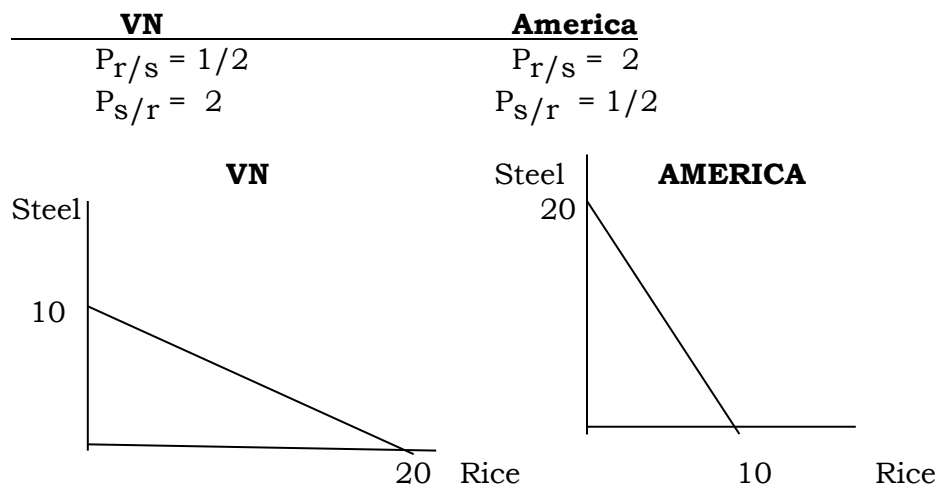


CHAPTER 2 LECTURE B - ABSOLUTE AND COMPARATIVE ADVANTAGE

Principle of Absolute Advantage

Suppose we have two countries: Viet Nam and America
Two commodities: Rice and Steel

We assume both countries have same initial endowment of resources.



If VN produces only rice it can produce a maximum of 20 units of rice.

If VN produces only steel it can produce a maximum of 10 units of steel.

If America produces only rice it can produce a maximum of 10 units of rice.

If America produces only steel it can produce a maximum of 20 units of steel.

In the above case it is said that the VN has an absolute advantage in rice - with given endowment it can produce more rice than America.

In the above case it is said that the America has an absolute advantage in steel - with given endowment it can produce more steel than VN.

However, look at the cost of steel in terms of rice for both VN and America

For Viet Nam:

$P_{s/r} = 2$ VN must give up 2 units of rice for 1 unit of steel.

$P_{r/s} = 1/2$ VN must give up 1 unit of steel for 2 units of rice or $1/2$ units of steel for one rice.

For America:

$P_{r/s} = 2$ America must give up 2 units of steel for 1 unit of rice.

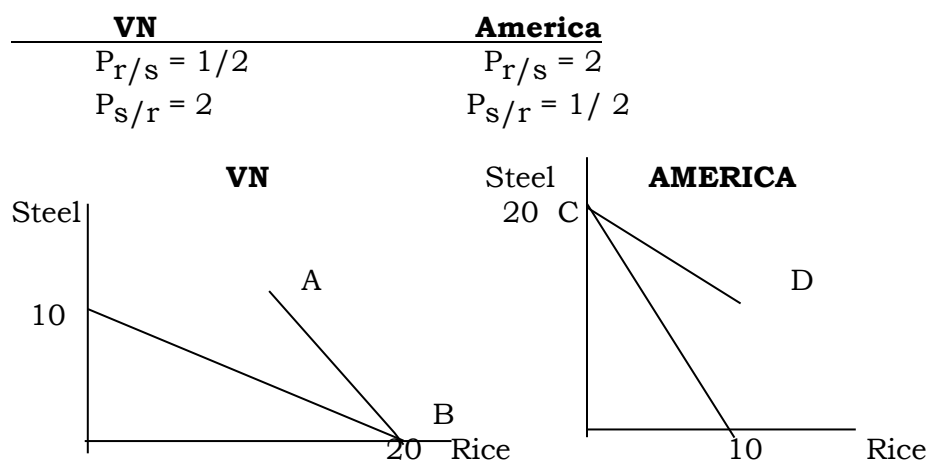
$P_{s/r} = 1/2$ America must give up 1 units of rice for two units of steel or $1/2$ unit of rice for one steel.

Terms of Trade

Looking at example above you can see that VN would be willing to trade steel for rice if it can receive 1 unit of steel for less than 2 units of rice. Remember that if it produces both commodities the price of steel in terms of rice is 2.

Again, looking at example above you can see that America would be willing to trade rice for steel if it can receive 1 unit of rice for less than 2 units of steel. Remember that if it produces both commodities the Price of rice in terms of steel is 2.

Look at diagram again.



Suppose both countries face a price ratio of $P_{s/r} = P_{r/s} = 1$.

VN would specialize in rice. It would then be willing to trade along line AB assuming $P_{r/s} = 1$. America would specialize in steel. It would then be willing to trade along line CD assuming $P_{s/r} = 1$. Thus, the terms of trade would be $P_{s/r} = P_{r/s} = 1$.

America	Terms of Trade	Viet Nam
$P_{r/s} = 2$	$P_{r/s} = 1$	$P_{r/s} = 1/2$
$P_{s/r} = 1/2$	$P_{s/r} = 1$	$P_{s/r} = 2$

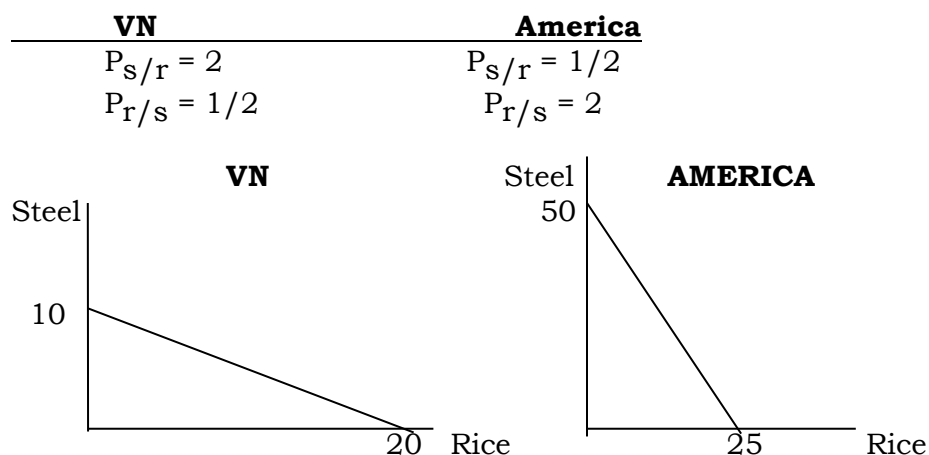
In this case both countries would gain from trade.

If relative commodity prices differ between countries in the absence of trade both countries can gain by exchanging commodities at any intermediate price ratio. Each country should specialize in that which it has an absolute advantage.

Principle of Comparative Advantage

Now suppose we have two countries: Viet Nam and America
two commodities: Rice and Steel

We assume both countries have same initial endowment of resources.
However, one country has an absolute advantage in both commodities.



If VN produces only rice it can produce a maximum of 20 units of rice.

If VN produces only steel it can produce a maximum of 10 units of steel.

If America produces only rice it can produce a maximum of 25 units of rice.

If America produces only steel it can produce a maximum of 50 units of steel.

In the above case it is said that the America has an absolute advantage in both commodities.

However, look at the cost of steel in terms of rice for both VN and America

For Viet Nam:

$P_{S/r} = 2$ VN must give up 2 units of rice for 1 unit of steel.

$P_{r/s} = 1/2$ VN must give up 1 unit of steel for 2 units of rice or $\frac{1}{2}$ steel for one rice.

For America:

$P_{r/s} = 2$ America must give up 2 units of steel for 1 unit of rice.

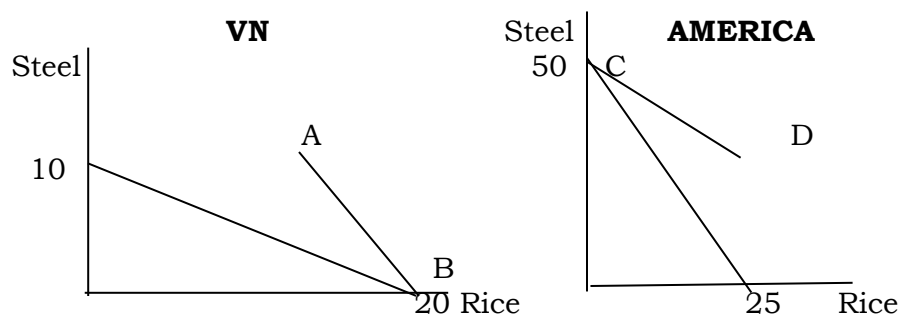
$P_{S/r} = 1/2$ America must give up 1 unit of rice for 2 units of steel or $\frac{1}{2}$ rice for 1 unit of steel.

Terms of Trade

Looking at example above you can see that VN would be willing to trade steel for rice if it can receive 1 unit of steel for less than 2 units of rice. Remember that if it produces both commodities the price of steel in terms of rice is 2.

Again, looking at example above you can see that America would be willing to trade rice for steel if it can receive 1 unit of rice for less than 2 units of steel. Remember that if it produces both commodities the Price of rice in terms of steel is 2.

Look at diagram again.



Suppose both countries face a price ratio of $P_{S/R} = P_{R/S} = 1$. VN would specialize in rice. It would then be willing to trade along line AB assuming $P_{R/S} = 1$. America would specialize in steel. It would then be willing to trade along line CD assuming $P_{S/R} = 1$. Thus, the term of trade would be $P_{S/R} = P_{R/S} = 1$.

<u>America</u>		<u>Terms of Trade</u>		<u>Viet Nam</u>
$P_{R/S} = 2$	>>>>	$P_{R/S} = 1$	<<<<	$P_{R/S} = 1/2$
$P_{S/R} = 1/2$	>>>>	$P_{S/R} = 1$	<<<<	$P_{S/R} = 2$

In this case both countries would gain from trade.

In this case it is said that the VN has a comparative advantage in rice and America has a comparative advantage in steel. This is known as the **Law of Comparative Advantage** and it claims that the total world output of both commodities will rise if each country should specialize (or tend to specialize) in that good for which it has a comparative advantage.

Trade is generally better than not trading or Autarky - closed economy.

Although the models show that there are gains to trade, quite often governments intervene in markets to change trade patterns. This is based on the concept that even though the overall world economy gains from trade, there may be some losers.