

# Hawassa University Department of Economics

Introduction to Economics (Econ 1011)

by: MISRA M.

## CHAPTER ONE 1.1. DEFINITION OF ECONOMICS

- **Economics** is a science that deals with efficient <u>allocation of scarce</u> resources to <u>satisfy</u> Unlimited human <u>wants</u>.
- **Economics** is made so as to minimize the very wide gap between scarce/limited resource & the unlimited human wants.
- It is study of choice under conditions of scarcity or the study of choice with constraints.
- Scarcity refers to the imbalance b/n scarce/limited resources & unlimited wants. The quantity desired of a resource is more than the quantity available.

## Resources

- Resources are inputs used to produce **goods** & **services** to satisfy human wants.
- ➤ It also called factors of production, are all the things used in producing goods and services;
- > Resourses are categorized into four groups:
  - i. Land
  - ii. Labor
  - iii. Capital
  - iv. Entrepreneurship

### Resources ... cont'd

- ✓ Land:-Everything on Earth with its natural state (Earth's natural resources) free gifts of nature. The reward for service of land is **rent**
- ✓ **Labor:-** All the people who work in the economy-physical and mental effort of human being. The reward for labor is **wage.**
- ✓ Capital:- All the manufactured inputs that are used to produce other goods and services. The reward for capital is **interest.**
- ✓ Entrepreneurship:-the skills of people who organize, manage factor of production and take risk of making losses. The reward for Entrepreneurship is profit.

## 1.2. The rationales of economics

There are two fundamental facts that provide the foundation for the field of economics. two fundamental facts that provide the foundation for the field of economics are.

- 1) Human (society's) material wants are unlimited.
- 2) Economic resources are limited (scarce).

## The basic economic problem is about

**scarcity and choice** since there are only limited amount of resources available to produce to unlimited amount of goods and services we desire

## 1.3. Scope And Methods Analysis In Economics 1.3.1. Scope of Economics

- ❖ In the recent past, many new branches of the subject have developed, including development economics, industrial economics, transport, international economics economics, welfare economics, environmental economics,
- ❖ 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.
- *Micro economics* 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.
- *Macro economic* 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. 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.

## Con'd

Microeconomics	Macroeconomics
Studies individual economic units of an	Studies an economy as a whole and its
economy.	aggregates.
<ul> <li>Deals with individual income, individual</li> </ul>	Deals with national income and output
prices, individual outputs, etc.	and general price level
Its central problem is price determination	❖ Its central problem is determination of
and allocation of resources.	level of income and employment.
Its main tools are the demand and supply of	❖ Its main tools are aggregate demand and
particular commodities and factors.	aggregate supply of an economy as a
<ul> <li>It helps to solve the central problem of</li> </ul>	whole.
_what, how and for whom to produce in an	❖ Helps to solve the central problem of
economy so as to maximize profits	_full employment of resources in the
<ul> <li>Discusses how the equilibrium of a</li> </ul>	economy
consumer, a producer or an industry is	Concerned with the determination of
attained.	equilibrium levels of income and
Examples: Individual income, individual	employment at aggregate level.
savings, individual prices, an individual firm's	Examples: national income, national

## 1.3.2. Positive and Normative Analysis

Economics can be analyzed from two perspectives:-

## I. Positive Analysis:-

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. Any disagreement on positive statements can be checked by looking in to fact.

Examples

- ✓ The current inflation rate in Ethiopia is 50 percent.
- ✓ Poverty and unemployment are the biggest problems in Ethiopia.

## II. Normative analysis

A normative economics offers recommendations based on value judgment. It deals with the questions like: what should be; what ought to be; what must be. In this situation since normative economics is loaded with judgments, 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.

## Example:

- $\Box$  The poor should pay no taxes.
- $\Box$  There is a need for intervention of government in the economy.

## 1.3.3. Inductive and Deductive Reasoning

#### **Inductive Reasoning**

- It is the process of deriving a principle or theory by moving from facts to theories
- This method involves reasoning from particular facts to general principles.
- It aims to generate new theories from observed data.
- 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.

## **Deductive Reasoning**

- Deductive method proceeds from general to particular.
- It involves reasoning from certain principles to the analysis of specific facts.
- Then conclusions are drawn which are verified against observed facts.
- It aims to test an existing theory

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 Opportunity Cost, Production Possibility Frontier, and Efficiency

#### **Definitions:**

- Production: The process of using the services of labor and other resources to make goods and services available.
- Economic resources: are inputs used in the process of production. Economic resources are divided into four broad categories: land, labor, capital and entrepreneurship.
- Outputs: are commodities made available for use.

#### **Definitions** ... cont'd

- Technology: is society's stock of knowledge.
  - It is the **knowledge of how to produce** goods and services.
  - ➤ It is society's pool of knowledge regarding how goods and services can be produced from a given amount of resources.
- **Efficiency**: is producing the right goods and services in the right way.

#### **Definitions** ... cont'd

- **Full employment**: a situation where no resources remain idle. All available resources are employed in the production process, avoiding involuntary unemployment of some resources.
- Full production: a situation where all employed resources should be used so that they yield the maximum possible satisfaction of human wants. This is the use of resources efficiently.
- Production possibility: the maximum amount of goods and services which can be produced at a point in time with existing resources and a given state of technology.

## **Opportunity cost**

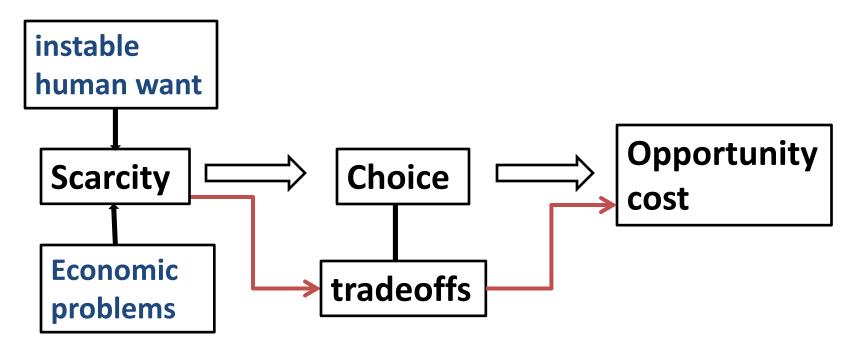
- The value of the next best alternative that must be sacrificed is the opportunity cost of the decision.
- Opportunity cost is the value or amount of the next best alternative that must be sacrificed or forgone to obtain one more unit of a product.
- N.B.: the opportunity cost of getting one more unit of a product is the amount or value of the next best alternative that is sacrificed.

## The Production Possibility Frontier (PPF)

- The Productions Possibilities Frontier/Curve (PPF or PPC) is a curve that shows the various possible combinations of goods and services that the society can produce given its resources and technology.
- PPF is a simple graphical device that illustrates the principles of scarcity, choice, and opportunity cost.
- The production possibilities curve shows the tradeoffs among choices we make.

## The PPF describes three important concepts:

- Scarcity
- Choice
- Opportunity cost



## e.g. Assume there two goods produced.

 The production possibilities of these two goods can be presented in a table as follows.

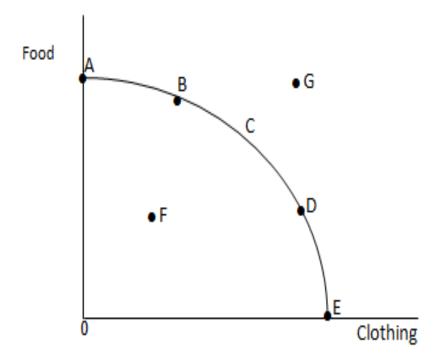
Type of good	Production possibilities					
	A	В	C	D	Е	
Food (F) (tons)	50	42	32	18	0	
Clothing (C) (numbers)	0	5	10	15	20	

### Cont'd

- The country has five production possibilities.
- These are the maximum combination of the two goods that the society can produce if it uses all the available resources in food production.
- If it decides to use all its economic resources to produce food only, it can produce 50 tons of food and zero clothing.
- This is production possibility given by point A
- If the society decides to spend all of its resources to the production of clothing, it can produce 20 units of clothing but zero ton of food, point E

## Cont'd

Plotting these points will result in PPF or PPC, i.e the graphic representation of production possibilities.



## Con'd

## **Regions of the PPF**

<u>Points lying outside the PPF</u> (such as G): are unattainable with the current level of resources and technology.

<u>Points lying inside the PPF</u> (such as F): represents combinations of two goods that correspond to less than the maximum possible output. They are attainable but inefficient since there is underutilization of resources or mismanagement of resources.

<u>Points on the PPF</u>: represent the maximum possible output of the two goods. They represent effective utilization of productive resources.

Hence, PPF illustrates the idea of scarcity in two ways;

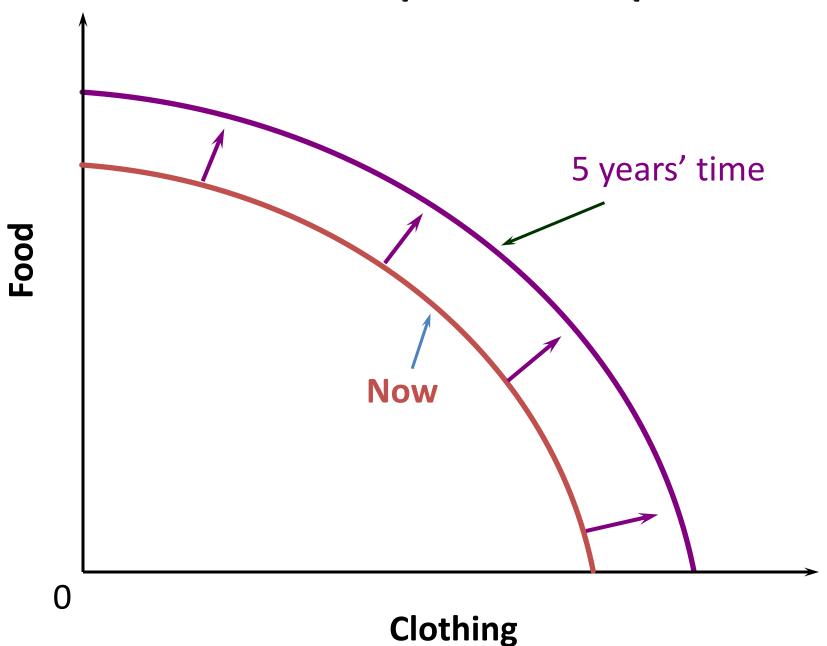
It shows only a limited number of production possibilities existing in a given period with the current level of technology and resources (only points inside and on the curve are possible)

It also shows that the maximum amount of any one good is produced, given output of the other. Additional production of the first good requires a reduction of the other.

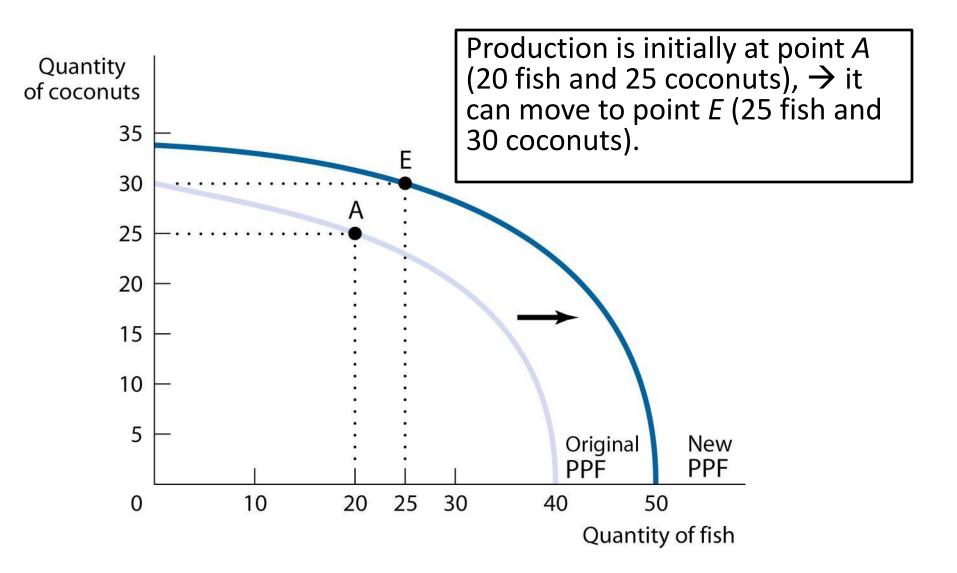
## **Economic growth and the PPF**

- Economic growth- increase in real output
- Results when one or both of the following occur:
  - Increase in quantity and/or quality of resources
  - ➤ Advance in technology
- Can we produce outside the production possibility curve?
  - More output is represented by an outward shift in the production possibility curve.

## **Growth in potential output**

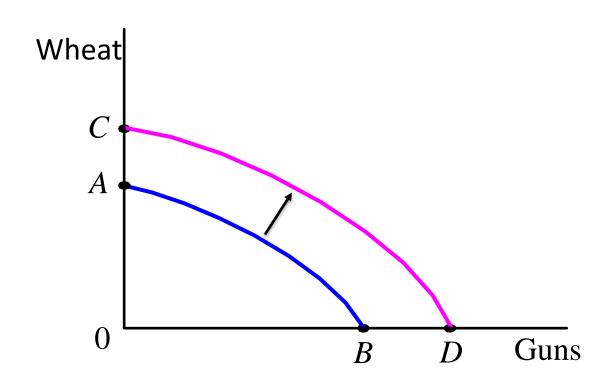


#### **Economic Growth**



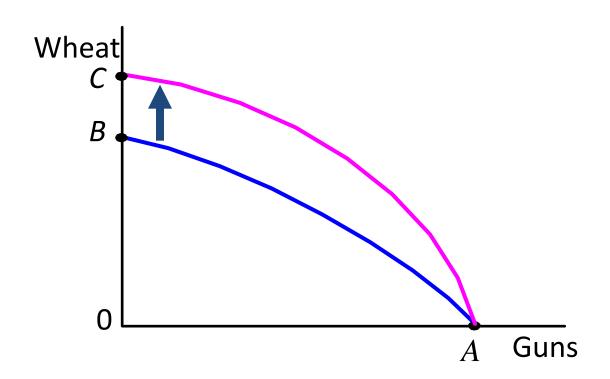
## Shifts in the Production Possibility Curve

#### **Neutral Technological Change**



## Shifts in the Production Possibility Curve ...

Biased Technological Change (asymmetric technological change)



## 1.5 Basic economic questions

Economic system faced by an economic problem due to scarcity of resources are known as

basic economic problems. These problems are common to all economic systems

#### 1. 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 production.

## 2. How to Produce?

- This problem is also known as the *problem of choice* of techniques
- 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.
- various techniques of production can be classified into two groups:
- Labour-intensive techniques and capital-intensive techniques

## 3. 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

### 1.6 An economic system

is a set of organizational and institutional arrangements established to answer the basic economic questions.

These are capitalism, command and mixed economy

## 1.6.1 Capitalists economy

capitalism is the oldest formal economic system in the world. It became widespread in the middle of the 19<sup>th</sup> century. In this economic system, all means of production are privately owned, and production takes place at the initiative of individual private entrepreneurs who work mainly for private profit. Government intervention in the economy is minimal. This

system is also called *free market economy* or *market system* or *laissez faire* 

## Features of Capitalistic Economy

- **✓** The right to private property
- **✓** Freedom of choice by consumers
- ✓ Profit motive

✓ Competition: 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 and confines itself to defense and maintenance of law and order.
- ✓ **Self-interest:** Each individual is guided by self-interest and motivated by the desire for economic gain.
- ✓ **Inequalities of income:** There is a wide economic gap between the rich and the poor.
- **Existence of negative externalities:**

## Advantages of Capitalistic Economy

Flexibility or adaptability: It successfully adapts itself to changing environments.

**Decentralization of economic power:** Market mechanisms work as a decentralizing force against the concentration of economic power.

Increase in per-capita income and standard of living Capital formation ,entrepreneurship growth

New types of consumer goods: Varieties of new consumer goods are developed and produced at large scale.

Growth of entrepreneurship: Profit motive creates and supports new entrepreneurial skills and approaches.

**Optimum utilization of productive resources:** 

## **Demerits of Capitalism**

## Ignore the Role of government:

- Provision of public goods- non-rival & non exclusive
- Regulating externalities- positive & negative externalities
- Bridging Income & wealth inequality

Exploitation labor-pays workers for minimum wages

Creates monopolies

## 1.6.2 Command Economy (socialistic economy)

Under this economic system, the economic institutions that are engaged in production and distribution are owned and controlled by the state.

**Main Features of Command Economy** 

Public/collective ownership of property/resources

**Strong government role**: Economic activities are coordinated and directed by gov't through **central planning**.

Maximum social welfare: Command economy aims at maximizing social welfare and does not allow the exploitation of labour.

Relative equality of incomes

## Advantages of command economy

**Absence of wasteful competition:** There is no place for wasteful use of productive

resources through unhealthy competition.

Balanced economic growth: Allocation of resources through centralized planning

leads to balanced economic development

Elimination of private monopolies and inequalities:

Command economies avoid the

major evils of capitalism such as inequality of income and wealth

# Disadvantages command economy Absence of automatic price determination

- Absence of incentives for hard work and efficiency
- Lack of economic freedom: Economic freedom for consumers, producers, investors,
- and employers is totally absent, and all economic powers are concentrated in the hands
- of the government.
- v **Red-tapism:** it is widely prevalent in a command economy because all decisions are
- made by government officials

#### 1.6.3 Mixed Economies

A mixed economy is an attempt to combine the advantages of both the capitalistic economy and the command economy. It incorporates some of the features of both and allows private and public sectors to co-exist.

- There is some government involvement in the economy.
- Both the market and the state answer the basic economic questions: what, how and for whom to produce and distribute
- Economic welfare and planning as well as price mechanism and economic equality
- Real world economies are between pure capitalism and command economic system

# **Advantages of Mixed Economy**

Private property, profit motive and price mechanism

**Adequate freedom:** Mixed economies allow adequate freedom to different economic

units such as consumers, employees, producers, and investors.

Rapid and planned economic development

**Social welfare and fewer economic inequalities:** The government's restricted control

over economic activities helps in achieving social welfare and economic equality.

# Disadvantages

**Ineffectiveness and inefficiency:** A mixed economy might not actually have the usual

advantages of either the public sector or the private sector. The public sector might be

inefficient due to lack of incentive and responsibility, and the private sector might be

made ineffective by government regulation and control.

v **Economic fluctuations:** If the private sector is not properly controlled by the

government, economic fluctuations and unemployment can occur.

v Corruption and black markets: if government policies, rules and directives are not

effectively implemented, the economy can be vulnerable to increased corruption and

black market activities.

### 1.7 Decision making units & Circular flow diagram

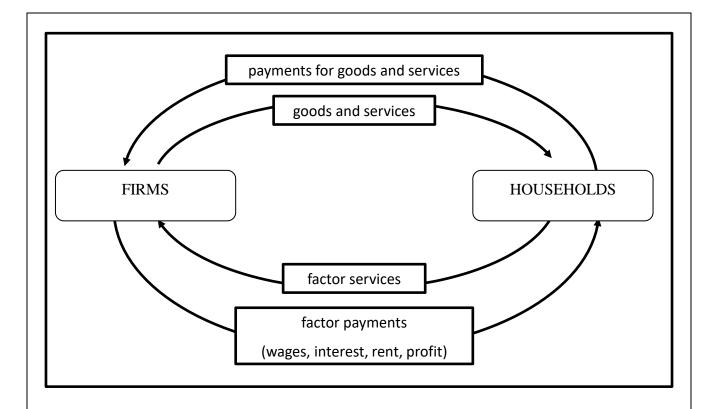
- There are three decision making units in a closed economy.
   These are households, firms and the government
- These Economic agents are :
  - 1. Households: sell their resources & buy G & S
  - 2. firms (business): buy economic resources & sell G & S
  - 3. Government: provide public goods, regulate externality,...

#### ... Circular flow diagram ... cont'd

- Economic agents interact in :
  - Resource market: resources are bought and sold
  - Product market: final products are bought and sold
- In this model, there are two flows:
  - Real flow: the flow of resources & finished G&S
  - Financial flow: The flow of income & consumption expenditure

#### Circular flow diagram

- 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
- a) The economy composed of households and firms only
- b) Households: own factors of production, consume goods and service
- c) Firms: hire factors of production to produce goods and services

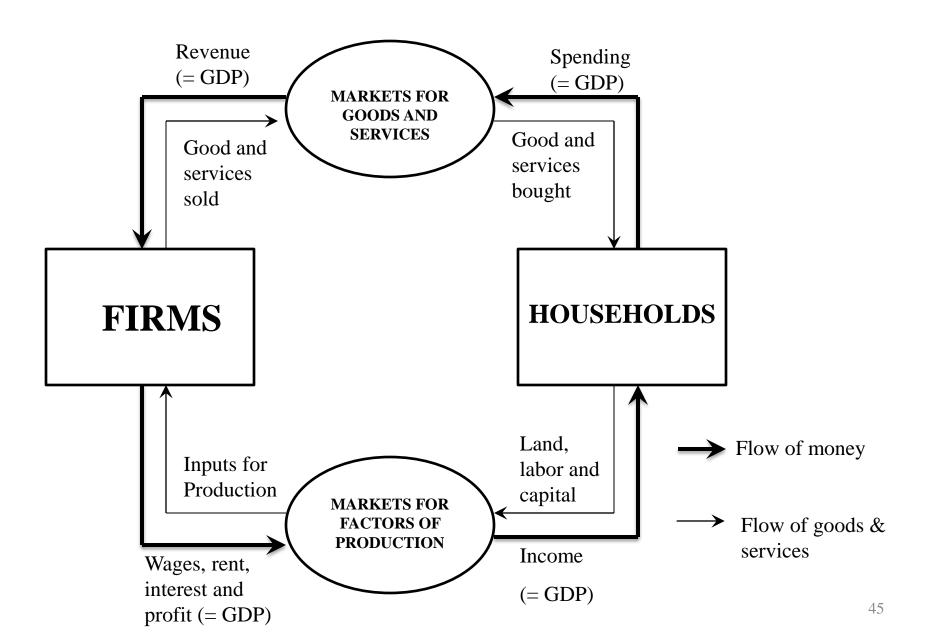


**FIGURE 8.1. Circular flow diagram.** The diagram above represents the transactions between firms and households in a simple economy.

In the upper loop, the arrow emanating from firms to households represents the sale by firms of goods and services to households. On the other hand, the arrow from households to firms represents the payments.

n the lower loop, the arrow originating from the households to the firms shows that firms hire labor and capital from households in order to produce goods and services. The arrow emanating from the firms indicates their payments for the use of the factors of production.

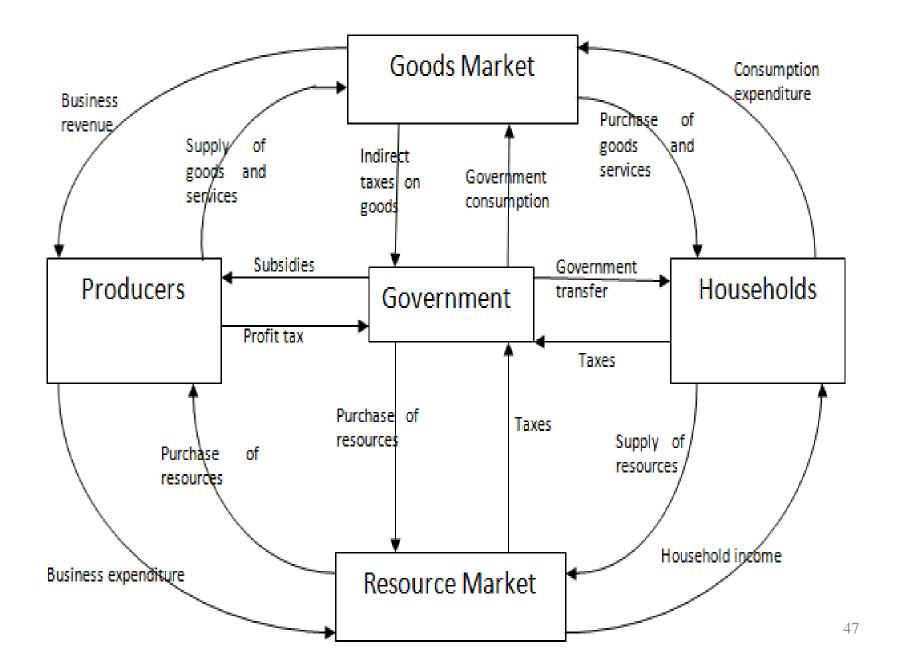
#### The two sectors of the Circular flow model



#### ...Circular flow diagram ... cont'd

- Upper loop of the circular flow diagram: transactions in the goods and services markets
- Lower loop: transactions in the factor markets
- What is cost for the firm is income for HH
- What is referred as expenditure by HH is Revenue of the firm

## The three sectors of Circular flow model



# Cont'd

# THANK YOU SO MUCH FOR YOUR ATTENTION!