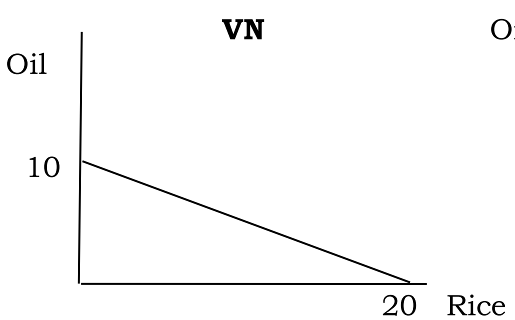
Absolute Advantage and Comparative Advantage – A Primer

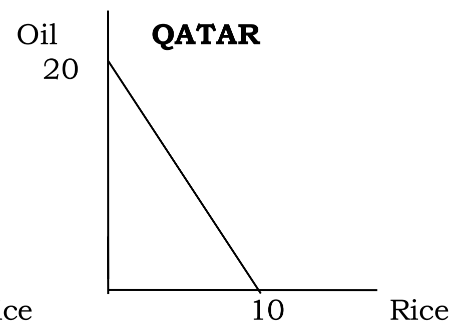
Principle of Absolute Advantage

Suppose we have two countries: Viet Nam and Qatar
Two commodities: Rice and Oil

We assume both countries have same initial endowment of resources.

VN	Qatar
$P_{r/o} = 1/2$	$P_{r/o} = 2$
$P_{o/r} = 2$	$P_{o/r} = 1/2$





If VN produces only Rice it can produce a maximum of 20 units of Rice.
If VN produces only Oil it can produce a maximum of 10 units of Oil.
If Qatar produces only Rice it can produce a maximum of 10 units of Rice.
If Qatar produces only Oil it can produce a maximum of 20 units of Oil.

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

However, look at the cost of Oil in terms of Rice for both VN and Qatar

For Viet Nam:

$P_{o/r} = 2$ VN must give up 2 units of Rice for 1 unit of Oil.
$P\ r/o = 1/2$ VN must give up 1 unit of Oil for 2 units of Rice or ½ units of Oil for one Rice.

For Qatar:

$P_{r/o} = 2$ Qatar must give up 2 units of Oil for 1 unit of Rice.
$P_{o/r} = 1/2$ Qatar must give up 1 units of Rice for two units of Oil or 1/2 unit of Rice for one Oil.

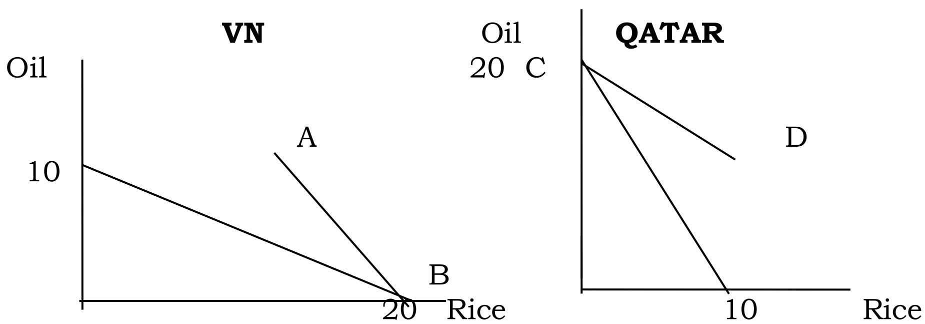
Terms of Trade

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

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

Look at diagram again.

VN	**Qatar**
$P_{r/o} = 1/2$	$P_{r/o} = 2$
$P_{o/r} = 2$	$P_{o/r} = 1/2$



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

VN would specialize in Rice. It would then be willing to trade along line AB assuming $P_{r/o} = 1$. Qatar would specialize in Oil. It would then be willing to trade along line CD assuming $P_{o/r} = 1$. Thus, the terms of trade would be $P_{o/r} = P_{r/o} = 1$.

Qatar		**Terms of Trade**		**Viet Nam**
$P_{r/o} = 2$	>>>>>	$P_{r/o} = 1$	<<<<<	$P_{r/o} = 1/2$
$P_{o/r} = 1/2$	>>>>>	$P_{o/r} = 1$	<<<<<	$P_{o/r} = 2$

In this case both countries would gain from trade.

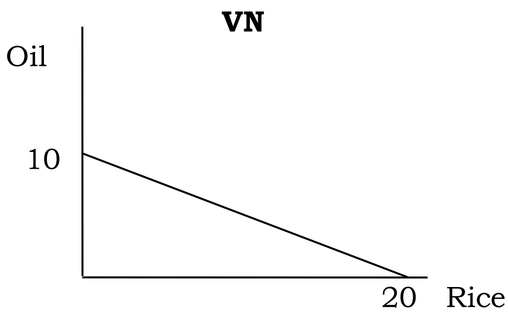
If relative commodity prices differ between countries in the absence of trade both countries can gain by exchanging commodities at any intermediate price ratio. Each country should specialize in that which it has an absolute advantage.

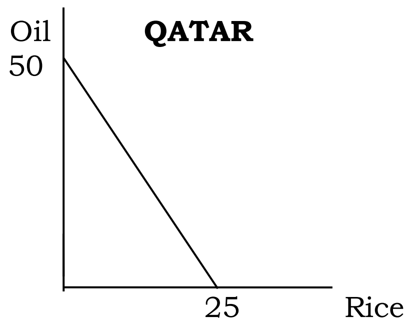
Principle of Comparative Advantage

Now suppose we have two countries: Viet Nam and Qatar
two commodities: Rice and Oil

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

VN	Qatar
$P_{o/r} = 2$	$P_{o/r} = 1/2$
$P_{r/o} = 1/2$	$P_{r/o} = 2$





If VN produces only Rice it can produce a maximum of 20 units of Rice.
If VN produces only Oil it can produce a maximum of 10 units of Oil.
If Qatar produces only Rice it can produce a maximum of 25 units of Rice.
If Qatar produces only Oil it can produce a maximum of 50 units of Oil.

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

However, look at the cost of Oil in terms of Rice for both VN and Qatar

For Viet Nam:

$P_{o/r} = 2$ VN must give up 2 units of Rice for 1 unit of Oil.
$P_{r/o} = 1/2$ VN must give up 1 unit of Oil for 2 units of Rice or ½ Oil for one Rice.

For Qatar:

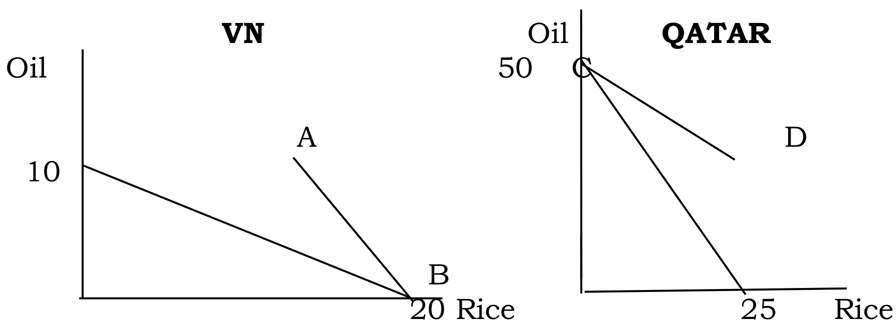
$P_{r/o} = 2$ Qatar must give up 2 units of Oil for 1 unit of Rice.
$P_{o/r} = 1/2$ Qatar must give up 1 unit of Rice for 2 units of Oil or ½ Rice for 1 unit of Oil.

Terms of Trade

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

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

Look at diagram again.



Suppose both countries face a price ratio of $P_{o/r} = P_{r/o} = 1$. VN would specialize in Rice. It would then be willing to trade along line AB assuming $P_{r/o} = 1$. Qatar would specialize in Oil. It would then be willing to trade along line CD assuming $P_{o/r} = 1$
Thus, the term of trade would be $P_{o/r} = P_{r/o} = 1$.

Qatar		**Terms of Trade**		**Viet Nam**
$P_{r/o} = 2$	>>>>>	$P_{r/o} = 1$	<<<<<	$P_{r/o} = 1/2$
$P_{o/r} = 1/2$	>>>>>	$P_{o/r} = 1$	<<<<<	$P_{o/r} = 2$

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 Qatar has a comparative advantage in Oil. 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.