ECONOMICS: The study of how limited productive resources are efficiently allocated in a world of unlimited wants.

## SCARCITY: WANTS EXCEED RESOURCES

We want more than we are capable of getting.

MICROECONOMICS: deals with specific economic units and a detailed consideration of these individual units. The economist is placing a specific portion of the economy under a microscope.

MACROECONOMICS: Deals either with the economy as a whole or the basic subdivision or aggregates such as government, household, or business sectors, which make up the economy.

CETERIS PARIBUS: Means other things being equal. In economics when you are working on a problem we must assume that only those variables will change. All others remain the same.

OPPORTUNITY COSTS: The amount of other products which must be foregone or sacrificed to obtain some amount of any given product. Ex: In order to have more pizzas we must give up robots. The opportunity cost of pizzas is therefore measured in robots.

## Factors of Production (AKA: Resources)

1) Land: This includes the land and its natural resources
2) Labor: This includes all services of people used in production except Entrepreneurial ability, which will be discussed later.
3) Capital: This is all the things used in production.
(Notice that money is not capital because it in itself is useless.)
4) Entrepreneurial Ability: This is the person responsible for taking the first three and combining them into a product or service. He is also the one who bears the risk of the undertaking.
5) Fixed Resources:
6) Fixed Technology:
7) Two Products: (Usually one capital good and one consumer good)
8) We are achieving economic efficiency:

This also assumes that what is being produced is what we want to be produced.
EFFICIENCY: Resources are devoted to goods most wanted by society and producing in the least costly way.
Given that we have a world of unlimited wants in a world of limited resources we must decide how to allocate production to satisfy society. We must look at our production possibilities.

## Assume two products

1. What is the opportunity cost involved?
2. Why is the PPC concave?

Law of Increasing Opportunity Costs: As more and more of a good is produced it takes more away from the other because the resources are not easily converted.
3. What does a point inside the curve represent?
4. Can you think of an example in history when we were inside the PPC?
5. What is the significance of a point outside the PPC.

Suppose that additional resources (land, labor, capital and entrepreneurial ability was found. (In other words the economy is expanding.) HOW WOULD THIS AFFECT OUR PPC?

The same is true for technological advancements or improvements in education.
One thing a society must decide is if it wants to produce more goods that will help it advance or more goods that it can consume now. Should we produce at A or B? Either works, it just depends on what society wants. However, A will help you advance quicker in the long run.

6. Under what conditions could the point outside the PPC be reached?

Opportunity Cost - the value of the best alternative given up when a choice needs to be made between mutually exclusive options.

|  | Ron | Leslie |
| :--- | :---: | :---: |
| Chairs produced per hour | 5 | 4 |
| Shelves produced per hour | 15 | 20 |

Marginal Analysis is very important in economics. Marginal means change.

## Broad Social Goals of societies.

1. Economic Freedom: The right to choose your own occupation, employer, and use of your money (taxes?). Business owners have the right to produce what they want and how much they want.
2) Economic Efficiency: gains must be more than costs.

Efficiency must continually improve if we expect our standard of living to increase.
3) Economic Equity: Equity means fairness

Illegal to discriminate based on age, race, sex or disability
False advertising, unfair pricing and dangerous products are prohibited.
4) Economic Security: protection from layoffs due to illness
5) Full Employment:

If people cannot work they cannot support their family. Society is hurt.
Unemployment reduces efficiency because factors of production are not being used.
Unemployed people must rely on others for support. (Family, friend, government...)
6) Price Stability

Inflation is defined as rise in the general level of prices
Inflation reduces every person's buying power
Inflation is especially difficult for people on fixed incomes (Fixed incomes are incomes that do not rise as prices rise)

Inflation Hurts Savers
7) Economic Growth: the increasing of our production of goods and services

Is necessary to satisfy the needs and wants of a growing population
Do you want your children to live better than you do?
Do you want to improve the quality of home, medical care, transportation, and clothing....
To do this requires economic growth.

The idea of any economic system is to answer the fundamental questions of what, how, and for whom to produce. These are called the three basic questions.

In order to understand Command and Market economies it is helps to understand the difference between Capitalism, Socialism and Communism. These are all based on who owns the productive resources.

Capitalism: an economic system in which private individuals and businesses own the factors of production. Supply and demand determines the prices in a capitalist economy.

Socialism: many of the basic productive resources are government owned and operated. Prices still plays a role in distribution but the government often controls the price to the extent that the market is not free to work.

Communism: both a political and economic framework, all property is collectively owned and labor is organized for the common advantage of the community.

For an economy to be Capitalistic it needs to meet the following requirements.

1) Private Property: Individuals must have free control of property. They must be able to control, use and dispose of that property as they see fit.
2) Freedom of Enterprise and choice: must be able to produce and sell Goods and Services. There should be no government restrictions.

Owners must be able to use Goods and services in any way they see fit.
Workers must have access to any occupation they see fit.
Consumers must have access to all goods and services (at a price)

## 3) Role of Self Interest:

All parties must be free to try and get the most out of the system. (seller tries to get a high price while the buyer tries to get a low price.
4) Competition: Large number of buyers and sellers each free to enter and exit the market If you have a large number of buyers and sellers this means none will be able to influence the price.
5) Markets and Prices:

Capitalism is a market economy so without a free market you no longer have Capitalism.
Market: simple mechanism or arrangement which brings buyers (demanders) and sellers (suppliers) of goods and services together.
6) Limited Government Interaction:

The market must be self-regulating. As soon as government steps in it upsets the balance.

## Market, Command and Mixed Market Economies

Command Economies provide the least amount of economic freedom while pure Market economies provide the most economic freedom. In reality, neither really exists. Economies are actually Mixed Market. It all then comes down to where they fall on the spectrum.


Command Economy (Less Capitalistic)
A central authority (usually government) makes decisions. The people are expected to follow the commands of the authority. The central authority defines their needs and wants.

Strengths:
If circumstance requires a quick change in allocation of resource it can meet this need rapidly.
Weaknesses:
They are not designed to meet the wants and needs of the people.
People have little incentive to work hard in a command economy because they will get paid by meeting quota. Require huge bureaucracies to make decisions. This slows the day to day decisions. It also raises costs. Little flexibility to deal with day to day problems. Decisions must be made with approval from above. People have trouble getting ahead in a command economy.

## Market Economy (More Capitalistic)

People and business decide how to allocate resources. A market allows buyers and sellers to meet to exchange goods and services. The dollar forces decisions instead of central authority or customs.

## Strengths

Markets can adjust over time.
Producers can decide WHAT to produce and HOW to produce. This leads to greater efficiency in the market. Small degree of Government interference.
Individual decisions direct the use of scare resources.
A very large variety of goods will be produced because there are buyers.
Both majority and minority get what they want.
Weakness:
The FOR WHOM part is weak.
Sometimes competition is not as great as it should be.
If market fail to meet needs and wants this system breaks down. It only rewards production, so those who do not produce suffer. (Young, old, sick.)

Unit One, Day Four (pages 17, 40)
Absolute and Comparative Advantage
Input vs. Output:
Output problems state that you get a certain amount of product out of a given input. Examples miles per gallon, pieces of gum per dollar...

Input problems state that it takes a certain amount of input to get a given product. Examples are hours to do a job, apples to make a pie,

## Absolute Advantage:

For output problems you look at if one nation (individual/company) can produce more output with the same resources as the other.

For Input Problem: you look at who uses the least amount of input to get the output.
Examples:
Output: (Tons produced per hour)

|  | Milk | Cheese |
| :--- | :--- | :--- |
| Ted | 70 | 15 |
| Nancy | 40 | 45 |



Ted


Nancy

You can see that Ted can produce 70 tons in an hour while Nancy can only produce 40 tons of milk in an hour. It makes sense that Ted should produce Milk because he has the absolute advantage in milk

On the other hand Nancy can produce 45 tons of cheese to Teds 15 tons. Therefore Nancy produces Cheese. She has the absolute advantage in Cheese.

For Input Problem: you look at who uses the least amount of input to get the output.
Input: (hours to build)

|  | Car | Tank |
| :--- | :--- | :--- |
| Company X | 2 | 2 |
| Company Z | 3 | 1 |

You can see that it takes X 2 hours to build a car and Z 3 hours. Therefore X should build the car. It takes Z one hour to build a tank but it takes X 2 hours. Therefore Z should build tanks.

Comparative Advantage: One nation (individual/company) can produce a good at a lower opportunity cost than the other. This comes into play when one individual (nation, company....) has the absolute advantage in both.

Output method: Must look at the opportunity cost in order to determine comparative advantage. The person with the lowest opportunity cost should produce that good.

Output: (Tons produced per hour)

|  | Milk | Cheese |
| :--- | :--- | :--- |
| Ted | 70 | 15 |
| Nancy | 40 | 45 |

We already found that Ted has absolute advantage in Milk and Nancy has absolute advantage in Cheese. What about comparative advantage?

Input Method: You must first convert to an output problem and then determine who has the lowest opportunity cost.

Input: (hours to build)

|  | Car | Tank |
| :--- | :--- | :--- |
| Company X | 2 | 2 |
| Company Z | 3 | 1 |

You will notice that when one has absolute advantage in a product and the other has the absolute advantage in the $2^{\text {nd }}$ product they will always have the comparative advantage in those product.

Product per hour

|  | Corn | Wheat |
| :--- | :--- | :--- |
| Mike | 8 | 6 |
| John | 2 | 4 |

Notice that Mike can produce more Corn and Wheat. He has absolute advantage in both. Does this mean he should produce both. NO!!! He should produce the one that he has comparative advantage in and then trade for the other.

Who has comparative advantage?
You will never have a situation where someone has comparative advantage in both!
Input Method:
Apples to make one

|  | Pie | Juice |
| :--- | :--- | :--- |
| Susan | 5 | 3 |
| Megan | 6 | 3 |

For each of the following problems identify if it is input or output problem, who has absolute advantage, and who has comparative advantage.

1. Days to Produce

|  | Pen | Crayons |
| :---: | :---: | :---: |
| Jean | 5 | 4 |
| Gary | 3 | 3 |

2. Number Produced

|  | Books | Computers |
| :---: | :---: | :---: |
| Eve | 4 | 2 |
| Jake | 5 | 5 |

3. Acres to Produce

|  | Rice | Soy |
| :---: | :---: | :---: |
| France | 60 | 12 |
| Germany | 20 | 12 |

4. From one ton of peanuts

|  | Peanut Butter | Peanut Oil |
| :---: | :---: | :---: |
| ABC Corp | 50 | 20 |
| DEF Corp | 60 | 70 |

5. Hours needed to

|  | Mow Grass | Clean Pool |
| :---: | :---: | :---: |
| Aaron | 2 | 3 |
| Xiao Ling | 4 | 4 |

6. Number per acre

|  | Sheep | Goats |
| :---: | :---: | :---: |
| USA | 25 | 40 |
| Canada | 12 | 6 |

## Unit One, Day Five/Six (pages 36-44)

Terms of Trade: the rate by which one unit of a good or service is traded for another unit of a good or service such that they do better trading than they do on their own.

In this case if each produced the maximum of the good that they have the comparative advantage they could then trade.

Example: Product per hour

|  | Wheat | Coffee |
| :---: | :---: | :---: |
| US | 30 | 30 |
| Mexico | 10 | 20 |



US


Mexico

|  | Wheat | Coffee |
| :---: | :---: | :---: |
| US | 30 | 30 |
| Mexico | 10 | 20 |

What are the terms of trade for this example?

Given specialization and trade, what happens to the trading possibility curve?


By producing what they are good at and trading, they are both doing better than they would have before.
Why Specialize?

1. more efficient use of resources
2. increased production without increase in resources
3. increase division of labor


Two groups of decision makers: Households and Business (later the government will be added.)
The market coordinates these two groups.
The upper half of the diagram portrays the resource market (also called factor market). It is through the resource market that households supply the resources for the business. (Land, Labor, Capital, Entrepreneurial Ability) Notice that through this market that the business demand resources.

The lower portion of the diagram represents the product market. It is through this market that the households spend the money they receive through the resource market. Here the household is the demander and the businesses are the suppliers.

Scarcity and opportunity costs enter in this market through the supply of resources by the households. They only have a limited amount of resources to provide and therefore have an opportunity cost in everything they provide.

When you write a free response question in this class - each question must be labeled clearly so that I can tell what question and what part you are working on. Graphs must be at least 7 lines big or they will not be graded!

