

## Macro Unit 1, Lesson 1 (one day)

**ECONOMICS:** Concerned with the efficient use and management of limited productive resources to achieve maximum satisfaction of human material wants.

**ECONOMICS:** The study of our behavior in producing, distributing, and consuming material goods and services in a world of scarce resources.

**SCARCITY: WANTS EXCEED RESOURCES**

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

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.

relation v. causation: Just because something happens when something else happens does not mean one caused the other. It may just be that they are correlated. (They are associated in some systematic but dependable way.) It may be that a third variable is the cause yet that variable makes the first two correlated.

An example of this is hot weather and electric bills. When the weather gets hot your parents electric bills go up. These two are not related by causation. (one does not cause the other.) Instead, they are correlated. When the weather gets hot the air conditioners are turned on and this causes the electric bills to go up.

To illustrate the example of ceteris parabus use the example of shooting a bullet out of a gun at an angle. How far does the bullet travel. In physics what do you consider. Velocity, projectory, friction (air pollution)...

**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.

## Unit One: Lesson 2

Once again, look at the definitions of Economics. Relate this to limited resources.

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**SCARCITY:** WANTS EXCEED RESOURCES

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

Economics is the study of the distribution of goods and services. It is all based on the idea that we live in a world of unlimited wants with limited or scarce resources.

Examples of Resources are:

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. Can anyone give me examples? (Tools, machinery, equipment, the factory itself...) (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.

Some assumptions are (CETERIS PARIBUS)

1) Fixed Resources:

2) Fixed Technology:

3) Two Products: (Usually one capital good and one consumer good)

4) We are achieving economic efficiency:

Inside the PPC you would not be at economic efficiency. We might not be at full employment. This could be that workers that want to work can not find jobs. We are not at FULL EMPLOYMENT.

This also assumes that what is being produced is what we want to be produced.

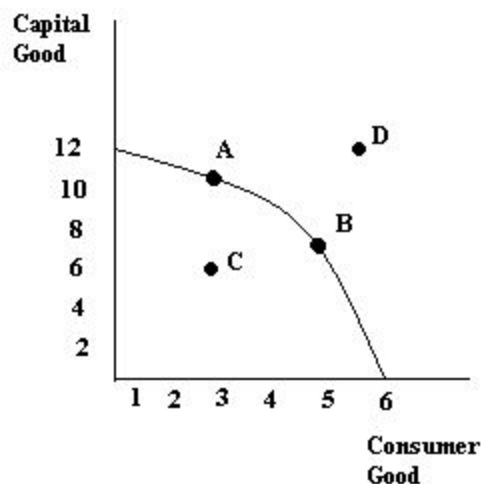
**ALLOCATIVE EFFICIENCY:** Resources are devoted to goods most wanted by society.

**PRODUCTIVE EFFICIENCY:** Least costly production techniques are used to produce wanted goods and services. If you building boats by hand you are not utilizing full production.

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.

Production Possibilities Curve (also called Production Possibility Frontier)

Assume two products



1. What are the tradeoffs involved?

Must give up units of one good in order to produce units of the other.

Notice that if they give up more capital goods for consumer goods they are hurting their future.

2. Why is the PPC concave?

As more and more of a good is produced it takes more away from the other because the resources are not easily converted. (Law of Increasing Opportunity Costs)

3. What does a point inside the curve represent?

A point in which efficiency is not being achieved.

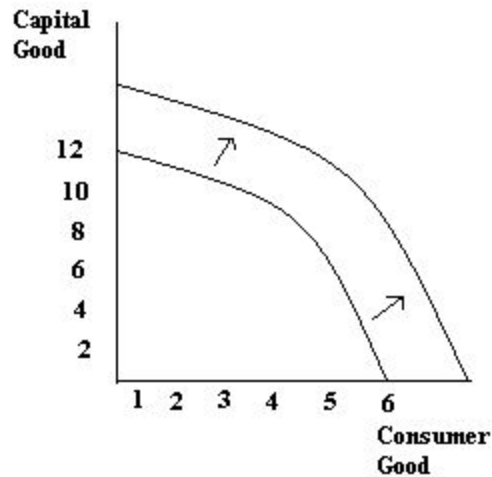
4. Can you think of an example in history when we were inside the PPC?

Great Depression

5. What is the significance of a point outside the PPC.

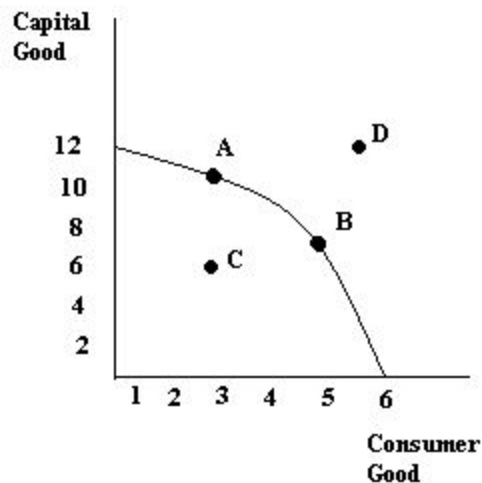
Without advancements in technology or changes in factors of production this is unattainable for long period of time.

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? (It would shift it outward.)



The same is true for technological advancements

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?  
Technological advancements or new resources

Make sure that students understand that no point on the curve is more desirable from an economist standpoint. That gets into societies specific wants, which is outside the scope of the class.

**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 of pizzas is therefore robots.

**OPPORTUNITY COST:** The best alternative forgone. This takes into consideration all types of opportunity costs rather than just production costs. Ex. Study or go on a date

**IMPLICIT COSTS:** Resources that could have been used in the next best alternative. You could be taking team sports or marketing instead of A.P. Economics. You could take a nap tonight instead of studying.

**EXPLICIT COSTS:** These are the measurable costs. It costs \$3 for a Big Mac. This is measurable.

Marginal means change.

### Broad Social Goals

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.

Measurement: Corporate Profits, GNP, GDP and Unemployment

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.

Measurement: Unemployment, # of discrimination cases, minimum wage

4) Economic Security: protection from layoffs and illness

Measurement: Welfare Total Recipients, Social Security Expenditures, and unemployment rate

5) Full Employment:

If people can not work they can not 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...)

Measurement: unemployment rate

6) Price Stability

Inflation is a 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

Measurement: Consumer Price Index (CPI)

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.

Measurement: GNP, Corporate Profits and Dow Jones IA

## Unit 1 Lesson 3:

Notice that students should have gotten this from reading. Go over this quickly.

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

### Capitalist Ideology:

A capitalist society must have:

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.

(WHAT will happen if one seller decided to increase the price of his goods?)

5) **Markets and Prices:**

Capitalism is a market economy.

Market: simple mechanism or arrangement which brings buyers (demanders) and sellers (suppliers) of goods and services together.

Though price, the market decides what is to be produced, for whom and how.

6) **Limited Government Interaction:**

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

7) **Use of capital goods:**

**Capital Goods:** goods used in production (buildings, equipment...)

8) **Division of Labor:**

Individuals specialize in tasks. They then allow others to do jobs for them.

9) **Use of Money as a medium of exchange.** (very little bartering)

10) **Specialization of tasks:** We produce very little of what we consume. Instead we trade our services for money and money for goods and services.

## Traditional Economy

Allocation of scarce resources stems from ritual, habit and custom. Individuals are not free to make decisions based on their wants. Roles are defined by the customs of their ancestors.

### Strengths:

Everyone knows WHAT to produce, HOW to produce and FOR WHOM to produce.  
Life is stable, predictable and continuous.

### Weakness:

Discourages new ideas.  
Lack of progress usually leads to a lower standard of living.  
Traditional economies offer few choices.

## Command Economy

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

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 scarce 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.)

## Chapter 19 (section 1)

**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.

### Advantages of Capitalism:

More efficient than communism and socialism

Produces more, higher quality goods at lower prices than other two systems.

Allows for individual freedom.

People are allowed to use their time, energy, talent, and resources as they see fit

People can keep profits if they make them

Capitalist economies are flexible

People will not buy the products if they do not want them so.....

Business is motivated to listen to consumer

Suppliers must find product people want or go out of business

Consumer is sovereign

Suppliers have to adjust to meet consumer demands.

### Disadvantages of Capitalism:

Pure capitalism does not meet the needs of the least skilled, the disabled, the young, old or least productive.

**Socialism:** many of the basic productive resources are government owned and operated. Prices play a major role in distribution.

### Advantages of Socialism:

Takes care of those that can not afford the benefits of society

People elect officials who make economic decisions.

### Disadvantages of Socialism:

Less efficient because business have no incentive to cut costs.

Special interests often take over.

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

In theory goods and services have no prices so there is no need for payment for the factors of production.

### Advantages of Communism:

Workers can not be fired.

Many public good provide

### Disadvantages of Communism:

Individual freedom is lost. (little or no freedom to choose jobs or change jobs)

Lack of incentives to produce what is wanted by society

Inefficiency of centralized planning.



## Unit 1 Lesson 4

### 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:

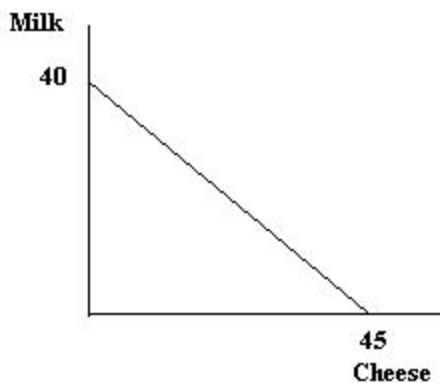
For output problems you look at if one nation (individual/company) can produce more output with the same resources as the other.

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

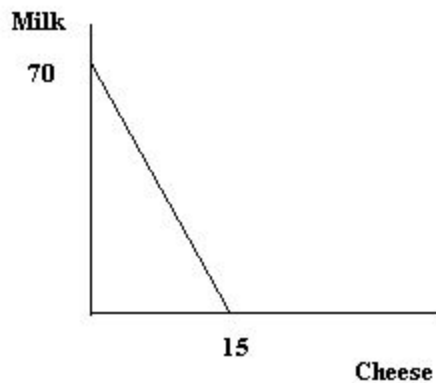
Examples:

Output: (Tons produced per hour by each cow)

	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.

### **Using numbers to calculate who has comparative advantage**

Output method: put the output of each product over the output of the other product for the same person. This makes a fraction. Look at the opportunity cost. The person with the lowest opportunity cost should produce the good that costs the least.

Example: 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.

Calculate this:

You will never have a situation where someone has comparative advantage in both!!!!

Input Method: divide the input required for each product into the input for the other product. Then take the one with the lowest opportunity cost.

Apples to make one

	Pie	Juice
Susan	5	3
Megan	6	3

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

1. Days to Produce

	Pen	Crayon
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

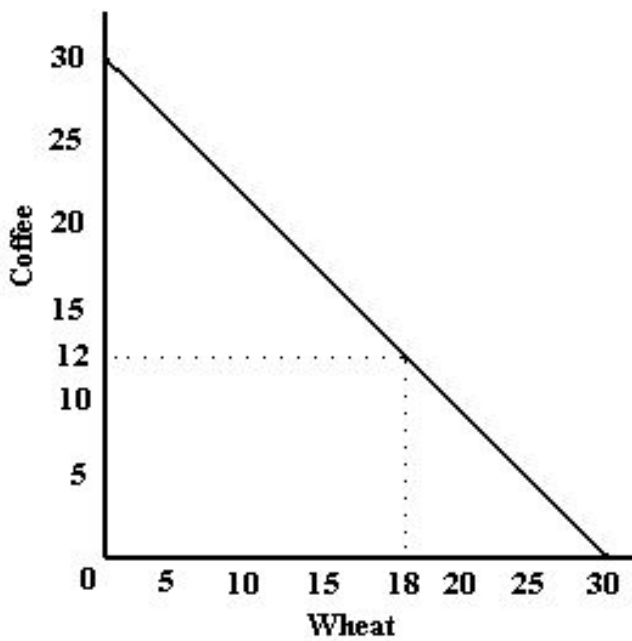
	Sheep	Goats
USA	25	40
Canada	12	6

**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.

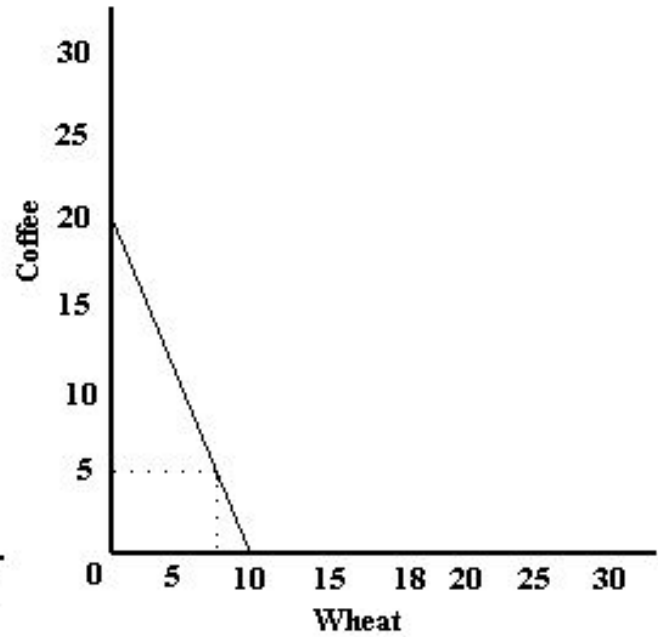
In this case if each produced the maximum of the good that they have the comparative advantage they could then trade.

Example: Product per hour

	Wheat	Coffee
US	30	30
Mexico	10	20



US

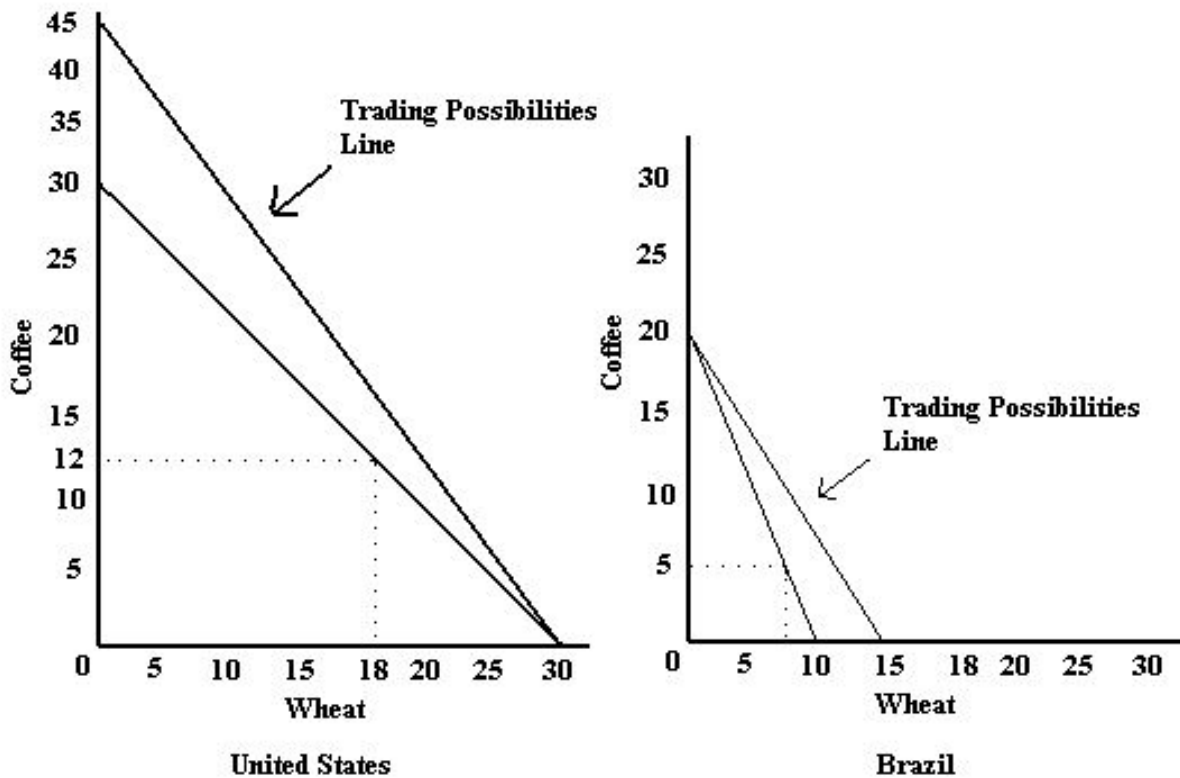


Mexico

	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?

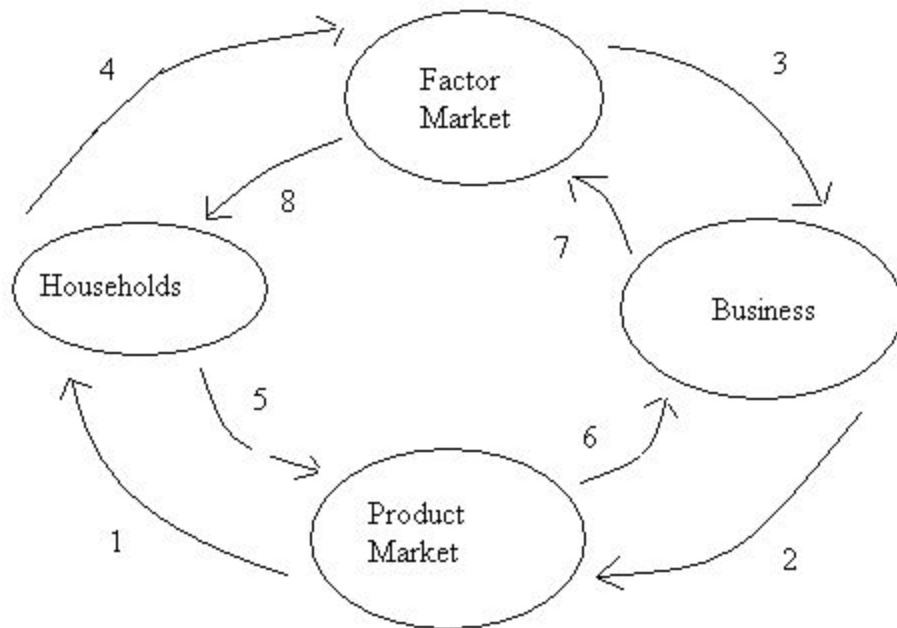


By producing what they are good at and trading, they are both doing better than they would have before.

Why Specialize?

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

## Circular Flow Diagram:



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 answered on a separate piece of paper. They must be labeled clearly so that I can tell what question and what part they are working on. Graphs must be at least 7 lines big or I will not give you credit!

Use the following only if you have time.

Have students do three practice problems on their own. Answers are on the internet.

Draw each PPC

Who has absolute advantages?

Who has comparative advantages?

What are the Terms of Trade

Given that each country was on the second point on the PPC, what has happened when they specialize?

What happens to the production possibility curve when specialization occurs?

Scotland					USA				
Cows	0	<b>5</b>	10	15	Cows	15	30	<b>45</b>	60
Sheep	30	<b>20</b>	10	0	Sheep	30	20	<b>10</b>	0

Snehal					James				
Bread	0	10	<b>20</b>	30	Bread	0	5	<b>10</b>	15
Apples	30	20	<b>10</b>	0	Apples	45	30	<b>15</b>	0

USA					Japan				
Silver	0	30	<b>60</b>	90	Silver	0	5	<b>10</b>	15
Gold	30	20	<b>10</b>	0	Gold	15	10	<b>5</b>	0



#1

Scotland					U.S.A.				
Cows	0	<u>5</u>	10	15	Cows	15	30	<u>45</u>	60
Sheep	30	<u>20</u>	10	0	Sheep	30	20	<u>10</u>	0

Neither has the absolute advantage in sheep. U.S. has absolute advantage in cows.

Scotland:

5 cows = 10 sheep

U.S.

15 cows = 10 sheep

	Cows	Sheep
Scotland	5	10
U.S.	15	10

Given the above information Scotland should produce sheep and U.S. should produce cows.

U.S. produces cows and for them 1 cow = 2/3 sheep.

Scotland produces sheep and for them 1 cow = 2 sheep.

Scotland wants to give away less than 2 sheep and U.S. wants to get more than 2/3 of sheep so

**Terms of Trade** is between 2/3 and 2 sheep.

Before specialization: Total cows produced were  $5 + 45 = 50$

Total sheep produced were  $20 + 10 = 30$

After specialization we have 60 cows and 30 sheep. A gain of 10 cows due to specialization and trade.

#2

Snehal					James				
Bread	0	10	<b>20</b>	30	Bread	0	5	<b>10</b>	20
Apples	30	20	<b>10</b>	0	Apples	45	30	<b>15</b>	0

Snehal has the absolute advantage in bread. James has absolute advantage in apples.

Snehal:

10 bread = 10 apples

James

5 bread = 15 apples

	Bread	Apples
Snehal	10	10
James	5	15

Given the above information Snehal should produce apples and James should produce bread.

James produces apples and for him 1 bread = 3 apples.

Snehal produces bread and for her 1 bread = 1 apple

Snehal wants to get more than 1 apple for her 1 bread while James wants to give away less than 3 apples.

**Terms of Trade** is between 1 and 3 apples.

Before specialization: Total bread produced was  $20 + 10 = 30$

Total apples produced were  $10 + 15 = 25$

After specialization we have 30 bread cows and 45 apples. A gain of 20 apples due to specialization and trade.

#3

U.S.					Japan				
Gold	0	30	<b>60</b>	90	Gold	0	5	<b>10</b>	15
Silver	30	20	<b>10</b>	0	Silver	15	10	<b>5</b>	0

The U.S. has the absolute advantage in both gold and silver.

U.S.

30 gold = 10 silver

Japan.

5 gold = 5 silver

	Gold	Silver
U.S.	30	10
Japan	5	5

Given the above information U.S. should produce gold and Japan. should produce silver.

U.S. produces gold and for them 1 gold = 1/3 silver.

Japan produces silver and for them 1 gold = 1 silver.

Japan wants to give away less than 1 silver and U.S. wants to get more than 1/3 of silver so

**Terms of Trade** is between 1/3 and 1 silver.

Before specialization: Total gold produced were  $60 + 10 = 70$

Total silver produced were  $10 + 5 = 15$

After specialization we have 90 gold and 15 silver. A gain of 20 gold due to specialization and trade.