

Introductory Discussion on Microeconomics

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Abstract

Here, the article will describe the definition of various types of microeconomics. The usefulness of economics are described here. And then the microeconomics' nature has been described. Besides, microeconomic terms and their descriptions are presented in this article. How the microeconomics are related to the practical life that will be described. The important term production possibility cost with examples are explained here. Explicit ideas about microeconomics you will get here.

Keywords: Microeconomics; Ideas; Scope; Agents; PPC.

1. Introduction

Economists do not restrict themselves to considering only decision problems involving money and markets, though that is a big part of economics. Microeconomics is the study of how resources are allocated to various uses in society. Each society must answer the following three questions through microeconomics- what to produce? How to produce? And for whom do we produce it?

2. Idea of Economics

An important usefulness of economics is economics provides an objective mode of analysis with rigorous models that are predictive of human behavior. It includes

- a. Scientific approach
- b. Rational choice

Assumptions in Economics are economic models of human behavior are built upon assumptions; or simplifications that permit rigorous analysis of real world events without irrelevant complications.

Microeconomics: The study of how resources are allocated to various uses in society. *Microeconomics* examines small economic units, the components of the economy. For example: individuals, households, firms, industries.

2.1 Macroeconomics looks at aggregates

For example: national output, overall price level, aggregate unemployment

Economics Defined - Economics is the study of the allocation of scarce Resources to meet unlimited human wants.

a. Microeconomics - is concerned with decision-making by individual

Economic agents such as firms and consumers. (Subject matter of this Course)

b. Macroeconomics - is concerned with the aggregate performance of the

Entire economic system. (Subject matter of the following course)

c. Empirical economics - relies upon facts to present a description of Economic activity.

d. Economic theory - relies upon principles to analyze behavior of economic

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Agents.

e. Inductive logic - creates principles from observation.

f. Deductive logic - hypothesis is formulated and tested.

3. Idea of Microeconomics

This is the part of economics concerned with single factors and the effects of individual decisions. Microeconomics is the study of individuals, households and firms' behavior in decision making and allocation of resources. Microeconomics stands in contrast to macroeconomics, which involves "the sum total of economic activity, dealing with the issues of growth, inflation, and unemployment and with national policies relating to these issues". It generally applies to markets of goods and services and deals with individual and economic issues. Microeconomic study deals with what choices people make, what factors influence their choices and how their decisions affect the goods markets by affecting the price, the supply and demand. Microeconomics (from Greek prefix micro- meaning "small" + economics) is a branch of economics that studies the behavior of individuals and firms in making decisions regarding the allocation of scarce resources and the interactions among these individuals and firms. One goal of microeconomics is to analyze the market mechanisms that establish relative prices among goods and services and allocate limited resources among alternative uses. Microeconomics shows conditions under which free markets lead to desirable allocations. It also analyzes market failure, where markets fail to produce efficient results.

4. Microeconomic Agents

In economics, an agent is an actor and more specifically a decision maker in a model of some aspect of the economy. Typically, every agent makes decisions by solving a well- or ill-defined optimization or choice problem.

Shortly the agents of microeconomics are explained in below:

Firms

- a) Produce and sell goods and services
- b) Buy inputs (labor, capital & raw materials)

Consumers

- a) Buy goods and services
- b) Sell inputs (labor services, loanable funds)

Methodology: Positive v. Normative Economics

Microeconomics plays a vital role in assisting the business firms and business decision makers.

Microeconomic analysis provides business managers with a thorough knowledge of theories of production and pricing in order to ensure optimum profit for the firm in the long run.

Microeconomics tools are useful for introducing policies relating to tax, tariff, debt, subsidy, etc. it helps the governmental bodies to fixate on the tax rate, types of tax, and the amount of tax to be charged to buyers and sellers.

Microeconomics is useful in explaining and determining the rate of foreign exchange between currencies, fixing international trade and tariff rules, defining the cause of disequilibrium in the balance of payment (BOP), and formulating policies to minimize it.

4.1 Scopes of Microeconomics

The scope or the subject matter of microeconomics is concerned with:

a) Commodity pricing

The price of an individual commodity is determined by the market forces of demand and supply. Microeconomics is concerned with demand analysis i.e. individual consumer behavior, and supply analysis i.e. individual producer behavior.

b) Factor pricing theory

Microeconomics helps in determining the factor prices for land, labor, capital, and entrepreneurship in the form of rent, wage, interest, and profit respectively. Land, labor, capital, and entrepreneurship are the factors that contribute to the production process.

c) Theory

Welfare economics in microeconomics is concerned with solving the problems in improvement and attaining economic efficiency to maximize public welfare. It attempts to gain efficiency in production,

Some of the major functions of microeconomics in business decision making are listed below:

d) Optimum utilization

The study of microeconomics helps the decision makers to analyze and determine how the productive resources are allocated for various goods and services. It also helps in solving the producers' dilemma of what to produce, how much to produce and for whom to produce.

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e) Demand

With the help of microeconomic analysis, business firms can forecast their level of demand within the certain time interval. The demand for a commodity fluctuates depending upon various factors affecting it. Thus, business firms and decision makers can determine the level of demand for the commodity.

f) Cost

Microeconomic theories explain various conditions of cost like fixed cost, variable cost, average cost, and marginal cost. Along with this, it also provides an analysis of the short run and long run costs that help the business decision makers determine the cost of production and other related costs, so they can implement policies to cut down cost and increase their level of profit.

g) Free Market Economy

Microeconomics explains the operating of a free market economy where, an individual producer has the freedom to take economic decisions like what to produce, how to produce, or for whom to produce. Allocation of resources is determined by price or market mechanism i.e. interaction between demand and supply

Microeconomics deals with different production techniques that help to find out the optimal production decision which helps the decision makers to determine the factors needed in order to produce a certain product or a range of products.

5. Economic Efficiency

An economy, or economic process, is operating efficiently

If it cannot make more of one good without making less of another. Economic efficiency implies an economic state in which every resource is optimally allocated to serve each individual or entity in the best way while minimizing waste and inefficiency. When an economy is economically efficient, any changes made to assist one entity would harm another. In terms of production, goods are produced at their lowest possible cost, as are the variable inputs of production. The principles of economic efficiency are based on the concept that resources are scarce. Therefore, there are not sufficient resources to ensure that all aspects of an economy functioning at their highest capacity at all times. Instead, the scarce resources must be distributed to meet the needs of the economy in an ideal way while also limiting the amount of waste produced. The ideal state is related to the welfare of the population as a whole with peak efficiency also resulting in the highest level of welfare possible based on the resources available. Measuring economic efficiency is often subjective, relying on assumptions

about the social good, or welfare, created and how well that serves consumers. At peak economic efficiency, the welfare of one cannot be improved without subsequently lowering the welfare of another. In this regard, welfare relates to the standard of living and relative comfort experienced by people within the economy.

5.1 Economic Efficiency consists of the following three components

A. allocative efficiency - is measured using a concept known as Pareto

Superiority (or Optimality)

1. Pareto Optimal - is that allocation where no person could be made better off without inflicting harm on another.
2. Pareto Superior - is that allocation where the benefit received by one person is more than the harm inflicted on another. [Cost – benefit approach]

B. technical efficiency - for a given level of output, you minimize cost or (alternatively) for a given level of cost you maximize output.

C. full employment - for a system to be economically efficient then full employment is also required.

6. Economics Models and Theories

6.1 Economic Models

Models are simplified representations of reality, used to study and understand relationships in the real world. Models are, by nature, abstractions. The trick is choosing the correct level of abstraction. List of variables, especially a clear statement of what is to be explained Dependent v. independent variables Hypothesized relationships among the variables. Using tables of values, graphs, or equations. In economics, a model is a theoretical construct representing economic processes by a set of variables and a set of logical and/or quantitative relationships between them. The economic model is a simplified, often mathematical, framework designed to illustrate complex processes. Frequently, economic models posit structural parameters. A model may have various exogenous variables, and those variables may change to create various responses by economic variables. Methodological uses of models include investigation, theorizing, and fitting theories to the world.

6.2 Three ways to describe models

- a) Graphs
- b) Tables of values
- c) Mathematical functions (equations)

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- d) Important concepts
- e) Dependent and independent variables
- f) Linear function, intercept and slope

7. Purposes of model

In general terms, economic models have two functions: first as a simplification of and abstraction from observed data, and second as a means of selection of data based on a paradigm of econometric study. In addition to their professional academic interest, uses of models include:

Forecasting economic activity in a way in which conclusions are logically related to assumptions;

Proposing economic policy to modify future economic activity;

Presenting reasoned arguments to politically justify economic policy at the national level, to explain and influence company strategy at the level of the firm, or to provide intelligent advice for household economic decisions at the level of households.

Planning and allocation, in the case of centrally planned economies, and on a smaller scale in logistics and management of businesses.

In finance predictive models have been used since the 1980s for trading (investment, and speculation), for example emerging market bonds were often traded based on economic models predicting the growth of the developing nation issuing them. Since the 1990s many long-term risk management models have incorporated economic relationships between simulated variables in an attempt to detect high-exposure future scenarios (often through a Monte Carlo method). In below, I am giving points of model

- a) Show scarcity constraint
- b) Illustrate economic efficiency
- c) Introduce opportunity cost concept
- d) Variables
- e) Quantities of goods that may be produced
- f) Givens
- g) Total amounts of inputs available
- h) Technology of production
- i) Most economic models are built with mathematics; graphs
- j) And equations.

8. Production Possibilities Curve (PPC)

The Production Possibility Curve (or frontier) shows the maximum amount of a good you can produce given the amounts of other goods produced, and given the total amounts of inputs available, and given the technology of production. A graph of all *economically efficient* combinations of goods the society is able to produce.

The changes in *slope* in the diagram tell us how the rate of exchange, or rate of transformation of goods, between fish and berries changes as we continue to transfer resources from one product to the other. The PPC shows the maximum amount of pizza you can produce, given the amount of spaghetti to be produced.

The opportunity cost of doing something is what you must give up in order to do it.

The cost of a pizza is what you must give up to consume it, which in this case is easily computed in money.

The cost of a college education includes both money and other foregone alternatives. For example, the cost of a year at MSU includes not only tuition and books, but the income you could have earned working on a full time job.

The cost of attending a Logouts baseball game includes the value of the time you could have spent studying economics. The Rate of Transformation on the PPC is the rate of economically efficient exchange; it tells us the Opportunity Cost of one good in terms of another.

EXAMPLE

Assumptions

There are only two goods, pizza and spaghetti.

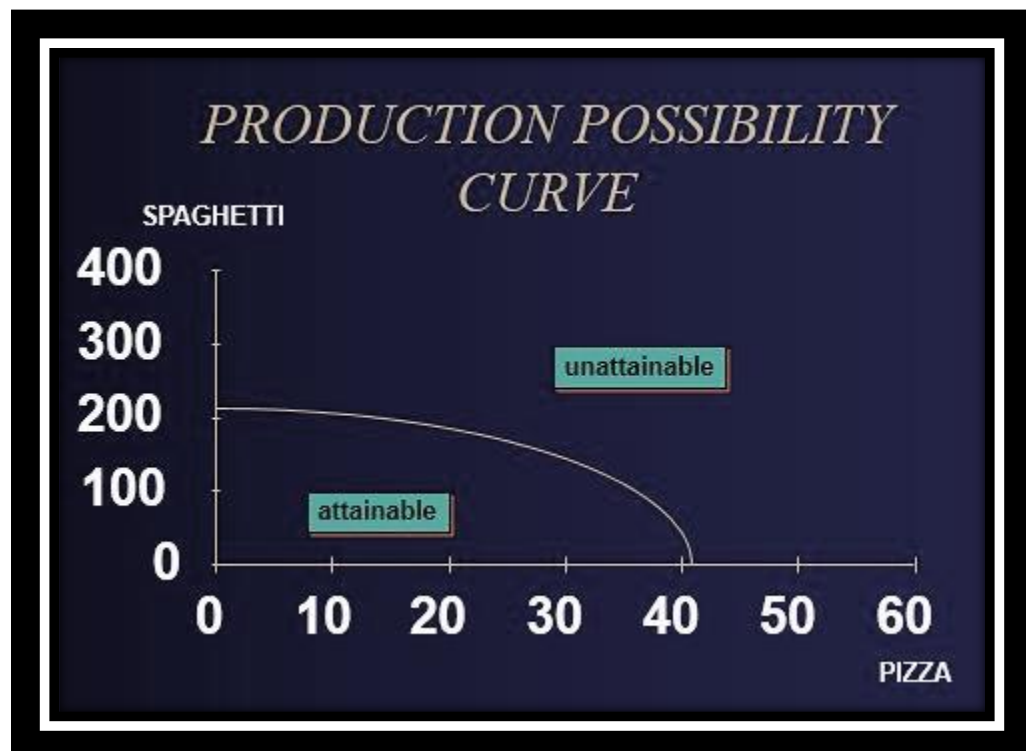
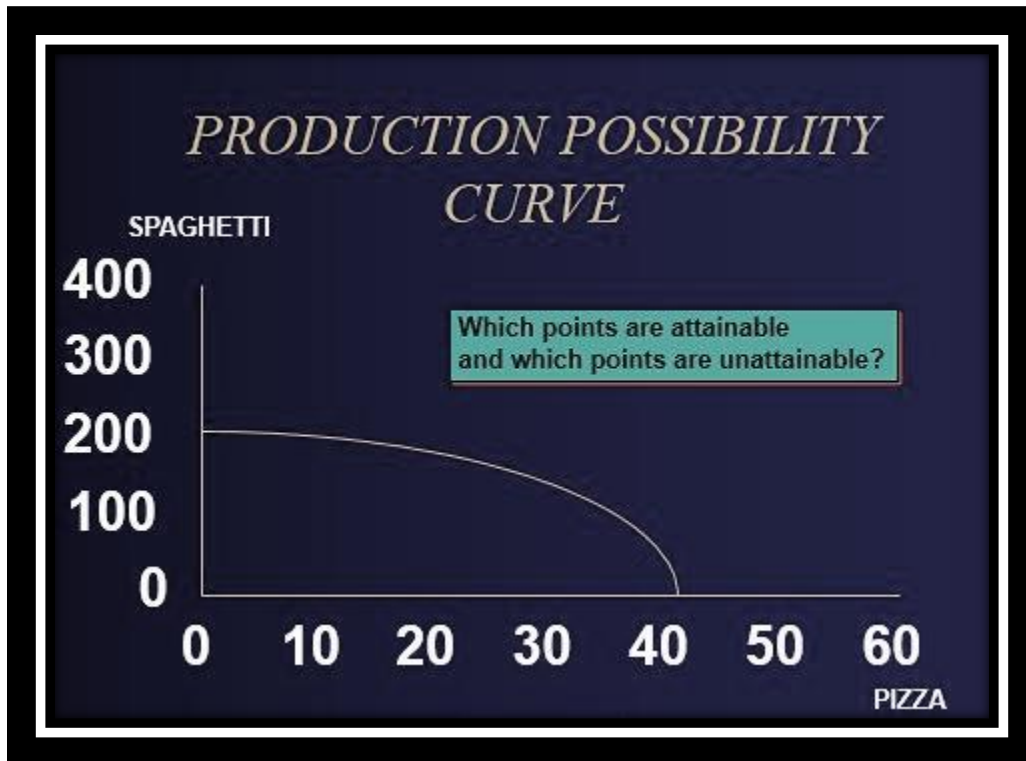
There are limited inputs and given technology of production.

Suppose you are at some point on a PPC.

Then suppose you want to consume one more pizza.

The opportunity cost of one more pizza is the amount of spaghetti you must *give up in order to get it*.

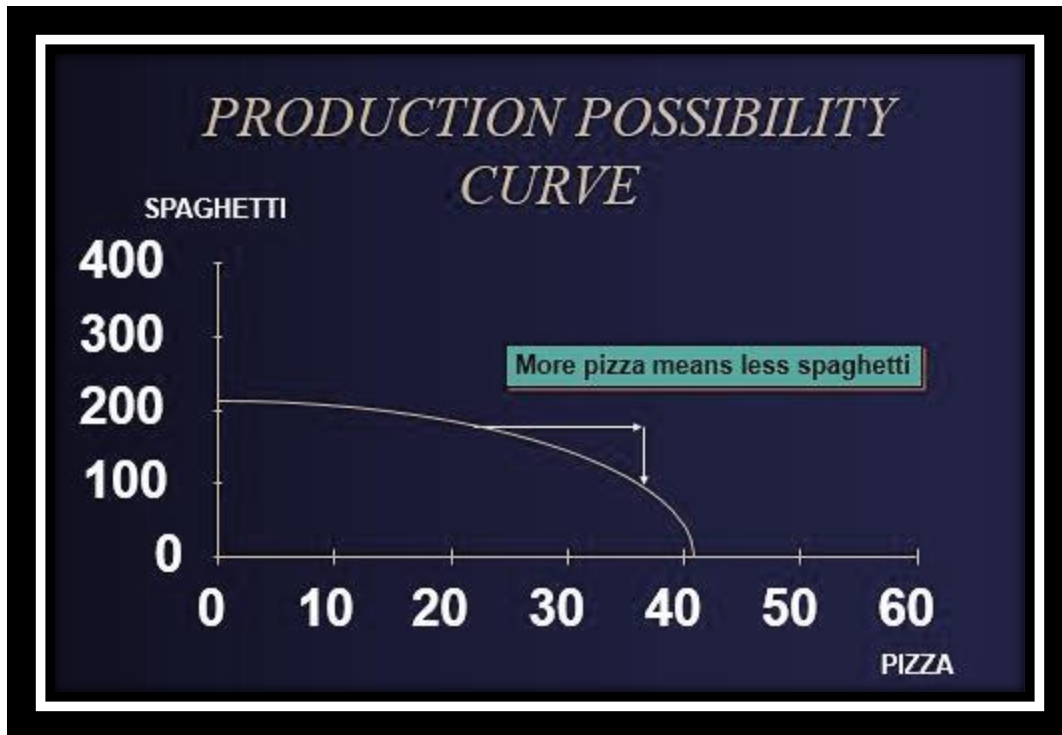
Note that this opportunity cost is equal to minus the slope of the PPC.



Points “inside” the PPC are inefficient.

For any point “inside” there corresponds some point that represents more production of both goods.

Note that while points on the PPC are efficient, we cannot say at this time whether some are better for society than others.



Opportunity cost increases as more of a good is produced

Not only does more pizza mean less spaghetti, but each additional pizza costs more than the one before it.

This idea shows up as the PPC being concave to the origin. (The curve bows out.)

We will use Production Possibilities Curves that are straight lines (i.e., that have constant opportunity cost) to illustrate some important economic principles.

8.1 Rate of Transformation

As we move along the PPC In other words, it is the *slope* of the PPC. On the upper part of the curve, the slope is -1 On the lower part of the curve, the slope is -4 The Rate of Transformation measures the amount of one good we must sacrifice to get one unit of the other, or, the Opportunity Cost. The Opportunity Cost of one bushel of berries is one pound of fish on the upper part of the curve, and 4 pounds of fish on the lower part of the curve.

8.2 The PPC will shift outward

- h) If additional productive resources are made available.
- i) If current available resources become more productive.

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- j) If more productive ways of combining resources are found.

8.3 Microeconomics as Welfare Economics

Microeconomics is not only concerned with analyzing economic condition but also with the maximization of social welfare. It studies how given resources are utilized to gain maximum benefit under various market conditions like monopoly, oligopoly, etc. Analysis of production efficiency, consumption efficiency, and overall economic efficiency are conducted on the basis of microeconomics.

9. Conclusion

Thus we can know about economics and how the microeconomics is the part of it. We can know the important parts of microeconomics. We can know theories and nature of microeconomics by this article. Microeconomics how related with the economy here the article explained.

Reference

1. Bade, Robin; Michael Parkin (2001). Foundations of Microeconomics. Addison Wesley Paperback 1st Edition.
2. Microeconomics: Principles, Problems, & Policies (McGraw-Hill Series in Economics) by Campbell McConnell, Stanley Brue, and Sean Flynn, 1st Edition
3. Editors, biography.com (August 17, 2016). "Adam Smith Biography.com". A&E Television Networks.
4. Bouman, John: Principles of Microeconomics free fully comprehensive Principles of Microeconomics and Macroeconomics texts. Columbia, Maryland, 2011
5. Colander, David. Microeconomics. McGraw-Hill Paperback, 7th Edition: 2008.