

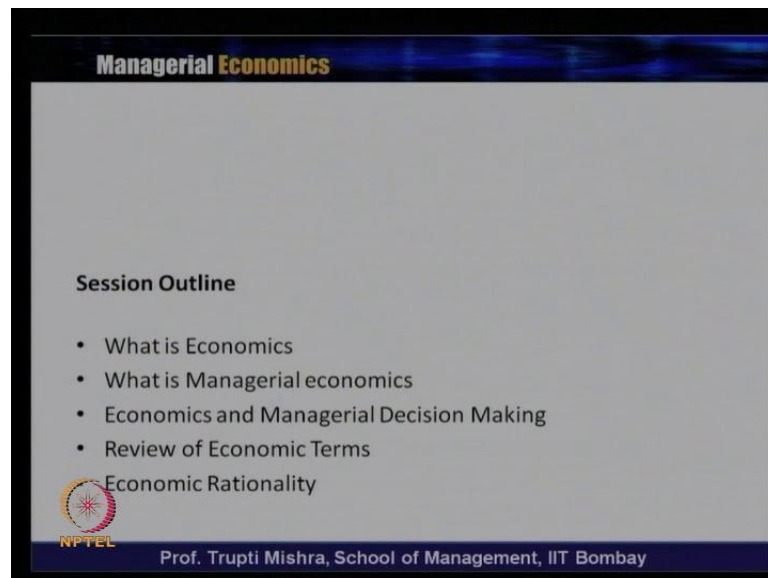
Managerial Economics
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Lecture - 1
Introduction to Managerial Economics

So, welcome to the course on managerial economics, this course is specially designed for the MBA students. And the motivation for this course comes from the fact that managers need clear understanding about the economic concept, economic principles. And because the understanding of economic concept and economic principle helps them in managing the day to day problem associated with the business decision.

So, in this course specifically, we will see that what are the different domains of a business decision problem and how economic concept, when economic principle generally get used to solve these business decision problems.


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Managerial Economics

Session Outline

- What is Economics
- What is Managerial economics
- Economics and Managerial Decision Making
- Review of Economic Terms
- Economic Rationality

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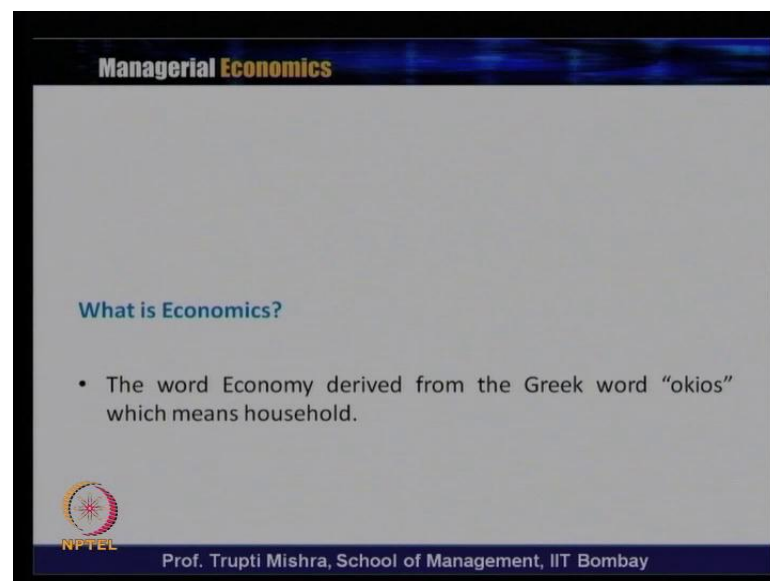
So, to start with, we will talk about the or we will define the economics, what is economics. Then we will talk about what is managerial economics, how this economics or which part of the economics considered to be the managerial economic. Then we will talk about specifically the economics and managerial decision making and we will just do are view of the economic terms, there are many concept like opportunity cost,

rationality, marginal and incremental analysis; in today's session we will focus only on the economic rationality.

So, to start with there are numerous definition of economics may be one group of economics they call it like science of wealth, that it typically given by father of economy that is Adam Smith. This is called science of wealth, similarly from Marshall another economists Marshall, the definition comes from economics of (()), and similarly from the other economists Robin its comes as economics of choice scarcity and choices.

So, we will pick up the third definition that comes from robins that economics is just that study of the science of choices and the scarcity and from there we will try to link that, how this is related to the distance problems and how it is related to the day to day business activity of a typical organizer.

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So, the word economics is derived from the Greek word okios which means household. And when we talk about this household if the word comes from the Greek word okio, so basically this is the managements related to the household. Now, what is economics, so reaching to this economics that how economics has become the scarcity and choices we need to understand the fact that human wants are unlimited.

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Managerial Economics

What is Economics?

- Human wants are unlimited
- Resources available to satisfy these wants are scarce / limited
- People want to maximize their gains

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So, whether you talk about a individual, whether you talk about the people, whether you talk about as a group of people, whether you talk about the economy, human wants are always unlimited. And why we call the human wants are unlimited, because of the fact that we always have a wish list that may be in a specific time period, these are the things I have to get or these are the things I have to achieve.

But wants are unlimited because everything everything never converted into the satisfying the wants want satisfaction; because whatever the want and whatever we are doing there is a difference there is a gap. So, wants are unlimited individual or the group or the economy as you they will never get satisfied that beyond this I do not want anything else.

So, for it comes to individual, when we are in the lower income group will aspire always to go to the middle income group. When we are in the middle income group we always aspire to get into the high income group. Similarly in the economy level when it comes to the if the duty free growth of 5 percent, they always aspire to have a duty free growth of 7 percent when the duty free growth is 7 percent they always aspire to GDP growth of 10 percent. So, any individual any economy they always increase their want they always feel that there are some wants which need to be fulfill in the next time period.

But the other side of the story is that human wants are unlimited, but the resources to satisfy those wants, those are basically scarce and unlimited. So, in the one hand the

human wants are unlimited the people, the individual, the economy they go on goes on demanding the demanding the whatever the wish list or whatever their wants. On the other hand resources are scarce, resources are not unlimited rather they are limited to satisfy this want. Now, what what people or what individual they try to do in this process in this process they want to maximize their gain.

How they want to maximize the gain they want to maximize the gain, whatever the limited resources, whatever the whatever the time available, whatever the resources available may be in term of the raw materials in terms of time. They want to see that how much they can maximize or how much they can achieve whatever their want they have given.

So, if you take in a very lay man understanding that why this want and resources. As an individual we have only 24 hours in a day. So, if you look at we never get satisfied that this 24 hours, may if that 20 hours could be have been 30 hours it could have been better, I could have done this if the 24 hours would have been 34 hour I would have done this, this is in term of the time.

Similarly, when it comes to resources, if I have more money I would have done that, if I have more money I would have done the other. So, whether it is money whether it is time or may be if I would have been studied more may be I would have aspiring a job which comes in a higher qualification.

So, whatever if you look at these are all resources, whether it is time, whether it is money, whether it is qualification. Typically from the individual point of view, but there is a scarcity to it and that is why there is always a gap between whatever the human wants and what whatever the resources available to satisfy those wants.


And as an economic agent typically in the individual as an economic agent they always try to maximize the gain. Looking at the fact that whatever the resources available how much they can use the available how much they can use the available resources to satisfy their want to maximize the gain. So, economic problems comes from here, that human wants are unlimited; however, the resources to satisfy this wants or the those are typically limited, those are not unlimited.

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What is Economics?

- Economic agents / society have some economic problems because of scarcity of resources
- They need to choose scarce resources among alternatives (scarce resources) based on choice and valuation of alternatives

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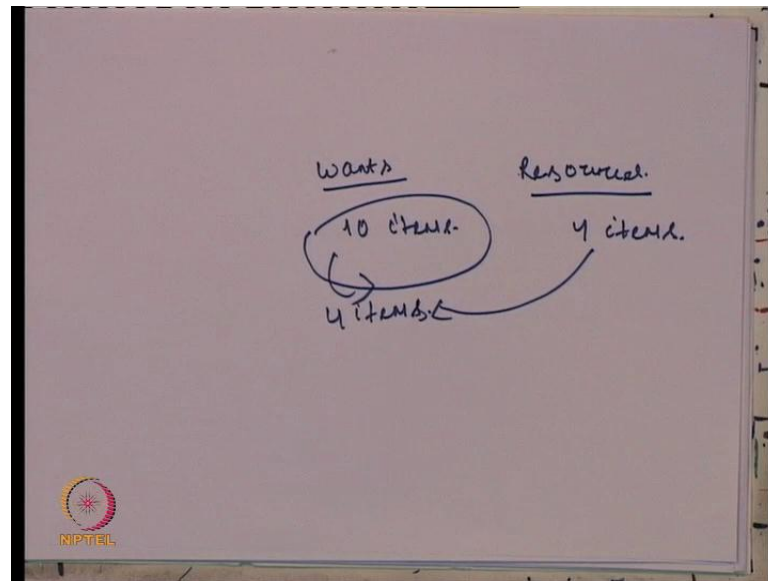
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So, here it comes that the economic agents and the society have some economic problem because of scarcity of resources. Because, there is a gap between the want and the resources available resources that leads to the fact that there is a economic problems. And this economic problem generally economic agent in a individual level and economic agent in a society level generally they face this problem and why this economic problem comes because there is a gap between whatever the human want and whatever the limited resources available to them.

Now, what is the challenge for the economic agent, may be at the individual, may at a group, may be at a country level. The challenge comes here that the need to choose the scarce resources among alternatives based on the choice and valuation of the alternatives. So, the challenge comes here that they have to choose the scarce resources, resources are limited they have to choose the scarcer sources among alternative based on choice and evaluation of alternatives.

Now, what are the alternatives over here so typically talking about one individual agent what are the what are the wants? They may be want be 1 there want may be 2 the wants may be 3 the wants may be 4 may be this is a list often items in the want. May we will take a example that resources are available only to satisfy the wants that come may be four wants out of ten two wants in the list of 10 or three wants in the list of ten now.

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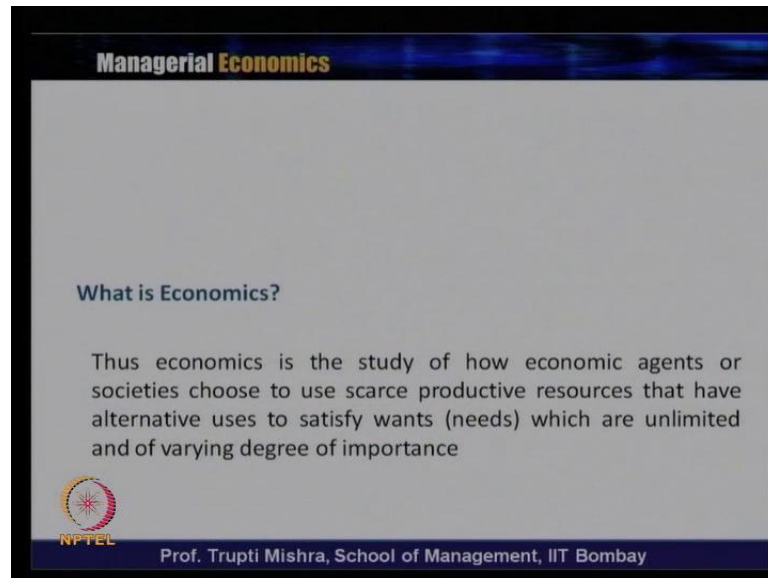
So, if you look at here we have wants, that is human wants here we have resources. So, may be to put it in numbers. Suppose, there are ten items in the wants that is 10 wish list from the 10 wish list of the economic agent and the resources are just to satisfy four item.

Now in this case what will be the alternative, alternative is that human is the economic agent has to be has to choose 4 items from this 10 items where the resources can what the resources can satisfy now these four items will be chosen from 10 items. So, what are the alternatives available to the human being, now what will be the alternatives available to the economic agent.

They have to choose among this 10 4. So, there are 10 alternatives and among these 10 alternatives the economic agent has to choose 4 items or 4 alternatives. So, the need to choose the scarce resources among the alternatives based on the choice and evaluation of the alternative, whatever the choice whatever the evaluation.

On the basis of that if there are 10 items they need to find out what is there in the priority list, what they require most and on that basis, they will choose that 4 items typically in this case, where the resources can satisfy to fulfill those 4 items. So, since resources are scarce here human wants are unlimited the economic agent has to choose the alternative choose among the alternative which the resources can satisfy.


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Managerial Economics

What is Economics?

Thus economics is the study of how economic agents or societies choose to use scarce productive resources that have alternative uses to satisfy wants (needs) which are unlimited and of varying degree of importance

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Now, from here the definition or the meaning of economics comes that economics is the study of how economic agents or society choose to use scarce productive resources. That has alternative use to satisfy wants, which are unlimited and varying degree of importance. So, looking at this definition, the first part of this definition if you look at this is a study of how economic agent and society use those scarce resources scarce productive resources.

So, first one is that about the choice part of it, choice part of the economic agent that, how they choose the that is the productive resources available to them. And then the second part is that these resources have alternative uses. So, if the resource is not getting used fulfilled may be the first want this can also be used to satisfy the other kind of wants.

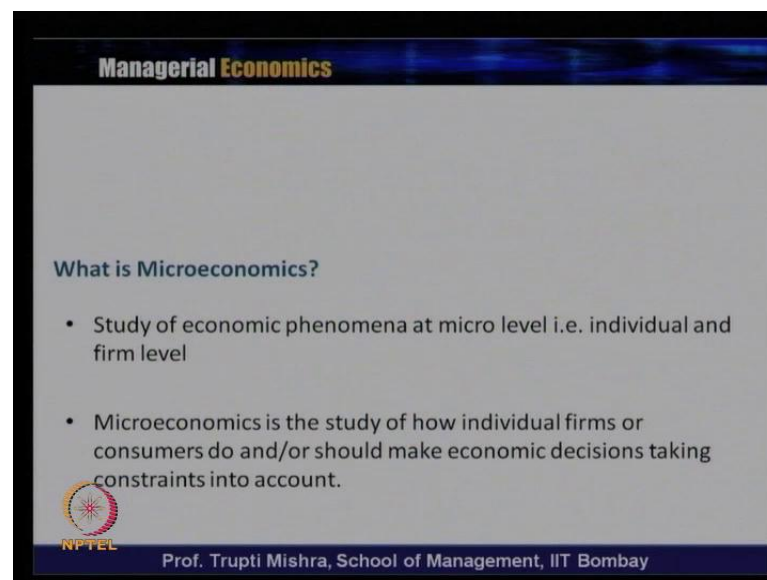
So, this resources they have the alternative use if the economic agent they are not choosing this resources may be the other economic agent will choose that resources and they will try to satisfy their want by using that particular resources. So, the first part is about the study of choice of the scarce sources by the economic agent.

Second part the resources have alternative use and what is the alternative use? Alternative use to satisfy the wants. And the third part of the definition comes the third part of the definition comes that the human wants are unlimited and this alternative uses that is they varying degree of importance, depends upon the want of the economic agent.

So, the entire definition we can break into three part, first part we can talk about the study of choice, because the economic agent has to choose the scarcity sources for the alternative use. Second part is that the resources have alternative use that if it is not getting fulfilled one want is getting used to fulfill the other want; and also these resources they have the varying degree of importance. So, taking this we can maybe we can simply say that this is the economic this is the study of scarcity and choice.

Because, the scarcity comes there is a gap between the human want and the resources available to them, there is a resource scarcity. And since there is a resource scarcity there is the next challenge comes from the economic agent to choose the scarce resource for the alternative uses for their wants.

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What is Microeconomics?

- Study of economic phenomena at micro level i.e. individual and firm level
- Microeconomics is the study of how individual firms or consumers do and/or should make economic decisions taking constraints into account.

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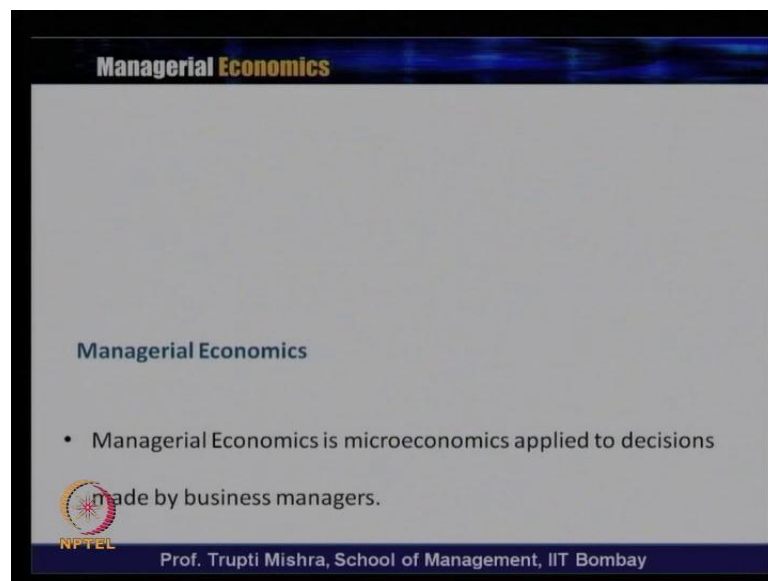
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So, from economics from the definition of economics, now will come specifically what is micro economics. So, micro economics is a study of economic phenomena at the micro level typically individual and firm level.

So, this is the micro economics in the when we do the individual level study whether it is about the individual consumer, individual producer, individual firm, individual organization, that is the micro economics. And it is the study of how individual farm farms or consumer do should make economic decision taking constant into the account.

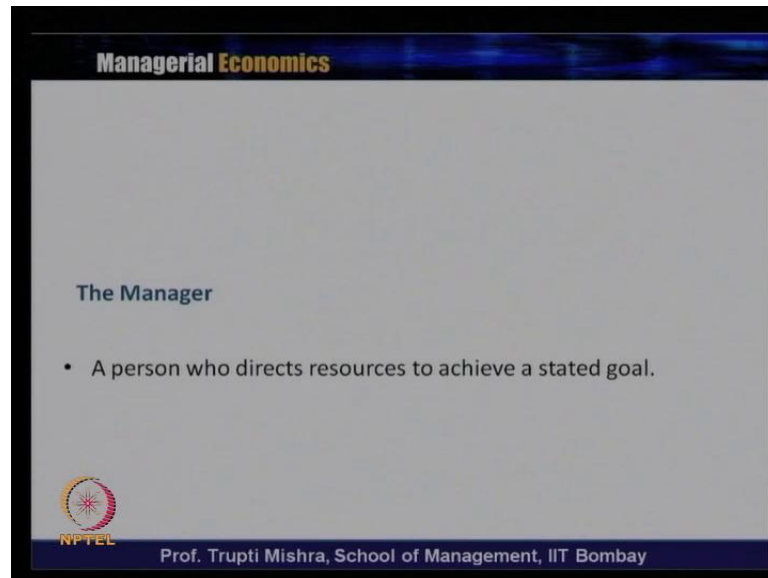
The micro economics essentially deals with the fact that how individual firm individual producer, individual organizer; they should take their decision they should make their economic decision taking whatever the constant into account. So, in this case what is the basic constant in case of the economic theory the basic constant is there is all the theory all the principle comes from the fact that there is a resource scarcity and there is unlimited human wants.

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So, basically managerial economics is the micro economics applied to the decisions made by the business managers, but there are some topics from the micro economics which also essentially comes between the in the preview of managerial economics. But here typically in this course we will focus more on the micro economics concept and which is generally applied by the manager to take the business decision problem. So, managerial economics is the micro economics applied to the decision made by the business manager. And now we will see that, how we generally lead the economics into the managerial decision making problem and from there this managerial economics comes into picture.

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So, there are two stake holders here one is the manager manager is the person who directs to resources to achieve a stated goal and so, what is the role of manager? Role of manager is they have the resources and generally they are used to see that how the resources can be used to meet the objective of the firm or meet of meet the goal of the firm.


If the goal of the firm is profit maximization, if the goal of the firm is the revenue maximization, how these resources can be used to meet the objective of the profit maximization or objective of the objective of the revenue maximization. So, manager is the person who directs resources to achieve the stated goal.

(Refer Slide Time: 16:06)

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Economics

- The science of making decisions in the presence of scarce resources.

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The second stake holder here is the study of economics economics is what? The science of decision making, even in the presence of scarce resources. So, we had a discussion on that why how resources are scarce and human wants are unlimited. And the challenge for the economic agent is to use the scarce resources into the productive choosing among their alternatives. So, in the taking that (()) we can define economics here is the science of making decision in the presence of scarce resources.


So, manager is one, who directs the resources to achieve the stated goal of the firm and economics is one which talks about or study of the science of making decision in the presence of scarce resources. So, taking together both the stake holder manager and the economics manager is the person and the study what is getting used in solving managerial decision problem from which economics and from there we get the managerial economics.

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Managerial Economics

Managerial Economics Defined

- The study of how to direct scarce resources in the way that most efficiently achieves a managerial goal.

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And managerial economics is the study of how to direct scarce resource in the way, that the most efficiently achieve a managerial goal, so what is managerial economics? Managerial economics is the study of how to direct scarce resources in the way that most efficiently achieve a managerial goal. So, basically when a manager uses this managerial economics managerial economics is the study of how to direct scarce resources that most efficiently achieves a managerial goal.


So, basically when a manager you just use this economics for solving managerial decision problem, but content is the part of the managerial economics and from these two stake holder managerial economics we can define managerial economics is the study of how to direct scarce resources. In a way that mostly efficiently achieve the stated goal.

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Managerial Economics

Managerial economics: Science of directing scarce resources to manage more effectively

- resources – financial, human, physical
- management of customers, suppliers, competitors, internal organization
- organizations – business, nonprofit, household

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So, since the definition of the managerial economics is the science of directing scarce resources to manage more effectively. Here we get resources now what are the resources over here? The resources may be the financial resources, the resources may be the human resources, the resources may be the physical resources. So, here in managerial economics it is a study of directing the scarce resources that is directing the financial resources, directing the human resources and directing the physical resources.

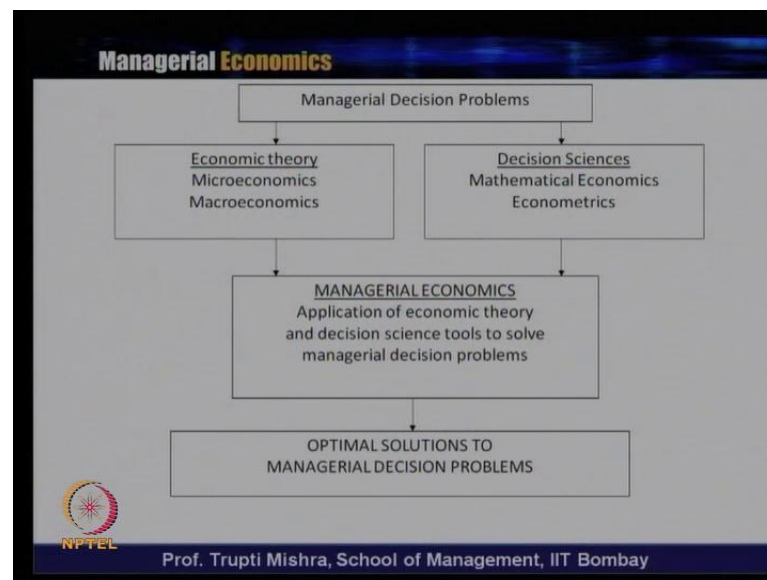
Then it comes since it is the directing the human resources, here it comes to the management of customers that management of supplier management of the competitor and management of the internal organization. And the organization can be business, the organization can be nonprofit, organization the organization can be household.

But here comes if the organization is business the goal of the organization is different and accordingly the resources has to be directed. Or the resources has to be planned to satisfy this want, if the because business organization is one which has the motto of profit making.

And as compared to that we have the nonprofit organization and non profit organization it is not about making profit and in this case again the business decision or the challenge for the manager will be different, because here it is not about achieving the profit rather here it is a nonprofit organization.

So non profit organization they have to look what is the goal of this typically typical nonprofit organization and accordingly the manager has to direct the scarcity resources into the end product use. Then we have household. So, household again if you look at it is not profit making rather it is about how to generate more income. So, that they can use that for the consumption or saving or may be for the future consumption. And again in this case again since the goal of the household its different, here again the scarce resource has to be used in a different fashion to meet the end objective. Now, since we say that since the economics is one which generally use in the managerial decision problems the economic concept and the economic principle, it is generally used in the managerial decision problem.

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We will see that what comes from the economic theory, what comes from the decision sciences for this managerial economics. So, typically there is a managerial decision problem and how this managerial decision problem gets solved. They use the concept of micro economics, macro economics which is part of economic theory; and then they use the concept of decision science typically the mathematical economics and econometrics where we use different mathematical tools, statistical tools and economics tool to solve the problem and from this the economic theory.

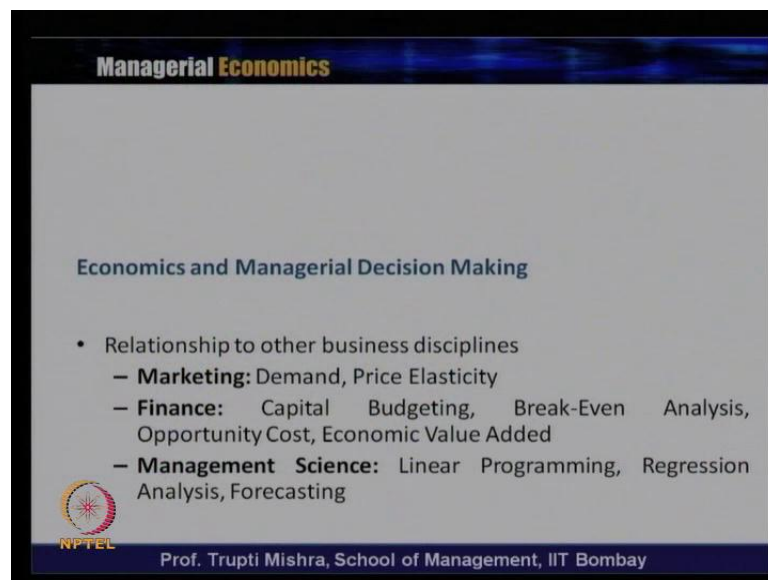
From the decision sciences we get into the managerial economics and this managerial economics is basically the application of economic theory and decision science tools to

solve the managerial decision problem. So, we have the economic theory from there we get the economic theory and principle, we have decision sciences from decision sciences we get the basically the mathematical tools statistical tools and the economic tool.

Application of economic theory and decision science tools to solve the managerial decision problem, basically leads to the optimal solution to the managerial decision problem. So, if there is a managerial decision problem, it can be solved through the through using the concept from economic theory and to that using the tools from the tools from the decision sciences, that may be statistical tool mathematical tool or the economic tool.

And taking this economic theory using the decision tool generally the manager try to give the optimal solution and from there the optimal solution emerge from the managerial decision problems. So, when it comes to the economic and the managerial decision making problems decision making we need to see that how there is a relationship with the other discipline typically this managerial economic.


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Managerial Economics

Economics and Managerial Decision Making

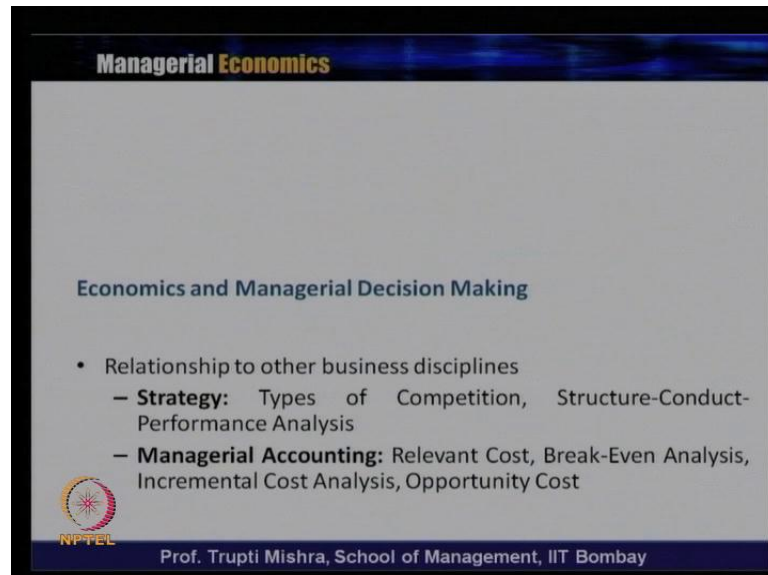
- Relationship to other business disciplines
 - **Marketing:** Demand, Price Elasticity
 - **Finance:** Capital Budgeting, Break-Even Analysis, Opportunity Cost, Economic Value Added
 - **Management Science:** Linear Programming, Regression Analysis, Forecasting

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We talk about demand and price elasticity, in case of in case of managerial economics which has also a link with the discipline of marketing. We talk about the capital budgeting break even analysis, opportunity cost economic value added that is in relevance with the finance. Then we talk about linear programming, regression analysis, forecasting that is part of the management science. So, even if this topic we cover in the

managerial economics it has also link with the other business discipline like marketing, finance and the management science.

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Managerial Economics

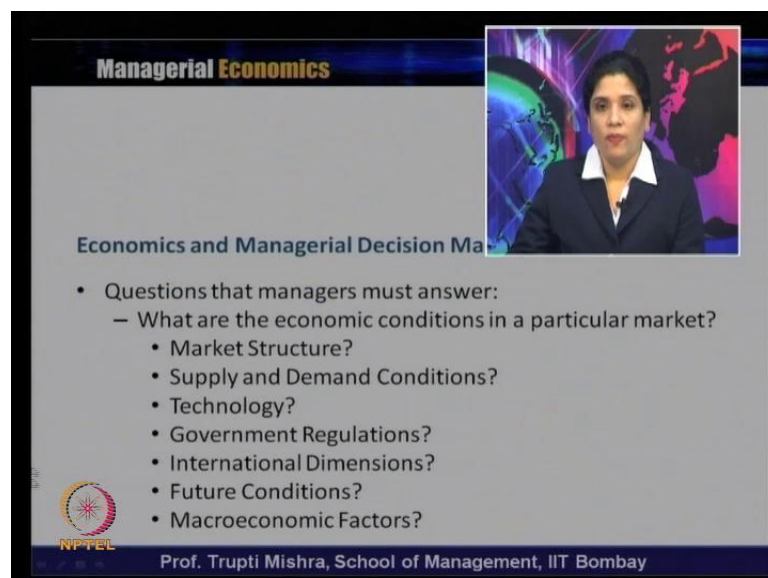
Economics and Managerial Decision Making

- Relationship to other business disciplines
 - **Strategy:** Types of Competition, Structure-Conduct-Performance Analysis
 - **Managerial Accounting:** Relevant Cost, Break-Even Analysis, Incremental Cost Analysis, Opportunity Cost

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Similarly, this has relationship with the strategy that is type of competition structure conduct performance analysis, it is the relationship with managerial accounting that is relevant cost, break even analysis, incremental cost analysis and opportunity cost.

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Managerial Economics

Economics and Managerial Decision Making

- Questions that managers must answer:
 - What are the economic conditions in a particular market?
 - Market Structure?
 - Supply and Demand Conditions?
 - Technology?
 - Government Regulations?
 - International Dimensions?
 - Future Conditions?
 - Macroeconomic Factors?

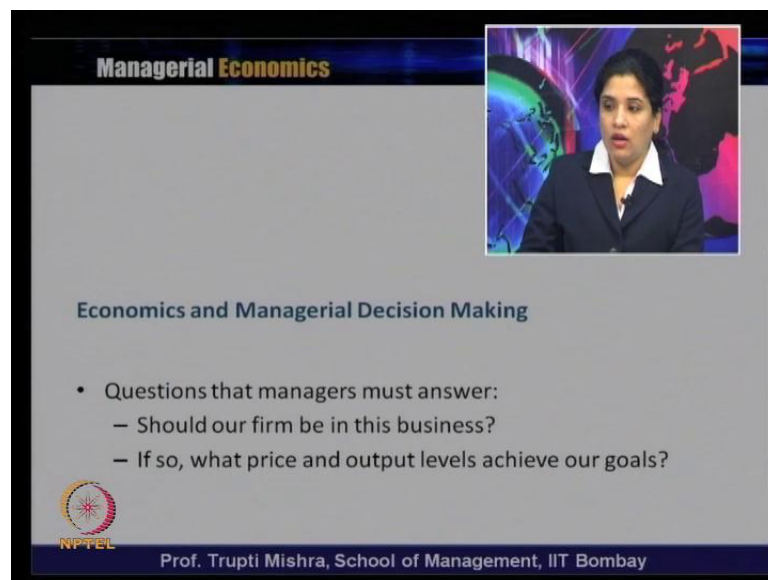
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Now, what are the questions, what is the general question that a manager must answer or from here we can form here what kind of we can form an opinion that what kind of

managerial decision is generally involved in the organizer. Now, the question that the manager must answer, what are the economic condition in a particular market, what is the market structure, what kind of market is being followed, what is the supply and demand condition, what is the technology being used.

What kind of government regulation is there, what is the international dimension in term of international trade and international finance, what is going to be the future condition for this firm? And what are the macroeconomic change in the macroeconomic in the government policy or change in the economic environment of economy, generally how it effects the firm.

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Managerial Economics

Economics and Managerial Decision Making

- Questions that managers must answer:
 - Should our firm be in this business?
 - If so, what price and output levels achieve our goals?

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Then the question that the manager must answer looking at all these factor, whether it is technology, whether it is policy, whether it is relationship with the international or the world economy. The question that the manager must answer is should our firm be in this business if, so what price and output levels achieve our goals.


So, if we look at these are the two basic manager problem, what the manager faces that is should our firm be in business and if so what is the price and output levels achieve our goals. Here we need to specify whether the profit has the maximization goal, whether the firm is having the revenue maximization goal.

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Managerial Economics

Economics and Managerial Decision Making

- Questions that managers must answer:
 - How can we maintain a competitive advantage over our competitors?
 - Cost-leader?
 - Product Differentiation?
 - Market Niche?
 - Outsourcing, alliances, mergers, Acquisitions?
 - International Dimensions?

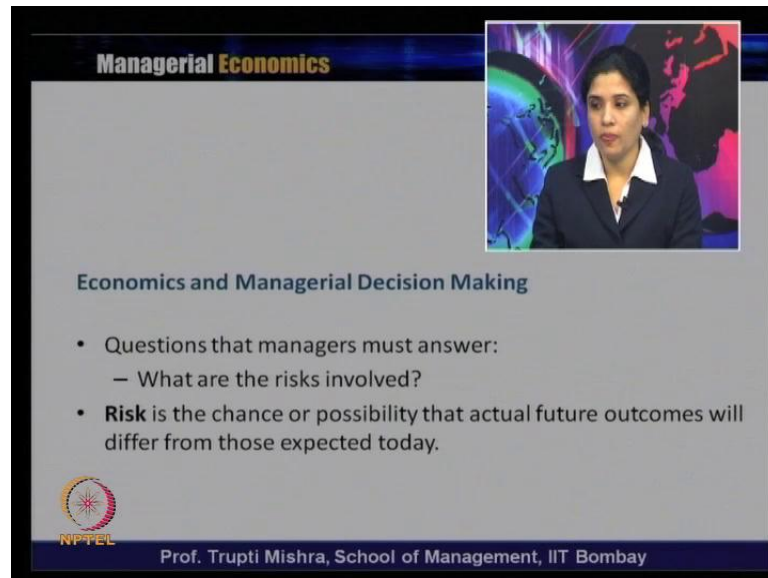
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Then looking at these achievements there are few more set of challenges that is, for the managers what the managers must answer. That is how can we maintain a competitive advantage over our competitors, that is will take typically through the product differentiation whether it is a cost leader, whether it is a low cost firm whether it is a high cost firm.

Product differentiation should be in term of content in term of quality in term of the services, whether it is a niche market, whether the outsourcing alliance merger acquisition is going through the beneficial. And again what is the international dimension that is in term of the merger acquisition alliance and the outsourcing.


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Managerial Economics

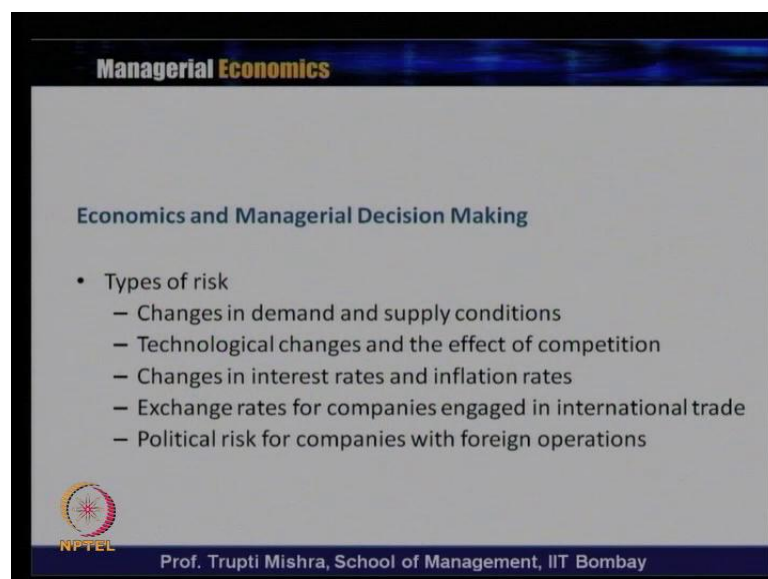
Economics and Managerial Decision Making

- Questions that managers must answer:
 - What are the risks involved?
- **Risk** is the chance or possibility that actual future outcomes will differ from those expected today.

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So, here again the another challenge comes from the manager, that what are the risks involved in that and what is risk? Risk is the chance or possibility that actual future outcomes will differ from those expected today. So, after taking all these decision, whether it is related to price, whether related to output the manager is also needed to answer that what is the risk involved in the firm, when it is taking a specific step strategy or specific output plan.


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Managerial Economics

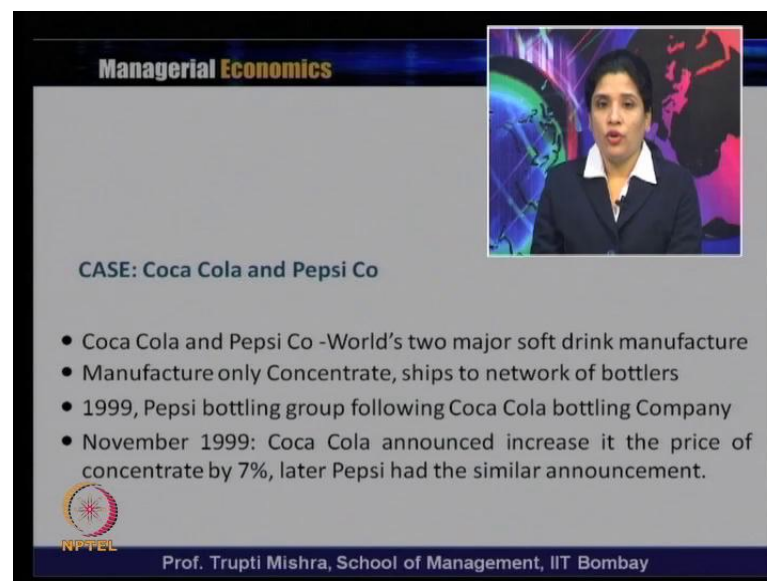
Economics and Managerial Decision Making

- Types of risk
 - Changes in demand and supply conditions
 - Technological changes and the effect of competition
 - Changes in interest rates and inflation rates
 - Exchange rates for companies engaged in international trade
 - Political risk for companies with foreign operations

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So, that again they had need to know the economic concept and the economic principle to understand this. Now, what are the type of risk over here? There is a risk associated when there is a change in the demand and supply condition; there is a risk associate when there is a technological changes and the effective competition; there is a risk associate, when there is a change in interest rates and inflation rates, risks associated with exchange rates for companies engaged in international trade; and risks associated with political risk for companies with foreign operations.

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Managerial Economics

CASE: Coca Cola and Pepsi Co

- Coca Cola and Pepsi Co -World's two major soft drink manufacture
- Manufacture only Concentrate, ships to network of bottlers
- 1999, Pepsi bottling group following Coca Cola bottling Company
- November 1999: Coca Cola announced increase it the price of concentrate by 7%, later Pepsi had the similar announcement.

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So, now we will take a example to understand this how this generally from the day to day activities of the company; how this managerial decision problem involve. So, if have some idea about this soft drinks manufacturer coco cola and Pepsi, there are two major soft drink manufacturer in the world; the manufacture only concentrate and ships to the network of bottlers and who finally gives the bottle soft drink. In 1999, Pepsi bottling group following coco cola, bottling company and what they did, and what they did, they announce the increase in the price of concentrate.

And how they did that, because in November 1999, coco cola also announced that increase in the price of concentrate by 7 percent; before that also, Pepsi followed another decision of coco cola like coco cola separated its manufacturing with the bottling company and the same decision followed by Pepsi. So, whether it is a separation of the

bottling company or whether it is the increase in the price of coco cola immediately both the decision get followed by the Pepsi group.

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Managerial Economics

CASE: Coca Cola and Pepsi Co

- 7% increase in price will lead to increase in retail price from \$1.99 to \$2.49.
- Price increases were welcomed by Beverage Digest editor with the justification of improving over all profitability and margin.

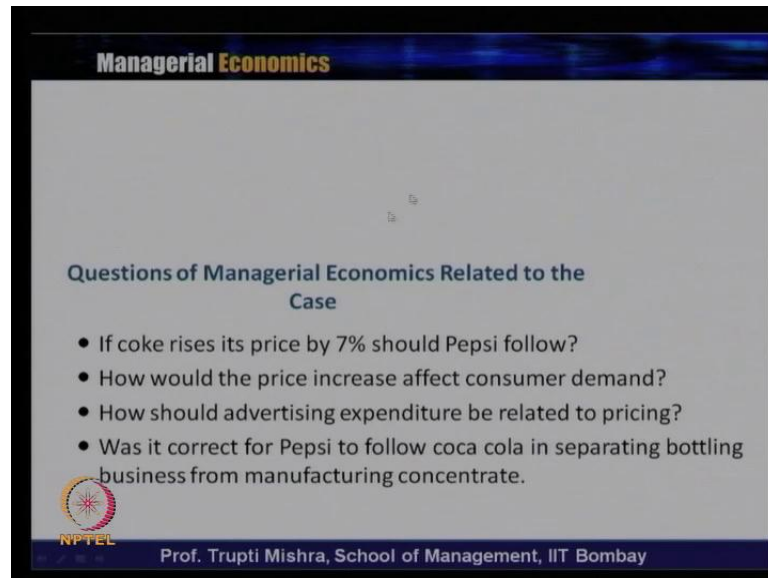
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Now, 7 percent increase in the price will lead to increase in the retail price 1.99 dollar to 2.49 dollar. So, price increase is welcomed by beverage digest editor with the justification of improving the overall profitability and margin. So, when there is a 7 percent increase in the price of the product that leads to increase in the retail price from 1.99 dollar to 2.49 dollar.

However the increase in the price is where welcome by the beverage digest editor and the justification for improving this is that and the overall profitability and margin and that is why the price should increase.

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Managerial Economics

Questions of Managerial Economics Related to the Case

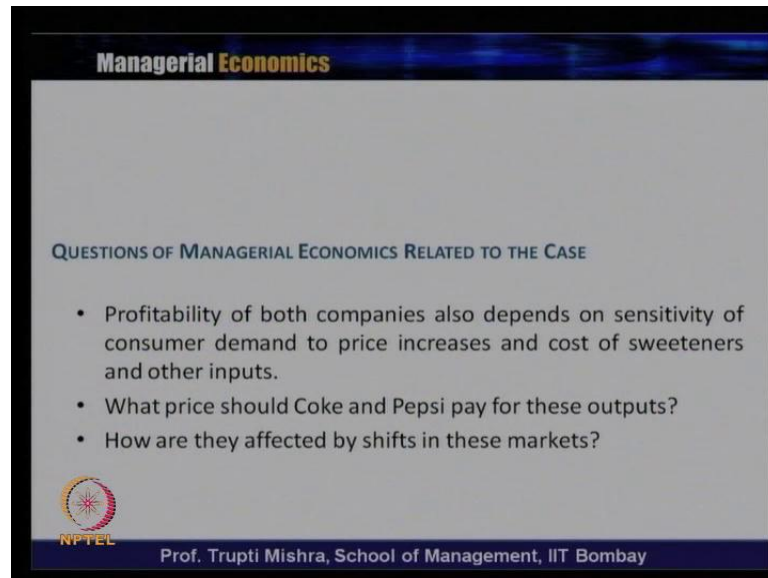
- If coke rises its price by 7% should Pepsi follow?
- How would the price increase affect consumer demand?
- How should advertising expenditure be related to pricing?
- Was it correct for Pepsi to follow coca cola in separating bottling business from manufacturing concentrate.

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Now here how we can refrain this to a question of managerial economics part of managerial economics or part of managerial business decision. If coke increases its price by 7 percent should Pepsi follow, this will typically address in the theory of market, typically address when you talk about the elasticity of demand. How would the price increase affect consumer demand? It is again the price demand relationship and the elasticity of demand.

How advertisement expenditure should be related to pricing here we talk about cost of production, how advertising cost increase the average cost this will discuss in the case of cost analysis and monopolistic competition. Was it correct to was it correct for Pepsi to follow coco cola in separating from bottling business from manufacturing concentrate? This we will analyze through our oligopoly market structure. Generally how the farm farms behave in the market when there is a interdependence from both the firm in the typical market.


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Managerial Economics

QUESTIONS OF MANAGERIAL ECONOMICS RELATED TO THE CASE

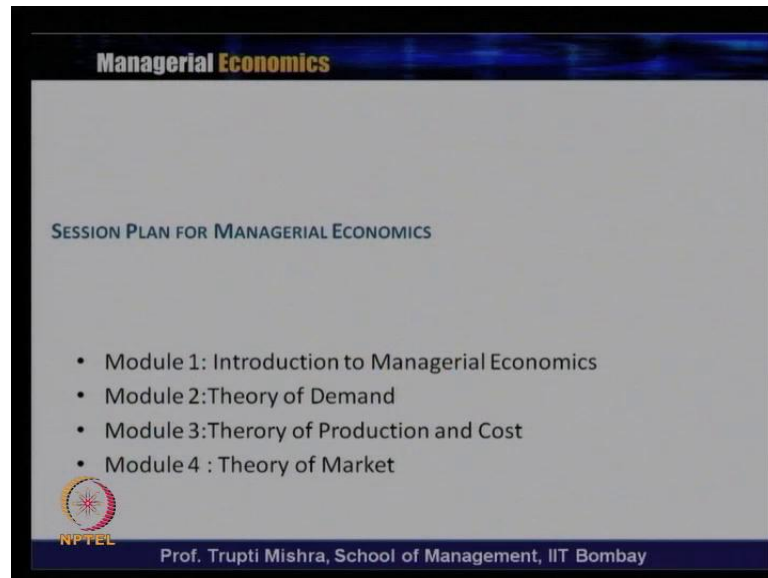
- Profitability of both companies also depends on sensitivity of consumer demand to price increases and cost of sweeteners and other inputs.
- What price should Coke and Pepsi pay for these outputs?
- How are they affected by shifts in these markets?

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Then here again the question related is the profitability of both the company also depends on the sensitivity of the consumer demand to price increase and the cost of sweeteners and other inputs the need to check what is the sensitivity. And the sensitivity can be analyzed through the elasticity of demand, what price should coke and Pepsi pay for these outputs here again we will see that who is going to decide the price. So, partly it will be addressed in the cost analysis and partly it will be announced in market structure.

How are they affected by the shift in this market, so here again we will discuss this is in the context of the demand analysis and the theory of market structure. So, this is a small example to understand the difference between the understand the relationship between the company that is coke and pepsi it is an event if you look at it is an event, it is an economic activity. And similarly for the other activity happens in the day to day business life that can be that solution can be found by using the economic concept on economic principle and this generally we address in the managerial economics.


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Managerial Economics

SESSION PLAN FOR MANAGERIAL ECONOMICS

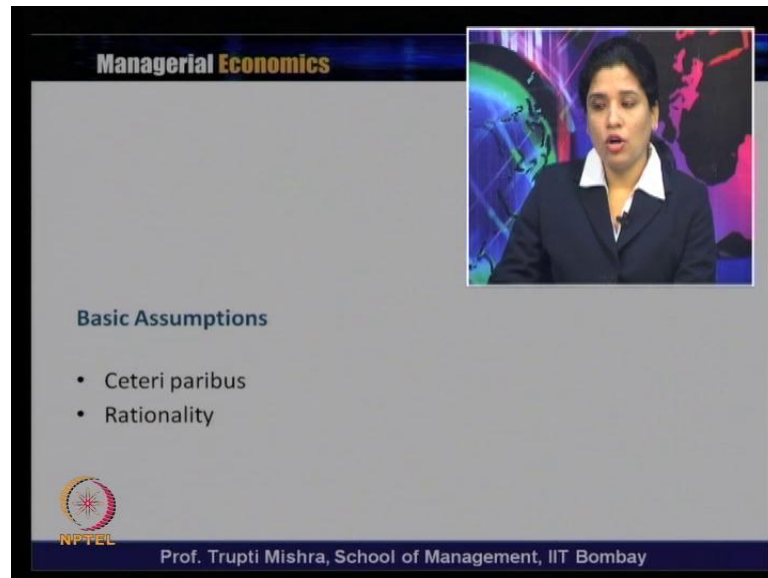
- Module 1: Introduction to Managerial Economics
- Module 2: Theory of Demand
- Module 3: Theory of Production and Cost
- Module 4 : Theory of Market

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So, the entire managerial economics course is planned in 4 module, module 1 talks about introduction to managerial economics typically the economics term what generally being used and the basic economic analysis and the optimization technique. Then theory of demand address the relationship between demand supply and market equilibrium and also the demand forecasting then theory of consumer behavior. Then theory of consumer production and cost basically deals with short run long run production analysis, short run long run cost analysis; expansion path and economic region economic region of production and also the economy of scale. Finally, module four will talk about the different kind of market structure the pricing practices and finally, the sum up of the entire course.

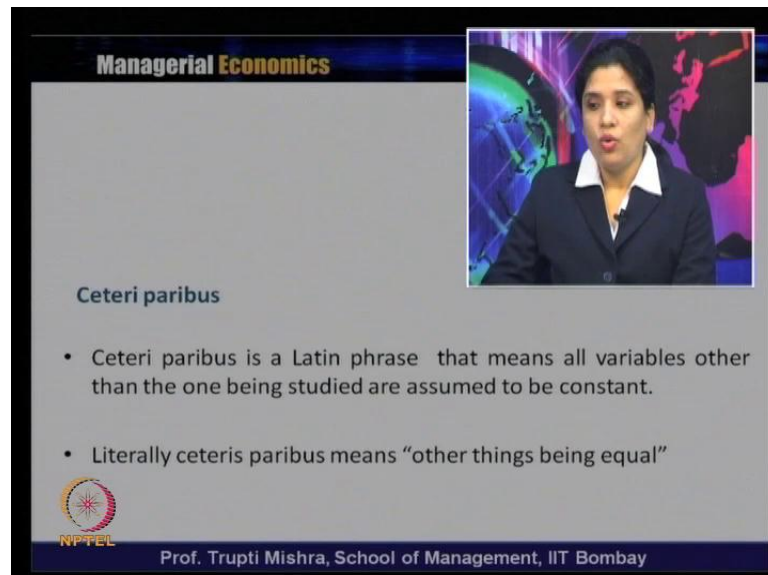
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The slide is titled "Managerial Economics" in the top left corner. In the top right corner, there is a video inset of Prof. Trupti Mishra. The main content area is titled "Basic Assumptions" and lists two bullet points: "Ceteri paribus" and "Rationality". At the bottom left is the NPTEL logo, and at the bottom right is the text "Prof. Trupti Mishra, School of Management, IIT Bombay".

So, to start this module 1 there will be basically deals with the basic economic terms or the generally will be using for the entire course or the, what is the basic generally used for all economic principle we are going to discuss this. So, there are assumption mainly taken one is ceteri paribus another is rationality.

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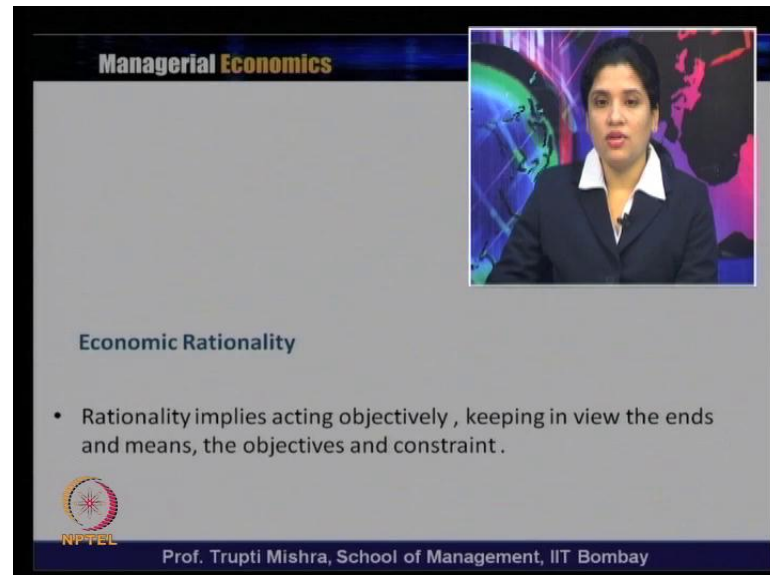


The slide is titled "Managerial Economics" in the top left corner. In the top right corner, there is a video inset of Prof. Trupti Mishra. The main content area is titled "Ceteri paribus" and lists two bullet points: "Ceteri paribus is a Latin phrase that means all variables other than the one being studied are assumed to be constant." and "Literally ceteris paribus means 'other things being equal'". At the bottom left is the NPTEL logo, and at the bottom right is the text "Prof. Trupti Mishra, School of Management, IIT Bombay".

What is ceteri paribus, it is a it is a Latin phrase; that means, all variables other than the one being studied are assumed to be consumed and here the literally the ceteri paribus means that other things being equal. So, if there are five variable the study variable are

five and the relationship between two variables are being studied the other three variables has to be constant.

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Managerial Economics

Economic Rationality

- Rationality implies acting objectively, keeping in view the ends and means, the objectives and constraint.

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So, ceteri paribus means all variable other one variable are being studied are assumed to be constant. And the literal meaning of ceteri paribus means other being equal, that is the assumption that is the basic assumption we follow for all power theory all power principle. Then the second assumption comes as the economic rationality and here rationality implies basically acting objectively keeping in view the end and means objective and the constant.


So, if layman understanding not biased for anything rather we are unbiased and keeping the object in mind, we take a decision or take a activity. So, it implies acting objectively keeping in view of the end and means and the objective and the constant.

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Managerial Economics

Economic Rationality

- Economics assume rationality on the parts of its subject like consumer, producer and seller.
- Economic rationality means economic agents see feasible, known and alternative course of action, rank them on priority and choose the one which is highest in ranking order.

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It generally in economics, we assume the rationality on the part of subjects like all the economic agent, that is consumer producer and seller form or the economy as a whole. So, economic rationality means economic agents see feasible known and alternative course of action, and rank them on priority and choose the one which is highest in ranking order. So, rationality is one where if you look at the process, if you define the process first the economic agent has to be think, what is the feasible course of action that is known to them.


What is the alternative course of action then, they will rank them on the basis of priority basis and they will choose that as the option that is highest in the order and that is generally known as the economic rationality.

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Managerial Economics

Review of Economic Terms

- **Resources** are factors of production or inputs.
 - Examples:
 - Land
 - Labor
 - Capital
 - Entrepreneurship

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Then we will talk about resources, there are mainly four factors of production or four resources that is used in economics; that is one is land for any production process these are the factory production and these are land, labor, capital and entrepreneurship.

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Managerial Economics

Review of Economic Terms

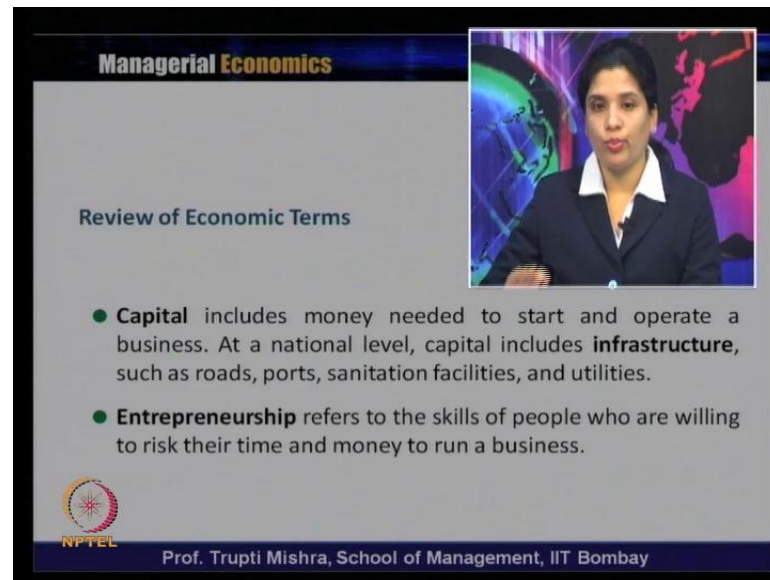
- **Land** refers to everything on Earth that is in its natural state, or Earth's natural resources.
- **Labor** refers to all the people who work in the economy.

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So, land refers to everything on earth that is in its natural state or earth's natural resources labor refers to all the people who work in the economy, whether they are skilled, whether they are unskilled and the accordingly the elimination for both of them changes. So, for the skilled we will always say salary for unskilled labor we always say

wages. And land refers to everything on the earth that is in the natural state or earth's natural resources. However the definition of the land changes when the reclamation is also done. So, that is also to be added in the in the possible list of the land.


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Managerial Economics

Review of Economic Terms

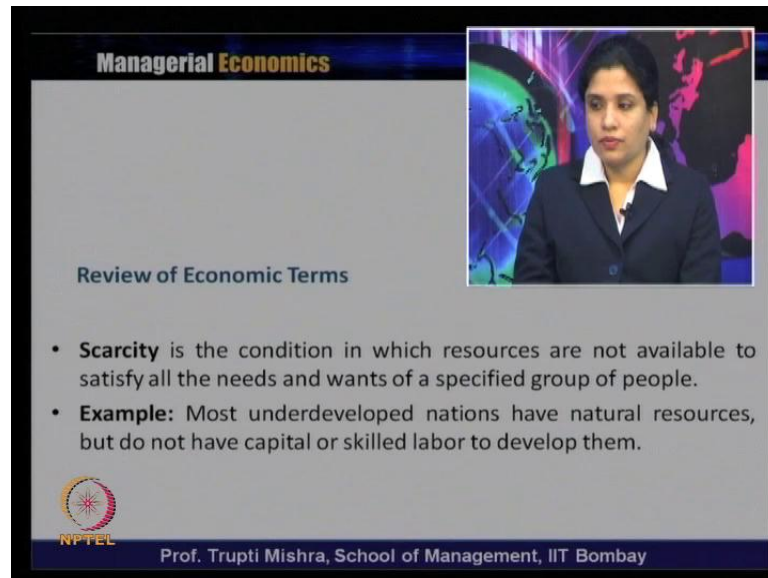
- **Capital** includes money needed to start and operate a business. At a national level, capital includes **infrastructure**, such as roads, ports, sanitation facilities, and utilities.
- **Entrepreneurship** refers to the skills of people who are willing to risk their time and money to run a business.

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Then capital it includes money needed to start an operate business at a national level capital includes infrastructure such as roads ports sanitation facilities and utility services. And also in the industry level or firm level even (()) can be consider as a capital, because they are also one kind of infrastructure to produce the goods and services. Then the last factor entrepreneurship it refers to the skills of people who are willing to risk their time and money to run a business; so the entire uses of skill and their time, and money to run the business that is typical known as the entrepreneurship.


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Managerial Economics

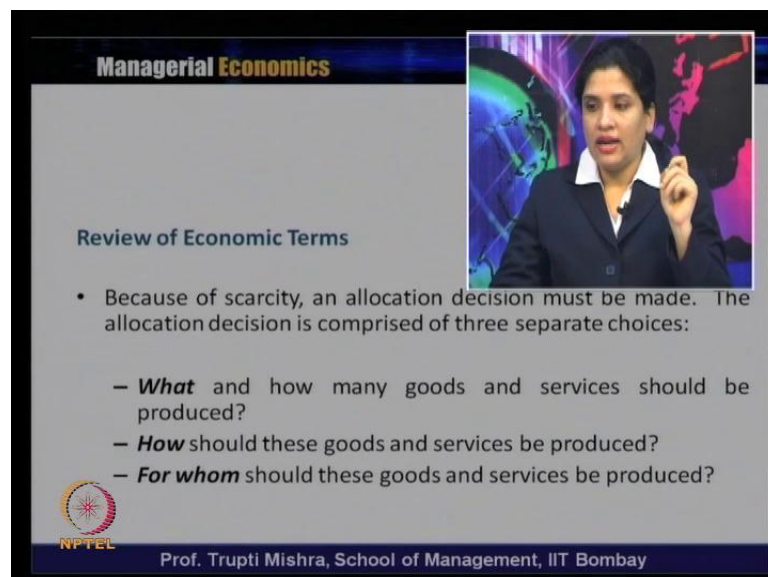
Review of Economic Terms

- **Scarcity** is the condition in which resources are not available to satisfy all the needs and wants of a specified group of people.
- **Example:** Most underdeveloped nations have natural resources, but do not have capital or skilled labor to develop them.

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So, we know that there is a scarcity and what is scarcity scarcity is a condition in which resources are not available to satisfy all the needs and wants of a specified group of people. And if you look at the most under developed nation have natural resources, but do not have the capital or skilled labor to develop them and that is why there is a scarcity.


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Managerial Economics

Review of Economic Terms

- Because of scarcity, an allocation decision must be made. The allocation decision is comprised of three separate choices:
 - **What** and how many goods and services should be produced?
 - **How** should these goods and services be produced?
 - **For whom** should these goods and services be produced?

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And since there is a scarcity the the allocation decision must be made and what is the allocation decision? It comprise of the three separate choices that is what and how many

goods and services should be produced, how should these goods and services be produced and for whom these goods and services be produced.

So, what to produce and how to produce and for whom to produce are three basic allocation problems or the three basic question, that is generally known as the three basic economic problem of the that is one, what to produce, second is how to produce and third is for whom to produce.

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Managerial Economics

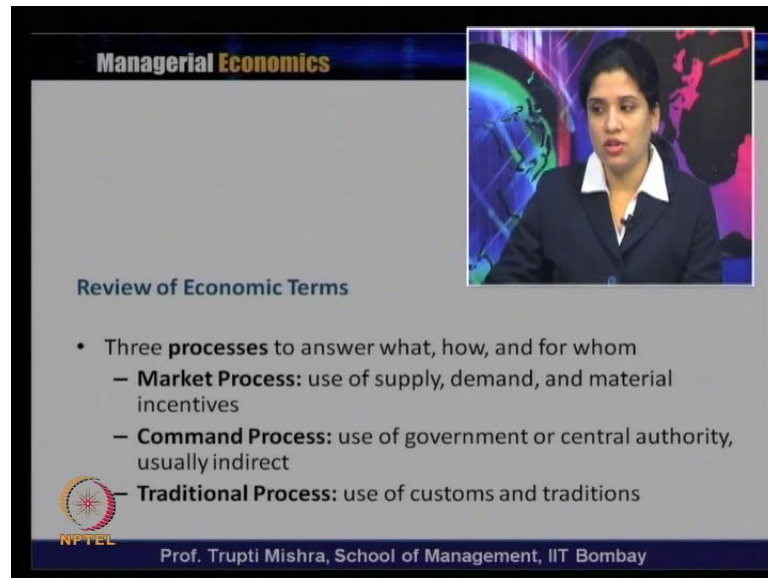
Review of Economic Terms

- Economic Decisions for the Firm
 - **What:** The product decision – begin or stop providing goods and/or services.
 - **How:** The hiring, staffing, procurement, and capital budgeting decisions.
 - **For whom:** The market segmentation decision – targeting the customers most likely to purchase.

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On this basis on these three basic the economic decision for the firm is dependent, typically when it comes to what it is about the product decision of the firm, whether to begin the production, whether to stop providing goods and services. How the hiring staffing procurement and capital budgeting decision and for whom the market segmentation decision targeting the customers most likely to purchase. So, what consider to the product decision of the firm how is basically the hiring staffing procurement capital budgeting decision. And for whom also the market segment decision that is targeting the customer who are the end users to purchase these goods.

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Managerial Economics

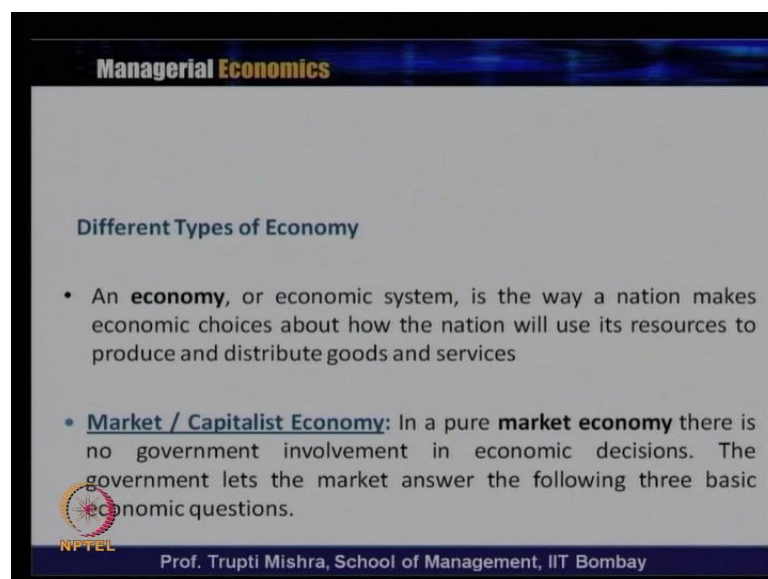
Review of Economic Terms

- Three **processes** to answer what, how, and for whom
 - **Market Process:** use of supply, demand, and material incentives
 - **Command Process:** use of government or central authority, usually indirect
 - **Traditional Process:** use of customs and traditions

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Now, from here there are three processes to answer these how what and for whom. One is the market process here generally the use of supply, demand forces and material incentives to answer for these how what and for whom. In the command process, there is the use of government or central authority, usually indirect process and traditional process, when there is a use of customs and traditions to decide for what how and for whom.

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Managerial Economics

Different Types of Economy

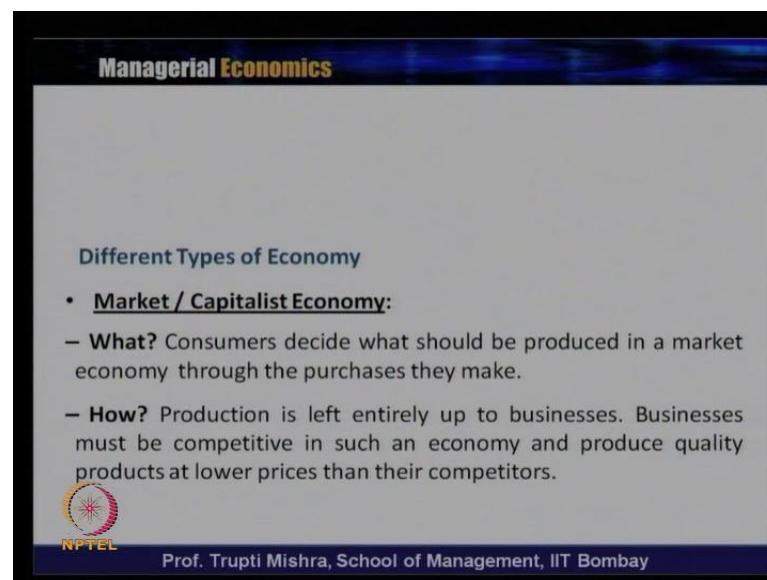
- An **economy**, or economic system, is the way a nation makes economic choices about how the nation will use its resources to produce and distribute goods and services
- **Market / Capitalist Economy:** In a pure **market economy** there is no government involvement in economic decisions. The government lets the market answer the following three basic economic questions.

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On the basis of three processes, generally we can define the different types of economy and what is the economy an economy is the way a nation makes economic choices about how the nation will use its resources to produce and distribute goods and services. So, from here the first kind of economic come is market and capitalist economy and in a pure market economy there is no government involvement in economic decisions. The government lets the market answer the following three economic questions that is what produce how to produce and for whom to produce.

So, in a market economy there is no government involvement this is also known as the capitalistic economy; generally, the free hand principle of the individual and principle works here, the market forces correct imbalance itself, whenever it is required.

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The slide is titled "Managerial Economics" in a blue header. Below the title, the text "Different Types of Economy" is displayed. A bullet point lists "Market / Capitalist Economy:" followed by two sub-points: "What?" and "How?". The "What?" sub-point states that consumers decide what should be produced through their purchases. The "How?" sub-point states that production is left to businesses, which must be competitive and produce quality products at lower prices. At the bottom left is the NPTEL logo, and at the bottom right is the text "Prof. Trupti Mishra, School of Management, IIT Bombay".

The thus second in the market capitalistic economics how the decided, the consumer decides what should be produced in the market economy through the purchase they make. So, the consumer decides what to produce because ultimately they are end user.

How to produce the production is left entirely up to business businesses must be competitive in such economy and produce quality products at lower prices than their competitors. And for whom typically in a market economy the people who have more money are able to buy more goods and services.

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Managerial Economics

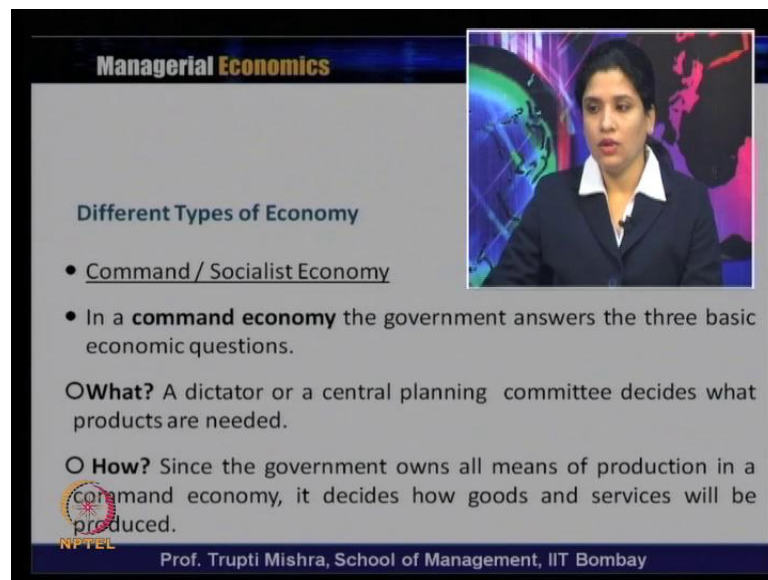
Different Types of Economy

- **Market / Capitalist Economy:**
- **For whom?** In a market economy, the people who have more money are able to buy more goods and services.
- Based on Adam Smith's invisible hand principle
- Examples: USA / European countries

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And typically the market and capitalistic economy based on the Adam Smith invisible hand principle and typical example of market and capitalistic economy is USA and the European countries.


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Managerial Economics

Different Types of Economy

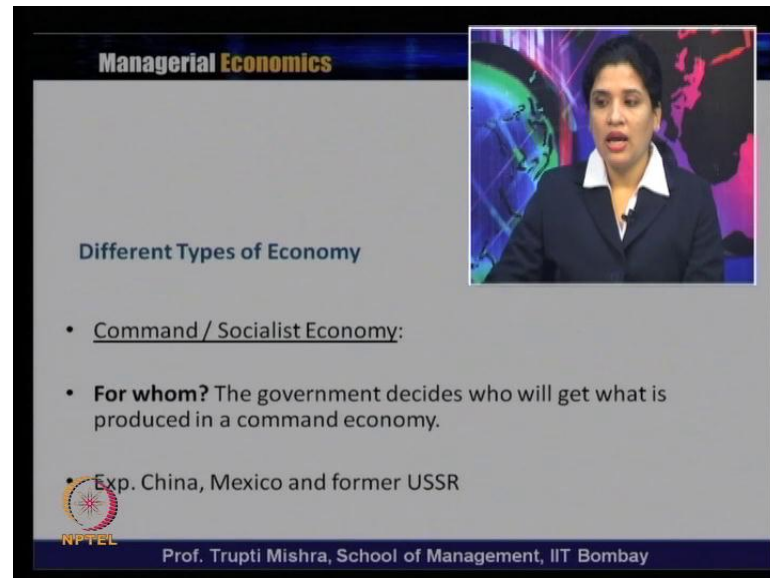
- **Command / Socialist Economy**
- In a **command economy** the government answers the three basic economic questions.
- **What?** A dictator or a central planning committee decides what products are needed.
- **How?** Since the government owns all means of production in a command economy, it decides how goods and services will be produced.

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Then the second kind of economy is command and capitalist economy in the command economy the government answers the three basic economic questions, that is what a dictator or a central planning committee decides what products are needed. How since

the government owns all means of production in a command economy it decides how goods and services will be produced.

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The slide is titled "Managerial Economics" and features a video inset of a woman speaking. The main content is a list of points under the heading "Different Types of Economy".

- Command / Socialist Economy:
- **For whom?** The government decides who will get what is produced in a command economy.
- Exp. China, Mexico and former USSR

At the bottom of the slide, there is an NPTEL logo and the text "Prof. Trupti Mishra, School of Management, IIT Bombay".

And for whom the government decides, who will get what is produced in a command economy. And typical examples of command economy are china Mexico and former USSR, what is the essential difference between the market or capitalistic economy, command and socialistic economy in market and capitalistic economy, there is absence of government intervention the market forces is free the invisible hand works.

The market forces decides or the consumer producer decides the what to produce, how to produce and for whom to produce; where as in case of socialistic economy or the socialistic economy or the command economy generally the authority or the government means all the productive resources.

And generally they directs how the resources has to be used what to be produced and finally, who is going to consume or who is going to purchase these products. The typical example is the china then in between these two they are too extreme one is capitalistic economy entirely free command economy that is entirely restricted through the authority or through the government.

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Managerial Economics

Different Types of Economy

- Mixed Economy: Private sector is allowed to use free market within the broader political and economic policy framework, public sector reserves certain trade / industry / services / activities
- Example : India.

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So, in between these two we get the mixed economy and mixed economy is particularly here it is the mix of the capitalist economy and the socialist economy. Here the private sector is allowed to use free market within the broader political and economic policy framework; public sector reserves certain trade or industry or services or activities. So, here some of the sector is directed by the government restricted by the government some of the sector is given to the to private sector and they have to add a whatever the policy framework they have to add a what are the rules and regulations. So, part of the sector goes to private, part of the sector goes to restrict by the government. The typical example is India, India generally known for the kind of economic structure that follows that is mixed economy.

So, to summarize whatever we discussed today, we discussed that how generally the managerial economics emerge in the, because in the managerial decision problem. The managerial decision problem can be solved with the help of the concept from economic theory that is from the micro economic macro economics.

And using the decision tools, that is statistical tool, mathematical tool and economic tool and that generally used to solve of the managerial decision problem that way they get the optimal solution. Then we talked about what are the challenges the manager faces and from there if you look at the three basic problems that is what to produce how to produce and for whom to produce; that is dealt with the three different kind of economy the

different kind of processes. And also we talked about two basic assumption that its economic rationality and the ceteri paribus.

And along with it also the whatever was the simple understanding of factor of production or the inputs what gets used in the production. So, we will continue our discussion on reviewing the basic economic terms in the next session also. So, next session we will talk about opportunity cost, the importance of profit or the concept of profit accounting profit and also the marginal and incremental analysis. And finally, we will see the model on economy how there is a inter relationship between the resources. How the flow from sector to another and how the income flow from the one sector of the economy to the another sector.