



EDO UNIVERSITY IYAMHO
Department of Economics and Business
ECO211 Introduction to Microeconomics



Instructor: *Dr. John Chiwuzulum Odozi*, email: john.Odozi@edouniversity.edu.ng
Lectures: Tuesday, 8am – 10am, LC3, phone: (+234) 7035538613
Office hours: Wednesday, 11am – 3pm, Office: Rm 7, Admin Block

LECTURE ONE

Problems of scarce resources and allocation in product and factor markets

LEARNING OUTCOMES

1. Define resource scarcity
2. Contrast scarce resources and scarce goods
3. Contrast the three major resource allocation systems
4. Illustrate a simple model of price system showing key components and flow of goods, resources and payments
5. Contrast resource allocation in product and factor markets
6. Explain briefly: marginal value, marginal cost, value of marginal product and marginal resource cost in relation to allocation of resources in product and factor markets.

Resource scarcity

Scarcity is the availability of resources in insufficient amounts to satisfy all of our needs. A resource is what we used to achieve our needs and wants. It is the means to an end. Resource scarcity is the insufficient availability of resources

NB: Scarcity of resource is both availability and insufficiency. Price is the economic test for scarcity. What resources do not have price?

Scarce resources

Producer Resources

- Land (earth resources, forests, mineral deposit, rivers, oceans)
- Labour
- Capital
- Machines and equipment
- Human resources (skill, entrepreneurial ability)

Consumers Resources

1. **Time**
2. **Money**

NB: These resources are used as inputs to produce economic goods or purchase other goods or commodities.

- **Scarce goods**

Tangible

Television, pressing irons and cars, fertilizers.

Intangible

Services such as insurance, hair-cut, and teaching.

Scarcity also applies to goods since scarce resources are used to produce them

Resource allocation Systems

- How do we allocate resources given that resources are scarce and there are many big mouths and ambitions that are never ending giving rise to economic problems and questions

Producer: what, how, whom

Consumer: what to buy and in what amount

Society: How many roads to construct and communities to benefit

- (1) Price or market (2) command and
(3) mixed systems(4) traditional

Price system

1. Consumers constitute the demand side of the system while firms, the supply. Market forces of demand and supply determine prices and therefore the allocation of resources
2. The key decision maker consist of millions of consumers and producers and no single individual or group can influence the system.
3. Private ownership of resources.
4. The pricing system reflects individual decisions

Command system

There is a centralized planning authority that determine resource allocation

A single individual or group decision can influence the system

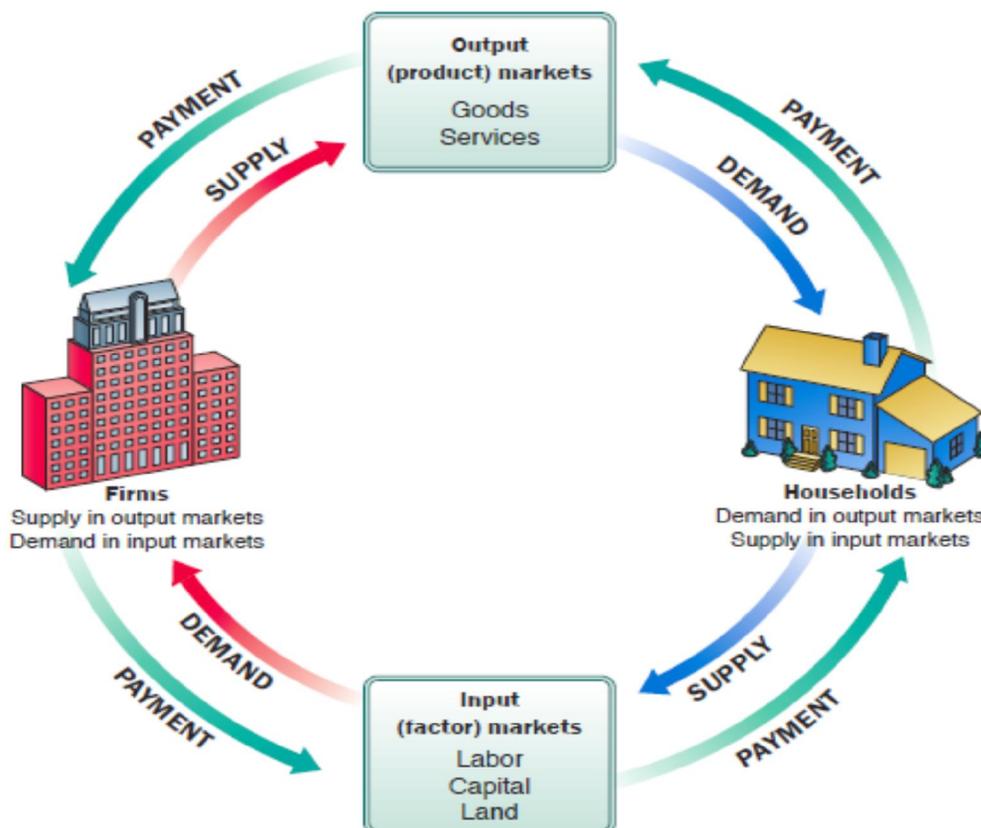
Centralized decisions

Government ownership and control of resources. The extreme case is referred to as socialism.

state may allow private ownership, but uses taxes, subsidies and regulations

Pricing system reflects controlled decision

A simple model of the Price System or Market economy



Households

Are buyers of what is sold by firms and suppliers of factors used by firms.

Allocation problems :(1) what goods to consume, (2) how much labour to supply, (3) whom to work for and at what amount and price.

Play a key role in the price system and possess what economists referred to as “consumer sovereignty

Aim to maximize utility.

Firms

Are producers of goods and services and buyers of factors of production.

Allocation problems of firms: (1) what to produce, (2) how to produce, (3) for whom to produce.

Aim to maximize profit or minimize cost.

Markets

Are like institutions and facilitate resource allocation, the flow of goods, factors and payments.

Product Market

Where goods and services are supplied by firms and demanded by households.

Decisions to allocate resources depends on the price of the product, household income, prices of other products, etc.

Factor market

Where factors of production are supplied and demanded.

Similar to product markets but differ in one important way: The demand for a factor of production is a **derived demand**.

Examples are **labor market, capital market, land market**

Importance of the Price System

1. Helps society or a firm to solve resource allocation problem of: what to produce, how to produce, and whom to sell to.
2. Communicate information to decision makers (what to produce)
3. **Prices coordinate the actions of market participants (how to produce)**
4. **Prices motivate economic players(whom to sell to)**

Resource allocation in product markets

Consumer decision depends on: MU and P

Firms decision depends on: MC and P

Definitions

1. Marginal utility is the increased benefits a consumer derives from additional units of the good
2. Marginal cost is the increased or extra cost to a firm of producing additional units of the good.

Conditions for allocation

Consumer

1. $MU = >P$. This is the condition that maximizes the utility of the buyer. A consumer would buy less of the good if the marginal utility of the good is less than its price.

Firm

1. $MC = >P$. Or $MC=MR$. In a perfectly competitive market, the price of a product P is equal to the Marginal Revenue.

Resource Allocation in a Factor market

The concern here is

- (1) what is the condition for firms to buy some units labour or land.....**depends on the value of marginal product**
- (2) What is the condition for owners of factors to sell some units of labour, land or capital?.....**wage, rent, interest**

Terms to understand

1. Marginal Cost (MC)
 2. Marginal Revenue Product (MRP)
 3. Marginal Product (MP) or Marginal Physical Product (MPP)
 4. Value of Marginal Product (VMP).
1. **Marginal Revenue Product (MRP) is change in total revenue of a firm as a result of employing an additional unit of the resource.**
 2. MP is the change in total output as a result of employing an additional unit of a resource. MP is measured in units of physical output; it is also called Marginal Physical Product (MPP).
 3. **Value of Marginal Product (VMP) is Marginal Product (MP) of a resource multiplied by the selling price of the product.**

Condition for a firm to buy some units of a factor of production, say labour: the VMP approach

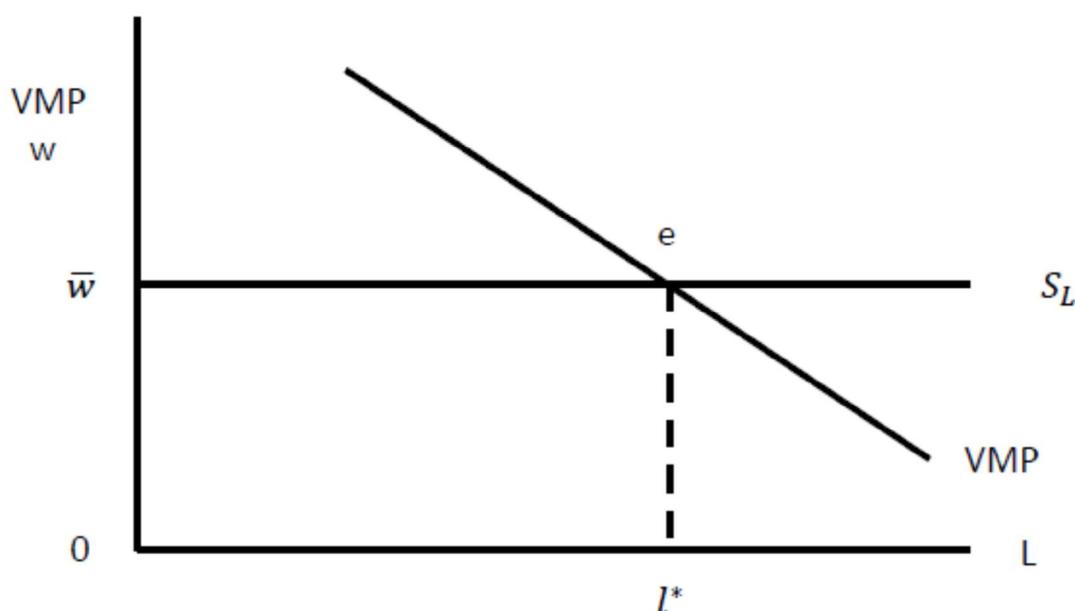
Value of marginal Product(VMP)of labour is the Marginal Product (MP) of labour multiplied by the price of the output produced using that labour. We represent it as

$$VMP_L$$

Given that the prevailing price or wage rate of labour in a competitive labour market is represented as \bar{w} . The figure in the next slide shows the value marginal product of labour curve. In the figure the supply of labour to the individual firm is the straight line S_L passing through the given wage rate \bar{w}

The two curves intersect at point e which defines the point at which it is most sensible to employ additional units of labour. Economists refer to this point as the point at which the firm's profit is maximized. The firm is in equilibrium by equating

$$w = VMP_L$$



To the left of	l^*	$VMP > \bar{w}$
To the right of		$VMP < \bar{w}$
Point of meeting		$VMP = \bar{w}$

$D_L =$ resource demand (labour) = VMP.....Value of marginal product

$S_L =$ resource supply (labour) = MC.....marginal resource cost

