INTERNATIONAL TRADE THEORY AND POLICY

A Zimbabwean Integrated Approach

Clainos Chidoko and Janemary Magonde

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By Clainos Chidoko & Janemary Magonde

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Preface

This book is an integrated approach to international trade theory and policy analysis. It is approached from the Zimbabwean perspective, although the theory is general. It covers most elementary content covered in lower levels of universities, upper levels in polytechnics, teachers colleges and high schools. The book is not exhaustive but covers essential topics in the field.

The book is intended and covers essential reading and content for the following readers at university and college levels:

1. *Commerce* (Economics, Banking and Finance, Business and Management Studies, Information Technology, and Marketing, among others).
2. *Education (*Specialists in Commercial fields)

It is also intended for use by policy makers and to some extent the general reader who have an interest in policy issues.

About the Authors

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1. General Introduction

International trade that applies microeconomic models could help us understand the international economy. It deals with the exchange of goods and services across international borders. It is basically concerned with the causes, structure and volume of international trade, why nations trade with one another.

International Trade

There are various reasons why and how international trade takes place (Sawyer & Srinkle, 2003; Salvatore, 2001).

Resource Endowments Differences

The basis for trade in both the pure exchange model and the Heckscher-Ohlin model is differences in resource endowments. Countries differ in their resource endowments as a result there will be need to trade so that they benefit from each other's resources.

Technology Differences

This is also related to the differences in resource endowments. When technologies are different, countries can trade so as to benefit from products that are produced by those countries. The products are usually different in terms of quality or may not be produced by another country. On th*at note it may not be existent in that economy.*

Economies of Scale in Production

Economies of scale enable some countries to produce goods at lower costs than the other. In that case some countries will find it cheaper to import than to produce the goods, thereby enhancing trade among countries. Countries with better technology usually enjoy economies of scale in production.

Government Policies

Government may influence prices for finished goods and services. The policies may be sufficient enough to influence the production process that would be advantageous to some countries and industries. In these situations international trade may happen only due to differing policies across countries of the world.

Differences in Demand

Preferences for goods and services are not the same across countries. On that notes some countries import goods from other countries because their citizens have a strong preference for some goods and services produced by other countries. Zimbabweans may import maize more than Mozambicans do because it's their staple food while Mozambicans import more rice.

Other Reasons

- No country is self-sufficient so countries rely on one another.
- There is also the exploitation of a country's comparative advantage and then trade with other countries.

Conclusion

Trade encourages the transfer of technology between countries. Zimbabweans have benefited a lot in terms of technology transfer from Japan as a result of importing second hand vehicles. In that case these are now maintained in the country. Trade is also likely to increase employment, in the export sector, where the exporting agencies engage in activities that would need more personnel to contact business.

2. Theory of International Trade

There are three main traditional models (theories) of trade: Mercantilism, absolute advantage and the comparative advantage models.

The theories of trade are mainly concerned with the following five questions:

1. What's the basis for trade and gains from trade?
2. What's the pattern of trade?
3. What determines the pattern of trade, who trades what, with whom and at what price.
4. What are the sources of gains from trade and how are these distributed among trading partners (i.e.) countries.
5. What are the implications of trade (i.e.) how trade affects factors of production (i.e.) returns to factor of price within countries?

Economists have been striving to provide answers to these issues right from the time of Adam Smith and David Ricardo.

Mercantilists View on Trade

A group of writers from Europe known as the Mercantilists concerned themselves with the question on how nations could promote its material well-being. The Mercantilists view the real source of material well being to be found in the country's stock of precious metals, especially silver and gold. They argued that the more gold and silver a nation had the richer and more powerful it was.

Limitations

There are various limitations to this mercantilist philosophy. On a global scale, it is not possible to simultaneously lower imports and increase exports. This is because world exports equal world imports. David Hume (1711-1776) argued that a favourable BOP was possible only in the short term because the increase in gold (money) would cause domestic prices to rise relative to foreign prices, thus causing exports to fall and imports to rise.

The mercantilists had a static view on world economy. World output is not

constant, international trade permits countries to take advantage of the division of labour and specialization, which increase the general level of output in any country and thus world output. A more dynamic view of trade suggests that all trading partners can simultaneously enjoy higher levels of production and consumption with free or at least less restricted trade.

The Theories of Absolute and Comparative Advantages

Absolute Advantage: Adam Smith

Smith asserted that nations trade with each other so as to realize gains from that venture. Smith said that the wealth of a nation is not shown by the stock of precious stones but by its capacity to produce goods and services. He said that a country has to engage in production of goods and services where it has an absolute advantage and export those goods, while it imports goods of which its trading partner has absolute advantage.

The theory states that international trade can occur basing on the country's level of production efficiency. The resources will then be used efficiently and output will increase. The increase in the output of both commodities measures the gains from specialization in production available to be divided between the two nations through trade.

Simple Illustration of Absolute Advantage

Adam Smith saw trade as beneficial to both parties of an exchange as long as there is specialization for example a shoemaker will benefit from trading with a tailor and vice versa.

Assumptions

The world is made up of two countries Zimbabwe and Namibia. These countries produce two goods only, X and Y. There is one major factor of production which determines price and value of a commodity. The factor is homogenous and is labour. Price and value of a commodity (product produced for resale) is determined by the number of hours spent in production of the commodity. That is it is the number of hours that determines the exchange values.

Table 1. Production per labour per hour

	Good X	Good Y
Zimbabwe	10 hrs	20 hrs
Namibia	20 hrs	10 hrs

Zimbabwe is efficient in producing commodity X therefore has an absolute advantage in producing X. Namibia has absolute advantage in the production of commodity Y since it is efficient in producing Y. Exchange in this case takes place if the countries specialize in producing those goods that they have an absolute advantage. Zimbabwe will shift resources from Y production to X production. Through trade Zimbabwe is able to save 10 hours by buying commodity Y as well as Namibia. The 10 hours that Zimbabwe saved as well as Namibia shows the gains from trade.

Each country should specialize so that the world will enjoy the lower costs of production per unit in all goods being produced. This increases the total output of the commodities therefore will increase consumption of each country. Smith says fundamental objectives of trade activities should not be interfered with, in other words, he advocates for free trade.

Criticism

Only a small percentage of trade can be explained by this theory. Most of today's world trade cannot this concept.

The Classical Theory of Comparative Advantage: David Ricardo

Ricardo states that countries should specialize in producing goods where they can do it efficiently. Each country should specialize in the production of a commodity for which it has less opportunity cost.

Assumptions

1. Two countries
2. Fixed endowment of resources that are identical.
3. Factors of production are perfectly mobile between alternative uses within a country;
4. Returns to factors of production are also the same.
5. Factors of production are perfectly immobile externally.
6. A labour theory of value is employed, that is the relative value of a good is dependent on its relative labour content.
7. Technology is fixed for both countries.
8. There are also constant returns to scale.
9. There is full employment, no government intervention, there is perfect competition, and no transport costs.

According to the theory, even if Zimbabwe is more efficient than Namibia in

producing both goods, trade between them is still beneficial to both.

Simple Illustration of Comparative Advantage

David Ricardo postulates that absolute advantage is not always a prerequisite for international trade. Trade can also be beneficial when one country is more efficient in the production of both goods. Comparative advantage is determined not by absolute values but by labour productivity ratios. The following example illustrates this law or principle.

Suppose there are only two countries, Zimbabwe and Namibia, and the production per labour per hour is given as in the table.

Table 2 (a). Production per labour per hour

	Good X	Good Y
Zimbabwe	120 hours	100 hours
Namibia	80 hours	90 hours

Table 2 (b). Opportunity cost

	Good X	Good Y
Zimbabwe	100/120=0.83	120/100=1.2
Namibia	90/80=1.125	80/90=0.889

The opportunity cost of producing Good X in Zimbabwe is Good Y / Good X=100/120 = 5/6 = 0.83, and Good Y is Good X / Good Y = 120/100=1.2. For Namibia Good Y, 80/90 = 8/9 = 0.889 and Good X, 90/80 = 9/8 = 1.125. This means in order to produce one unit of Good Y, Zimbabwe should give up 1.2 hours of producing Good X. Therefore it is better for Zimbabwe to produce Good X which has a smaller opportunity cost. With trade Zimbabwe can import a unit of Good Y at a cost less than 1.2 of Good X and therefore gains 0.2 which it can spend on her own production of Good X. 0.2 is the gain of Zimbabwe. Namibia, for one unit of Good Y it will be able to get 1 hour of production of Good X and free up time which again represent a gain to Namibia.

So it will be good for Zimbabwe to specialize in production of Good X because it spends less hours and exchange that with Namibia. Namibia should specialize in Good Y production because it spends fewer hours and trade for Good X. The principle states that even if a country has absolute advantage of producing all goods, trade and specialization will still derive some benefits to both countries provided each has a comparative cost advantage. Thus the theory assumes barter trade.

Criticisms

The theory is a static model, that is, it does not take changes in production process into consideration for example changes in technology and interaction between production processes. It also assumes the use of one factor of production i.e. does not consider the use of other factors of production such as land and capital. The use of two goods is unrealistic because countries produce many goods simultaneously. It assumes that labour is only mobile nationally.

It assumes that exchange is based on barter trade. The theory does not consider effects of trade on income distribution, it assumes zero transport costs. The theory also looks at the supply side only and not the demand side of trade.

Sources of Comparative Advantage

Three main sources are explained below:

Technology

Technological differences emanate from knowledge that is accumulated through experience or as a result of innovation. If a country possesses a production process that is superior to the processes used by other countries, this could be a source of that country's comparative advantage.

Resource Endowments

Many countries are endowed with different quantities and qualities of scarce resources as well as different proportions of factors of production. This becomes a source of comparative advantage.

Differences in Tastes or Demand

Technology and resource endowments emphasize the conditions of supply in the various countries. However, relative prices cannot be determined on the basis of supply considerations alone. The force of demand is also important in the determination of a country's comparative advantage. Rising demand in the market encourages specialization and higher productivity. For example, if consumers in Namibia have a relative preference for good X, whereas consumers in Zimbabwe have a relative preference for good Y, pre-trade relative prices will differ between Namibia and Zimbabwe even if they have similar resource endowments and production techniques. Tastes or demand differences are thus also important in explaining trade flows between countries.

Conclusion

There are other sources of comparative advantage. Import controls such as tariff, quotas and export subsidies which create artificial comparative advantage for domestic producers. Climatic differences which determines the cost at which different countries produce their commodities.

3. Important Concepts of International Trade

Introduction

Production Possibility Curve for Zimbabwe

A production possibility curve (PPC), sometimes called a production possibility frontier, production possibility boundary or product transformation curve, is a graph representing production tradeoffs of an economy given fixed resources, like the one given below.

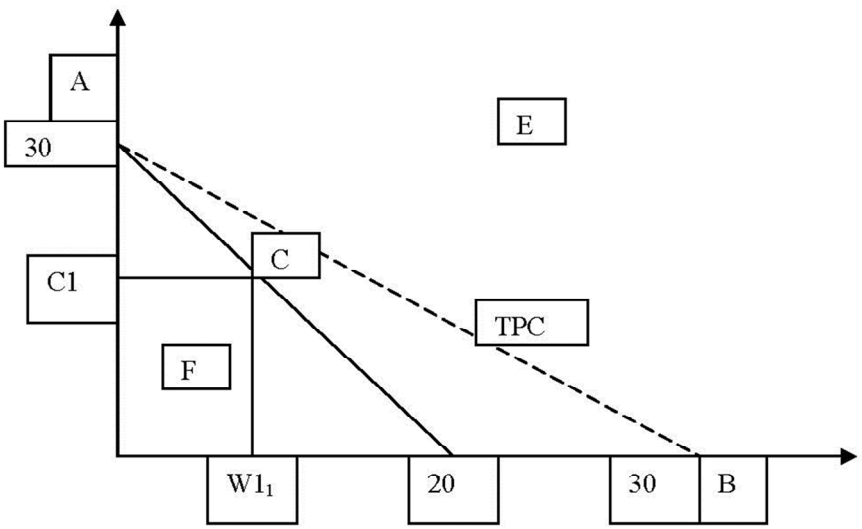


Figure 1. Production possibility curve

C – is on the PPC and it is efficient

E – is outside the PPC and is unattainable

F – is inside the PPC and it is attainable but inefficient

If Zimbabwe decides to produce Good X only, it will produce 30 and 20 only if Good Y alone is produced. The PPC is called transformation curve i.e. it shows possibility of increasing output of one good by reducing that of the other. Point C

represents production and consumption before trade. Zimbabwe will produce 30 units of Good X if it engages in trade and complete specialization. Assuming an exchange rate of 1 unit of Good X to 1 unit of Good Y, Trade Possibility Curve is given by TPC. On point A, it is assumed that Zimbabwe produces 30 units of Good X and uses them to acquire 30 units of Good Y. This means that the TPC shows the possible consumption combination of Good X and Good Y when Zimbabwe engages in trade.

Note that combinations of TPC are in the unattainable region before Zimbabwe engages in trade. The TPC shows that Zimbabwe gains from trade because it will be consuming beyond its means. Trade provides more goods. The neoclassical economists extent their analysis by considering varying opportunity costs, that is decreasing opportunity cost, and increasing opportunity cost.

In David Ricardo's principle of comparative advantage, labour is assumed to be of equal efficiency but the neoclassicals argue for a generally increasing opportunity cost. A case of constant opportunity costs will lead to complete specialization but with varying opportunity cost there would be no complete specialization. Ricardo concentrated on supply side but the neoclassicals consider the demand side as well, that is they make use of indifference curves to show the gains of trade where there is no complete specialization as illustrated below.

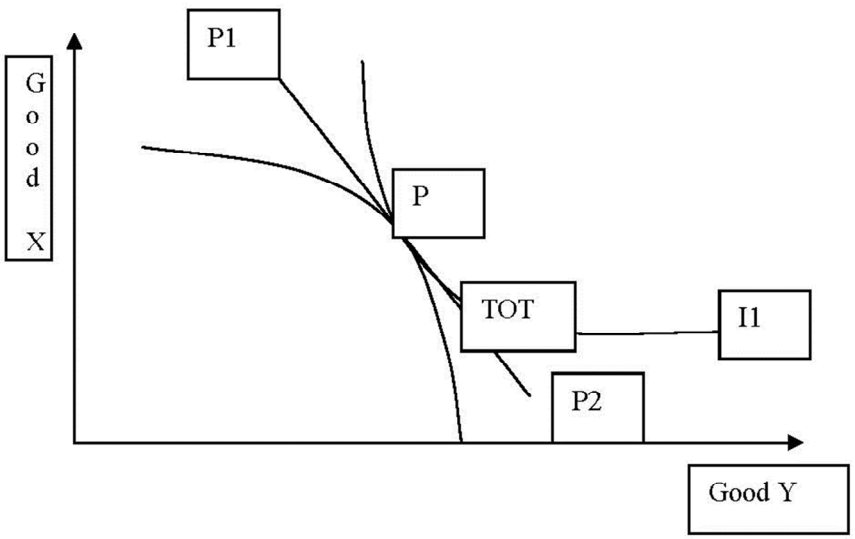
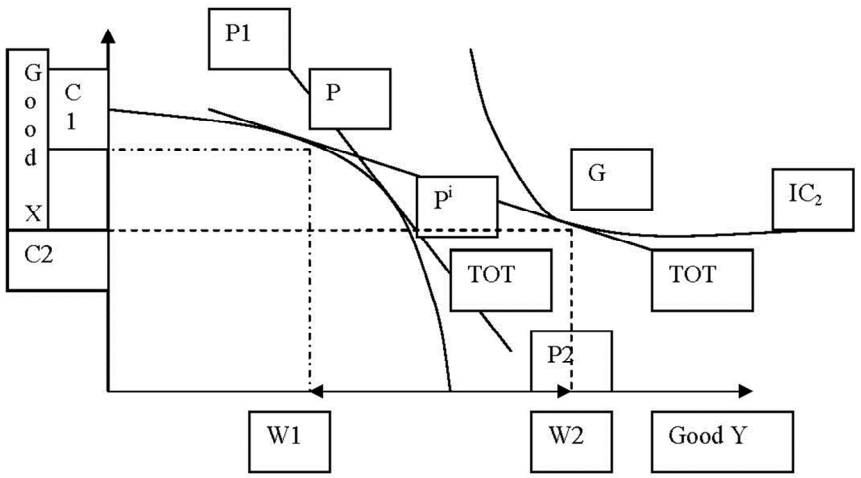


Figure 2. Terms of trade

Terms of trade is the price of one good in terms of another. Point P is the point of consumption and production before trade and also P can be defined as the point

of efficient production. I1 is an indifference curve showing consumer's preferences in Zimbabwe. Line terms of trade (TOT) can be defined as the terms of trade when there is trade or a budget line of consumers, its slope shows number of units of Good X to be given up in order to have one unit of Good Y i.e. opportunity cost. Therefore with a dome shaped production possibility curve it is not possible to have complete specialization.

When there is trade, production and consumption can be illustrated by the following diagram (Figure 3):



- C1 - C2 – exports; W1 – W2 – imports

Figure 3. Production and consumption

Zimbabwe can produce efficiently on point P i.e. W1 of Good Y and C1 of Good X but its consumer preferences are shown by IC_2 i.e. consumers would want to have W_2 and C_2. This means that Zimbabwe is producing more Good X than required by its domestic market. Therefore it exports the difference but it is producing less Good Y than required by its domestic market and the difference is imported. Therefore residents in Zimbabwe will have a higher satisfaction when Zimbabwe engages in trade than when it does not. The neoclassical theorists have introduced money costs of production for example wage rates and money prices but maintain Ricardo's assumption that resources are immobile internationally. They believe that comparative advantage can be altered by a change in money costs and also by changes in the exchange rates for example depreciation or devaluation.

Gains from Trade

Ricardo and Smith treat gains from trade as increased output i.e. if countries in the world concentrate on producing a good they can produce best then the production possibility curve of the world will shift outwards. The neoclassicals divide gains from trade into two (static and dynamic gains). Static gains from trade arise from applying a simple principle of comparative advantage, that is, the prices of goods in the world will decrease. Dynamic gains result from a shift of the PPC i.e. the impact of trade on the PPC i.e. domestic productivity. Static gains are the movement from one point to another along the PPC which alters the price of the goods.

Static gains can also be divided into two i.e. a gain in production and a gain in consumption.

A gain in production is the movement along the PPC while a gain in consumption is movement from point P to point G i.e. an increase in satisfaction levels after trade. Dynamic gains can only be valid as long as there is a shift of the PPC. These are derived from advantages of specialization which increase the quality and quantity of resources.

Factors Determining Dynamic Gains

Increased Trade is the main factor determining dynamic gains. Trade expands the size of the market which encourages investment resulting in economies of scale. An increase in the market encourages specialization and increases the benefits resulting from large scale production. Neoclassicals believe that a country which does not trade will experience low levels of investment. Trade simply makes available better imported technology which increases productivity of domestic factors of production. This factor is however controversial because it favours the employment of capital as opposed to labour. However, openness to trade encourages competition between domestic and foreign producers and this will lead to production of high quality goods therefore trade acts as an engine of growth.

Other Concepts

The Marginal Rate of Transformation (MRT)

MRT of X for Y refers to the amount of Y that a country must give up to produce each additional unit of X. Thus, MRT refers to the opportunity cost of X. We talk of MRT in production.

Community Indifference Curves

Community indifference curves show various combinations of commodities

yielding equal satisfaction to the community or nation. Higher curves portray greater satisfaction, while lower curves show less satisfaction. To be useful, indifference curves should not cross each other.

The Marginal Rate of Substitution (MRS)

The MRS of X for Y in consumption refers to the amount of Y that a nation could give up for one extra unit X and still remain on the same indifference curves. We talk of MRS in consumption.

Offer Curves

The offer curve of a nation shows how much of its import commodity the nation demands for it to be willing to supply various amounts of its export commodity. The offer curve of a nation shows the quantity of imports and exports the country is willing to buy and sell on world markets at all possible relative prices. It is really a combination of the demand curve and the supply curve because it indicates for any given exchange ratio the quantity of one commodity that a country demands and as well as the quantity of another commodity it wishes to offer (export) in exchange.

Features of the Offer Curve

Bends upwards from left to right for the country that is substituting and the lower limits indicate the less preferred exchange ratios. The behaviour of the offer curve is linked to the operation of the law of diminishing marginal utility i.e, at some point, the country is willing to offer significantly more of what it produces for what it doesn't produce but reaches a point where it is willing to offer little or no of what it produces for what it does not.

Conclusion

Analysis of production, consumption and the subsequent trade is vital for any economy for this will give a good overview of the performance of economic activities in a particular nation. As a result correct policy prescriptions can be given.

4. Factor Endowments and the Heckscher-Ohlin (H-O) Model

This is one of the dominant model of comparative advantage in modern economics and one of the most influential theories. It is a general equilibrium mathematical model of international trade. It was developed by Eli Heckscher and Bertil Ohlin, building on David Ricardo's theory of comparative advantage by predicting patterns of commerce and production based on the factor endowments of a trading region.

Theoretical Foundations

The Ricardian model of comparative advantage postulates that trade is motivated by differences in labour productivity using different technologies. The H-O model has identical production technology everywhere. Ricardo considered a single factor of production, that is labour.

The Model

A country's comparative advantage is determined by relative endowments of the factors of production that is land, labour, and capital**.** Countries have comparative advantages in the goods that require local inputs because profitability is determined by input costs. Goods that require inputs that are locally abundant will be cheaper to produce than those goods that require inputs that are locally scarce.

Assumptions of the H-O Model

Given a production function Q= f(K,L), the model assumes constant returns to scale i.e. technology is similar in both countries but differ across goods in different countries and remain the same in the two countries on a particular good. This means that knowledge is transmitted freely across countries because countries are using the same methods of production i.e. perfect knowledge of producing a particular good in the whole world.

The production function is linearly homogeneous of degree 1 i.e. if inputs are increased by a certain proportion then output will increase by the same proportion. Factors of production like labour and capital are assumed to be

substitutes of each other i.e. there is a down sloping isoquant. The same level of output can be produced by using different combinations of labour and capital. Increased use of labour means reduction in the use of capital and vice versa thus labour and capital are substitutes. There are no factor intensity reversals. Factor intensity on each product is not expected to change i.e. if a product is labour intensive it is not expected to be capital intensive even if prices change. Find the illustration below.

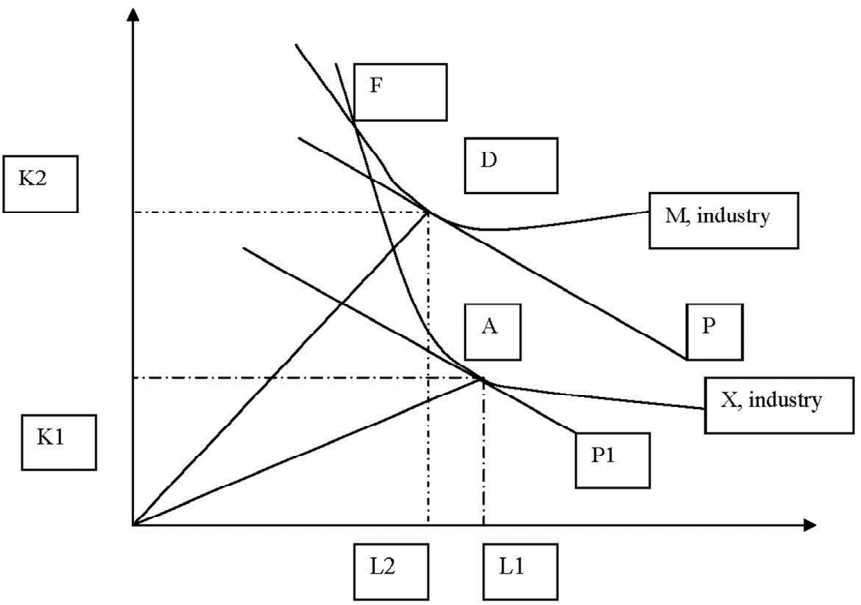


Figure 4. Factor intensities

If the two isoquants are for industries X and M and factor price ratios are given by P and P1 (these are parallel), industry M is capital intensive, and it will find it relatively cheaper to produce at point D because at that point the K/ L ratio is greater than at point A. This makes good X labour intensive. When the isoquants cross each other, factor intensity changes for example on point F, X is capital intensive because K/L ratio for good X is greater than that of good M.

It is also assumed that the equilibrium in the economy will be attained instantly i.e there are some forces that ensure the existence of an equilibrium for example demand and supply forces, therefore full employment is assumed. There are no transport costs and there is free trade.

Perfect competition is assumed to be prevailing in all markets including in factor markets. This also implies full employment of resources. Consumer preferences are captured by indifference curves. All the assumptions are useful because they

are used to define PPC and comparative advantage.

Factor Intensity

H-O theorem assumes that the two commodities have different factor intensities. A commodity is said to be factor –X- intensive whenever the ratio of factor X to a second factor Y is larger. Commodity 1 is said to be capital intensive compared to commodity 2, if the K/L ratio in commodity I is larger than the K/L ratio in commodity 2 production. Factor intensities represent requirements in the production of commodities 1 and 2.

Difference in Factor Endowments

A country is capital-abundant relative to another country if it has more capital endowment per labour endowment than the other country. Thus in this model country 2 is capital-abundant relative to country 1 if:

$$\frac{K}{L} > \frac{K^*}{L^*}$$

where K is the capital endowment, L is the labour endowment in the country 2. K* is the capital endowment and L* is the labour endowment in country 1.

Note that if country 2 is capital-abundant then country 1 is labour-abundant since the above inequality can be rewritten to get:

$$\frac{L^*}{K^*} > \frac{L}{K}$$

The Main Theorems of the H-O Model

The four main theorems in the H-O model include the Heckscher-Ohlin theorem, the Stolper-Samuelson Theorem, the Rybczynski theorem, and the factor-price equalization theorem.

The Heckscher-Ohlin Theorem

The H-O theorem says that a capital-abundant country will export the capital-intensive good while the labour-abundant country will export the labour-intensive good. The theorem identifies the structure of trade as a function of the difference between autarky prices and post trade prices.

The Stolper-Samuelson Theorem

The theorem states that if the price of the labour-intensive good rises then the

price of labour, the factor used intensively in that industry, will rise, while the rental rate paid to capital will fall. Thus, if the price of sugar were to rise, and if sugar were labour-intensive, then the wage rate on labour would rise while the rental rate would fall.

The Factor-Price Equalization Theorem

The factor-price equalization theorem says that when the prices of the output goods are equalized between countries, then the prices of the factors (capital and labour) will also be equalized between countries. This implies that free trade will equalize the wages of workers and the rents earned on capital throughout the world.

The Rybczynski Theorem

The Rybczynski theorem demonstrates that an increase in a country's endowment of a factor will cause an increase in output of the good which uses that factor intensively, and a decrease in the output of the other good.

Returns to Factors of Production

The move to free trade equalizes relative commodity prices. Since there is a one to one correspondence between relative commodity prices and relative factor prices, the reduction in the relative prices of capital intensive good in the labour –rich country which imports it must reduce the relative price of capital in the country.

Alternatively, increase in the relative price of the labour-intensive good which it exports must increase the relative price of capital in the capital-rich country. Each country exports the good which uses intensively the factor which is relatively cheap in the country under autarky and import the commodity which intensive in the factor which is relatively expensive. The increased demand for the export good drives up the price of that good and the price increase has more effect on the factor used intensively thereon.

Conclusion

The H-O model forms the basic explanation for inter industry trade. Its theoretical basis is well founded in empirical evidence and has dominated literature on trade, despite other new models that have been developed to explain new type of trade in the modern world, that is, intra industry trade.

5. Imperfect Competition and International Trade

Trade based on perfect competition proposed by Ricardo, HOS and the standard theories does not increase competition and firms involved do not enjoy economies of scale. These theories predict that the more countries are different the more they should trade. However a lot of trade takes place between countries with similar technologies and endowments such as trade between developing countries therefore access to international markets allows firms to take advantage of economies of scale.

Trade Based on Product Differentiation

Krugman (1981) highlighted a number of factors about trade which are contrary to the H-O model. There is existence of large and substantial trade between countries with similar factor endowments e.g. among EU countries, Latin American Countries, SADC countries. The H-O model would suggest that there will be very little trade between such countries. There is also the existence of large quantities of very similar products being exchanged between countries e.g. Zimbabwe sells shirts to Botswana and Botswana sells shirts to Zimbabwe.

The H-O model implies that one country would export one range of a good and it should use that country's abundant factor. Trade in manufactured goods exists because of:

- Economies of scale.
- Difference in demand patterns which leads to production of differentiated products.
- Difference in availability of human capital.
- Differences in technology thus leading to technological gap and imitation gap.
- Differences in Research and Development.
- Differences in stage of product development i.e. the product cycle theory.

Measuring Intra-Industry Trade

The level of intra-industry trade can be measured by the intra-industry trade index (T) (Greenaway et al., 1995):

$$T_j = -\frac{|X_j - M_j|}{X_j + M_j}$$

Where X and M represent, respectively, the value of exports and imports of particular industry or commodity group and the vertical bars in the numerator of Equation denote the absolute value. The value of T ranges from 0 to 1. T = 0 when a country only exports or only imports the good in question (i.e., there is no intra-industry trade). On the other hand, if the exports and imports of a good are equal, T = 1 (i.e., intra-industry trade is maximum).

Trade Based on Dynamic Technological Differences

Apart from differences in the relative availability of labour, capital, and natural resources as stressed by the Heckscher-Ohlin theory and the existence of economies of scale and product differentiation, dynamic changes in technology among nations can be a separate determinant of international trade. These are examined by the technological gap and product life cycle models.

Technological Gap Model

According to the technological gap model put forward by Posner in 1961, a great deal of trade among industrialized countries is based on the introduction of new products and new production processes. These give the innovating firm and nation a temporary monopoly in the world market. Such a temporary monopoly is often based on patents and copyrights, which are granted to stimulate the flow of inventions. As the most technologically advanced nation, US exports a large number of new high-technology products. However, as foreign producers acquire the new technology, they eventually are able to conquer markets abroad.

Conclusion

Intra industry trade has come to dominate the world as most countries are endowed with the same resources and technology that they produce almost similar products. The only difference will be the quality of the resources that will in turn influence product differentiation.

6. International Trade Policy

Introduction

There are various arguments for trade barriers that include the following.

Balance of Payments Argument

Nations impose tariffs as a way of correcting the Balance of Payments disequilibrium usually as a short term measure.

Infant Industries

Young industries have to be protected so that they have more time to grow strong before they can face international competition. If not protected these will quickly fold as the cheaper imports will outcompete them.

Dumping

Trade barriers can be imposed to prevent dumping of cheaper and at times low quality product from developed countries. Some product may even be hazardous to human and animal health.

Employment

This factor is linked to almost all arguments for protection. The local economy is protected so as to ensure the continued existence of local firms by protecting them from foreign competition. This ensures that they do not fold and hence protecting employment of locals.

Government Revenue

Import tariffs are a source of government revenue. Production, consumption, income and property cannot be effectively taxed or subsidized when they cannot be measured or monitored, and with import tariff revenue can be raised more cheaply than through more elaborate kinds of taxes.

National Security

Governments prefer not to be entirely dependent upon foreign suppliers for essential resources. It is therefore often argued that industries that produce products that will be essential in times of war or international crisis should be protected.

Old Industry Argument

This is when a government argues that an essential industry in the economy is now too old to compete for the same industries on the world market e.g. the then Zisco Steel in Zimbabwe. This industry cannot change or adopts new technology used by the same industries in the world. Therefore, the trade policy instrument may be used to protect the old industries.

Strategic Good Argument

There are some goods which are strategic especially politically, e.g. food and military hardware. If a country depends on importing such goods its citizens will suffer in times of war and sanctions. The government has to protect such industries in order to remain self sufficient even if the industry isn't efficient. Some strategic goods cannot be exported especially food. If goods like military hardware are exported to other countries, other countries will imitate the product and therefore there will be loss of certain advantages eg political position.

Cultural Reasons

Some Countries impose barriers so as to preserve their culture e.g. the French government to its film industry.

Arguments against Trade Barriers

Other countries may react by retaliating a particular country's products following its imposition of protectionist measures. Welfare costs of society may be a result of protectionist measures. Trade barriers may lead to inefficiency by local firms. They will not strive to compete but only will relax knowing that they have less or no competition.

Trade Policy Instruments

Riveria-Batiz and Riveria-Batiz (1994) say that tariffs and import duties, export subsidies, quotas, exchange rate controls, embargoes and boycotts are the main policy instruments used by most governments.

Import Tariffs

It is a tax which is levied or charged on a good as enters in an economy. There are three types of tariffs:

Ad-Valorem Tariff

It is a tariff charged depending on the value of the imported goods i.e. it is a percentage of the price of the good eg 20% Ad Valorem on cars – the tarrif would be 20% of the price of the car.

Specific Tariff

It is a fixed amount of charge per unit of a good e.g. $1000 specific tariff on every car that enters the economy, regardless of its price e.g. if you purchase a car for $6000 you will be asked to pay specific tariff of $1000.

Compound Tariff

Combines the two types of tariff i.e. Ad Valorem and specific e.g. a compound tariff of 20% Ad Valorem and $1000 specific tariff on all cars that enter the economy. This is meant to combine the advantages of the two types of tariff. The imposition of tariffs on imported inputs can reduce protection because this increases the cost of production. This increases domestic price and therefore discourage goods to flow into the economy. There are two types of tariff rates:

- Nominal Tariff Rates

This is a proportionate increase in the price of imported goods due to the imposition of tariff and tax.

- An Effective Rate

It is a proportionate increase in the value added due to the imposition of tariff on both the product and inputs.

- Nominal and Effective Rate of Protection

The nominal rate of protection shows in percentage terms the extent to which domestic price of the imported goods exceed what their domestic price would be in the absence of protection. The nominal rate is given by the cost of tariff. The effective rate of protection added at a stage of production in domestic industry can exceed what it would be in the absence of protection. The concept of effective rate of protection is more useful and the nominal

rate of protection. This is because it analyses the net effect on an industry or production process on controls of imports for both inputs and outputs.

Partial Equilibrium Effects of a Tariff

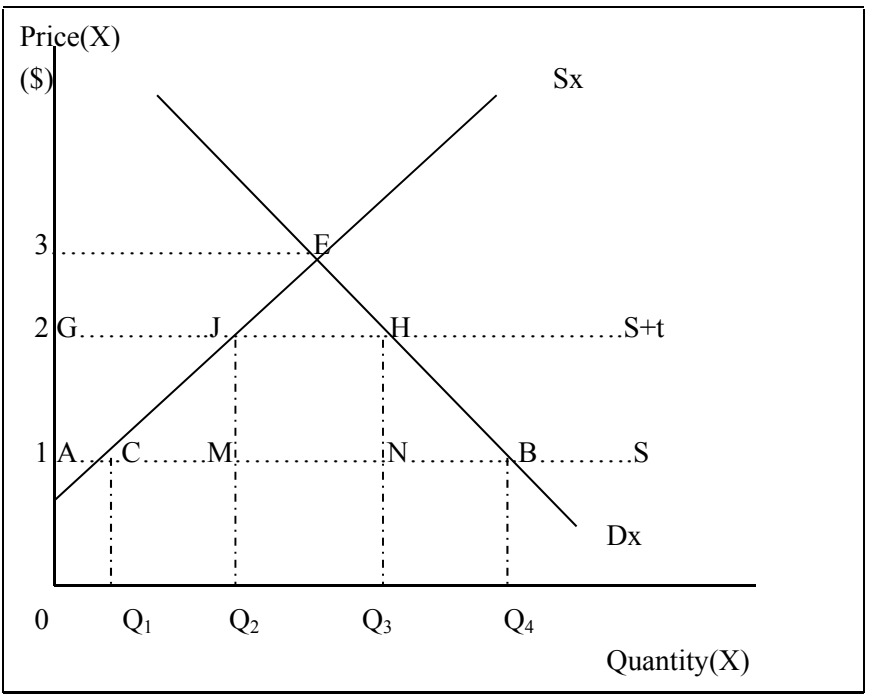


Figure 5. Partial Equilibrium analysis of a tariff

The partial equilibrium effects can be analyzed with the given diagram in which D_X and S_X are demand and supply curves respectively of commodity X in Country 2, while Country 1 is the trading partner. In the absence of S_X trade, the intersection of D_X and S_X defines equilibrium point E. With free trade Country 2 will consume (AB), of which (AC) is produced domestically and the remainder of (CB) is imported. The horizontal dashed line S represents the infinitely elastic free trade foreign supply curve of commodity X to Nation 2.

If Country 2 imposes a 100 percent ad valorem tariff on the imports of commodity X, P_X in Nation 2 will rise to $2. At Px=$2, Country 2 will consume (GH), of which (GJ) is produced domestically and the remainder of (JH) is imported. The horizontal dashed line S + t represents the new tariff-inclusive foreign supply curve of commodity X to Country 2. Thus, the consumption effect of a tariff Quantity (X) equals (BN); the production effect equals (CM); the trade effect equals (BN + CM);

and the revenue effect equals MJHN. The more elastic D_X and S_X are in Nation 2, the greater is the trade effect, and the smaller is the revenue effect of the tariff.

Non-tariff Trade Barriers and the New Protectionism

Tariffs have historically been the most important form of trade protection. However there are many other types of trade barriers, such as import quotas, voluntary export restrictions and anti-dumping actions. As tariffs were negotiated down during the post-war period, the importance of non-tariff trade barriers was greatly reduced (Makochekanwa et al., 2010).

Conclusion

Countries use trade policies to influence economic activities for the good of both consumers and producers. Governments also use these so as to gain revenue that will in turn be used to stimulate further economic activities.

7. Theory of Regional Integration

Introduction

Economic integration brings countries together in terms of economic cooperation in all spheres of development. ECA (2010) gives the following regional integration levels:

Preferential Trading Area (PTA)

In a PTA arrangement, countries offer preferential access to goods and possibly services from partner countries. The preferential access need not necessarily cover all goods, and need not necessarily entail the complete removal of tariffs where preferences are granted.

Free Trade Area (FTA)

No tariffs among member states in case of an FTA.. Where there is FTA, the member countries need to ensure that a good from a non-member country does not enter the free trade area via the country with the lowest external tariff, and is then shipped to any of the other countries.

Customs Union (CU)

With a customs union there are again no tariffs on trade within member countries, but for each product category there is a common tariff applied by each country. This is usually referred to as the Common External Tariff (CET).

Common Market (CM)

A common market is a customs union where in addition to the free circulation of goods is the free mobility of factors of production, and in particular capital and labour, across countries. The European Economic Community is an example of CM.

Monetary Union (MU)

A monetary union entails a common monetary policy, and hence implies common currency. Within SADC region, the Common Monetary Area (CMA) between Lesotho, Namibia, South Africa and Swaziland is one of the few examples.

Economic Union

Economic union is a stage from monetary union and implies the coordination/central determination of economic policy and in particular fiscal policy. The EU is a grouping that is the closest to an economic union.

Regional Groupings in Africa

Southern African Development Community (SADC)

The Southern African Development Community (SADC) is a transformation of Southern African Development Coordination Conference (SADCC), which was formed in 1980 as a way of reducing economic over-dependency on the then apartheid South Africa. The aim was to coordinate development projects. SADC is now more focused on development and economic cooperation among its member states, with the main aim of coordinating development projects in order to lessen economic dependence on the then apartheid South Africa.

Common Market for Eastern and Southern Africa (COMESA)

COMESA began as a preferential trade area in 1980 and became a common market thirteen years later. Its aims are more or the same as those of SADC except that its membership is larger and encompasses southern and eastern Africa. It fosters closer economic cooperation.

COMESA Treaty

Aims and Objectives of the Common Market

The main aims and objectives of COMESA:

- attain sustainable growth and development of member states
- to promote joint development in all fields of economic activity
- to foster closer relations among its member states; among other objectives.

Impediments to integration (adapted from Muuka et al., 1998)

Initial Rigidities

Most African countries are former colonies of European states. There are factors that have been there when these countries got independence and can be cited as a source of integration failure. These include over-dependency on unprocessed and primary exports and underdevelopment of human capabilities. These have not changed since and have hampered progress in terms of closer cooperation of African states.

Other Factors

Other factors have contributed to non-achievement of integration objectives and ideals. Among these are:

Parochialism

Member countries are failing to integrate their policies in line with COMESA agreements and as a result there is always conflict of interest whenever members engage with each other in relation to trade and other economic engagements.

Dependency on the Western Countries

Members continue to depend on their former colonizers for imports and other services. This has hindered closer cooperation with fellow African states.

Proliferation of Regional Groupings

There is a spaghetti bowl problem in Africa where members belong to various regional grouping and as a result coordination of policy at regional level becomes impossible. This hinders close integration process.

Political Obstacles to Integration

There is also lack of political will among members to succeed. They do not take the agreements that are reached at the regional seriously, and these groupings are merely reduced to talk shows.

Africa's Debt Burden

The high indebtedness of African states is a hindrance to integration as a large chunk of their income is channeled to debt servicing. This then starves development programmes in the respective countries.

Transport Problems

There is serious lack of transport infrastructure in Africa. Many countries do not even have a well developed railway system. This has affected progress in terms of closer cooperation.

Unstable World Economic Conditions

COMESA economies are suffering from negative development of developed states. The global warming and world economic crises are affecting the development of smaller states in Africa.

War Damage, Disease and Drought

Many COMESA members have been affected by civil wars and the liberation struggles have left many with a need for reconstruction problems. The countries in question include Angola, DRC, Mozambique and Rwanda among others.

Bribery and Corruption

Corruption is rampant in Africa and this has affected development in member states of COMESA. Hence integration process has been weakened.

Conclusion

Regional integration has benefited many small countries that would not otherwise be competitive on the global market. This is so as they would gain collective bargaining power, larger markets implement common tariffs and gain preferential treatment from fellow members.

8. World Trade Organisation

Introduction

The World Trade Organization (WTO) supervises international trade of member states. It was formed in 1995 in Marrakech. It replaced the General Agreement on Tariffs and Trade (GATT), which commenced in 1948. It offers a platform for formalization of trade agreements and dispute resolutions. It is based in Geneva in Switzerland.

History

ITO and GATT 1947

GATT was the predecessor of WTO, and was established soon after World War II. The International Trade Organisation (ITO) which was a comparable international institution was successfully negotiated then but did not go into effect since many countries failed to approve it, including the USA. In the absence of an international organization on trade the GATT became a defacto institution that would govern trade until WTO was formed.

The WTO Functions

The WTO is a centre of economic research and analysis, regular assessments of the global trade picture in its annual publications and research reports on specific topics are produced by the organization.

The WTO establishes a framework for trade policies; it does not define or specify outcomes. Five principles are of particular importance in understanding both the pre-1994 GATT and the WTO.

Non-Discrimination

Constitutes the most favoured nation (MFN) rule, and the national treatment policy (NT).

The MFN rule requires that a WTO member treat all WTO members the same. Same conditions must be applied to all without discrimination.

National treatment means that all goods entering the economy from member

states should be given same treatment as domestically produced ones.

Reciprocity.

It reflects both a desire to limit the scope of free-riding that may arise because of the MFN rule, and a desire to obtain better access to foreign markets.

Binding and Enforceable Commitments

The tariff commitments made by WTO members in a multilateral trade negotiation and on accession are enumerated in a schedule (list) of concessions.

Transparency

The WTO members are required to publish their trade regulations, to maintain institutions allowing for the review of administrative decisions affecting trade.

Safety Valves

In specific circumstances, governments are able to restrict trade. There are three types of provisions in this direction: articles allowing for the use of trade measures to attain noneconomic objectives; articles aimed at ensuring fair competition; and provisions permitting intervention in trade for economic reasons.

Conclusion

The WTO has achieved a lot in terms of regulating world trade. Without it trade would not be what it is today. The less developed countries have benefited a lot in terms of fair trade with the developed world, where it is recognized that countries are at different stages of development and should be treated as such.

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This book is an integrated approach to international trade theory and policy analysis. It is approached from the Zimbabwean perspective, although the theory is general. It covers most elementary content covered in most lower levels of universities, upper levels in polytechnics, teachers colleges and high schools. The book is not exhaustive but covers essential topics for the field.

The book is intended and covers essential reading and content for the following readers at university and college levels:

1. Commerce (Economics, Banking and Finance, Business and Management Studies, Information Technology, and Marketing, among others).

2. Education (Specialists in Commercial fields)

It is also intended for use by policy makers and to some extent the general reader who have an interest in policy issues.

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