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Module 19: International Trade Theories-I

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Items	Description of Module
Subject Name	Management
Paper Name	International Business Operations
Module Title	International Trade Theories-I
Module Id	Module no.- 19
Pre- Requisites	Trade, Factors of production, opportunity cost, Production
Objectives	To understand the international trade theories
Keywords	Mercantilism, Comparative advantage, Absolute Advantage

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Objectives

After reading this module, students will be able to:

a) Understand what fosters the international trade
b) Know the classical theories of international trade

Introduction

Since times immemorial, goods have moved across nations and people have made profit by selling the products to other countries, which were not available there. As per the principals of classical economics, there are four basic factors (resources) of production –Land, such as land, trees and minerals; Labor- the mental and physical skills of individuals; Capital- such as tools, machines and factories used in production or to facilitate production; and Entrepreneurship -The availability of natural resources, labour and capital is not sufficient to ensure economic success. These factors of production have to be combined and organised by the enterprising people who see opportunities for making a profit and who are willing to take risks by producing goods and services in the expectation that they will be sold. However, for success in business, it is not just a matter of what resources we have but also of how well we use them. Since the times of Adam Smith, people have been pondering on what underlies the movement of goods and services across nations, giving rise to the theories of international trade. As the times changed, the nature of economic activities also underwent a change and accordingly the ways to look at the underlying factors also underwent a change. Several economists proposed different theories of international trade. In this module, we shall study various theories of international trade.

Mercantilism

In the earlier days, dating back to the 16-18th century, Mercantilism was the economic philosophy that maintained that a country's wealth is measured by its holdings of gold and silver. Probably, it is this philosophy that India earned lot of gold and she was called as 'golden bird' in the ancient times. According to the principles of mercantilist theory, a country's goal should be to enlarge those holdings, i.e. the assets in the form of gold and silver. In order to increase the gold in the country, it was believed that money should come into the country and not go out of it. Therefore, mercantilism suggests that the ruling government should advance these goals by playing a protectionist role in the economy by encouraging exports and discouraging imports, notably through the use of subsidies and tariffs respectively. The theory dominated Western European economic policies from the 16th to the late-18th century. That was the time of colonialism and the nations concentrated on capturing the colonies, exploiting them to purchase the raw material and sell the finished goods. There was no move to sell the goods between the nations.

Considering the prevailing socio-economic conditions of those times, mercantilism might have been a useful line of thought, but it has several shortcomings. Its major limitation is that it confuses the acquisition of treasure with the acquisition of wealth. Assets in the modern times do not exist only in the form of gold and silver. In the present times, there are newer forms of assets. Moreover, protectionist policy weakens the country because it robs individuals of the ability to trade freely, and to benefit from voluntary exchanges. Moreover, it forces countries to produce products it would otherwise not in order to minimize imports.

The theory of mercantilism was questioned by the economists like Adam Smith and later by Ricardo by giving due importance to the individuals, and stressing that their welfare was the welfare of the nation. They believed in free trade, supported liberalism and enlightenment, and treated the wealth of the nation in terms of the "the sum of enjoyments" of the individuals in society, and not merely in terms of the gold and silver. Therefore, any activity, which would increase the consumption of the people, was to be considered with favour. Accordingly, their trade theories proposed by them were based upon the principles of free trade and the specialisation in the production of those goods where resources were most suitable.

Theory of Absolute Advantage

The theory of Absolute Advantage was proposed by Adam Smith, who argued that mercantilism robs individuals of the ability to trade freely and to benefit from voluntary exchanges. According to this theory of absolute advantage, a country should export those goods and services for which it is more productive than other countries and import those goods and services for which other countries are more productive than it is. A country is said to possess an absolute advantage over its trading partner when it can produce more of an output with a given amount of inputs. This can be understood with the help of an example.

Suppose that we are studying two countries – England and Portgal, who are producing wine and cloth. We further assume that there is no trade between the two countries and the output of the two countries per unit of the output is shown in the following table:

Table 1

Outputs / unit of Inputs of two countries

Country	Output of Wine/ unit input	Output of Cloth/ unit input

England	1	12
Portugal	6	10

When there is not trade between the two countries, both produce the goods as per their needs. We further assume that each country has 1000 units of inputs and uses the resources equally to produce the two products. When they are consuming their output alone, we can find their optimal production / consumption point by multiplying our 2X2 matrix of outputs by 500 (1/2 of the 1000 units of inputs for each country in the production of each product). We find that the output per one unit of Input Production Wine Cloth Inputs Wine Cloth England 1 12 500/500 500 6,000 Portugal 6 10 500/500 3,000 5,000 Total Production / Consumption in the two countries : 3,500 11,000. This can be shown with the help of the following table:

Table 2
Outputs / unit of Inputs of two countries

Output per unit of input				Production	
Country	Wine	Cloth	Inputs	Wine	Cloth
England	1	12	500/500	500	6000
Portugal	6	10	500/500	3000	5000

In this scenario, the total production of wine is 3500 units and cloth is 11000 units. Both the countries consume what they produce.

In the next scenario, we assume that each country specializes in the production of that product for which it has an absolute advantage. In this example, England has an absolute advantage in cloth and Portugal has an absolute advantage in Wine. The two countries produce only one product, i.e. England produces only cloth and Portugal produces only wine. Both allocate their full resources to only one product. Assuming that they allocate 1000 units, England will produce 12000 units of cloth and Portugal will produce 6000 units of wine. The total output of the two countries increases by 2500 additional units of wine and 1000 additional units of cloth. Hence, with the same output, foreign trade between the two countries increased the output. After trade, the international exchange ratio would lie somewhere between the pre-trade exchange ratio of the two countries. In other words, the additional output produced because of the trade will be distributed according to the terms of the trade between the two countries. For this purpose, the domestic scenario of the two countries has to be studied. In England, 1 unit of Wine is equivalent to 12 units of cloth and 1 unit of Cloth is equivalent to 1/12 barrel of Wine. Similarly, in case of Portugal, 1 unit of wine is equal to 1 2/3 units of cloth and 1 unit of Cloth is equivalent to 3/5 unit of Wine. Hence, the additional output will be taken by the two countries and both would benefit from trade, as compared to production in isolation.

Theory of Comparative Advantage

Theory of absolute advantage provided a useful framework for international trade for centuries, but it was looked upon with a different perspective. David Ricardo, a British economist argued that cost advantage is not the necessary and sufficient condition for trade between the nations. He argued that nations would benefit from trade even if they had absolute cost advantage. According to Ricardo, so long as the other country is not equally less productive in all lines of production, measurable in terms of opportunity cost of each commodity in the two countries, it will still be mutually gainful for them if they enter into trade. This theory states that a country should produce and export those goods and services for which it is relatively more productive than are other countries and import those goods and services for which other countries are relatively more productive than it is.

A country is said to have a comparative advantage in the production of a good if it can produce it at a lower opportunity cost than another country. In the example given earlier, (wine-cloth) the opportunity cost of cloth production is defined as the amount of wine that must be given up in order to produce one more unit of cloth.

The Ricardian model assumes two countries producing two goods using labor as the only factor of production. Goods are assumed to be homogeneous (identical) across firms and countries. Lobor is homogeneous within a country and heterogeneous (nonidentical) across countries. Goods can be transported costlessly between countries. Labor can be allocated costlessly between industries within a country but cannot move between countries. Labor is always fully employed. Production technology differences exist across industries and across countries and reflected in labor productivity parameters. Firms are assumed to maximize profit, while consumers are assumed to maximize utility.

The concept of opportunity cost can be explained with the help of the following table:

Table 3

Opportunity Cost

Output per unit of input	Paper	Fish
Finland	3	4
Germany	1	2

In this example, we assume that two countries – Finland and Germany produce paper and fish. If both the countries were to produce only one product, they would have to forego the production of the other product. For example, if Finland decided to produce only fish, then it would forego the production of paper, similarly, if Germany decides to produce paper, it has to forego the production of fish. In these cases, the foregone alternative is lost when one option is selected.

Each country has a comparative advantage over its trading partner in the production of that good for which its opportunity cost is lower than that of its trading partner. In the above example, the Output/unit of the Input in case of paper produced by Finland is ¾ of that of fish, and in case of Germany, it is ½. In other words, if Finland were to produce paper by foregoing fish, it would be able to produce 3/4th of the output per unit labour cost it would have used to produce fish. Opportunity cost (what must be be given up to produce more) Output/Input for Paper for Fish in case of Finland is 1 : 1/3 fish, and ¾ paper. In case of Germany it is 2 fish, and ½ paper. With this background, if we assume that the input is 1000 units of labour in each country, the output for each country would be as shown in the following table:

Table 4

Output for 1000 units of labour inputs in isolation

	Paper	Fish	Inputs	Paper	Fish

Finland	3	4	500/500	1500	2000
Germany	1	2	500/500	500	1000

In the situation when there is no trade between the two countries, 1000 units of labour input is equally divided between the two products and the output paper produced by Finland and Germany would be 1500 and 500 units respectively. Similarly, the output of fish would be 2000 and 1000 units respectively. Therefore, the total production/consumption of the two countries would be 2000 units of paper and 3000 units of fish.

Further, let us assume that the two countries engage themselves into trade and produce the product in which they have a comparative cost advantage, i.e. produce the product which they can do at a price lower than the other country. In this example, Finland has a comparative advantage because she is able to produce 3 units of paper with one unit of input, as against Germany, who can produce 1 unit of paper. Similarly, Germany has a cost advantage of producing fish. Assuming that Finland allocates 70% of its inputs to producing paper and rest 30% to producing fish, and Germany allocates 100% of the inputs to producing fish, the output would be as shown in the following table:

Table 5

Output per 1000 unit of inputs in case of trade

Country	Paper	Fish
Finland (700/300)	2100	1200
Germany (0/1000)	0	2200
Total Output	2100	3300

We see that in situation of trade, the total output of the two countries increases. Now, who would take the increased output would depend upon the terms of trade and bargaining power of the two countries.

Ricardian theory concludes that when countries specialize and trade the relative price of the produced good rises, income for workers rises and imported goods are less expensive for consumers. Trade has the potential to benefit both high productivity and low productivity countries, although trade may change the distribution of income within countries. The high productivity or low wages give countries a cost advantage that allows them to produce efficiently. However, the limitation of the theory is that in actual practice the assumptions cannot be overlooked. There are transportation costs and several other factors that can influence with the flow of goods across nations. Still, this theory provides a basis to encourage free trade between the nations, as against the protectionist theory of the earlier times.

Both the absolute advantage and comparative advantage theories failed to realise that the welfare of society does not depend only on the gains from the international trade but depends upon the way the gains are distributed. The individual gains under the theories are not guaranteed unless the government adopts an appropriate redistribution policy. There have to be certain incentives for the producers also in order to keep them engaged in the exportable production. These theories have also been criticised on the ground that labour is not the only input determining the cost of production.

Summary

The issue of trade between the nations has been studied by the economists since long and Adam Smith proposed that the nations would trade if there is absolute cost advantage in producing a product in one country. However, Ricardo proposed that that absolute cost advantage could not fully justify trade between nations, and he proposed a comparative cost advantage theory. Ohlin's thesis proposes that a country export goods which use relatively a greater proportion of its abundant and cheap factor.