

# MODERN THEORIES OF INTERNATIONAL TRADE

1. Resources and Trade (The Eli Heckscher and Bertil Ohlin Model)
2. Specific Factors and Income Distribution (Paul Samuelson - Ronald Jones Model)
3. The Standard Model of Trade (Paul Krugman – Maurice Obsfeld Model)
4. The Competitive Advantage (Michael Porter’s Model)

## 1. Resources and Trade (The Eli Heckscher and Bertil Ohlin Model)

The Heckscher-Ohlin theory explains why countries trade goods and services with each other, the emphasize being on the difference of resources between two countries. This model shows that the comparative advantage is actually influenced by the interaction between the resources countries have (relative abundance of production factors) and production technology (which influences the relative intensity by which the different production factors are being utilized during the production cycle.

The model starts with the presumption that country A produces two products: food (X) and textiles (Y). These two kinds of production need two different inputs, territory (T) and labour (L), which are available in limited quantities. In the same time, food production (X) requires more land, so it can be said it is territory intensive and textile (Y) production requires more labour, being in this way labour intensive.

Beginning with these presumptions, the Heckscher-Ohlin model explains the implications trade between two countries A and B has, if the countries produce the same products: food (X) and textiles (Y).

The relative resource abundance, factors intensity and trade specialization.

Country	Inputs and production without trade		The relative abundance and trade specialization in the product for which there is a factor intensity.	
	Labour (L)	Territory (T)	L/T	T/L
<b>A</b>	<b>X</b>	<b>Y</b>	<b>X</b>	<b>-</b>
X	20	<b>95</b>	0.21	4.75
Y	<b>10</b>	5	2.00	0.50
Total	30	100	0.30	<b>3.33</b>
<b>B</b>	<b>X</b>	<b>Y</b>	<b>-</b>	<b>Y</b>
X	3	5	0.60	1.66
Y	10	2	5.00	1.20
Total	13	7	<b>1.85</b>	0.53

A country having a bigger offer in a resource than in another is **relative abundant in that resource** and tends to produce more products that use that resource. Countries are more efficient in producing goods for which they have a relative abundant resource.

According to the Heckscher-Ohlin theory, trade makes it possible for each country to specialize. Each country exports the product the country is most suited to produce in exchange for products it is less suited to produce. In our case, country A is relative abundant in territory (T) and will specialize in producing food (X) and country B is relative abundant in labour (L) so it will specialize in producing textiles (Y). In this case, trade may benefit both countries involved.

The changes in relative prices of goods have a powerful effect on the relative income obtained from the different resources. International trade also has an important effect on the distribution of incomes.

## **2. Specific Factors and Income Distribution (Paul Samuelson - Ronald Jones Model)**

There are at least two reasons why trade has an important influence upon the income distribution:

a) resources can't be transferred immediately and without costs from one industry to another.

b) industries use different factors and a change in the production mix a country offers will reduce the demand for some of the production factors whereas for others it will increase it.

Paul Samuelson and Ronald Jones, two American economists, elaborated a trade model based on **specific factors**.

This is a tri-factorial model because it is based on 3 factors: labour (L), capital (K) and territory (T). Products like food (X) are made by using territory (T) and labour (L) while manufactured products (Y) use capital (K) and labour (L). From this simple example it is easy to observe that labour (L) is a mobile factor and it can be used in both sectors of activity, while territory and capital are **specific factors**.

A country having capital abundance and less land tends to produce more manufactured products than food products, whatever the price, while a country with a territory abundance tends to produce more food. If the other elements are constant, an increase in capital will mean an increase in marginal productivity from the manufactured sector, while a rise in the offer of territory will increase the production of food in the detriment of manufacturers.

When the two countries decide to trade, they create an integrated global economy whose manufacture and food production is equal with the sum of the two countries' productions. If a country doesn't trade, the production for a good equals the consumption.

The gains from trade are bigger in the export sector of every country and smaller in the sector competed by imports.

### 3. The Standard Model of Trade (Paul Krugman – Maurice Obsfeld Model)

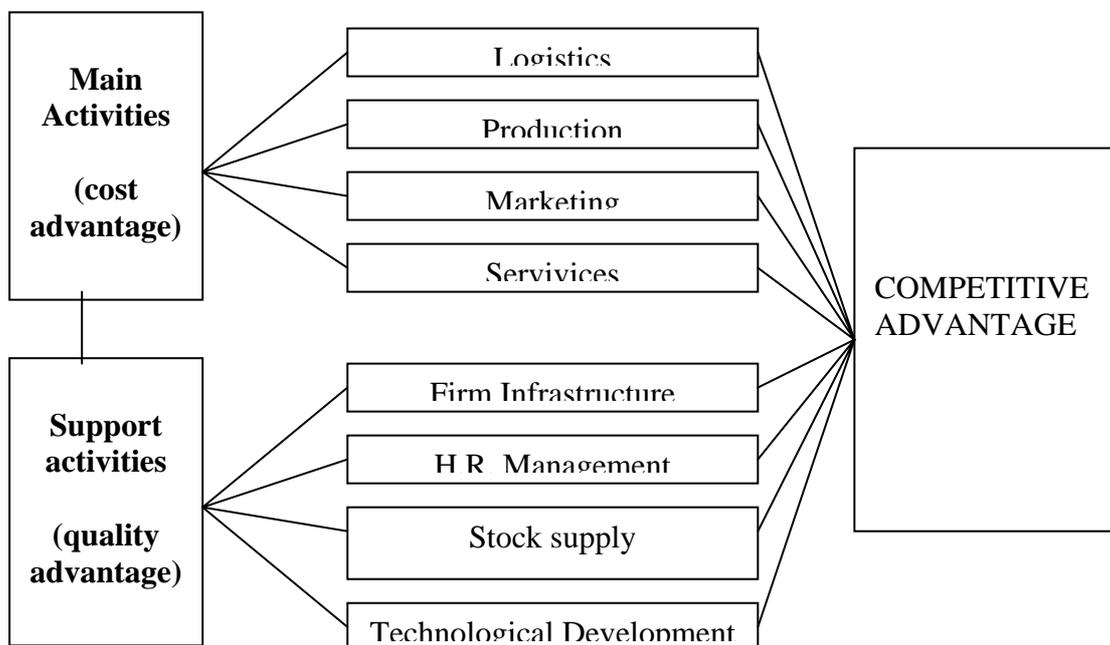
The standard model of trade implies the existence of the relative global supply curve resulting from the production possibilities and the relative global demand curve resulting from the different preferences for a certain good.

The **exchange rate** (the rapport between the export prices and the import prices) is determined by the crossing/intersection between the two curves, the relative global supply curve and the relative global demand curve.

If the other elements remain constant, the exchange rate improvement for a country implies a substantial rise in the welfare of that country.

### 4. The Competitive Advantage (Michael Porter's Model)

The chain value



Michael Porter identified four stages of development in the evolution of a country:

- Development based on factors
- Development based on investments
- Development based on innovation
- Development based on prosperity

The theory is based on a system of determinants, called by the author “diamond”:

- The capacity of internal factors
- The specific of the domestic market
- The links between the industries
- Domestic competition environment