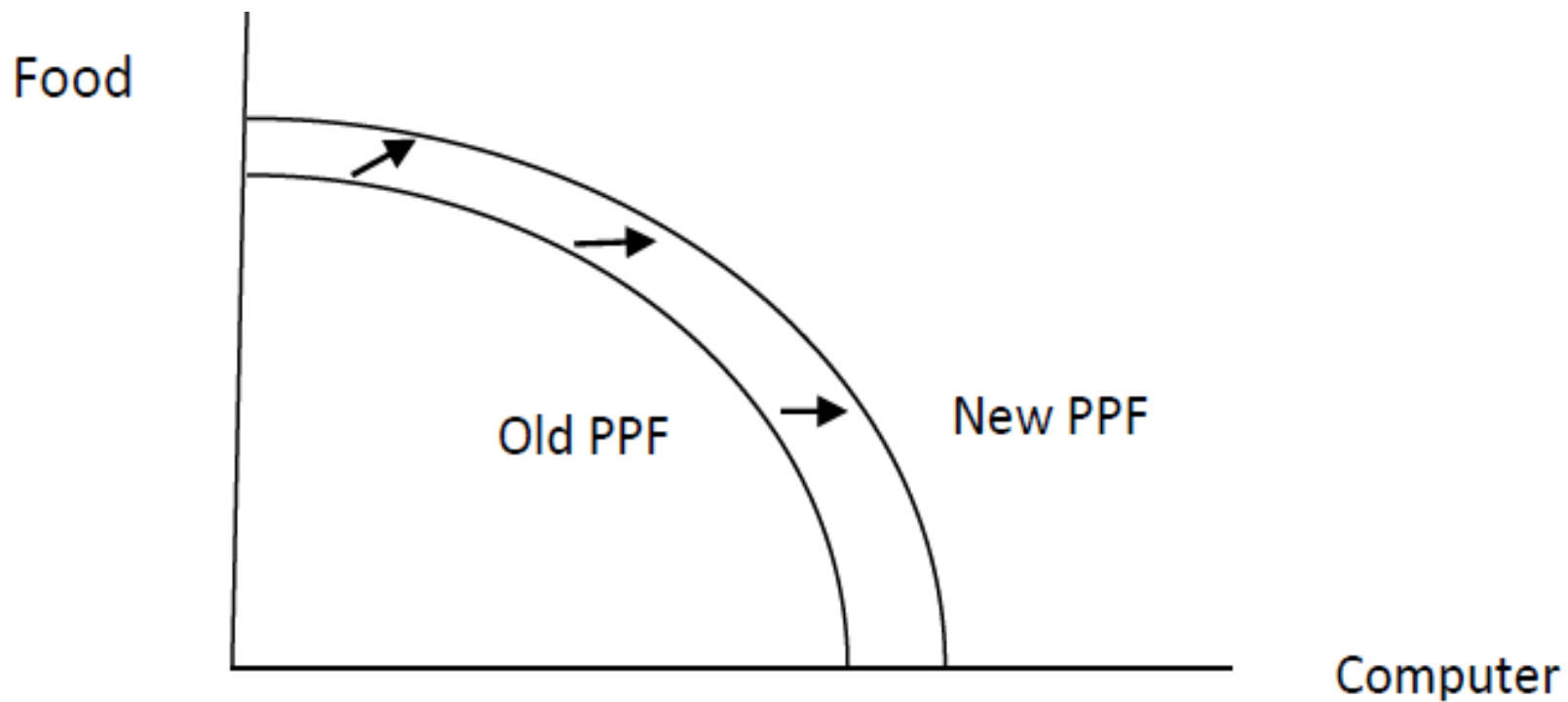


Figure 1.2: Economic growths with a new PPC

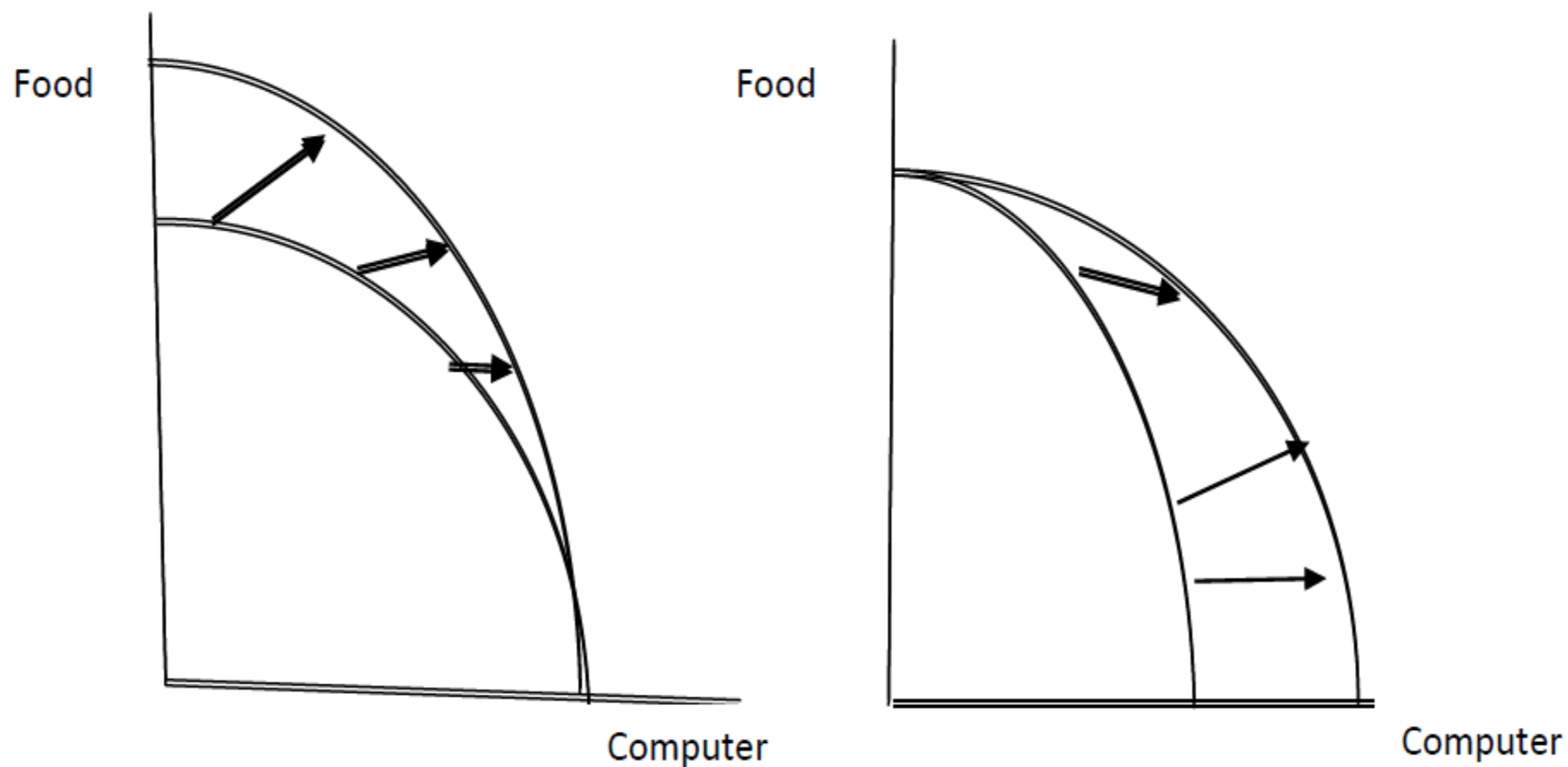


Figure 1.3: improvements in technology and quantity and/or quality of resources on national output

1.5 Basic economic questions

- **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.
- **How to Produce?** This problem is also known as the *problem of choice of technique*.
- Once an economy has reached a decision regarding the types of goods to be produced, and has determined their respective quantities, the economy must decide how to produce them - choosing between alternative methods or techniques of production.
- **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.

1.6 Economic systems

- Customarily, we can identify three types of economic system. These are capitalism, command and mixed economy.

1.6.1 Capitalist economy

- This system is also called *free market economy* or *market system* or *laissez faire*.

- **Features of Capitalistic Economy**

- **The right to private property**-As part of that principle, economic or productive factors such as land, factories, machinery, mines etc. are under private ownership.
- **Freedom of choice by consumers**-This is known as the principle of consumer sovereignty
- **Profit motive**-are guided by the motive of profit-making.
- **Competition**-competition exists among sellers or producers of similar goods to attract customers.
- **Price mechanism**-All basic economic problems are solved through the price mechanism
- **Minor role of government**-The government does not interfere in day-to-day economic activities
- **Self-interest**-motivated by the desire for economic gain.
- **Inequalities of** - There is a wide economic gap between the rich and the poor
- **Existence of negative externalities- income**-A negative externality is the harm, cost, or inconvenience suffered by a third party because of actions by others.

Advantages of Capitalistic Economy

- **Flexibility or adaptability**
- **Decentralization of economic power**
- **Increase in per-capita income and standard of living**
- **New types of consumer goods**
- **Growth of entrepreneurship**
- **Optimum utilization of productive resources**
- **High rate of capital formation**

Disadvantages of Capitalistic Economy

- **Inequality of income**
- **Unbalanced economic activity**
- **Exploitation of labour**
- **Negative externalities**

1.6.2 Command economy

Command economy is also known as socialistic economy

Main Features of Command Economy

- **Collective ownership**-no right to private property.
- **Central economic planning**-socio-economic goals
- **Strong government role**-Government has complete control over all economic activities.
- **Maximum social welfare**-does not allow the exploitation of labour.
- **Relative equality of incomes**-no opportunities for accumulation of wealth.

Advantages of Command Economy

- Absence of wasteful competition
- Balanced economic growth
- Elimination of private monopolies and inequalities

Disadvantages of Command Economy

- Absence of automatic price determination
- Absence of incentives for hard work and efficiency
- Lack of economic freedom
- Red-tapism

1.6.3 Mixed economy

- It incorporates some of the features of both and allows private and public sectors to co-exist.

Main Features of Mixed Economy

- **Co-existence of public and private sectors**
- **Economic welfare**
- **Economic planning**
- **Price mechanism**
- **Economic equality**

Advantages of Mixed Economy

- Private property, profit motive and price mechanism
- Adequate freedom
- Rapid and planned economic development
- Social welfare and fewer economic inequalities
- Disadvantages of Mixed Economy
- Ineffectiveness and inefficiency
- Economic fluctuations
- Corruption and black markets

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. Government also provides some types of goods and services known as public goods and services for the society.

- The three economic agents interact in two markets:
- **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.
- **Factor market (input market):** it is a market where economic units transact/exchange
- factors of production (inputs). In this market, owners of resources (households) sell their
- resources to business firms and governments.

A Two sector model

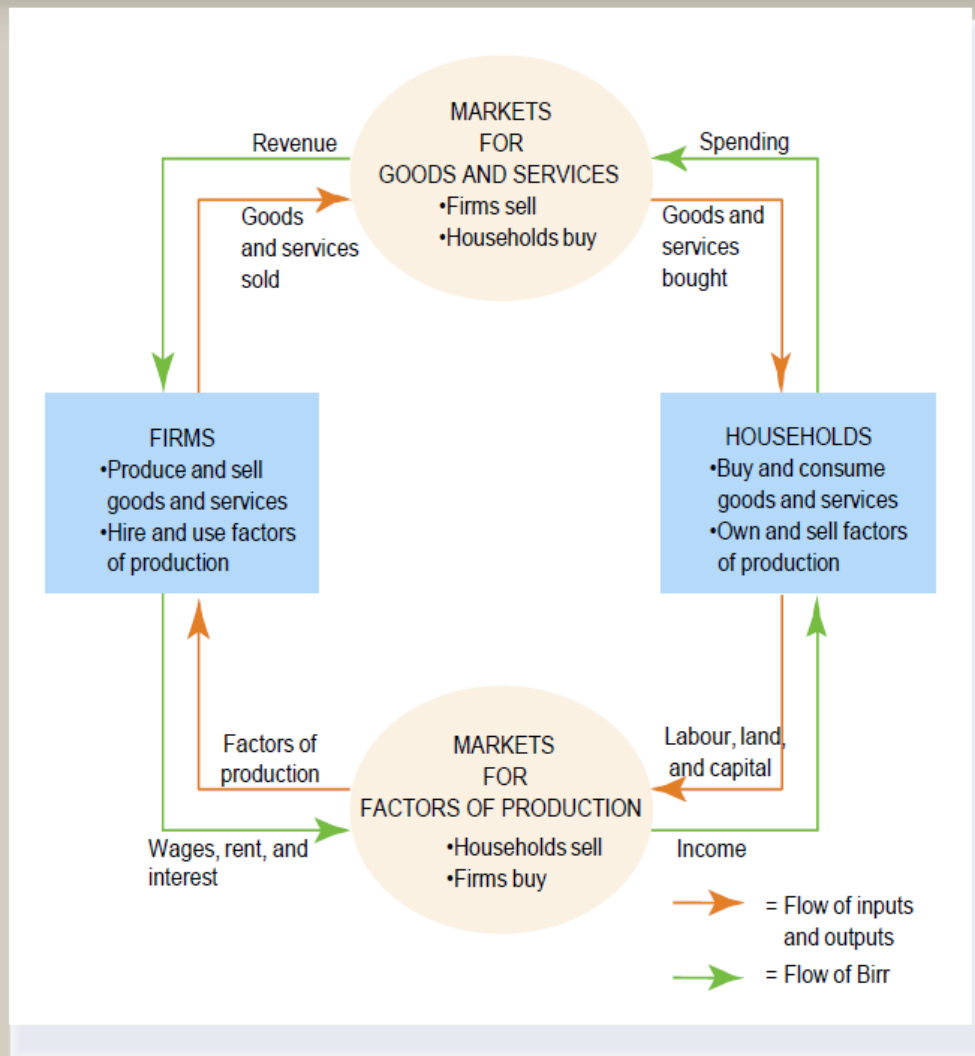


Figure 1.4: Circular flow of income with two sector model

A Three sector model

