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International Economics

International Trade and Development Introduction

Foreign trade has worked as an "engine of growth" in the past, and even in more recent times the "outward-oriented growth strategy" adopted by the Newly Industrialising Economies of Asia, including South Korea, Taiwan, Singapore, and Hong Kang, has enabled them to overcome the constraints of small resource-poor under-developed economies. Notwithstanding a strong belief in Prebisch, Singer and Myrdal thesis at some point of time in the history of international economic relations, the free trade paradigm in the current WTO administered era has thrown open innumerable opportunities for growth. Increasing spread of globalisation translated into larger movement of goods and services across the nations. Trade is intertwined with another element of globalisation: the spread of international production networks. Growth of trade is firmly buttressed by international institutions of long standing. The WTO, built on the legacy of the GATT, aims to create a commercial environment more conducive to multilateral exchange of goods and services. Recent years have seen substantial reductions in trade policy and other barriers inhibiting developing country participation in world trade. Lower barriers have contributed to a dramatic shift in the pattern of developing country trade - away from dependence on commodity exports to much greater reliance on manufactures and services. In addition, exports to other developing countries have become much more important. We address all these issues in this unit.

Trade and Development

The role of foreign trade in fostering economic development can be examined under two headings: (i) static gains from foreign trade, and (ii) dynamic gains from foreign trade.

Static Gains from Foreign Trade

The static gains from foreign trade can be briefly stated as follows. If there is a difference between internal relative prices in autarky and those that can be obtained internationally, then a country can improve its well-being by specialising in and exporting the relatively less expensive domestic goods and importing goods that are relatively more expensive.

From a development standpoint, the change in economic structure and factoral distribution of income that is assumed to accompany this adjustment is of clear concern. Because the economic systems of the developing countries tend to be somewhat unresponsive to changing price incentives, at least in the short run, factors of production may not move easily to the expanding low-cost sectors from the contracting higher-cost sectors. In this case the adjustment process takes on the characteristics of the "specific-factors model" and the gains from specialisation are reduced in the short-run.



Nevertheless, even if a country's production does not change at all, there are still gains from trade as follows:

- (1) The characteristics of the import good either in terms of quality for consumers or productivity in the case of capital and intermediate inputs may improve the economy's ability to meet consumer needs. Imports may also help relieve short-run domestic bottleneck and permit the economy to operate closer to its production-possibilities-frontier that is to say, more efficiently on a consistent basis.
- (2) The static impact of trade on the production structure of the economy that occurs when specilaisation follows comparative advantage will result in a relative expansion of the sector(s) using the relatively abundant factor. For most developing countries, this results in incentives to expand labor-intensive production instead of more capital-intensive production. This means expanding traditional agriculture, primary goods, and labor-intensive manufactures. International trade thus stimulates employment and puts upward pressure on wages, as suggested in Heckscher Ohlin explanation of the basis for trade.
- (3) Since most of the developing countries are far removed from full employment situation, another potential gain from foreign trade has been elaborated by Hla Myint. Myint suggests that unemployment represents a potential production supply that exceeds domestic demand in the developing country. In this instance, foreign trade can provide a 'vent for surplus', that is, a large market that will permit the country to increase its output and employment (conceptually, to move from well inside its production-possibilities-frontier to a point near or perhaps on the PPF). Myint argues that vent for surplus is a more convincing explanation of why countries start to trade, while comparative advantage helps us to understand the types of commodities countries ultimately trade. From a development standpoint, the gains in income, employment, and needed import goods can influence the development process in a positive manner.

However, these gains from trade are limited by a number of factors; among these the more important are as follows:

One, given the economic characteristics of many primary goods and labor-intensive manufactures, many observers question the desirability of a relative growth in the production of traditional goods, particularly if this growth is at the expense of modern manufacturing. Because of the lower income, low price elasticities of demand for these products and the instability in supply of agricultural and primary production, greater specialisation in these goods can result in a greater instability of income, even in the static sense.

Two, to the extent that the developing country is a large country in terms of export goods, supply may well lead to undesired terms-of-trade effects that will significantly reduce the expected static gains from trade and lead to a distribution of the gains from trade that favours the more developed trading partner.

Three, expanding production of basic labour-intensive products and relying on the industrialised countries for manufactures and capital goods not only can lead to a critical economic



dependency but also inextricably links the economic health of the developing country to that of the industrialised country.

Four, to the extent that developing countries are characterised by high rates of unemployment, the impact of increased demand for labour on the wage level is often limited.

To sum up, the static gains from trade for a developing economy originate from the traditional gains from exchange and specialisation as well as, perhaps from a vent for surplus. However, because of the inflexibilities in the traditional economies and the nature of the traditional labour-intensive exports, the relative static gains from trade may be less than those for the more flexible industrial economy and also may be reduced by the undesirable effects of increased economic instability and terms-of trade behaviour.

Dynamic Gains from Foreign Trade

The biggest potential impact of trade on development rests with dynamic effects. Dynamic effects may be both positive and negative.

(A) Dynamic Positive Effects: The principal positive effects may be stated as follows:

- (i) The expansion of output brought about by access to the larger international markets permits the developing countries to take advantage of economies of scale that would not be possible with the limited domestic market. Thus, industries that are not internationally competitive in an isolated market may well be competitive by way of international trade through expansion of market.
- (ii) Since comparative advantages change over time and with economic development, international trade can foster the development of infant industries into internationally competitive ones by providing the market size and exposure to products and processes that would not happen in its absence. This of course is one of the reasons cited for using trade policy instruments to restrict imports or promote exports, although these are problems with using the policies in practice.
- (iii) Other dynamic influences of trade on economic development arise from the increased investment resulting from changes in the economic environment, the increased dissemination of technology into the developing country, exposure to new and different products, and changes in institutions that accompany the increased exposure to different countries, cultures and products.
- (B) Dynamic Negative Effects: As conditions in the developing countries differ so dramatically from the theoretical models, the static application or comparative advantage may not be very helpful in providing guidelines for trade and specialisation in a dynamic developing economy setting. It is important to examine briefly several of the more important disadvantages of unrestricted trade for the developing country, particularly since these concerns can have important implications for trade policy.
 - (i) The possible negative effects of trade on development arise from factors that are ignored when focusing on static comparative advantage to delineate factors and imports For example, market imperfections in developing countries generally result in private costs and benefits being different from social costs and benefits. Relying on private (market)



prices in this environment can lead to a pattern of trade that is not consistent with either relative social costs or long-term development goals of the country.

- (ii) In a broader dynamic context, it must also be recognised that since the production linkages vary between different commodities or sectors, the overall effect of exports on growth and is likely to vary from commodity to commodity. Some commodities thus act like "growth poles" for the entire economy while others such as primary production have little effect outside their own sector.
- (iii) A further complication arises from the variation in the returns to scale characteristic among commodities. Thus, a country might not appear to have a relative cost advantage in a particular product at the level of production needed to fill the home market, but there might well be a comparative advantage in that product at a higher level of production. In a similar fashion, a product that appears to have a current cost advantage but is characterised by decreasing returns to scale may find its export possibilities very limited.
- (iv) From an internal perspective, the domestic supply and demand conditions that underlie both current and future comparative advantage have been and will continue to be influenced both by the imperfect nature of the markets and by government policy.
- (v) The operation of markets and the characteristics of traded goods often differ between the developing countries and the industrialized countries. Many argue that these differences result in the greater share of trade related benefits going to the industrialised countries and may even contribute to the furthering of underdevelopment in the developing economies.

To sum up, while empirical analysis often supports the idea of a positive connection between the expansion of international trade and growth in income, a certain ambiguity remains. The manner and the degree to which trade influences growth and development is complex and often country-specific. The nature of the effect appears to vary with the degree of development, the nature of the economic system, and world market. World business cycles in particular seem to play an important role. While empirical analysis has not as yet provided a conclusive answer to the links between trade and growth, some of the recent models of growth through endogenous technological change that incorporate various effects of international trade might prove more successful.

Prebisch, Singer and Myrdal Thesis

Prebisch-Singer-Myrdal Thesis states that the terms of trade of the developing countries have declined over a long period of time, much to their disadvantage. The thesis is so named after the names of the three economists who popularized it, viz., Raul Prebisch, Hans W.Singer and Gunnar Myrdal.

The problem of long-run deterioration in the terms of trade refers to the fact that, over the span of several decades or so, there has been a persistent tendency for the commodity terms of trade (price of exports/price of imports) to fall for developing countries. If the world is viewed as consisting of two groups of countries - the developing countries (DCs) and the industrialized countries (ICs) - then the implication is that the commodity terms of trade have been improving



for ICs, since exports from DCs(ICs) are imports into ICs(DCs). In other words, the international economy is transferring real income from DCs to ICs.

The thesis emerged in response to statistical studies showing that, particularly for Great Britain, the TOT had risen dramatically in the 50-to-100-year period ending with World War II. The inference was made that since the IC's TOT had improved, the DC's TOT must have deteriorated.

Objections to the Thesis

A number of economists pointed out that such an inference was invalid for the following reasons:

- (i) One reason concerns the way international trade are recorded. Exports are usually recorded f.o.b. (free on board) which means that insurance and transportation costs are not included; however, imports are usually recorded c.i.f.(inclusive of cost, insurance and freight). Hence Pexports/Pimports for the ICs could have been rising because as has been the case over the long run, transport costs had been falling. Thus, the use of the reciprocal of the IC's TOT as an indication of the DC's TOT is invalid, since the recording procedure could be consistent with improving TOT for both DCs and ICs due to the decline in transportation costs.
- (ii) Another reason for objection to long-run studies of TOT behaviour concerns quality changes in products. It is very difficult to incorporate quality changes into price indexes, and a rise in price for a product may not indicate a true price increase if the quality of the product purchased has also improved. Quality improvement have been greater in manufactured goods than in primary products in the long-run. Thus, since the share of primary products in DCs exports is larger than in DCs imports, even if Pexports/Pimports is falling for the DCs this may not be a true 'deterioration' in TOT. While the DCs may be paying relatively more for their imports, they may also be receiving relatively better products.

Despite these objections, there is considerable concern over the trend of TOT for DCs.

Causes of Deterioration in TOT

Several reasons have been offered for the long-run TOT decline of DCs.

(1) Differing elasticities of demand for primary products and manufactured goods.

Empirical evidence indicates that the income elasticity of demand is higher for manufactured products them for primary products. Consequently as DCs and ICs both grow, they devote a larger percentage of their incomes to the purchase of manufactured goods and smaller percentage on primary products. Since many DCs are net exporter of primary products and net importer of manufacturers, the prices of their imports will rise more rapidly than the prices of their exports, other things being equal.

(2) Unequal market power in product and factor markets in ICs and DCs

The general point is that primary products are sold in competitive world markets, while manufactured goods are often sold in an oligopolistic market setting where prices can be higher than would be the case with perfect competition. In addition, labour markets in ICs may contain imperfectly competitive elements if labour unions are strong and thus wages are relatively high, while labour in the primary-product sector in DCs is not organized and



cannot exert upward pressure on wages and prices. The result is that prices of primary products do not have the upward pressures put upon them that prices of manufactured goods do; therefore, the TOT of the DCs suffer. There may also be an asymmetry in price behaviour; primary-product prices may be slow to rise in the upswing of business cycles but fall in downswings, while manufactured goods prices rise in upswings and are slow to fall in downswings. Over the long run, DC's TOT decline.

(3) Technical change

The nature of technical change has worked to reduce the growth rate of demand for primary products. Those reduction in the growth of demand has therefore, other things being equal, resulted in less upward pressure on primary-product prices.

(4) Multinational Corporations and Transfer Pricing

The behaviour of MNCs through the mechanism of transfer pricing can worsen the DCs TOT. Suppose that a MNC operates a subsidiary in a DC that is sending inputs to another subsidiary in an IC and at the same time the subsidiary in the IC sending inputs to DC subsidiary. Since both subsidiaries are part of the same enterprise, such trade is called intrafirm trade. In intra-firm trade, prices are largely arbitrary because the goods do not pass through organized markets, and the recorded prices are merely bookkeeping entries for the firm.

Trade Strategy: Export-Led Growth

What is the appropriate trade strategy for DCs. Economists and policy-makers have debated two competing strategies regarding the trade sector: (i) inward-looking strategy, and (ii) outward looking strategy.

An inward-looking strategy is an attempt to withdraw, at least in the short-run, from full participation in the world economy. This strategy emphasise import substitution, that is, the production of goods at home that would otherwise be imported. This can economise on scarce foreign exchange and ultimately generate new manufactured exports if economies of scale are important in the import

Substitution industries and if the infant industry argument applies. The strategy uses tariffs, import quotas, subsidies to import-substitute industries, and other measures of this type.

An outward-looking strategy emphasizes participation in international trade by encouraging the allocation of resources without price distortions. It does not use policy measures to shift production arbitrarily between serving the home market and foreign markets. In other words, it is an application of production according to comparative advantage.

Some analysts go further and focus particularly on export promotion, whereby policy steps such as export subsidies, encouragement of skill accumulation in the labour force and the use of more advanced technology, and tax breaks are used to generate more exports, particularly labourintensive manufactured exports in accordance with the Heckscher-Ohlin Theorem.



Arguments for Inward-looking Strategy

The advocates of inward-looking strategy plead that inward-looking policies encourage indigenous talent, learning to do things by oneself, domestic technological development and suitable range of products, avoiding the ill-effects of demonstration from the outside world. Given gaps of development between the developing and the developed countries, inward-looking strategy is advocated as an inevitable one.

Arguments for Outward-looking Strategy

The advocates of outward-looking strategy argue that openness is useful to bring about good educational effects, new ideas and new techniques, growth of new forms of organization, etc. They believe that free trading encourages learning by trade and implies achievements of dynamic transformation of the economy into higher standards of living. Free trade is a win-win situation, all the trading partners stand to gain through productivity improvements, notwithstanding diversities in their domestic institutions and policies.

Quotas and other quantitative restrictions, on the other hand, interfere with price mechanism, involve allocative and X-inefficiencies, create distortions and impede the progress of competitive and industries.

Effects of these two types of strategies on growth of output, employment, income generation and income inequalities could also be of diverse nature, and no general inference can be drawn in this context.

Dual-Gap Analysis

A two-gap analysis of capital requirements for economic growth has been put forth by Hollis Chenery and Michael Bruno. This "two-gap" approach to economic development argues that "saving gap" and "foreign exchange gap" are two separate and independent constraints on the achievement of a target rate of growth in DCs. According to this analysis, foreign capital fills both the gaps and helps to attain the target rate of growth.

The size of gaps can be calculated by assuming a target growth rate and a given capital-output ratio. To illustrate, if the target growth rate is 8 per cent per annum, and the capital-output ratio is 4:1, then the country must save 32 per cent of its national income to attain the growth target. But if the domestic rate of saving is 28 per cent, the saving gap is 4 per cent of national income. This gap can be filled by foreign capital. Similarly, a fixed relationship is envisaged between targeted foreign exchange requirements and net export earnings to find out the foreign exchange gap which can be covered by foreign capital inflow.

The two gaps can be explained in terms of the national income accounting identities as follows:

 $\mathsf{E}-\mathsf{Y}\equiv\mathsf{I}-\mathsf{S}=\mathsf{M}-\mathsf{X}=\mathsf{F}$

Where

E is national expenditure

Y is national income

S is saving

M is imports

X is exports

F is net capital inflow

(I - S) represents the domestic saving gap and (M - X) is the foreign exchange gap. It may be mentioned here that the two gaps are always equal in the ex-post sense in any given accounting period but they may differ ex-ante like the basic national income identities. The reason in this case being that in the long run those who make decisions about savings, investment, exports and imports are different people.

The dual-gap analysis is based on the following assumptions:

- Savings and foreign exchange cannot be substituted for each other.
- The potentional savings of a country cannot be transformed into exports.
- Export promotion and import substitution policies are ruled out.
- There are certain structural rigidities and non-substitutability between different types of goods.

On the basis of these assumptions, the ex-ante gaps with different growth rates of income can be explained with the help of Fig. 1.



Fig 1: Dual Gap Analysis

In Fig. 1, target growth rates are measured on the x-axis; y-axis measures ex-ante gaps. (I - S) curve shows the saving gap and (M - X) curve represents the foreign exchange gap.

At point C, both the gaps are equal and the target growth rate achieved is OR with OC inflow of foreign capital.



In case the targeted growth rate is OR1, the foreign exchange gap is larger than the savings gap by AB. As a result, this growth rate will not be achieved as the inflow of foreign capital is not adequate to fill the larger foreign exchange gap OG1.

If the target growth rate is OR2, the saving gap is larger than the foreign exchange gap by ED. This growth rate cannot be achieved because the inflow of foreign capital is insufficient to inflow of foreign capital to meet the larger saving gap OF2. It is not possible to curtail imports due to "The nature and limited flexibility of the productive system and of the composition of consumer demand". Chenery, however, suggests changes in the exchange rate and restrictions of the pattern of consumption and distribution of income to remove these structural rigidities. Such measures may succeed in bringing about adjustments in the two-gaps without foreign capital but they will hinder growth.

The foreign capital needed to fill the gap is determined by the dominant gap at a given point in time.

- (1) If the saving gap is larger than the foreign exchange gap, the country is said to be in a savings constraint. In this case, over the long run the amount of foreign capital required will equal the gap between the increase in investment and the increase in savings generated by rising income. When the savings gap ceases to exist, the target growth rate will be ensured.
- (2) If the foreign exchange gap is larger than the savings gap, the country is said to be in a foreign exchange constraint. The inflow of capital can help overcome the foreign exchange gap and over the long period the required foreign capital will equal the difference between the increase in imports and exports and the target growth rate of economy will be ensured.
- (3) The model postulates stable values of the parameters for the future. This is unrealistic as the marginal savings rate and capital-output ratio change over time.
- (4) The model treats all types of capital investments as homogeneous. This is unrealistic because the capital requirements of developing countries pertain to different sectors, projects and industries.
- (5) Apart from the saving gap and foreign exchange gap, the developing countries also suffer from other equally important gaps in technology and infrastructure.

To sum up, dual-gap analysis may have some limited utility in the calculation of short-run capital requirements but over the longer run it is not of much use.

Balance of Payments

The principal tool for the analysis of the monetary aspects of international trade is the balance of payments settlement.

Concept and Uses

Balance of payments (BOP), is a systematic record of all international economic transactions, visible and invisible, of a country during a given period usually a year. In other words, the statement is a device for recording all the economic transactions within a given period between the residents of a country and the residents of other countries. The BOP of a country, technically speaking, always 'balances'. Such equality in the debit and credit sides of the BOP, known as



equilibrium, has no economic significance. It simply results from the double entry book-keeping procedure which is used to record the transactions.

The analysis of the BOP can be done in terms of its two major sub-divisions, vij, (A) viz., (i) Current account, and (ii) Capital account.

(A) Current Account: The current account can be broken in to two parts, viz. One, balance of trade, and two, balance of invisibles.

The balance of trade (BOT) deals only with exports and imports of merchandise (or visible items).

The balance of invisibles (BOI) shows the net receipts on account of invisibles. These include the remittances, net service payments, etc.

It is not necessary that BOT should always balance; more often than not it will show either a surplus or a deficit. Similarly, the BOI will always show either a surplus or a deficit. A surplus on BOT may be matched with a surplus or deficit on BOI. If the surplus on BOI equals the deficit on BOT, the current account will show a net balance. But then there is no reason why these two balances should always be equal, again, always in opposite directions. As a matter of fact, the balance on current account can always show a deficit or a surplus. A surplus on current account leads to an acquisition of assets or repayment of debts previously contracted, and a deficit involves withdrawal of previously accumulated assets or is met by borrowings.

(B) Capital Account: The capital account presents transfers of money and other capital items and changes in country's foreign assets and liabilities resulting from the transactions recorded in the current account. The deficit on the current account and on account of capital transactions can be financed by external assistance (loans and grants), borrowings from the International Monetary Fund and allocation of the Special Drawing Rights.

Uses: The BOP account provide a link between the increase in gross external debt and the portfolio and spending decisions of the economy.

Thus, increase in gross external debt = Current account deficit – direct and long-term portfolio capital changes.

- + Increases in official reserve
- + Other private capital outflows

The above equation shows that an increase in external debt can have three broad sources: i) current account deficits not financed by long-term capital inflows, ii) borrowing to finance a reserve build-up, and iii) private outflows of capital.

BOP and Developing Economies

It is well-known in development economics that developing economies invariably start as debtor economies. In the process of development itself these economies have to import a great deal of capital goods, consumer goods, food and raw materials, and spares and components. They also



have to import some new technologies and hence, the total exchange outgo cannot be matched by export earnings. But it is expected that soon, as the new capital goods and technologies begin to become effective and their products are directed towards exports, export goods and services become competitive in cost and quality. In that case, the volume of exports expands and, in due course, begins to overtake exports. A developing economy then moves on from being a debtor country to a balanced one in terms of BOP and, finally, becomes a creditor country exporting more than it imports and giving credit to buyers. Thus, from being a net debtor in the beginning, it becomes a net creditor in the end and, in fact, begins to invest abroad rather than have others bending to and investing in it.

Tarrifs and Effective Protection

More generally, governments do not adhere to free trade despite the strong case for the efficiency and welfare gains from trade that has been clearly established and accepted. Policymakers have proven very resourceful in generating different devices for restricting the free flow of goods and services. Among these, the most important are import tariffs.

Tariffs, generally speaking, are of two types: (i) specific tariff, and (ii) ad valorem tariff

A specific tariff is an import duty that assigns a fixed monetary (rupees) tax per physical unit of the good imported. Thus, a specific duty might be Rs.25 per ton imported or Rs.2 per kg. The total import tax bill is levied in accordance with the number of units coming into the importing country and not according to the price or value of the imports. Tax authorities can collect specific tariffs with ease because they need to know only the physical quantity of imports coming into the country, not their monetary value. However, specific tariff has a fundamental disadvantage as an instrument of protection for domestic producers because its protective value varies inversely with the price of the import.

The ad valorem tariff is levied as a constant percentage of the monetary value of 1 unit of the imported good. Thus, if the ad valorem tariff is 10 per cent, an imported good with a world price of Rs.100 will have Rs.10 tax added as the import duty. If the price rises to Rs.200 because of inflation, the import levy rises to Rs.20.

Although the ad valorem tariff preserves the protective value of the trade interference for home producers as prices increase, there are difficulties with this tariff instrument because customs inspectors need to make a judgment on the monetary value of the imported good. Knowing this fact, the seller of the good is tempted to under-value the good's price on invoices in order to reduce the tax burden. On the other hand, customs officials may deliberately overvalue a good to counteract undervaluation or to increase the level of protection and tariff revenue. Nevertheless, ad valorem tariffs have come into widespread use.

Effective Tariff Rate

An issue relating to trariffs concerns the choice of the appropriate tariff rate when evaluating the impact of tariffs. The issue involves the distinction between the nominal tariff rate on a good and the effective tariff rate, more commonly known as the effective rate of protection (ERP).



The nominal rate is simply the rate listing in a country's tariff schedule, whether it is an ad valorem tariff or a specific tariff that can be converted to an ad valorem equivalent by dividing the specific tariff amount per unit by the price of the good.

The ERP is defined as the percentage change in the value added in an industry because of the imposition of a tariff structure by the country rather than the existence of free trade. When using the ERP we are concerned about the extent to which "value added" in the domestic importcompeting industry is altered by the existence of the whole tariff structure.

The ERP can be illustrated with a numerical example.

Consider a situation in which good F is the final good and goods A and B are intermediate inputs used in making F. Assume that A and B are the only intermediate inputs and that 1 unit each of A and B is used in producing 1 unit of the final good F. Intermediate goods A and B can be either imported or produced in their country but compete with imports and thus have their prices influenced by the tariffs on the competing imports. Suppose that, under free trade, the price of the final good (PF) is Rs.1, 000 and the prices of the inputs are PA = Rs.500 and PB = Rs.200. In this free trade situation, the value added is Rs.1, 000 - B (Rs.500 + Rs.200) = Rs.1000 - Rs.700 = Rs.300.

Now consider a situation where protective tariffs exist: a prime mark next to a price (P') indicates a tariff-protected price. Suppose that the tariff rate (tF) on the final good is 10 per cent and that the tariff on input A (tA) is 5 per cent and on input B (tB) B it is 8 per cent. If we assume that the country is a small country then the domestic prices of the goods with the tariffs in place are

P'F = Rs.1000 + 0.10 (Rs.1000) = Rs.1000 + Rs.100 = Rs.1100

P'B = Rs.200 + 0.08(Rs.200) = Rs.200 + Rs.16 = Rs.216 B

The value added in industry F under protection is Rs.1, 100 - (Rs.525 + Rs.216) = Rs.1, 100 - Rs.741 = Rs.359. The industry has experienced an increase in its value added because of the tariffs, and therefore the factors of production working in industry F are able to receive higher returns than under free trade. There is thus an economic incentive for factors of production in other industries to move into industry F. Since the effective rate of protection is the percent change in the value added when moving from free trade to protection, the ERP in this example is

Value added under protection – Value added with free tradeValue added with free trade $= \frac{VA' - VA}{VA} = \frac{Rs.359 - Rs.300}{Rs.300}$ = 0.197, or 19.7%



Thus, the factors of production in industry F have benefited from the tariffs, although consumers have lost. A more common formula for calculating the ERP for any industry j utilizing inputs designated as i is

$$ERP_J = \frac{t_j - \sum_i a_{ij} t_j}{1 - \sum_i a_{ij}}$$

Where aij represents the free-trade value of input i as a percentage of the free-trade value of the final good j, to and ti represent the tariff rates on the final good and on any input i, respectively, and Σ means that we are summing over all the inputs. In the example, the aij for input A is Rs.500/Rs.1000 or 0.50, and the value of the aij for input B is Rs.200/Rs.1000 or 0.20.

This method of calculating the ERP has the advantage of illustrating three general rules about the relationship between nominal rates and effective rates of protection.

These rules are as follows:

- (1) If the nominal tariff rate on the final good is higher than the weighted-average nominal tariff rate on the inputs, then the ERP will be higher than the nominal rate on the final good.
- (2) If the nominal tariff rate on the final good is lower than the weighted-average nominal tariff rate on the inputs, then the ERP will be lower than the nominal rate on the final good.
- (3) If the nominal tariff rate on the final good is equal to the weighted average nominal tariff rate on the inputs, then the ERP will be equal to the nominal rate on the final good.

Overall, the nominal tariff rate is useful for assessing the price impact of tariffs on consumers. For producers, however, the effective note is more useful because factors tend to flow toward industries with relatively higher ERPs. In the assessment of development prospects and economic planning in the developing countries, a strong case can be made for ERPs as analytical tools, even more so than nominal rates of protection.

Post-gatt International Economic Order and WTO

As has often been pointed out, the one issue on which economists are in almost unanimous agreement is the social gains to be made by specializing and trading on the basis of comparative advantage and, correspondingly, opposition to protection. In spite of this view, the world continues to experience continual pressures to restrict the movement of goods, services, and factors between countries. Indeed, countries seem to continue to find new and novel ways to restrict these activities. Efforts nevertheless have been made to bring nations together and reach multi-lateral agreements that have a bearing on the movement of goods, services and factors.

Setting up of the GATT

Originally, as a part of the multi-lateral initiatives, the International Trade Organisation was proposed to be set up along with the World Bank and the IMF on the recommendations of the Bretton Woods Conference, 1944. But as the ITO could not be set up, the US, UK and a few other countries set up in1947 an interim organization about trade named GATT (General Agreement on Tariffs and Trade)



The GATT was biased in favour of developed countries and was called informally as the "rich nations' club". The developing countries insisted on setting up of the ITO; the move came to be opposed by the USA. To solve the issue the UN appointed a committee in 1963; the committee recommended as a possible alternative a via media, UNCTAD (United Nations Conference on Trade and Development). The UNCTAD was set up in 1964. The UNCTAD could manage to get some concession for the developing countries, more important among which was the GSTP (General Scheme for Trade Preferences). The GATT was also made progressively more liberal.

Establishment of the WTO

The Uruguay Round of the GATT sought to expand the scope of the organization by including services, investment and intellectual property rights. The Uruguay Round proposals were accepted by all the members of the GATT.

The Uruguay Round agreement provided for the setting up of the WTO. The WTO started functioning from January 1, 1995.

Objectives: The agreement reiterates the following objectives of GATT:

- Raising standards of living and incomes, ensuring full employment, expanding production and trade, and optimal use of world's resources, at the same time extending the objectives to services and making them more precise.
- Introduces the idea of sustainable development in relation to the optimal use of world's resources, and the need to protect and preserve the environment in a manner consistent with the various levels of national economic development.
- Recognises the need for positive efforts designed to ensure that developing countries, especially the least developed ones, secure a better share of growth in international trade.

The WTO is a forum where countries continuously negotiate the exchange of trade concessions to trade restrictions all over the world. The WTO already has a substantial agenda for further negotiations in many areas, notably certain services sector.

WTO and Developing Countries

An effective WTO can serve the interests of developing countries in many ways:

- (1) It facilitates trade reforms.
- (2) It provides a mechanism for setting disputes.
- (3) It strengthens the credibility of trade reforms.
- (4) It promotes transparent trade regimes that lower tractions costs.

WTO is likely to generate global income gains up to \$200 billion a year, with somewhere between a third and a half of the gains going to developing countries, particularly to the ones that have reduced their own protection and locked in the benefits of earlier reforms.

However, there are critics too. Many believe WTO will bring in destruction of biodiversity and people's livelihoods by encouraging over-exploitation of natural resources, creating pollution through increasing transportation, habitat loss by infrastructure development, and so on. This it will do by forcing countries to:



- Relax export rules that to date prohibit or restrict the exploitation of forests, fisheries and minerals,
- Encourage export policies that spread monoculture,
- Relax import rules that control the un-hindered dumping of all kinds of products, including polluting and hazardous wastes,
- Accept intellectual property regimes,
- Accept with few conditionality's, investment in several sectors by foreign firms and industrialists, with little regard for its ecological and social impacts.

Globalisation and Developing Countries

Globalisation, according to the Chambers 20th Century Dictionary, means "to make global, that is worldwide, or effecting or taking into consideration the whole world or all people". It has become a buzzword not only for India but across the world.

Implications of Globalisation

Globalisation in its totality implies the following:

- (1) There is a spread of international trade.
- (2) People migrate from one country or region to another, temporarily or permanently.
- (3) Money or means of payment are exchanged on an increasing scale between countries or regions.
- (4) Capital flows from one country to another to help produce goods and services.
- (5) Finance-not necessarily linked to the production of goods and services flows between different countries.
- (6) Traditional corporations arise which increasingly engage in the activities listed so far.
- (7) Technology is traded as between different countries. Increasingly, with the spread of the patent regimes governed by the WTO, frontier technologies take an increasingly proprietary form.
- (8) Spread of print and electronic media.
- (9) Growth in trade and production of services of all kinds shipping, insurance, banking, health care and, of course, finance.

In brief, globalization implies: being able to manufacture in the most cost-effective way possible anywhere in the world; being able to procure raw materials and drawing management resources from the cheapest source anywhere in the world; having the entire world as a single market.

Advantage of Globalisation

Supporters of globalisation argue along the following lines.

One, globalisation helps remove X-inefficiency. In the absence of globalization, prolonged protection of domestic industry has serious distortionary effects on cost structures. Exposure to competition acts as "bracing cold shower".

Two, globalisation helps improve the allocative efficiency of resources, reduce the capital output ratio and increase the labour productivity, help to develop the export spheres and the export