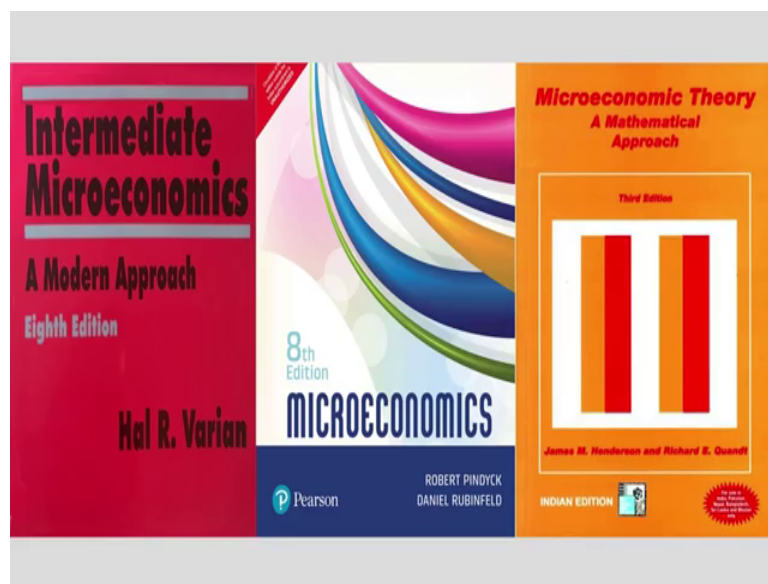


Microeconomics: Theory & Applications
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Lecture - 01
Introduction

Hello, welcome you all to the exiting world of economics of which microeconomics is a very important branch.

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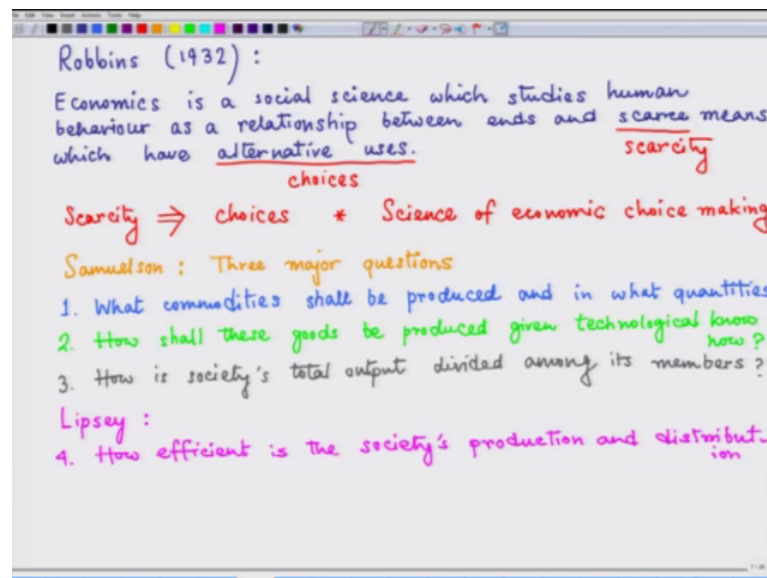
Before we start with the lectures let me show you the course text books. First one is by Pyndyck and Rubinfeld, Indian addition is available. This is an excellent text book you can definitely read this. There is another one by Hal Varian, and this is one of the leading text books in microeconomics as well; those who are more mathematically inclined and wants to learn microeconomics with full regard of mathematics, I would suggest them to have a look at this great book by Henderson and Quandt. This is also an Indian addition available.

This course aims you to educate with economic way of thinking, or put in other words this course would like to teach you with some listning techniques and tools which are useful to solve some practical economic, financial and managerial problems in the ordinary business of life. As an academic discipline economics is not really old, but with

passage of time the scope of the subject has grown so wide that it is very difficult to put forward a simple definition of economics which can be agreed by all.

Let us focus on one definition provided by British economist professor Lionel Robbins which is considered to be the most acceptable definition of the subject as practiced today. Let us look at the definition provided by professor Robbins.

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He defined economics as a social science subject. Now note in this definition there are 2 important facts on which we would like to deliver it further.

So now let us look at what do we mean by scarcity and how that is linked with alternative users which can also be called choices. So, by scarcity we mean that no human society has all the required resources to produce enough amount of goods and services to satisfy the materialistic demands of its individuals. And that definition of scarcity also holds for individual beams.

So, professor Robbins definition actually focuses on this nature of the subject which is basically can also be called science of economic choice making. So, the society confirms with the resource scarcity problem. At any point of time with given resources the society has to produce goods and services so that the societies welfare hits a maximum. That is basically the problem with which economics the subject deals.

Later professor Paul Samuelson an American economist who is also Nobel laureate tried to not to put forward a new definition of economics, he tried to explain what economists do. He said that society at any given point if time confronts 3 basic questions and economics a subject likes to find the answer for these 3 basic questions. So now, let us look at what are these 3 basic questions that society faces.

So now, we are going to look at professor Samuelson's work his 3 questions. And note that these questions immerge because there is scarcity of resources in the society. What commodities this could be goods and services shall be produced and in what quantities? Then the 2nd question is; how shall this goods and services be produced given technological knowhow?

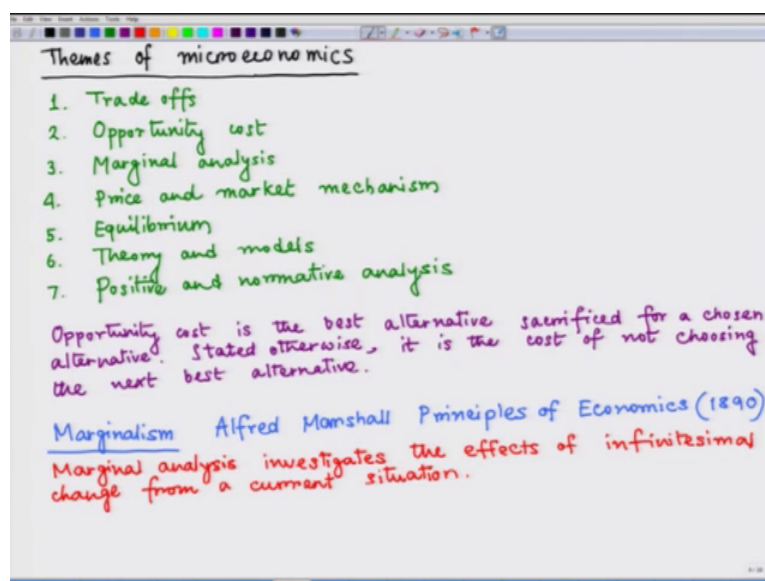
The 3rd question is how is societies total output of goods and services be divided, is divided? The third question is how is societies total output divided among its members? Putting other words, for whom the goods and services to be produced?

Later professor Lipsey has added a 4th question to this list. So now, we are moving to professor Richard Lipsey's contribution. The 4th question is how efficient is the societies production and distribution. Now note that here in this definitions we are talking about society which is basically collection of individuals. Now economics has 2 major branches, microeconomics and macroeconomics, the branch microeconomics talks about the individual's problem.

So, here in the course we are not going to look at society as a whole how it is facing different economic problems and how it is trying to solve different problems, rather we would like to see how a particular consumer, how a particular firm is facing economic problem and trying to optimize their decisions, their welfare given the recess constant it faces.

Now we are going to study themes of microeconomics.

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First we are going to talk about tradeoffs then we are going to talk about opportunity cost. The 3rd item is marginal analysis. 4th item is price and market mechanism. The 5th item is equilibrium. The next item would be theory and models and the last item in the list would be positive and normative analysis.

Let us now start with the problem of tradeoffs. We have already noted that both a society or an individual the economic agents face with the problem of resource constraint. Take the case of a household. The household has a given income so, with this given set of money they cannot buy everything that they want. The persons you know in a household may wish to have a luxurious car, but the income or the wealth that they have that may not be good enough to buy them a car. So, when an individual or a household makes small choices in ordinary business of life. Suppose you know a household or a person is choosing to purchase a (Refer Time: 12:57) then that is also because of the state of the same problem is faced by firms also.

Suppose we take the case of a multi-product firm, a firm which produces a more than one goods and services. Now a firm also starts with given resource constraint, and the firm has to decide how many units of good x to be produced and how many goods of how many units of good y to be produced the firm cannot make as many as number of goods x and y as it wishes it is constant by the resources. What are these resources?

These resources are like work force, natural capital or natural resources like raw materials and physical stock of capital.

Now let us move on to the concept of opportunity cost. Once another Nobel laureate professor Milton Friedman opined that, there is no such thing as free lunch. Now what is the reason behind this popular phrase? Note that even in this case when you are not paying for the lunch box, there is still some trade off and because of this trade off opportunity cost is arising. Suppose the society decides not to produce the lunch box for you. So, the labor, capital, land etcetera which had been employed to produce food and the lunch box for you, it could have been employed elsewhere to produce some other good.

So, the society sacrificing some other good or services to produce one unit of lunch box for you. It is free for you, but it is not free for society. Your lunch box comes at a cost for the society. Think about the friend who has offered you that free lunch box. Of course, that person has paid some money, now if he or she had decided not to buy that free lunch for you he or she could have used that money to buy some other good and services for him or her. So, of course, that person also sacrificed to provide you a free lunch.

Now, let us define opportunity cost because it is a very important concept in economics. Stated otherwise, it is the cost of not choosing the next best alternative. So, the point is that as society or any individual economic agent is always confronted with the problem of making choices. And each final choice has opportunity cost in terms of an alternative not chosen.

Now let us consider the 3rd in the theme list which is called marginal analysis. Towards late 19th century, there is some of search of research in microeconomics and economics, and it is known as marginalist revolution. So, what is marginalism? It is a new term marginalism became very popular with this book published by professor Alfred Marshall a British economist, and the name of the book is Principles of Economics which got published in the year of 1890.

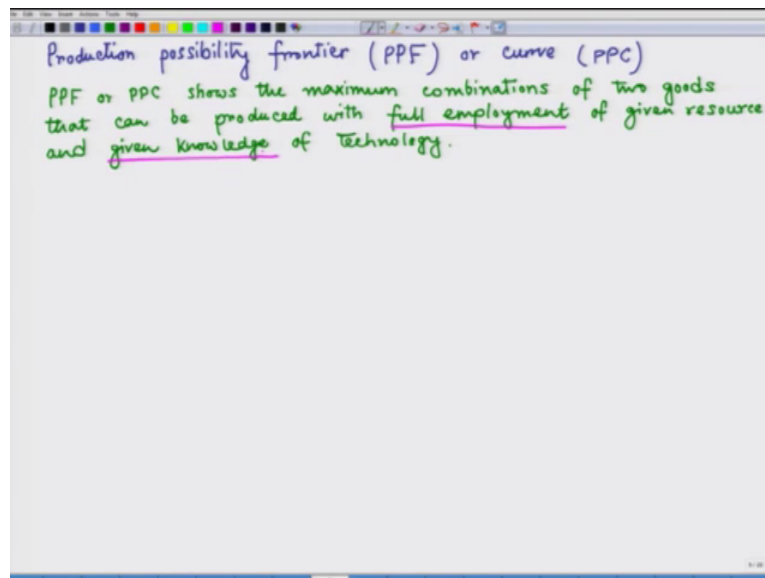
This concept of marginalism is now an integral part of economic analysis, it is very important. So now, let us look at what do we mean by marginalism. So, we will first define it and then we will discuss. So, marginal analysis investigates the effects of

infinitesimal which means very small change and this change could be addition or subtraction from a current situation.

So, as per the marginal analysis a national economic agent considers taking a move or taking an action by comparing the additional benefits of an activity to the additional cost of that activity if taken. And if he or she finds that the additional benefit from this marginal change is higher than that additional cost of this particular action taken, then he or she will take it otherwise not. Now having studied marginalism, trade off and opportunity cost, we should also comment that this 3 items or themes are linked with each other. Because there is resource scarcity the individual economic agent or society faces the choice problem. And as the person faces choice problems or society faces a choice problem there is opportunity cost.

Now, before we move on to the other items in the themes list, let us study a concept which is linked with these 3 themes. And the concept is known as a production possibility curve or production possibility frontier.

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First we are going to define the concept and then we are going to provide a graphical illustration of the concept. PPF or PPC shows the maximum contribution, combinations of 2 goods that can produced with full employment of given resources and given knowledge of technology. Two things are very important to note down, that we are

talking about full employment of given resources, and we are also talking about a given state of technology.

In the next lecture, we are going to study this concept of production possibility frontier in greater details.