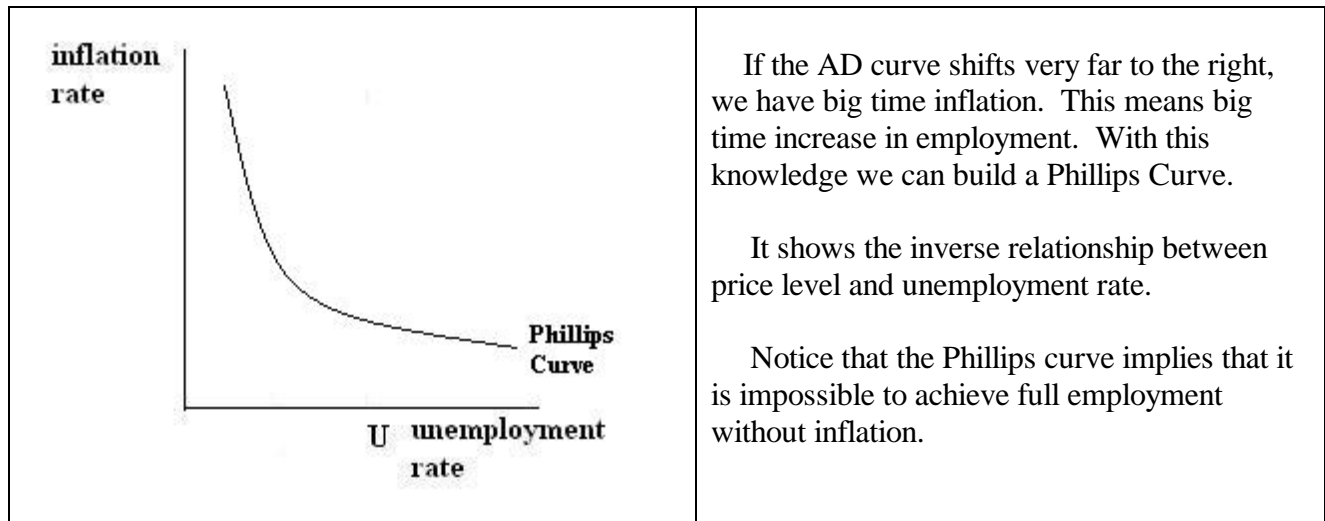
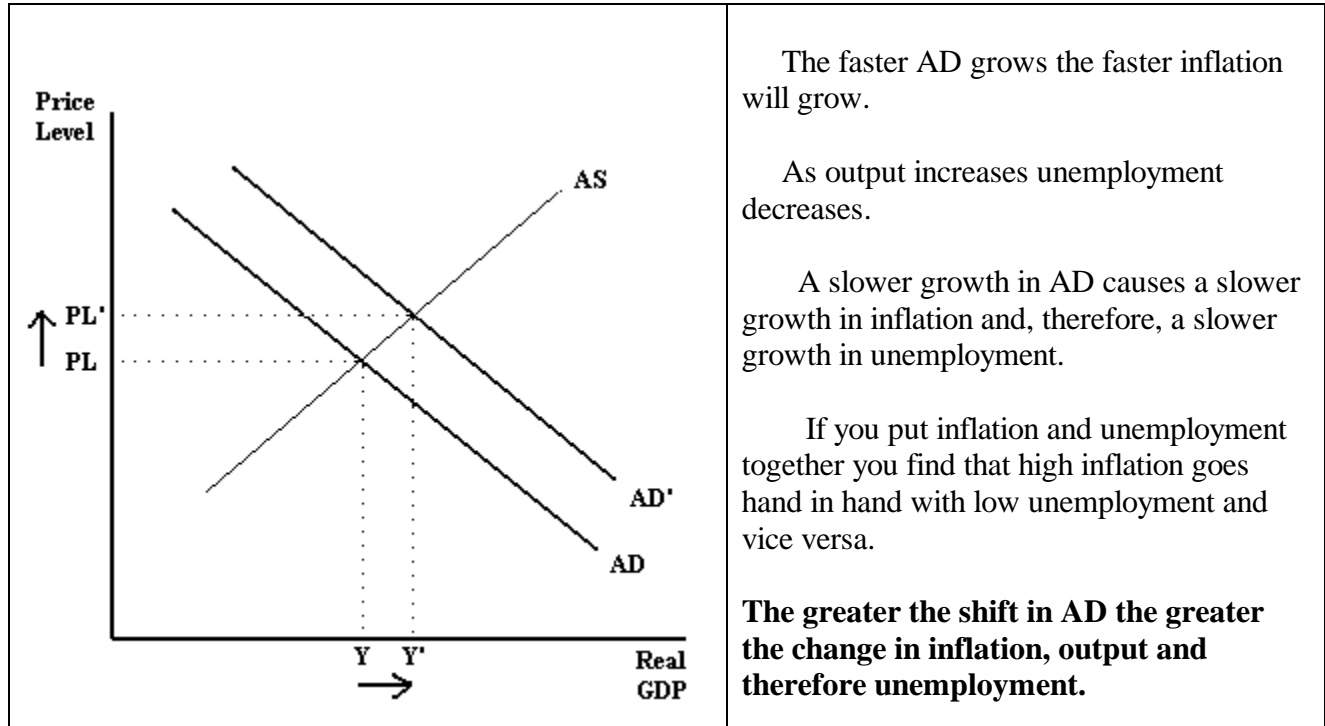


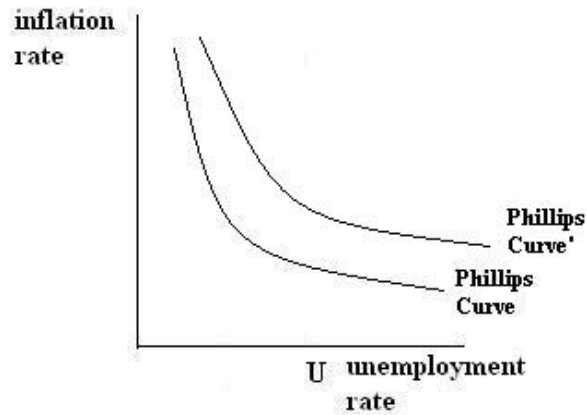
# Unit Five, Day One (pages 971-984)

## Phillips Curve

Looking at an AS/AD curve you can see what happens when a change in AD occurs. (You can also have changes in AS.)



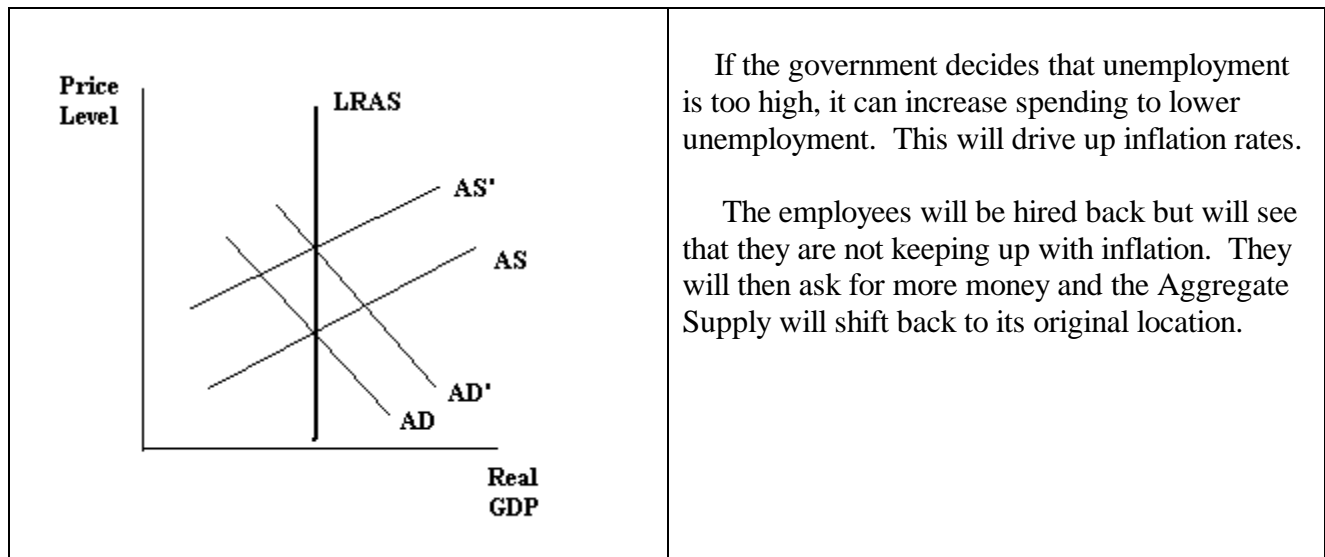
How then do we explain stagflation with the Phillips Curve? We do not. Instead, a new Phillips curve is drawn. A shift in the curve.

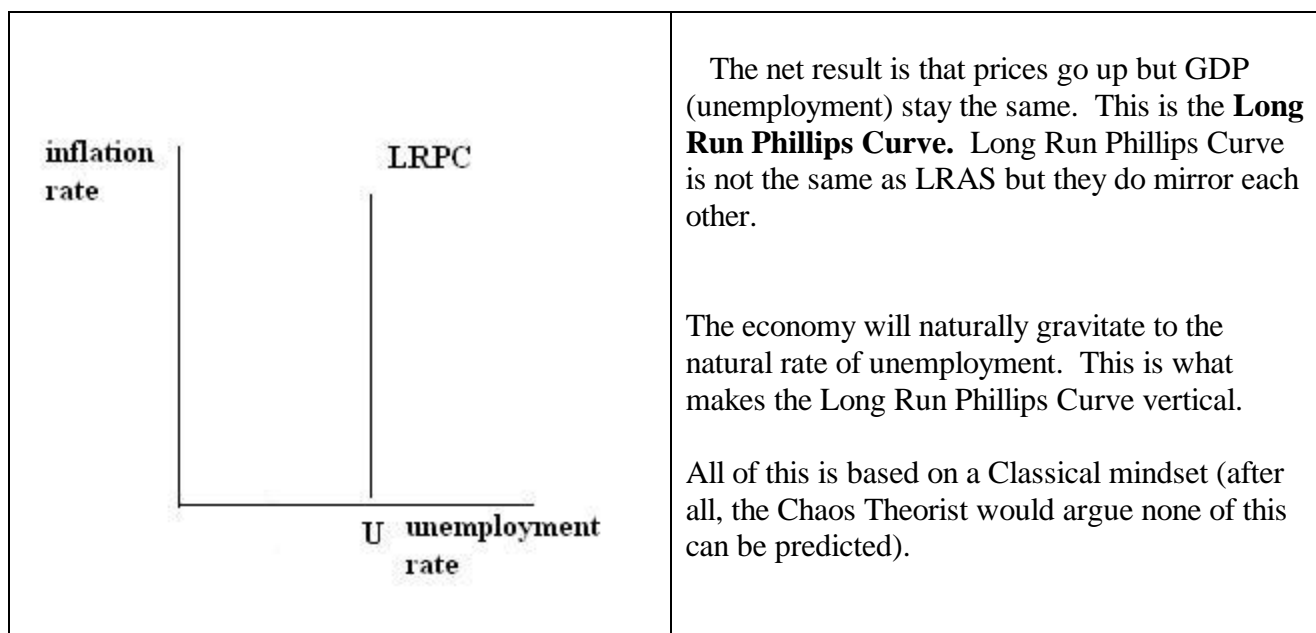


We derived the Phillips curve with changes in AD. A change in AS will shift the Phillips curve.

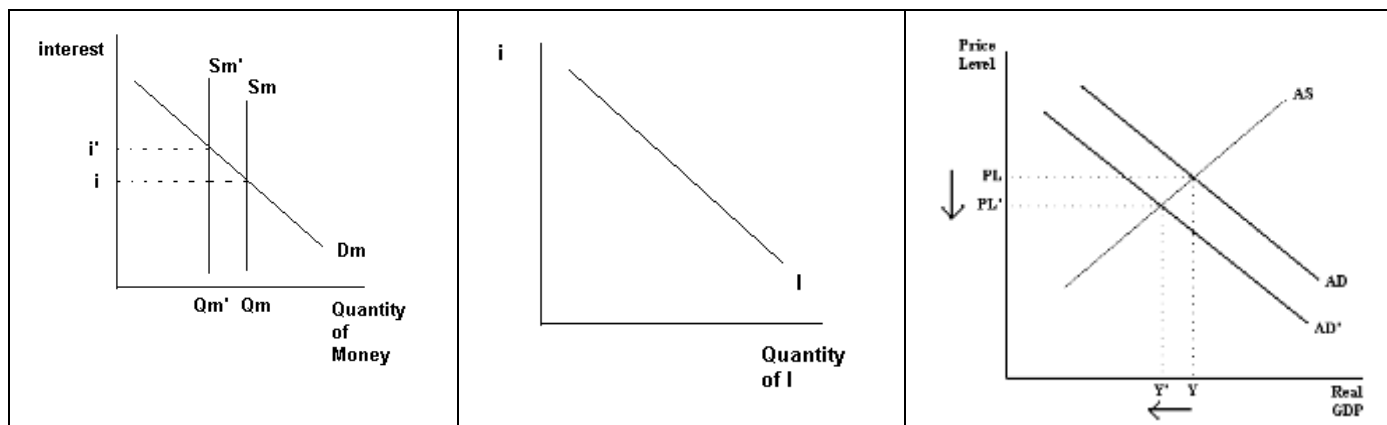
**The Rational Expectations Theory:**

This assumes that people have access to all the information needed in order to predict what the government will do. We've discussed this before.

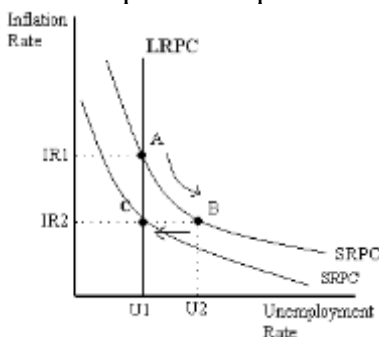




If you look at the effects of monetary policy on the Phillips Curve, you get the following knock down: Fed sees high inflation. It will contract the money supply which raises interest rates. This causes AD to shift to the left.

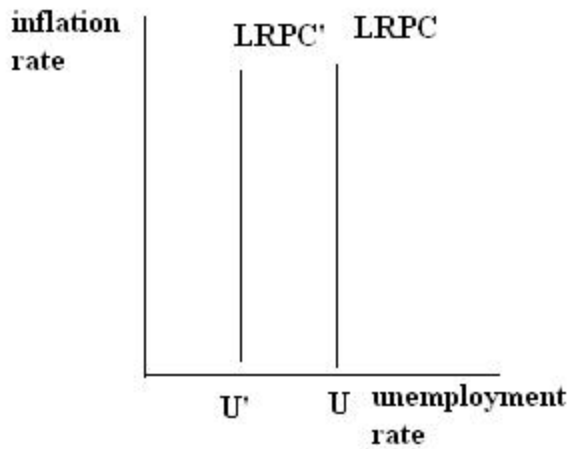


When this happens you get a decrease in price level (inflation) and an increase in unemployment. You move out along the Phillips Curve from point A to point B.



However, this is not long run. People see that the expected inflation rate has fallen and the Phillips Curve shifts to SRPC', returning to Long Rung.

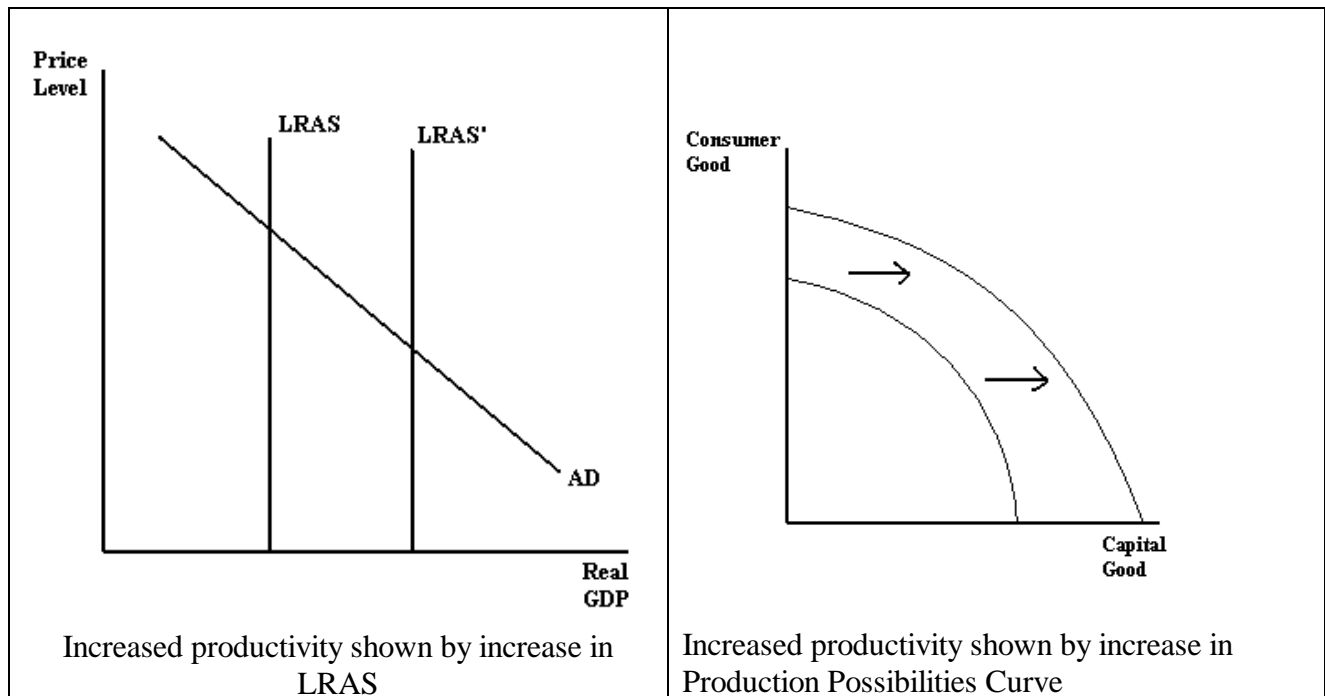
How do we show a shift in the Long run Phillips curve?



### Unit Five, Day Two (pages 971-984)

How much better off are we today than people were 50 years ago? Why?

Standard of living increases with inventions. This is part of economic growth.



Economic growth can be a percent change in real GDP or real GDP per capita.

Productivity determines the amount of economic growth.

It is hardly an exaggeration to say that, in the long run, almost nothing counts for the determination of a nation's standard of living but its rate of productive growth - for only rising productivity can raise standards of living.

Over long periods of time, small differences in rates of productivity growth compound like interest in a bank account and can make enormous difference to a society's prosperity. Nothing contributes more to reduction of poverty, to increases in leisure and to the country's ability to finance education, public health, environmental improvement, and the arts than increases in productivity growth.

Productivity growth can make an enormous difference in a nation's standing in the hierarchy of the world's economies. It has been remarked that the success of the United States in keeping its annual productivity growth about 1% ahead of Great Britain for about a century transformed America from a minor, developing country into a superpower and transformed Great Britain from the world's preeminent power into a second-rate economy.

\*\*\*\*\* Increases in aggregate demand is not economic growth. **Economic growth involves the change in productive capacity.** This is an increase in potential GDP. This involves a change in the long run aggregate supply curve (shift in the production possibilities curve). An increase in investment over and beyond the replacement of investment capital.

The average growth rate in per capita GDP has been over 2% a year for the last 4 decades. However, it has varied considerably during this time period.

Three sources of growth:

1. Supply of labor (population) – *increased human capital*
2. supply of capital (increases productivity) – *new resources*
3. technology (increases productivity) – *new technology*

### **Review of International Trade and Comparative Advantage**

International Trade is essential for the survival of all countries – i.e. globalization.

In the US alone we depend on other countries for things like bananas, cocoa, coffee, spices, tea, nickel, tin....

We in turn export things like wheat, cotton, tobacco and rice.

International trade is the way that countries can specialize, increase the productivity of their resources and realize a larger total output than otherwise.

Countries like individuals are able to specialize in their production.

The distribution of resources (human, natural and capital goods) and technologies leads to this specialization.

Some countries can produce goods that are labor-intensive while others can produce goods that are capital-intensive. Still others can produce goods that are land-intensive.

Comparative Advantage: The ability to produce a good or service at a lower opportunity cost compared to other producers.

Absolute Advantage: The ability to produce more output from given inputs of resources than other producers can.

You are an accountant that charges \$50 an hour to do someone's taxes. A painter who makes \$15 an hour is trying to decide if he should hire you to do his taxes. He knows it will take him 10 hours to do the accounting. He knows it will take you 2 hours. Should he hire you?

Each person has a comparative advantage in their specialty. Even though both could do the work themselves it is to their advantage to hire someone else.

The same can be said for two countries.

*In order to look at this we must assume.*

1) Just two countries and two products (coffee and wheat)

2) Constant costs: This means that production possibility curves are straight. (They are not really straight because as production increases the variable costs increase the cost of production.)

\*Remember that Comparative Advantage problems come in the form of input (less common) and output (more common).

## **Comparative Advantage**

**Input method:** looks at the amount of inputs (usually time) necessary to do an activity.

	Converted to output method			
	Good X	Good Y	Good X	Good Y
USA	10	5		
Japan	14	4		

Which nation has comparative advantage in production of Good X?

The one with the least opportunity cost COMPARED TO OTHER PRODUCERS is the one you choose. You then compare Good X for USA to Good X for Japan.

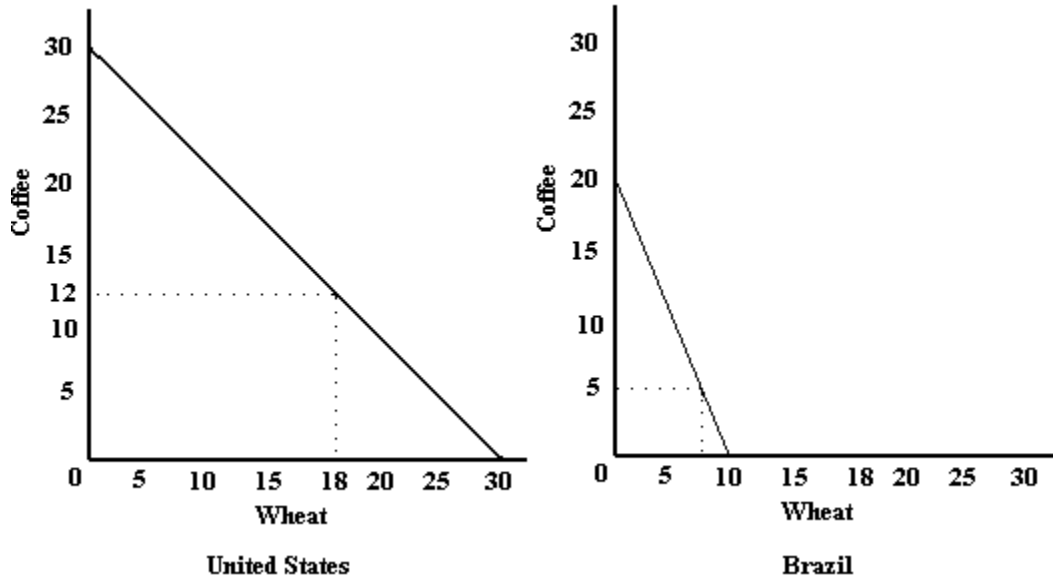
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**Output method:** looks at the amount of output over a given time.

	Good A	Good B
Germany	12	15
England	4	2

Which nation has comparative advantage in production of Good B?

Each should specialize where it has the comparative advantage.



In this case they each have separate cost curves. That is why the production possibility curves are shaped as they are.

The US can exchange 30 ton of wheat for 30 ton of coffee.  $1W = 1C$

Brazil has to give up 20C for 10W.  $1W = 2C$ .

Look at the possible points of production. US might choose 18W and 12C while Brazil might choose 8W and 4C. (THIS SHOWS WHAT EACH NATION CHOOSES TO CONSUME)

In our example the US has a comparative advantage in wheat. It can produce 1 wheat at the cost of only 1 C. The world economy would not be helped if Brazil produced W when the US can produce it cheaper.

Brazil has the comparative advantage in C. It must only give up 1/2 a ton of C for one ton of Wheat. It would be bad for the world economy for the US to produce C.

If each country produces the maximum amount of their good the world actually has more of that good. The US can produce 30 units of wheat and Brazil can produce 20 units of coffee (based on production possibility curve.)

Now that each country has specialized in its production it must now trade in order to get what it needs.

The US knows that if it produced 1C it would have to give up 1W. It must therefore get more than 1C for its 1W.

Brazil knows that it can produce 1W for its 2C. It must therefore get 1W for less than 2C.

### **Terms of Trade**



Each country wants to export as little as it can in order to get as much as it can. The actual exchange rate is based on this idea.

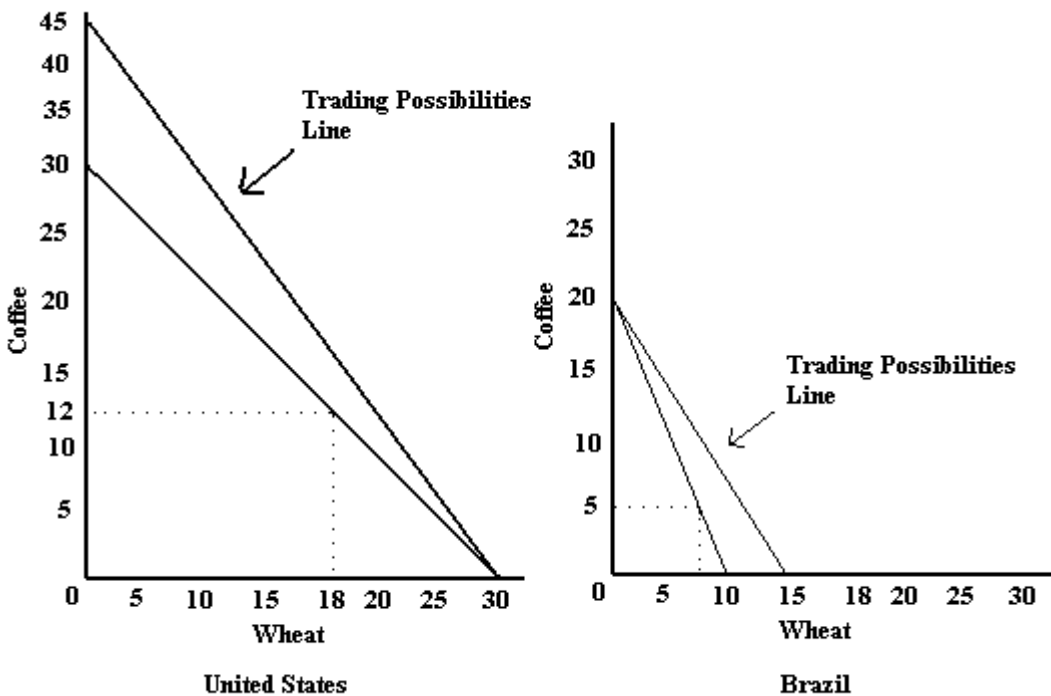
No matter what the US would want to get more than one unit of coffee for each unit of wheat. The reason being is that it can get one by itself.

No matter what Brazil will want to get more than one unit of wheat for two units of coffee. It can get that by itself.

Suppose it came out to be  $1W = 1\frac{1}{2}C$ . Each nation can then go in and make a Trading possibility curve base on  $1W = 1\frac{1}{2}C$ .

**Trading Possibilities Curve:** By trading, each country can reach a point beyond their production possibility curve. (Both get more of each product (or have to give up less to get more)).

The net result of all this is that the world produces more if the countries specialize.



Assume the terms of trade are agreed to be  $1W = 1.5 C$ . That means that for every 1 wheat that US trades they get 1.5 coffee. This is how we get the trading possibilities curve. For example, if US produces the 30 wheat and trades 12 (leaving them with the 18 they originally wanted) they would get  $1.5 * 12 = 18$  coffee. This gives them 6 more coffee than if they had tried to produce both themselves. If they produce 30 w and trade them all away (on the world market) they could get 45 coffee. This is 15 more than they could do on their own.

## Unit Five, Day Three (pages 870-876)

### Trade Barriers

How do the following trade barriers affect the economy?

- 1) **Revenue Tariffs:** taxes on imported goods to get money for the federal government. These are usually on goods that can not be produced in the US.

Effect:

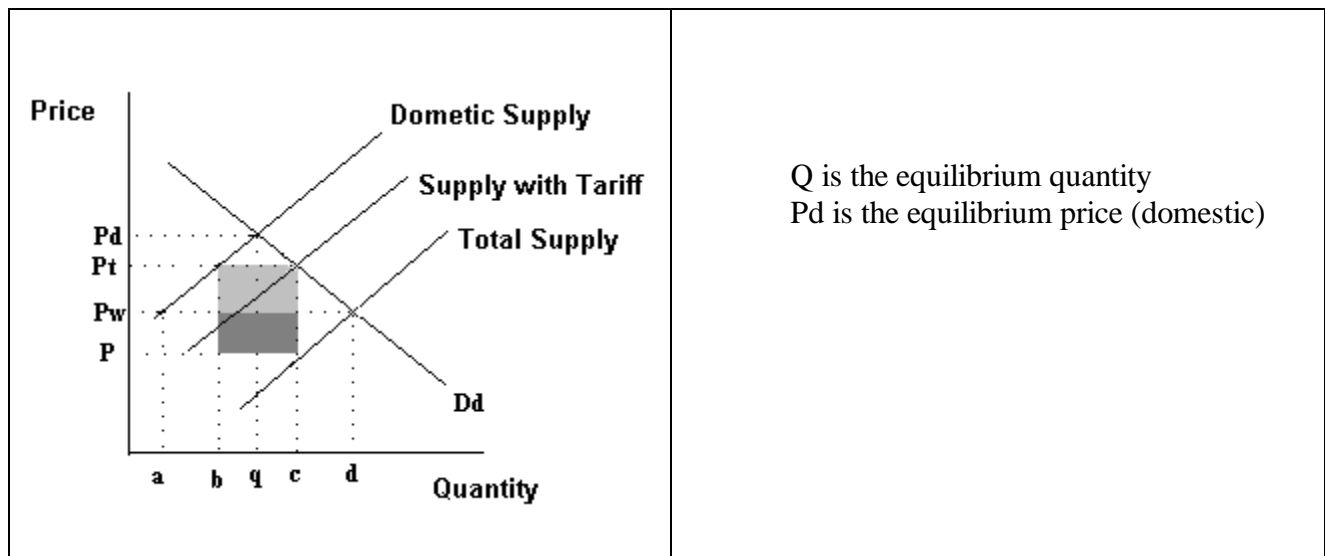
- 2) **Protective Tariffs:** taxes on imported goods to put them at a disadvantage to domestic goods. This is usually done for on fledgling industries or industries that could prove vital to national defense (cars...)

Effect:

- 3) **Import Quotas:** limits on amounts that can be imported.

Effect:

### The effects of a tariff



Now assume a foreign producer brings in a product. They have the absolute advantage in producing this item and can do it at a lower price

This will drop the price to  $P_w$  (World Price). At this price  $d$  will be sold.

The difference between  $d$  and  $a$  is the amount that the foreign producer sells.

Once the US imposes a tariff it will drive the price up. People will want less of the quantity. It will move up to the point where Demand intersects the new tariff price. ( $Q$  is  $c$  and Price is  $P_t$ )

Quantity demanded decreases and price increases.

Furthermore, the domestic producers are now getting more for their goods. They get  $P_t$  instead of  $P_w$ . They will also move up their supply curve (from  $Q_a$  to  $Q_b$ .) This means they are getting more money and increase sales.

The US government will get the amount equal to  $(P_t - P)$  times the number of foreign goods ( $bc$ ). Notice that they only collect tax from the sale of foreign goods. They do not tax domestic producers.

From all of this we get:

1. A decline in consumption in the United States. (Because of higher prices.) This means US consumers are hurt.
2. An increase in Domestic Production (over the amount prior to the tariff.) They will move up the supply curve.
3. A decline in imports. (It costs more to sell to us now.)
4. An increase in Tariff revenue for the government. This is in effect a transfer of money from the consumers to the government.
5. Fewer dollars in the foreign country means they can now buy less American goods.
6. US companies now are operating (using resources) in a less efficient manner.

If a country imposes a barrier against its imports, what is likely to happen to the amount imported and the price of the imported goods?

If the price of imported goods rises when a barrier is erected, what is likely to happen to the output of domestic firms that produce goods which can be substituted for imports?

Who is made worse off as a result of import barriers?

- (1) Foreign producers
- (2) domestic consumers who must pay higher prices
- (3) domestic producers who produce goods that complement the imported goods

Who gains and who loses from subsidies to our export industries?

Arguments for Protectionist Economic Policies – let's disprove them

1. Self-sufficient Military
2. Increase domestic employment – preserve jobs.
3. Level the playing field – from a wage perspective
4. Help infant industries
5. Diversify the economy
6. Protect against dumping

Other issues not discussed:

1. The other nations may retaliate. If they stop importing American goods we are hurt.
2. Inefficient use of resources leads to higher prices.
3. Foreign nations need to sell goods to us in order to afford our goods.

## Unit Five, Day Four/Five (pages 1018-1045)

### Balance of Trade

When dealing with international trade one of the things you have to deal with is the difference in the currencies. Each country wants to be paid in its currency. This means they must go through the foreign exchange market.

When we buy things overseas we pay them in their currency (for example, yen). We get these yen from a major bank. We give dollars for yen. They then have to buy the Yen from a Japanese bank.

1. In so doing we have created a demand for Yen. This gives the Japanese access to American dollars.

2. When we deposit our dollars in a bank in exchange for Yen that bank must hold those dollars for later exchanges. They have lost Yen. This represents a leakage from the money supply. If we do not export to Japan to get back those dollars our money supply is decreased.

American exports create a foreign demand for dollars (to replenish their money supply). It also creates a surplus of the foreign money available to consumers.

Why would the bank make the exchange? It is in the business buying and selling dollars for foreign currency. It does so at a fee.

Are countries concerned with investment (I) going outside their country? YES! If business take their money outside the US, then the US loses I. This means GDP decreases.

How do countries keep I inside the country?

*Balance of Payments* – an accounting of the country's international transactions for a particular period of time. Monitored by the Fed.

- Any transaction that causes money to flow into a country is a credit to its BOP account and any transaction that causes money to flow out is a debit.
- Includes...
  - The current account (accounting of  $X_n$ )
  - The financial/capital account (accounting of assets moving internationally)

**Balance of Payments:** is all the international trade and financial transactions. For the US it includes all transactions with all other countries.

Example of U.S. Balance of Payments – Handout/Activity

<b>Current Account: Summarizes Trade in G &amp;S, Income Payments and Receipts, and Net Transfers of Currency</b>	
U.S. Exports and Imports: Goods and Services	
Balance of Trade	
Income Payments:	
<b>Financial Account: Summarizes Trade in Assets</b>	
U.S. Assets sold to residents in other nations including:	
U.S. Currency	
U.S. Stock	
U.S. Treasury Bonds	
Foreign assets purchased by U.S. residents, including	
Foreign Currency	
Foreign Stocks	
Foreign treasury bonds	
<b>Official Reserves Account: Official reserves transactions balance – how the Fed makes it work).</b>	
<b>Balance of Payments: (Current Account + Financial Account) Should be Zero</b>	

**Current Account:** The US trades in currently produced goods and services, income payments and international transfers.

- Exports and Imports** are part of our Balance of trade. It is in the current account.
- Net Investment Income** (also called factor income) is flow of money for the use of factors of production. Ex: if I am temporarily assigned to teach in Europe, my pay would be represented here. The main income payment is profit. If an American company owns another company in that country, the profit from that other company comes back to America and is represented here.
- International Transfers** funds transferred from one country to another by individuals. Mexican immigrants in the US send millions of dollars to their families in Mexico. This is represented here.

**Financial/Capital Account:** Export or import of *ownership* of real or financial assets. In other words, if an asset that earns money (selling a business to a citizen of another country, for example) is sold to a citizen of a foreign nation it counts in the financial account.

1. **Capital going abroad** are part of our Balance of trade. It is in the financial account. Includes the literal money making asset changing ownership internationally.
2. **Capital coming in** flow of currency coming in for the purchase of assets (that create revenue).
3. **International Transfers** funds transferred from one country to another by individuals. Mexican immigrants in the US send millions of dollars to their families in Mexico. This is represented here.

Example problems –

**1. US buys \$100 in Japanese goods:**

**2. Japanese company buys business from a US citizen:**

**3. Dividends (or interest) are paid from a Japanese corporation to an American citizen/institution**

Let's step back, now:

All of these transactions (though quite simple) are more difficult than one's you will see on a test.

So here are the basics that you should know, in my opinion:

1. The current account will always equal the financial/capital account (reverse sign). This was explained above.
2. Know that the current account includes: a) exports - imports or the trade deficit/surplus and b) net interest and dividend flows, and c) net private and public transfer payments
3. Know the financial account/capital account includes net flows into financial assets (currency, savings accounts, bonds, stocks)
4. Know simple transactions (usually the AP exam asks only one-side of the transaction). For example, they would ask "what is the impact of the US purchasing Japanese products on:

What follows is an imagined conversation in an Economics Bar

Keynesian: Use monetary policies to boost or control demand, just like government spending.

Classical: GRRR!!! DO NOT INFLATE CURRENCY!!! PRICE STABILITY!!! KEEP GOVERNMENT OUT OF THINGS!!!

Monetarist: Well, a little \*anticipated\* inflation is a fine thing. But just a little. It keeps the economy growing and since it's anticipated, banks and businesses can plan around it.

Keynesian: Sure. So go for it! Boost that demand!

Monetarist: Well, we're gonna cut taxes, too.

Keynesian: No you're not.

Classical: YES HE IS BUT WE'RE GOING BACK ON THAT GOLD STANDARD! NO FIAT MONEY FOR US!

Keynesian: You are out of your mind, Classical Economist.

Monetarist: Indeed. The gold standard is a depression just waiting to happen.

Classical! YOU JUST WANT FLOATING CURRENCIES SO YOU CAN MAKE MONEY SHORTING THE DOLLAR AND STUFF LIKE THAT!

Keynesian: You're saying that like it's a bad thing. (*Fact: Keynes made a bundle in currency trading.*)

Monetarist: Floating currencies allow markets to punish or reward good policies.

Keynesian: Not if the government interferes.

Monetarist: So don't let it interfere.

Keynesian: That idea is SO 19th Century...

Classical: SO WHAT IF IT IS??? LAISSEZ-FAIRE! LAISSEZ-FAIRE!

Keynesian: You're not even pronouncing it right.



Classical: GRRR!!! JUST LET THE ECONOMY SELF-CORRECT OVER TIME!!!

Monetarist: Yeah, right. Like that ever happens. Much as I'd like to agree with you, Keynes was right on *some* points, just enough to justify monetary policies.

Keynesian: Uh, how about Keynes was right on *all* points? Enough to justify continued governmental involvement in modern economies to prevent recessionary gaps.

Classical: GRRRRRRRRRRRR!!! GRRRRRRRRRRRRRR!!! I'M TAKING MY VERTICAL AS LINE AND GOING HOME! (Exit)

Monetarist: I'm taking my de-emphasis of fiscal policies in favor of monetary policies designed to improve both AS and AD and going home!

Keynesian: Fine! I'm taking my sticky wages and prices and boosts to AD to avert economic stagnation and going home!

Marxist: Great. Now I don't have any toys to play with. YOU GUYS EVER HEAR OF \*\*\*SHARING\*\*\*??? Stupid capitalists...