STRUCTURE AND IMPACT OF NON-TARIFF TRADE BARRIERS : CASE STUDY OF INDIA *VIS-A-VIS* EEC, JAPAN AND USA

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To

My Mother

&

in memory of my

Late Father Gokul Chandra Ghosh

and

Teacher Late Prof. Kamalendu Ghosh

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DECLARATION

This is to certify that the dissertation entitled "**Structure and Impact of Non-Tariff Trade Barriers : Case Study of India vis-a-vis EEC, Japan and USA**", submitted by Madanmohan Ghosh, in partial fulfilment of the requirements for the award of the degree of **Master of Philosophy (M.Phil)** of this University, has not been previously submitted for any degree of this or any other University. This is his own work.

We recommend this dissertation to be placed before the examiners for evaluation.

Manmohan Agarwal	**Manmohan Agarwal**
Supervisor	**Chairperson**

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The opinion expressed in this dissertation are solely those of the author and therefore, responsibility for errors and omissions remain those of the author alone.

MADANMOHAN GHOSH

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CHAPTER I

INTRODUCTION: DEFINITIONS, SURVEY OF LITERATURE AND SCOPE OF STUDY

Introduction:

In a static framework and assuming ideal Pareto-optimality conditions all countries can gain by specializing in terms of their comparative advantage and trading freely with one another. This is a hard grain of truth which no nation can afford to ignore beyond a certain point. The gains from trade can be broken into production gains arising from production specialization and consumption gains arising from more beneficial terms of exchange. On the other hand protection lowers real income by entailing both a production cost and a consumption cost. However, a country's own policies or that of its partners may cause a deviation from free trade. If a country has monopoly power in trade it can gain even within a static framework by making the terms of trade more favourable by imposing a tariff. If there are domestic distortions in the product and/or factor market, though, the best policy is to combine free trade with an appropriate domestic (tax-cum-subsidy) policy designed to correct the particular distortion at its source, protection may also be justified on second best grounds.

In a dynamic context, infant industry protection is one of the oldest arguments for protection. A wider argument for protection based on inter-industry linkages, vertical and horizontal, would require a set of industries to be established under a protective umbrella. The purpose of protection of such industry is to eventually capture all the potentially available dynamic externalities to reduce costs and gain competitiveness in a range of activities. But comparative cost considerations can not be altogether abandoned even in the decision as to which industries to establish.

In this chapter we wish to study the following: Section-I analyses the need for tackling NTBs in present day international commerce. Section-II highlights the main forms of NTBs with their operational details. Section-III aims to provide a critical review of the earlier literature on NTBs. Section-IV deals with scope for the study and plan of study.

SECTION-I

Protectionism and the World Economy: Need for Tackling NTBs in Present Day International Commerce.

In the economic history of protectionism, however, protectionism has often been resorted to protect industries, facing an unfavourable international environment. Protection grew to an unprecedented level in the 1930s as countries frantically scrambled to save income and employment from the gathering storm of the world depression by sealing off their domestic markets. But all countries lost with the adoption of such beggar my neighbour policies. A direct outcome of this era of protectionism was increased awareness of the interdependent nature of commercial policy. An increased awareness which led to the establishment of the General Agreements on Tariffs and Trade (GATT), -- a multilateral institutional framework aimed at fostering more liberal trade policies. Negotiations towards a liberal world environment started under the auspices of GATT in the Geneva Round (1947). Since then, upto the end of sixties, a more liberal trade regime come to be adopted. Tariff rates were lowered to a bare minimum level of 4.8 per cent from an average rate of 40 per cent through successive rounds of multilateral trade negotiations in the Geneva Round (1947, 1956), Annecy Round (1949), Torquay Round (1951), Dillion Round (1962) and the Kennedy Round (1968). These liberalizations contributed to rapid growth of the volume of world trade and the GDP of developed market economies during the 1950s and 1960s. The 1960s were the golden years for the free traders. Between 1963 and 1973, while world output grew at an average annual rate of 6 per cent the volume of world trade grew at a rate of 7.2 per cent. But since the early seventies protectionism has taken a new turn which has been termed 'New Protectionism'.

This emerging pattern of protectionism in the 1970s does not simply mean the latest outbreak of protectionism but protectionism "different in structure or form"[1]. During the 1970s while tariffs of the industrial countries continued to fall new non-tariff barriers were imposed by industrial countries mainly on trade between them and the developing countries which almost nullified the decline in tariffs. The motto of protectionism was unambiguously growing even in the eighties only with minor offsets towards the middle of the decade.

The 'New Protectionism' characterized by increasing use of various NTBs has come as a major challenge to the GATT System which has tried to bring about transparency in trade policy. The threat posed to the GATT system[2] arises out of the following characteristics of NTBs.

i) information on NTBs is often fragmentary,

ii) NTBs frequently involve a lack of transparency in their usage and economic effects,

iii) they have many diverse forms and do not always operate through price mechanism. These make it difficult to measure the tariff equivalent of most of the NTBs.

The UNCTAD emphasized the importance of NTBs and their adverse effects on world trade more sharply. A Commonwealth Secretariat expert panel (1982) noted that:[3]

i) The new protectionism mainly affects the export prospects of LDCs. For instance, the EEC has become the world's second largest exporter of sugar after Cuba and of beef after Australia mainly due to production increasing effect of high internal price support policy, maintained with the help of NTBs

ii) The panel set up by the Commonwealth also revealed that there has been increasing resort to new instruments of non-tariff protection such as orderly marketing arrangement, voluntary export restraints, import levies and various forms of discriminatory interventions

iii) Authorized Non-Tariff measures such as the Multi-Fibre Arrangement (MFA), are becoming increasingly discriminatory against products of importance to developing countries.

In a recent study Balassa showed that the share of total consumption of manufactured goods subject to NTBs has not only increased in the 1980s but it is higher in the US than in the Japan.

It must be pointed out, however, that protectionism in the industrialized nations through NTBs is related to legitimate concerns for equity and income distribution domestically. In the words of Melvin B. Krauss[4], "The new protectionism implies that there has been a dramatic change on the world scene; that some new entity is with us,that has not yet been before. This new entity, I submit, is the interventionist or welfare state". But trade theory recommends taxation and subsidization at the point of divergence rather than trade intervention as the first best policy in cases of divergence between private and social costs and benefits (Bhagwati, 1971). Therefore, departures from GATT principles is bound to inflict heavy cost to the world community in terms of loss of welfare, employment etc.

SECTION-II

Identification of Main Types of NTBs and their Operational Details: Theoretical Issues

II. 1 Definition of NTB

It is important to define what constitutes a NTB before any formal analysis can be undertaken. Various definition have been advanced by different authors. The very nomenclature of 'Non-tariff Trade Barriers' suggests that they are broadly defined in a negative sense as any restraint on imports except tariffs. Massel[5] (1965) defines, NTB in a loose sense, because of the unlimited variety of forms these obstacles have. He describes a few NTBs such as quotas, customs regulation, anti-dumping levies, patent and trade-mark laws, health and security rules, labelling requirements, government procurement of domestic goods, subsidies to domestic import competitors, internal taxes, import licensing, export restraints and restrictive business practices (M.S. Massel, 1965).

Kelly[6] (1967) however, gives a more positive meaning to the term "Non-Tariff Barriers". His definition of NTBs is confined to government restrictions on imports and excludes restrictive private practices and other obstacles created by language, culture and geography. Only those restrictive government practices which have the definite purpose and/or effect of protecting domestic industries from foreign competition are regarded as NTBs in his definition. Fiscal and monetary policies, legislation governing public health, morals and national security are excluded from the list of NTBs to the extent that they are not purposefully abused.

According to Robert Baldwin[7] (1970) a non-tariff trade distortion is 'any measure (public or private) that causes internationally traded goods and services, or resources devoted to the production of these goods and services, to be allocated in such a way as to reduce potential real world income'. 'Potential real world income' is defined to be a level attainable if resources were allocated in the most economically efficient manner. However, in practice estimating the potential real income' is not an easy task as it requires at the minimum a knowledge of directional movements in income under alternative policy measures. While it may be possible to assess the impact of removal of measures such as a quota,there are other measures whose effects are more difficult to assess. For example removal of certain health and safety regulations may increase imports but its impact on world income is difficult to understand if the resulting trade expansion is accompanied by a decline in health standards and rising medical costs.

Ingo Walter's (1972) proposition is that NTBs broadly encompass all private and government policies and practices that distort the volume, commodity composition or direction of trade in goods and services. This definition again requires judgement on what constitutes a trade distortion. This difficulty is partially reduced by adopting Walter's suggestion that NTBs be classified on the basis of their intent. But even then measures like standard requirements, labelling and packaging regulation can be used to affect the level of imports depending on how they are applied,but the intent cannot be determined without a difficult and potentially inconclusive investigation of their nature and actual operation.

In recognition of this point UNCTAD used two terms: non-tariff measures and Non-Tariff Barriers. The term "measures" is wider than barriers since it encompasses all the instruments which may be used as barriers.

The UNCTAD classification scheme for non-tariff trade measures is of a product specify nature (i.e., NTBs are imposed according to tariff line) and are grouped into five broad categories depending on their method of operation. They are (A) fiscal measures (B) volume restraining measures (C) import authorization (D)control of the price level and (E) other measures.

II. 2 Broad Categories of NTBs

A. Fiscal Measures

There are many fiscal, NTBs which can influence the pattern of international trade. They can be broadly categorized by import-specific charges and product specific charges. Import specific charges include (1) para-tariff barriers, (2) charges applied on the basis of declared value and (3) charges applied on the basis of decreed value. The product specific taxes are ad valorem taxes, specific taxes and combined taxes.

(1) Para-Tariff Barriers

This can take the following forms.

(a) Tariffs with Quota: It is a hybrid of the tariff and the quota with a higher tariff being applied when imports exceed the quota. In other words, imports are subject to tariffs, but a variety of tariff rates may be set with quotas imposed on the volume or value of imports subject to each tariff rate. The only advantage of tariff quota relative to quota is its flexibility. At import levels, where the tariff rates are lower, there would be a rush for imports, because of the temptation to the importers to import more by taking advantage of the initial minimum rate and this results in fluctuation in prices.

(b) Seasonal Tariffs: Seasonal tariffs are different tariff rates charged to a given product depending on the time of the year. Generally used for agricultural products with the highest import duties applied during the period of domestic harvest.

(c) An ad valorem Tariff with Specific Minimum: An ad valorem tariff is, tariff defined in percentage terms. Ad valorem tariff with specific minimum is a tariff rate in percentage terms, but with a specified minimum amount for the duty payable. This minimum is, under GATT framework, specified in money terms per physical unit of import.

(2) Charges applied on the basis of declared value:

Primarily, these are import-specific charges, levies and other duties except tariffs. Secondly, these charges are calculated either on the basis of value declared by the importer or by the exporter or derived by the application of standard customs valuation procedures. These charges are sub-divided into (a) ad valorem charges (b) specific charges and (c) combined charges.

(3) Charges applied on the basis of decreed value:

These charges are calculated on the basis of the difference between the value established (decreed) by the authorities in the importing country and the value declared by the importer (or exports). Included under this category of NTBs are (i) variable import duties and (ii) transaction specific charges.

(i) Variable Import Duties: Variable import duties may have the following two forms (a) variable levy and (b) variable components.

(a) Variable levy: Levies are designed to achieve domestic price stability by imposing a charge on imports which varies to hold the landed prices of foreign goods constant. No levy is collected when the domestic target price is lower than the international price of a product.

(b) Variable Component: This is an import charge with a fixed and variable component. The fixed component may be a specific minimum, etc.

(ii) Transaction specific Charges: The most important forms of these charges are countervailing and anti-dumping duties.

These are generally referred to as cases where a foreign exporter is accused of setting the export price below its fair value. The fair value is determined either by the home market price (in case of dumping) or a contracted prices net of subsidies (as in a counter veiling case). In most developed countries a formal administrative process is generally required before these charges can be applied.

B. Volume Restraining Measures

These measures are adopted to restrain the volume or value of imports of any particular good from all sources or from specific sources of supply either to a predetermined level (quota) or through restrictive licensing. These are generally considered to have far more detrimental trade and welfare effects than tariffs. Under the UNCTAD classification scheme volume restraining measures include (a) prohibitions (b) quotas.

(a) Prohibition

In some cases there may be de facto prohibition even though import may not be formally prohibited. For example a State monopoly for import implies a prohibition for private sector importer. A suspension of licence issued in countries where licences are required is also a de facto prohibition. Prohibition may be total or conditional.

There are several sub-categories under total prohibition such as (i) prohibition of a general nature; (ii) prohibition for health and safety; (iii) wild-life prohibition; (iv) prohibition (censorship); (v) seasonal prohibition and (vi) prohibition with exception.

Under Conditional prohibition importation may be subject to certain predetermined conditions such as (i) sources; (ii) the purchaser e.g. government agencies or the armed forces; (iii) the use (e.g. health, safely) or; (iv) other unknown or unspecified reasons.

(b) Quotas

Quota restrictions can include (i) Global quota, (ii) Bilateral Quota, (iii) Seasonal quota and (iv) Voluntary export restraints.

(i) Global Quota: This is a case where the importing country fixes an absolute limit upon the quantity or value of a commodity eligible for import. Any country or group of countries are allowed to export to the concerned country until the full amount of the quota is exhausted. The quota may be a global one or allocated.

(ii) Bilateral Quota: Bilateral quotas are restrictions on the quantity or value of import of specific products originating in specified (country) foreign sources of supply. It is the result of a bilateral trade negotiation. These are issued either to favour or discriminate against a particular country.

(iii) Seasonal Quota: These are restriction on the quantity or value of imports of specific products, especially agricultural products, for a given period of time in the year.

(iv) Voluntary Export Restraint (VER): Voluntary export restraint is a quota imposed by an exporting country on its export to another country in response to pressure from the importing country.

The basic features which distinguish it from other forms of trade restriction like tariffs and import quotas are as follows: First it is a policy of protecting domestic producers of the importing country under the exporting country's administration.

Unlike tariffs or import quotas it is source specific in the sense that it applies to a specific exporting country(s). Interestingly exporters not covered by a particular VER are allowed to increase their exports to the importing country which imposes the VER.

VERs are typically implemented for a specified period while the other types of trade barrier are imposed for an indefinite period. VERs have become quite widespread because it is a convenient means for countries to restrict trade outside the framework of GATT. These are frequently used in the textiles and clothing area accounting for about 80 per cent of the world trade in these industries through the various bilateral agreements which constitute the Multi-Fibre Agreement (MFA)[8].

The distinction between tariff and voluntary export restraint can be analysed in a two country framework. In fig (1a), D represents the home country H's demand curve for imports and Sa is the country A's supply curve of exports under condition of free trade. The free trade equilibrium is at E, and the price in both countries is Pf.

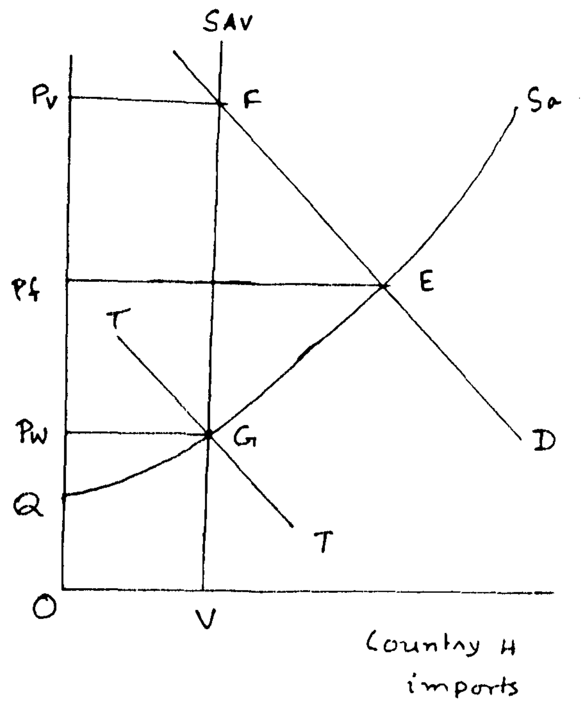

Fig (1a)

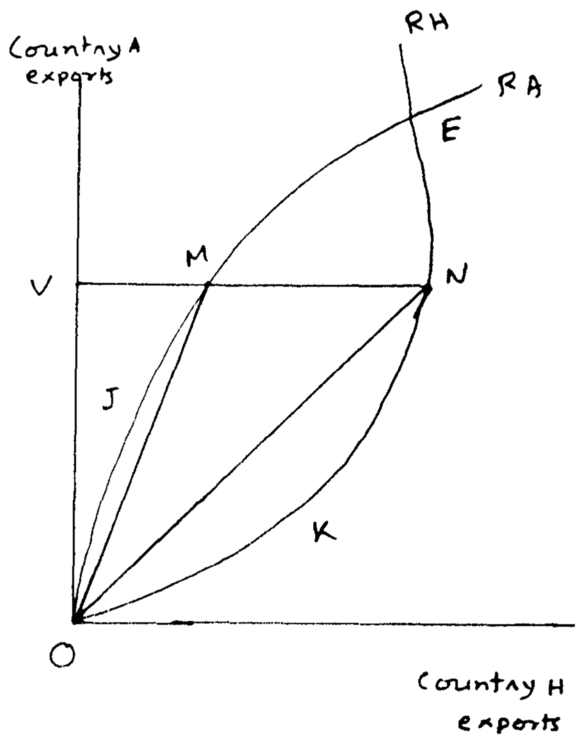

Fig (1b)

Now suppose that a voluntary export restraint of OV units is imposed. This will restrict country A's supply curve to QGSAv, the equilibrium is at F and the equilibrium price of the commodity will rise to Pv .

If instead a tariff is imposed to restrict imports to Ov, then the tariff must shift H's demand curve for imports down to position TT. In this case the world price will be Pw. While the domestic price would be as earlier i.e., Pv. Relative to a tariff or a quota, the voluntary export restraint implies a worsening terms of trade for the importing country. With a tariff the importing country gets a tariff-revenue (quota-rent) equal to the area of the rectangle PvFGPw, whereas under voluntary export restraint the revenue goes to the exporting country.

The terms of trade effect can be shown in figure 1b; ORH and ORA represent country H's and country A's offer curves respectively. Free trade equilibrium is at E. A voluntary export restraint that restricts A's export to OV changes A's offer curve to OJMN. The new equilibrium is at N with world relative price given by the slope of the ray ON. While the domestic price is determined by preferences and other factors in country H. If instead a tariff or import quota that yields the same level of imports for H was imposed, the offer curve would be OKNV. In this situation, equilibrium would be at M with terms of trade given by the slope of OM. Clearly, country A is on a higher indifference curve at M (under situation of voluntary export restraint) than at N and vice-versa for country H. Thus, in the case of voluntary export restraint, the exporting country gains relative to a tariff or import quota and the importing country loses.

C. Import-Authorisation

Under conditions of import authorisation permission for the importation of a particular product is required from some authority. Import authorisation may be subject to fulfilling certain conditions:(a)Non-automatic or (b)Automatic.

(a) Non-automatic Authorisation

This takes the following form:

(i) Discretionary Authorisation: Permission to import is granted at the discretion of the competent authority upon submission of an application. These procedures are mostly used for the administration of quantitative restrictions. The variants of these procedures are: (i) general import authorisation; (ii) discretionary licensing; (iii) automatic licensing; (iv) declaration with visa, (v) select purchase authorisation i.e., permission to import is granted to specified categories of importers and (vi)import permit.

(ii) Conditional Import Authorisation: Permission to import are given subject to certain conditions, for example export performance specified usually in the case of imports of intermediates, local content specification, scarcity in domestic market.

(iii) Authorisation to Control Compliance with Standards and/or Regulation: This includes authorisation dependent on certification on (i) health and safety; (ii) technical standards; and (iii) censorship.

(b) Automatic Authorisation:

In this case import licenses are granted automatically. The procedures maintained here may be for statistical purposes or for special purposes, for instance, monitoring of import of sensitive products.

D. Control of the Price Level

This measure can be sub-divided into (a) Minimum pricing (b) prior investigation and (c) price surveillance.

(a) Minimum Pricing:

If the actual import prices are below the minimum fixed by the country, a trigger action in the form of compensatory duties or price investigation is undertaken by the importing country. The minimum price may be described as minimum import price or reference import price or basic import price or trigger price.

(b) Prior Investigation

Investigations are sometimes undertaken by the importing country to determine whether the imported articles are subsidized by the foreign governments or there is dumping. If the investigation finds that the imported goods are supplied at less than fair value prices then the investigating authority may also determine the subsidy or dumping margin. Along with determining unfair pricing it is normally investigated whether the domestic industry is injured by such unfair pricing. An anti dumping investigation is undertaken to determine whether the imported articles are offered at less than their fair value due to dual pricing policy, while countervailing investigation determines whether imported articles are being subsidized.

(c) Price Surveillance

Price-surveillance action can be intended to ensure that possible injury by low-priced, but not subsidised or dumped, imports is detected at an early stage.

E. Other Measures

Other measures include miscellaneous items which cannot be included in the above categories. Some of these items of import restriction are discussed below.

(a) Standards and Regulation

These are certain requirements concerning the standards of the commodity to be imported. In principle, these requirements also apply to domestically produced goods. The varieties of the restriction are (i) health and safety regulation (ii) Technical standards and (iii) marking and packing requirements.

(b) Measures to Assist Import Competing Production

In UNCTAD Data Base a classification has been developed for different measures which may distort international trade flows by providing assistance to domestic import competing production. Only measures which are applied at the border are included in the Data Base as currently constructed.

(c) Other Import Measures

This includes the following:

(i) Multi-Fibre Arrangement (MFA): This is nothing but one form of quantitative restriction applicable to international trade in textiles. MFA came as a successor of the long term arrangement restricting trade in textiles (lasting for the period 1962-73) as temporary exception to the GATT in 1973 and renewed three times since then to provide special rules governing trade in textiles and clothing. The type of restrictions that a importing government may impose comprise mainly quantitative restrictions on imports of particular products from particular source. The restriction may take the form of import quota or voluntary export restraint implemented by the exporting country.

Attempt at restricting the import of textile products initially restricted to cotton textiles, and later extended to become all encompassing multilateral framework was first undertaken in the short term arrangement (STA) in 1962. This was subsequently replaced by the long term arrangement (LTA) of 1964 which lasted upto 1973. The MFA1 negotiated multilateral under the auspices of GATT came as a successor of LTA in 1973 and continued for 5 years. Unlike

LTA the scope of restriction in MFA was extended to include items made from non-cotton fibres and as volume growth in access was limited to an upper limit of six per cent per annum.

The second MFA which covered the period from 1978 to 1982 had the most serious fallout of substitution of inquiry by import penetration. The later depends on arbitrary level of product subdivision and arbitrary choice of countries to which the measures could be applied and it takes no account of export from the importing countries.

The third MFA was negotiated at a time when there was deep recession and sharply increasing unemployment in the industrialised economies and increasing indebtness in dèveloping countries. The agreement which was negotiated in 1982 supposed to be terminated in 1986, got extension upto 1992. Though there is some relaxation in the new agreement with regard to market disruption and reasonable departures from MFA norms, a new anti-surge mechanism has been introduced to prevent sharp growth in import from the developing countries.

(ii) MFA Quota: This is a kind of quantitative restriction established for certain textile articles through bilateral agreement under the MFA.

(iii) MFA Consultation agreement: This is a provision under which importing country calls for consultation with a view of introducing quantitative restriction under certain conditions for the articles in which bilateral agreement under the MFA has not set quantitative restraints at the moment of its signature.

(iv) Import Deposit: Requirement to deposit a specified sum of money (normally defined as a percentage of the value of the transaction) prior to importation is called import deposit. These deposits may be reimbursed either immediately or after importation or after a specified period of time (without payment of interest or compensation for devaluation).

SECTION-III
PART-I

Importance of NTBs in World Trade: Some Evidences

In this section we reviewed the existing literature of NTB.

A study by Ingo Walter, (1971) revealed that NTBs were quite prevalent and determinated against imports of manufactures from developing countries. 28 per cent of the imports of manufactures and semi-manufactures of developed market economy countries from developing countries were subject to known non-tariff barriers in 1968. The developing countries' share of manufactured and semi-manufactured imports of the developed countries in the same year was 16.5 per cent, but their share of imports subject to non-tariff barriers was 20.9 per cent. The study noted that not only was the coverage of NTBs facing developing country more when compared with that from developed country but also the fact that in respect of important product-groups such incidence is disproportionate to the developing countries. A country specific analysis identified the export products of developing countries most subject to NTBs. Japan imposed non-tariff barriers on imports from the developing countries of processed foods, beverage and tobacco, crude materials, fuel and chemical manufactures. The EEC applied NTBs on imports of beverages and tobacco and chemicals. In the UK, NTBs were most prevalent in the case of processed foods, machinery and transport equipment, while in the USA, NTBs were imposed on fuels and lubricants and miscellaneous manufactures.

Another study by Walter (1972) attempted to analyse the NTBs in nineteen major industrial countries. The major findings of Walter's study were (i) Approximately 18 per cent of imports of these nineteen industrial countries were subject to one or more non-tariff measures, (ii) agricultural imports were most heavily affected by non-tariff measures covering more than half the 1967 value of developed countries' imports of live animals and meats, cereals, sugar, beverages, tobacco and food preparation. Industrial goods, particularly items like transport equipment, chemicals and pharmaceuticals faced more non-tariff barriers than the average, (iii) as far as trade coverage of non-tariff barriers in terms of individual countries are concerned about a third of all 1967 imports in 1969 were under non-tariff restriction in Japan, Belgium-Luxembourg, United States and Portugal. Australia, Sweden, Denmark and Canada had the lowest coverage ratios, (iv) the study documented incidence of wide application of non-tariff measures in the agricultural sectors of all the nineteen countries, specifically on dairy products, cereals and prepared foods. Japan had the highest frequency (34 per cent) of non-tariff barriers' use and the lowest was seen in the case of Canada, Sweden and UK (7 to 14 per cent).

An attempt was made by Nogues, Olechowski and Winter (1985) to produce statistics on non-tariff measures in sixteen developed market economy countries. The study highlights the use of particular non-tariff restriction such as quotas, voluntary export restraints for prices and volumes, tariff quotas, seasonal tariffs, discretionary and conditional import authorisation, surveillance mechanisms, price and volume investigations, and anti-dumping and countervailing duties over the period 1981 to 1983.

The main findings of the study briefly are as follows:

(i) In 1981 nearly 13 per cent of the tariff lines in these sixteen developed market economy countries were subject to one or more non-tariff barriers. The coverage ratio of their imports subject to hard core non-tariff barriers was 27 per cent in value term and $231 billion in absolute terms. It is important to note that, hard-core measures had wider application in agricultural products, textiles, clothing, mineral fuels and ferrous metals where both the frequency ratio as well as coverage ratio were higher compared to overall average. For instance, 36 to 42 per cent of EEC and Japanese agricultural imports faced hard-core non-tariff measures and more than 50 per cent of the EEC and USA imports of clothing and textiles import were under non-tariff measures.

(ii) It has been observed that quantitative restrictions and trade monitoring systems were the most widely applied non-tariff measures accounting for 80 per cent of the restrictions in these developed economies. Voluntary export restraints had been found to constitute about 11 per cent of all non-tariff measures. The study further noticed significant differences in the use of specific non-tariff measures in various sectors. In brief,agricultural products faced a higher number of 'decre ed price' barriers, whereas manufactured goods most commonly faced quantitative restrictions and different forms of monitoring systems.

(iii) Statistical indicators suggest that in Australia, Finland, France and Switzerland non-tariff measures were most important as the coverage ratio exceeded 30 per cent (57 per cent for frame). In the United States the coverage ratio is sensitive to the inclusion of non-tariff barriers to the extent that if petroleum imports (which were subject to surveillance before 1984) are included the ratio increases from 18 per cent to nearly 43 per cent.

(iv) This study revealed three facts on the incidence of non-tariff barriers on developing countries. First, these measures were more extensively used in case of imports from developing countries. Secondly, the incidence of non-tariff measures in case of imports from highly indebted countries (35 per cent of these countries export face non-tariff measures) had been higher as compared to other developing countries or developed countries. Thirdly, the above two results are due to a discriminatory application of non-tariff measures on manufactured products because non-tariff measures were less widely applied in case of agricultural imports from developing countries than those from the developed countries.

(v) The study noted further that there had been an increase of non-tariff barriers' coverage, by nearly 1.5 per cent of the developed country total trade in 1981, during the period 1981 to 1983. These new restrictions were aimed primarily at developed countries' exports. However, despite the theoretical arguments by Prussa (1988), Dixit (1988) and Staiger and Wolak (1990), The impact of these measures on import prices and their protective effects on domestic firms is not well understood.

A recent study by Ann Harrison (November 1991) analysed the price effects of anti-dumping and countervailing measures in United States using a dataset which combines cross-section and time series data to form a panel for 41 different product groups over 1981-86. The study showed that import prices increased by as much as 10 per cent for some manufacturing sectors (such as garments) during a countervailing investigation. This result confirms that these measures do exert a significant protective effect through raising import prices, even apart from the actual imposition of duties. The study also estimated the price impact of countervailing investigation and duties separately by using panel data. For all three groups of manufacturing sectors covered in this paper, the study found that investigation ending in no duty had almost no impact on import prices. Intermediate goods' investigations which ended in duties were accompanied by either significant price increases (as in case of textiles) or accompanied by price declines as high as 15 per cent. This difference in result implies that the price dynamics across industries is likely to vary significantly.

A study was conducted by UNCTAD in 1983 on non-tariff barriers existing in developed and developing countries. The study analyzed how the non-tariff restrictions existing against the developing country exports to the North affect their trade and industrialization prospects. The statistical results presented in this study were for major ECCN groups where other studies generally used SITC format.

It was for the first time that an attempt was made in this study to examine changes in non-tariff measures. This study is an important contribution to the analysis of escalation of trade barriers. Out of the 24 CCN products covered in this study the incident of escalation occurred in 14 products in developed market economy countries, but the non-tariff measures' frequency index increased only for 4 commodities. The incidence of developed country escalation occurred in case of vegetables, fruit, coffee, oils, Cocoa, tobacco, rubber, leather wood, wool cotton (up to and including yearn) jute, sisal and phosphate. These measures were intended to protect domestic processing industries both by using tariff as well as non-tariff restrictions nullifying the comparative advantage of the developing countries. Further the study indicated that escalation is likely in developing countries which produce the raw materials and provide an advantage in commodity processing.

SECTION-III

PART-II

Sector Specifie Trade Barriers:

(a) Agriculture

(b) Textiles

(c) Manufacturing

(a) Agriculturel Trade Barriers

The fundamental cause of the current disarray in world agricultural markets has been the pervasive government intervention in domestic agricultural markets[9]. However, the issue of agricultural protection was not addressed until the Uruguay Round. This was because a number of countries, among others, the United States, Switzerland and Japan joined the GATT only after it was decided that agriculture would not be under GATT discipline. Provision were made in order to avoid the application of GATT disciplines to this sector. GATT formulated particular articles allowing the quantitative restriction on imports and export and production subsidies. But the mounting budgetary cost of agricultural support policies associated with surplus production of certain products, the disputes arising out of trade in agricultural products among major members as a result of intensified competition for export market with the use of export subsidies has helped to develop a consensus towards its remedial measures. The Uruguay Round is mandated to reduce the protection in agriculture and it is in this context the present section reviews some of the earlier studies to highlight the nature and extent of NTBs in the agricultural sectors of the developed economies.

It has been observed that the basic objectives of agricultural support programme in most countries (developing as well developed countries) are (i) stabilizing and increasing rural incomes, (ii) providing food supplies at stable prices, (iii) improving external trade balances, (iv) accelerating the development of sectors having linkages with agricultural sectors facilitating agricultural commodity processing and (vi) keeping a lid on the fiscal outlays needed to reach the first five objectives. Paradoxically, these narrowly defensive efforts appear to have rendered markets even more unstable (World Bank 1986a). Various studies show that these agricultural support programmes are often a heavy burden to society as they result in inefficiency. For instance Miller (1986) estimates the budgetary cost of such programme in 1986 to be approximately $ 700 for each non-farm family in USA, more than $900 in EEC, and in Japan the consumer prices are raised by about 60 per cent because of government's agricultural protection. Further more, the annual transfer from the domestic tax payers and consumers to dairy farmers through higher prices is $410 per cow in EEC and $ 835 per cow in US. The excess production because of the price support has led to stockpiling. Grain stocks in US is about two years' world trade in grain, while beef stocks in EEC is about 30 per cent of a year's world trade in beef. Also the farm support programme is again discriminatory in that mainly large farmers gain in US and EEC - a fourth of the largest farmers get more than three fourths of the support, A simulation exercise reveals that agricultural protection has been an important constraint on export earnings and employment prospects of countries having comparative advantage in these sectors. Therefore, questions are being raised whether agricultural support programmes can be substituted by alternative policies with lower impediment to international trade.

We now survey some earlier studies on agricultural policies adopted by the developed countries and their effect on world agricultural trade.

A time series (1955-80) analysis on Japanese agricultural protectionism was under taken by Saxon and Anderson[10] (1982). Saxon and Anderson (1982) estimated ad valorem tariff equivalents for the period 1955-1980 of Japanese trade barriers for ten major agricultural commodities (namely, paulished rice, wheat, barley, soybean, raw sugar, refined sugar, beef, pork, chicken and eggs), reveal that firstly, there is considerable variation in ad valorem equivalents due to year to year fluctuation in border prices. But the more important thing is that a clear upward trend in protection exists for most products particularly for polished rice, soyabean and refined sugar and that where a clear trend does not exist protection has remained high through out the 25 years. Rice is the single most item in Japanese production and trade which had a strong upward trend in the ratio of domestic to border prices. In case of beef though there was no clear trend but Japanese measures stimulated Japanese production surpluses. The high levels of protection provided has resulted in surplus production of rice, wheat and barley. Japanese long-term domestic prices have been maintained at levels of 150 to 400 per cent more than border prices.

Other studies (Fitechett, 1987b, OECD, 1979, 1987a) confirm the earlier results of Saxon and Anderson. Average annual transfers from consumers and from the budget to agriculture in OECD countries during 1979-1981, amounted to on about ECU 100 billion ($88 billion). In 1984-86 annual cost of agricultural policies had increased to about ECU 200 billion ($177 billion). Between 1979-81 and 1984-86 the over all cost of agricultural support in Japan had been more than doubled, increased by about 40 per cent in EEC and more than doubled in North America, Australia and New Zealand

There have been several studies aiming at quantifying the impact of full trade liberalization of some products. Study by Cline et al (1978) used a partial equilibrium model similar to that used by UNCTAD to simulate the effects of various tariff cutting formulae proposed during the Tokyo Round on world trade in agricultural commodities. The authors used the methodology of GATT (1971) to calculate tariff equivalent for variable levies in EEC as the ratio of total revenue collected by these charges to the value of trade in the product. The results indicated that tariff equivalent for 1972 was higher than that for 1969. These were then extrapolated to estimate the tariff equivalents in 1974 using the changes in agricultural production costs. By and large the effect of tariff cuts under any of the tariff cutting formulae would have been an increase of agricultural imports from non-EEC countries by nearly $1.9 billion (1974 dollars), and intra-EEC trade in these items would decline by about $900 million. The projection results further reveal that the US would be the largest gainer as its exports would increase by about $500 to $ 600 million annually and France's exports would decrease by about $ 570 to $ 700 million annually.

Cline et.al. estimated the percentage difference between Japanese domestic prices and equivalent import prices of the good, so that these estimates reflected the joint protective effect of tariff and non-tariff measures. For 1970 the tariff equivalent was more than 100 per cent for some products namely beef, non-sweetened evaporated milk, powdered milk, butter, cheese, peas, green beans etc, 200 per cent for barley and more than 300 per cent for powdered and skimmed milk.Liberalization of imports of these products was estimated to increase imports by about 45 per cent or $ 311 million over their 1971 trade base. Norway, Sweden, Finland, Austria, Switzerland and Denmark who are important exporters of dairy products were the major beneficiaries and US agricultural exports to Japan were also projected to increase by 44 per cent.

The tariff equivalents of non-tariff barriers in agriculture are much lower in the USA . For example Cline estimates that 'voluntary' export restraints on meat product had a tariff equivalent of 20 per cent and that on dairy products namely, milk, butter and cheese averaged about 90 per cent in 1971. Their simulation indicates that an elimination of all these barriers to agricultural trade would result in an increase of US imports by about $ 100 million (1974 dollars) and dairy products imports by about $76 million.

A study by commonwealth secretariat (1982) quantifies the impact of substituting some existing non-tariff barriers by other policies having a lesser detrimental effect to trade. Replacing production subsidies on five major agricultural products i.e., wheat, maize, barley, sugar and beef by other forms of protection in such a way so as to leave income support level unchanged is estimated to raise net import in 1976 eighteenfold and net imports of sugar, wheat and barley by 70 percent while maize trade would rise by 16 per cent. The results further indicate that while developed country exporters will experience the largest trade gain developing countries, particularly South America and some sugar exporters in the British Commonwealth, would also gain significant amounts.

All these results support the view that use of trade intervention to fulfill domestic objectives should be minimised if welfare is to be maximised.

A GATT study (1971) estimates ad valorem equivalents for all tariff-lines level products subject to variable levies in EEC (6), Sweden, Spain, Switzerland and Greece. This study also show that the protective effect of EEC levies is often very high with ad valorem equivalents exceeding 100 per cent for many tariff line items.

GATT report provides statistics on ad valorem equivalents for over 400 tariff-line-level products. Sampson and Yeats (1976; 1977) examine the ad valorem incidence of Sweden and EEC's variable import levies after aggregating the tariff-line-level information on ad valorem equivalents into SITC and two digit level. Sampson and Yeats shows that variable levies are frequently applied to items under SITC 4 (animal and vegetable oils) and SITC (food and live animals where more than 40 per cent of the tariff lines are subject to variable levies. The coverage of variable levies in the dairy product and egg (SITC 02) is 100 per cent since all the tariff lines encountered variable levies. The coverage of variable levies of Swedish import of fixed vegetable oils (SITC 42), Sugar, honey and preparation (SITC 06) are 90 and 62 per cent respectively while the corresponding coverage of tariff lines by variable levies are 77 and 59 per cent. Levies are applied in Sweden with a high frequency to meat products (SITC 01) as 95 per cent of all imports (measured by value) and 79 per cent of tariff line items are subject to these charges.

The findings of Sampson and Yeats further indicate that nominal or effective tariff rate cannot depict the true picture of Swedish agricultural protection structure. To cite an example, meat and dairy products have a slightly negative tariff rate but effective tariff protection when considered together with levies is several hundred per cent.

Similar kind of study was undertaken by Sampson and Yeats (1977) for European Economic Community. Utilising the basic data on ad valorem equivalents for levies from a GATT (1971) report, as has already been mentioned, these authors quantify the effects of EEC variable levies which are applied to most temparate-zone agricultural imports and also provide information on coverage of these charges. Sampson and Yeats noted that the GATT approach of estimating the ad valorem equivalents of levies, (i.e., taking the ratio of annual revenue collected by these charges to the value of tariff-line-level imports) has drawbacks. For example if levies become prohibitive the nominal equivalents can not be derived.

Sampson and Yeats estimated the coverage of variable levies in EEC both in terms of values of imports and percentage of tariff lines affected according to SITC 2 digit level for products in the broad group of (SITC 0) food and live animals, (SITC 1) beverages and tobacco and (SIIC 4) animal and vegetable oils. The results indicate that one third of all tariff line numbers SITC 00 (live animals), SITC 01 (meat and preparation), SITC 04 (cereals) and SITC 06 (sugar and honey) encounter these barriers. The ad valorem equivalent of these levies have been found to be very high ranging between two to five times of most favoured nations' tariff rate. The nominal rates of protection for both tariff and levies are also often very high. The combined effective tariff and nominal rate of protection on dairy product and egg in more than 170 per cent.

Sampson and Yeat's major findings on nominal and effective rates of protection for major categories of product are presented in table 1.1. They reveal that in EEC levies which are three times the tariff are very important source of agricultural protection. Since these estimates of level of protection only covers tariff and levies and there are other forms of non-tariff restrictions. Total index of agricultural protection will be still higher.

Table 1.1

Comparison of Nominal and Effective Rates of Protection for selected products in EEC

Products	Nominal Rates(%)		Effective Rates(%)		
	Tariffs	Levies	Tariffs	Levies	Total
<u>Farm Gate Products</u>					
Oats	13.0	84.2	25.8	177.9	203.7
Rye	16.0	75.8	32.1	160.0	192.1
Wheat	20.0	73.0	40.6	154.1	194.7
Rice	16.0	34.5	32.1	72.8	104.9
Maize	6.0	34.1	10.7	72.0	82.7
Sheep	14.8	a	33.7	-42.7	-9.0
Swine	15.8	26.4	37.7	34.4	72.1
Poultry	12.0	15.9	25.5	3.8	29.3
Bovine animals	15.2	16.0	34.9	5.0	39.9
<u>Meat Products</u>					
Bovine meat	20.0	64.2	38.2	215.2	253.4
Pig meat	20.0	30.4	36.7	52.9	89.6
Mutton	20.0	20.0	39.3	80.0	119.3
Poultry meat	18.0	23.3	38.5	51.9	90.4
<u>Preserved Fruits and Vegetables</u>	26.0	26.8	62.5	199.2	261.7
<u>Grain Products</u>					
Corn flour	8.0	45.3	10.4	85.6	96.0
Wheat flour	25.0	76.4	98.9	206.8	305.7
Other flour	8.3	37.5	-2.8	41.9	39.1
Rolled Cereal flakes	26.9	33.4	94.5	19.5	114.0
Meal or groats	23.0	17.3	75.6	-51.2	24.4
Roasted and puffed cereals	8.0	24.9	-14.9	-52.2	-67.1
Fodder	14.8	35.2	61.2	62.8	124.0
Macaroni and spaghetti	12.0	43.7	6.7	50.6	57.3
<u>Dairy Products</u>					
Cheese	23.0	82.5	58.8	217.2	276.0
Butter	21.0	328.0	76.5	1244.2	1320.7
Condensed and evaporated milk	21.0	98.5	44.3	290.1	334.4

Source : Sampson and Yeats(1977)
Note : "a" Variable Levies are not applicable to this Product Group.
Reproduced from: Laird and Yeats (1991)

A UN Food and Agricultural Organisation (1979) report estimates the ad valorem tariff equivalents in Japan and European Community for the period 1974 to 1978 for major agricultural products. The report also produces estimates of producers subsidy equivalent and additional consumer cost equivalent. The ad valorem equivalents were estimated as the differences between producers prices and representative world market prices as a ratio to producers prices. The results show an upward trend in this indicator indicating that the domestic producers are increasingly being guarded from free market competition. The results presented in table I.2 show that price ratios were atleast three times the 1974 estimates in 1978 and for beef and sugar the ratios were six times and eight times respectively. While part of the increase in tariff equivalents reflects the hikes in yen/dollar exchange rates on the net it signifies that in Japan agricultural protectionism is very high and is on the rising trend.

The table also shows that in EEC in 1978 the protection coefficients for various commodities were substantially higher than the relatively low level in 1974. Higher tariff equivalents in 1976 can be explained by lower world price rises tariff equivalents for barley, maize, oilseeds and sugar doubled from 1976 to 1977. Butter had the highest level of protection throughout the period exceeding 300 per cent in 1976.

(b) **Protectionism and Trade in Textiles and Clothing**

Much of the world's textiles trade especially the exports of developing and socialist countries is governed under the umbrella of MFA. The evolution of protectionism in textiles clothing through the MFA analysed in an earlier section

Table 1.2

Ad Valorem Tariff Equivalents in Japan and the EEC

Country/product	1974	1975	1976	1977	1978
JAPAN					
Rice	72.0	238.6	438.3	500.9	305.8
Wheat	100.0	145.0	194.7	378.6	448.9
Barley	130.0	168.0	224.3	322.5	491.1
Beef	36.0	227.9	241.5	285.4	250.7
Pork	28.1	60.2	48.4	105.7	117.3
Sugar	39.7	-10.7	40.3	215.0	329.9
EEC					
Soft Wheat	7.0	24.0	104.0	116.0	na
Hand Wheat	20.0	45.0			
Husked Rice	-19.0	37.0	66.0	29.0	na
Barley	7.0	17.0	47.0	106.0	na
Maize	6.0	28.0	63.0	103.0	na
White Sugar	-59.0	9.0	76.0	155.0	na
Beef and Veal	62.0	96.0	92.0	96.0	na
Pig Meat	9.0	13.0	25.0	37.0	na
Butter	216.0	220.0	301.0	288.0	na
Skimmed Milk Powder	39.0	166.0	471.0	394.0	na
Oilseeds	-20.0	27.0	21.0	53.0	na

Source : UN Food and Agricultural Organisation(1979)
Commodity Review and Outlook, 1979-80 (Rome:FAO)

Reproduced From : Laird and Yeats (1991) and presented in brief in Table 3 reveal that the coverage of restrictive trade in textiles has been broadened. The bilateral agreements have become more restrictive. Flexibility in terms of quota utilisation has been reduced. The annual rates of growth of goods under quota have generally been below the minimum specified 6 per cent (Cable V. 1987).

There is a substantial body of literature on trade in textiles and clothing - Cable and Weale (1985), Cable (1987), Greenaway (1985), Homilton (1984a, 1984b), Australian Industries Assistance Commission (1980), Jenkin (1980), Koekoek and Mennes (1986), OECD (1985b) etc. Most of these studies are related to developed country imports. These studies suggest that textiles and clothing is one of most the highly protected sector in developed countries. These studies show that protectionism in textiles and clothing imposes major economic cost and sizeable trade losses. For example one study noted that the removal of tariffs and non-tariff barriers could increase developing countries' exports to the main OECD markets by 82 per cent for textiles and 93 per cent for clothing. Similarly UNCTAD study indicated that full trade liberalisation could increase developing countries' exports of textiles by 78 per cent and of clothing by 135 per cent.

(c) **Protectionism and the Manufactured Products**

Studies relating to protectionism in manufacture products are few compared to studies on textiles and agricultural products. Some of the most important studies are Baldwin (1970), Balassa (1986), Bell (1971), Boyee and Llewellyn (1982), Collyn and Dunaway (1987), Greenway (1985b), McNamara

(1979), OECD (1985j), Yeats (1976) etc. Professor Baldwin derived nominal and effective rates of US tariff and non-tariff protection for 1958, 1964 and 1972. His study show that the effective protection rates are much higher in each case. Baldwin's study has been an important reference for studies attempting to determine how the reliance on different trade measures has evolved, how changes in protection influence comparative advantage, and how the relative importance of nominal and effective tariff and non-tariff protection has changed (Laird and Yeats 1991).

Balassa's study incorporated a regression model to examine the relationship between national characteristics and the ratio of imports to gross domestic product in industrial countries. The results show that Japan is a outlier invariably in case whether it imports from world or industrial countries or from the developing countries.

Bells, estimates reveal that US non-tariff equivalents for clothing was about 10 per cent. His estimates also indicated that the rate of protection in US domestic ship building to be about 122 per cent while that of for oil import tickets was about 60 per cent. But a very low or zero tariff and non-tariff protection was reported for aircraft industry in the US.

Greenaway examined the impact of UK 'voluntary' export restraint for non-leather footwear negotiated with Taiwan and Republic of Korea in the late 70s and thereafter. According to his estimates the voluntary export restraint raised border prices of non-leather footwear by some 13 per cent. Greenaway's projection using a partial equilibrium trade model reveals that removal of VER and existing tariffs would increase the consumption of non-leather footwear in UK by about 10 million pairs annually.

However, it is difficult to utilise these results for research or practical purposes due to various limitations. Firstly, most of these studies are initial attempts to quantify the effects of non-tariff barriers in a particular industry. Since other comparable studies utilising alternative methodology are not available, it is difficult to evaluate the degree of correctness in the estimates. Secondly, it is very difficult to draw conclusion about differences in national protection level since similar studies are often not available for other countries. The third problem is that these studies are mostly for a specific point of time and offer no evidence on trends in protection (Laird and Yeats).

However, even considering these limitations, the available studies are very important from the point of view of methodology applied for quantification. These study can also be verified from the results we got from non-tariff inventory studies.

The studies on non-tariff barriers surveyed here are of two types. The first relates to coverage and frequency of non-tariff barriers in use, and second attempts to quantify its impact on trade flows. In the second case some studies have gone further by predicting the impact of liberalizing some or all barriers to trade. The projection regarding the impact of liberalizing tariff and non-tariff barriers has been made by using a partial equilibrium simulation model developed by World Bank and the UNCTAD.

The coverage and frequency index of non-tariff barriers give a rough idea of the incidence of non-tariff barriers. But intensity i.e., the restrictiveness of the non-tariff barrier is not known. The coverage or frequency index of non-tariff barrier simply captures the percentages of trade (or tariff line) subject to non-tariff barriers. It does not take account of the nature of non-tariff barrier. Since different type NTBs have different implications, same coverage index with different combination of non-tariff restriction may have different implication for trade. The coverage index is not sensitive to number of non-tariff barriers facing a tariff line, therefore, coverage ratio of non-tariff barriers will be the same irrespective of whether tariff lines are subject to single or multiple non-tariff barriers, the implication of which might differ. Thus, comparison on the basis of coverage/frequency of non-tariff barrier across commodities is difficult and may not be meaningful. The studies on coverage of NTBs reviewed above are not beyond these limitations.

The studies undertaken to estimate the tariff equivalents of non-tariff barriers also have certain limitations. The study by Deardorff and Stern focuses on difficulties of making any quantitative assessment of the effects of non-tariff barriers. The study makes it clear that the measurement of non-tariff barriers presents enormous theoretical and practical problems and that there are as yet no clear-cut guidelines for proceeding with such measurement, nor indeed is any single method of measurement useful for all purposes. Sam Laird and Yeats (1990) have also analysed various practical, theoretical and conceptual problem in quantifying non-tariff barriers.

SECTION-IV

Scope of the Study:

This study aims to examine aspects of NTBs in the Indian perspective given the global environment of trade protectionism and the critical balance of payments situation.

The recent debt-crisis faced by a number of developing countries alongwith a marked decline in both bilateral and multilateral flows of concessional finance made it clear that India could no longer depend on external financing for its investment and import requirements. The unsatisfactory export performance of India is well reflected by the fact that its share of exports to the world as well as to the LDC's has markedly gone down from 1.3 per cent in 1960-61 (in value term) to about 0.4% in 1987-88. To raise its export earnings India requires an external environment that encourages the expansion of an international trade and the emergence of integrated world market (Kumar, Rajiv et.at. 1988).

The restrictions and distortion in world markets, however, has imposed serious constraints on the country's ability to expand its exports. In this respect, our study aims to explore the importance of non-tariff barriers in India's export performance. Most studies on non-tariff barriers have examined their effects in developing countries as a whole and few have examined this effect on a particular country. Studies on non-tariff barriers facing India's exports are again limited.

The Indian Institute of Foreign Trade (IIFT) made an effort to identify the types of non-tariff barriers and analyze the nature and extent of obstacles faced by Indian exports in the early seventies in EEC (the original six members), Japan, USA, Australia, Canada, New Zealand, Denmark and Ireland.

A recent study made by Rajiv Kumar et.al. (1988) covering 17 major items of exports during 1980-85 noted that conventional non-tariff barriers generally do not exist in developed market economies at least against Indian exports. Their impact on exports of marine products and leather manufacturers to developed economies is marginal. The information on non-tariff barriers were collected from government ministries and agencies and also through a survey of private firms. This study forewarns that the potential adverse effect of non-tariff barriers on India's emerging export of temperate-zone agricultural products may reach a critical situation. Indian export of metal manufactures have also suffered due to non-tariff barriers in developed economies. This study further noted that extension and intensification of non-tariff barriers is bound to severely restrict some of India's most promising export sectors. The author noted that "apart from actual imposition of non-tariff barriers 'the noise' created is often adequate to drive out exports and induce a fall in the structure of domestic industry and in the distribution of rewards between rent, profit, and wage incomes" (ibid 1988, p.105). The uncertainty created through imposition of non-tariff barriers has an adverse effect on capacity creation and investment in industry. The adverse effect of NTBs on investment prevents industry from making full use of technological potential and economies of scale. Though the study is a serious attempt to analyze the non-tariff aspect of trade on the basis of firm level investigation, it does not estimate quantitatively the extent and impact of non-tariff barriers.

The GATT records inventory of non-tariff measures specific to country of imposition and the countries affected by it. The information gathered on non-tariff measures in GATT comes from official sources, government documents and the complaints from various governments facing non-tariff barriers. GATT verifies it and records it. In the multilateral negotiations these informations are most useful in negotiating with the country that imposes the restriction. Our study for the first time attempts to incorporate these informations from UNCATAD Data Base on Trade Measures pertaining to India. The Data Base provides information in a very dis-agreegated form according to tariff line numbers.

Plan of Study:

The information on NTBs available from GATT tariff tapes pertains to the period from post-Tokyo Round (1980) to the beginning of the Uruguay Round in 1986. Our aim is to record comprehensively the information on NTBs and their impact on Indian exporters before the Uruguay round. The principal imports of India are EEC, USA and Japan as much 53.6 per cent of India's export earning in 1991-92 (April - Sept.) have been from these three trade partners. Therefore, it is important to examine whether our exports to them are subject to NTBs.

Period of Study:

The study period covered for Japan and USA is from post-Tokyo Round to pre-Urguay round. But for EEC, This study will go farther. According to the White Paper (1985) plans and proposals the integration towards a common market for the 12 European nations is expected to be over by December 1992. Since mid-1980's there has been several changes in the community aimed at eliminating the physical, technical and fiscal barriers to intra-community trade. Therefore, it is important to see how these changes affect India's export performance. European community has been India's largest importer contributing nearly 27% of India's export earnings in 1991-92. Therefore, comparing the restrictions before European Integration and post-European Integration is of vital importance. An evaluation of the protectionist structure in the pre-integration Europe and post-integration Europe will help to understand the degree of restrictiveness in the post-integration Europe. The study looks at that very aspect and raises the following questions.

Is the access to European market likely to become more restrictive after 1992? Will India's balance of trade situation improve in the post-integration European community and what should be our strategy towards Europe to get the opportunity to sell our products in the integrated market of the European community consisting of 325 million people. Therefore, the study period for the European community has been 80's and early 90's.

Commodity Coverage:

All the tariff lines items exported to these countries has been taken into consideration. These tariff line items are then aggregated into SITC 3 digit classification. However, in case of EEC the tariff line level information are aggregated into Harmonised 2 digit level. Incidence of non-tariff barriers has been analysed for each broad category which is subject to non-tariff barriers.

Data Sources:

As already stated the source of all tariff and non-tariff informations pertaining to India's exports to these countries is the UNCTAD Data Base on Trade Measures. The estimates of tariff rates, coverage and frequency indices have been done by utilising the above UNCTAD document. But for the study of impact of non-tariff barriers data on value of exports according to SITC 3 digit level for USA and Japan and according to Harmonised 2 digit level has been taken from Statistics of Foreign Trade of India, DGCI&S, Calcutta and from EUROSTAT, European Commission for EEC level data.

Methodology:

The tariff line level information available from UNCTAD Data Base has been first aggregated into SITC 3 digit level (in case of USA & Japan and harmonized 2 digit (for EEC). There were 1274, 467 and 1325 tariff lines respectively for EEC, Japan and USA in which India exported in 1983. The EEC data on value of trade in 1983 are available for the EEC as a whole but the non-tariff description are country specific though the tariff rate is applicable for the EEC as a whole. Secondly, information on number of tariff lines covered by India's exports to a particular country is not available. Therefore, data on NTBs has been tabulated countrywise to highlight the nature of non-tariff barriers specific to a country and commodity. This only gives a rough idea of pattern of tariff and non-tariff barriers in pre-integration European community.

The incidence of non-tariff barriers will be examined by estimating the following indices.

(i) The frequency index of NTB:

The frequency index shows the percentage of tariff lines covered by non-tariff measures. Using notation frequency index

(Fj) for a commodity group (j) can be presented as:

$F_j = (D_i N_i / N_t) \times 100$ ... (1)

Where N_i tariff line i, Di = dummy variable which takes a value of unity if one or more non-tariff measures is applied to the item or zero otherwise Nt = total number of tariff lines of the product group.

(ii) The coverage index of non-tariff barriers:

This takes account of the percentage of export/import (in value term) subject to non-tariff barriers. Using notation the coverage index (Cjk)

$$C_jk = ((D_{ik}, t\text{-}m \times V_{ik}) \; V_{ik}, t\text{-}n \; \ldots (2)$$

Where C_{ij} = share of total import (of a particular commodity /or all commodity) of a country j from a particular country k (here India) is subject to NTBs

V_{ik}, t-n = value of imports in tariff line item i in year t-n from K.

D_{ik}, t-m = Dummy variable that takes a value of unity if a NTM is applied to the item from k and zero otherwise.

If n and m are zero index is based on current trade values, otherwise it is expressed in a base year trade weights. In our case base year's (1983) export weights have been utilised. Holding non-tariff constant and varying m will measure the effects of changes in protection with constant trade weights.

The Impact of Non-Tariff Barriers:

The impact of non-tariff barriers would be examined by analyzing (i) the pattern of export growth of the commodities which are affected by it vis-a-vis the commodities in which there are no non-tariff barriers. Secondly attempt will be made to examine whether there is any correlation between average export growth of a specific product and the average coverage ratio of non-tariff barriers over the period 1981-86. Thirdly attempt will be made to examine whether the commodities in which India is having revealed comparative advantage are also subject to non-tariff barriers.

The Revealed comparative advantage has been estimated by using the following formula:

$$RCA_{ij} = \frac{x_{ij}/\sum x_{ij}}{W_{ij}/\sum W_{ij}}$$

x_{ij}	=	export of commodity i from India to country j.
$\sum xij$	=	sum of all exports from India to country j
Wij	=	import of commodity i from world to country j
$\sum$ Wij	=	sum of all imports from world to country j.
RCAij	=	Revealed comparative advantage of commodity i in country j.

Test of Hypothesis:

The following hypotheses would be tested:

Hypothesis 1: Higher the revealed comparative advantage of India has in a commodity greater is the coverage of NTBs. The incidence of NTBs is significantly higher.

Hypothesis 2: Higher the market share of the exporting country (India) in the importing country the higher is the coverage of NTBs.

Hypothesis 3: Higher the import growth of a particulra country from India the higher will be the coverage of NTBs.

The detail study of non-tariff barriers facing Indian exports has been undertaken in the following chapters. Chapter 2 analyses protectionism in the European Community and its implication for India's exports. This study also compares the pre-integration and post-integration scenario and its probable impact on Indian export performance taking into consideration both the pre-integration and post-integration EC. Chapter 3 deals with non-tariff barriers facing Indian exports in USA and Japan. Chapter 4 tests the above mentioned hypothesis and knit together the whole study and aims to draw some broad conclusions.

Footnotes

1. See Krauss, Melvin B. (1978). The New Protectionism, PP-XX

2. See for details commonwealth Secretariat (1982): Protectionism threat to International Order, London, Commonwealth Secretariat.

3. Ibid. 2

4. Ibid. 1

5. See Massel, M.S. (1965): Non Tariff Barriers as an obstacles to World Trade; Reprint No.97, Washington D.C. The Brookings Institution.

6. Kelly, B. Jr. (1967): Non-Tariff Barriers in Bela Balassa (ed.) - Studies in Trade liberalisation, Baltimore, P.266.

7. Please See Baldwin R.E. (1970): Non-Tariff Distortions of International Trade, Washington D.c., The Brookings Institution, pp.5

8. Please see United Nations Trade and Development General, No.TD/B/AC.42/2, 7 March, 1988.

9. Vousden, N. (1990): The Economics of Trade Protection pp.96.

10. Fitchett Delbert (1987): Agriculture in the Uruguay Negotiations edited by Finger J.M. et.al., the World Bank, Washington, D.C.

11. The authors estimated domestic and border prices for the commodities. To estimate domestic prices they used domestic wholesale and producer prices, while to obtain the border prices the unit value of imports (or unit value of exports was used for years in which Japan imported (exported) substantial quantities of the product. Proxy border prices were obtained from trade statistics of comparable countries for the years in which Japan traded a small or unrepresentative quantity of the product. In compiling data sufficient care was taken to include items of the some grade and quality so that the effect of product variation on prices is minimised. These annual ad valorem equivalents for Japanese trade barriers for each product were estimated by taking the ratio of domestic to border price.

CHAPTER 2

PROTECTIONISM AND THE EUROPEAN ECONOMIC COMMUNITY

SECTION I

Progress of Integration of the Community

I.1. The Initial Progress

The treaty of Paris, which set up the European Coal and Steel Community with six states (Belgium, the Netherlands, Luxembourg, France, Federal Republic of Germany and Italy) in 1951 was the beginning of European economic integration. The Treaty of Rome signed in 1957 gave birth to a six-member European Economic Community. The immediate objective of the community included free trade among the member countries and common protection vis-a-vis the outside world. In the long run it aimed at an ambitious economic, monetary and finally a political union of entire Europe[1]. The community succeeded in establishing a customs union in July 1968, 18 months, ahead of schedule. In 1970 the community got its own budget from monies collected from customs duties, agricultural levies, together with value added tax (VAT) of upto 1 per cent levied on a uniform basis within the member states. Intra-EC trade grew rapidly from 7 to 54 billion units of account between 1958 and 1973[2].

Denmark, Ireland and United Kingdom inspired by economic progress made by the European community joined the community in 1973.

I.2 Slackening of the Process in the 1970s

As the economic dependence among the member states grew considerably[3], it was realised that a common economic and monetary union was needed as economic and monetary measures adopted by a member state would have considerable impact on its partners. The framework for establishing an economic and monetary union was provided by the Warner Report[4] in 1970. This plan envisaged three stages to complete the economic and monetary union by 1980.

However, in the seventies the progress in the process of economic integration slackened[5] due to the worsening economic environment. The member nations passed through a difficult phase of structural unemployment, high inflation and a low growth rate accompanied by the two recessions following the major oil price shocks. The domestic policies of member states became increasingly inward looking as rising protectionist pressure on national administration lead to increasing use of mainly non-tariff measures in several forms. As a result in the seventies intra-EC flow of goods[6] was hampered and the process of integration was slakened. The second phase of Warner's plan, supposed to be started in 1974, could not materialise.

Since the late seventies, however, it has been increasingly realised that healthy competition, a large market and growing demand were the critical requirements for Europe's welfare. In pursuance of this, the European Commission prepared a number of plans for integrating the internal market in a systematic manner.

I.3 Plans for a Single Europe

The Single European Act (SEA) was enacted in December 1985, to integrate the economies of all the 12 countries, including the three new members, Greece, Portugal and Spain[7]. The integration process got a final approval in February 1992 when the 12 member states signed the "Treaty on European Union" in Maastricht[8].

The detailed programmes for achieving a Single European Market were included in the white paper (Title). The white paper set a time-table to achieve the single market by the end of 1992 identified nearly 300 measures to remove all the barriers namely the physical, technical and fiscal barriers impeding free movement of goods, services, capital and people across the community[9]. This was to create a common market of about 325 million people. The scope of the market was further expanded by including the seven nation of EFTA (European Free Trade Association) forming what is called the European Economic Area. This new free trade zone having a population of 380 million stretching from the Mediterranean to the Arctic accounts for 40 per cent of the world trade. Further agreements have also been signed with Hungary, Poland and Czechoslovakia for widening the European Economic Area. It is expected that by the beginning of the 21st century these countries will also become full members of the European Community.

I.4 India's Trade with the EC

The integration process in high gear started after 1986. Since then many measures have been undertaken towards single European Market. Though its impact on India is difficult to assess an evaluation of the trade situation may give some rough idea of the seriousness of the measures - already taken.

India's exports to EEC (9) in 1980 was ECU 180 million (Appendix B) which rose to ECU 454 million in 1990 - in which the three new members' contribution was ECU 26 million. This implies a more than two fold (2.37 time) increase in EEC (9) imports in 1990 from India as compared to the level of 1980. India's export growth to the EEC has not been uniform throughout the 1980s. The first half experienced fluctuation as against continuous progress since 1987. The annual average export growth during 1980-83 was 6.94 per cent as against 5.9 per cent during 1983-87 and 18.04 per cent in the period 1987 to 1990. Indian imports from EEC has also grown more rapidly than exports during the period 1980-87. While import from EEC grew at an annual average rate of 4.5 per cent during 1980-90, the growth rate has been 18.48 per cent and 10.4 per cent during 1980-83 and 1983-87 respectively. The growth of import from EEC during 1987-99 has been negative.

India's balance of trade with EEC, however, remained negative with exception in 1984, 1985 and 1990. The 1990 trade surplus can more be explained by import compression due to severe foreign exchange crisis rather than export performance.

A quick look over the table (Appendix B) reveals that among the 12 EC member countries Germany and UK countributed nearly 50 per cent of total exports to EC as against 36 per cent by Belgium - Luxembourg (13.4 per cent), France (11.22 per cent) and Itally (11.54 per cent) taken together in 1990. Indian balance of trade situation with Denmark, Greece, Ireland and portugal has always been positive with exception in 1986 and 1987.

Further, Appendix B, reveals that India's market share to EC market has increased from 0.33 per cent in 1987 to 0.40 per cent in 1990. How far this improved performance was due to Indian export liberalization and what way the measures taken in the process of integration responsible is difficult to assess.

I.5 <u>Plan of Study</u>

In evaluating the progress of integration towards a single market the 'Seventh Report of the Commission to the Council and European Parliament Concerning the Implementation of the White Paper on the Competition of the Internal Market (Brussels, 2 Sept, 1992)' suggests that 90 per cent of the white paper proposals has been implemented and noted that: "the program had slackened in the course of 1991 mainly on account of the proposals that were before Parliament and difficulties encountered in certain areas such as the opening up of the public procurement in the service sector, the mutual recognition of diplomas, the finalisation of certain technical harmonization measures, transport and insurance services". Considering all changes, more appropriately the "quiet revolutionary changes[10], it is essential to understand the implications of these changes for the extra-EC countries. In this section such an attempt has been made to analyse the changing pattern of protectionism towards the developing countries, especially India, keeping in view of the following points:

(i) is the protection in the European community increasing? and

(ii) how, will a third world country, especially India be affected by the EC's single market programme?

Section II analyses the protection pattern before integration[11]. Section III will address the consequences of the recent development in EC towards unified Europe, 1992 on the developing countries trade prospects with EC with special reference to India.

SECTION II.

The Evolution of EC's Protectionism

The community has always claimed to favour a liberal trade system and to be a firm supporter of trade rules specified in the General Agreement on Tariffs and Trade (GATT). The community's legal base, viz., Article 110 of the Rome Treaty (1957) declares , "By establishing a customs union between themselves the Member states intend to contribute, in conformity with the common interest, to the harmonious development of world trade, the progressive abolition of restrictions on international exchange and the lowering of customs barriers". The commission still assures [12]:

(i) "1992 will not mean protectionism because the community has a fundamental stake in the existence of free and open international trade;

(ii) the development of the community's external economic policy in the run up to 1992 will take place in harmony with its existing international obligation whether these be multilateral such as GATT, or bilateral such as Rome".

However, claims have been made that these assurances are general in nature and are not necessarily based on facts[13]. Therefore the task is to investigate the reality.

II.1 Tariff Protection

Trends in Tariff protectionism in EEC: Formation of customs union according to Rome Treaty of 1957 necessiated the replacement of national tariffs by common external tariffs in the European Economic Community. According to GATT rules a common external tariff must not be higher or more restrictive to trade than the national tariffs which it replaces[14].

The common external tariff or in other words the common customs tariffs (CCT) came into its existence in July 1968 and it virtually covered all the external trade of the community. Estimates reveal that in nominal terms the average level of the common customs tariff was initially 12.5 per cent, but duties were cut successively in the Dillion, Kennedy and Tokyo Rounds of GATT negotiations by 20 per cent, 32 per cent and 30 per cent respectively: Table2.1 presents the weighted and unweighted average nominal tariff rates in broad groups of products in EEC, USA, Canada and Japan in the post-Tokyo Round. The table reveals that the unweighted tariff rates in EEC is in most cases very similar to that of the U.S., higher than Japan but lower than Canada.

Hine (1991) has questioned the liberal tendency in EC trade policy on several grounds. First, when effective rather than nominal tariffs are considered the levels of protection are often high. For instance he provided example of UK tariff structure where the effective protection is substantial for finished goods - the weighted average amounting to 18.8 per cent as against the average for nominal rates of 9.6 per cent. In general, the UK effective tariff rates are some 1.5 to 2 times their nominal counterparts.

The liberal tendency of EC has further been questioned due the preferential hierarchy it established - the pyramid of privileges with a complex layering of preferential treatment (Hine 1991). The community has been providing duty free access to manufactures from privileged partners like EFTA countries and preferential treatment for others under the associated country schemes, Lome Convention etc,. Thus, it appears that the community preferences serve to undermine the basic principle of non-discrimination of the GATT.

TABLE 2.1

Average Nominal Tariff Rates: Post-Tokyo Round

Product Group	EEC	USA	Canada	Japan
	Weighted			
All industrial products	4.7	4.4	7.9	2.8
Raw materials	0.2	0.2	0.5	0.5
Semi-manufactures	4.2	3.0	8.3	4.6
Finished manufactures	6.9	5.7	8.3	6.0
	Unweighted			
All industrial products	6.4	6.3	7.3	6.0
Raw materials	1.6	1.8	2.6	1.4
Semi-manufactures	6.2	6.1	6.6	6.3
Finished manufactures	7.0	7.0	8.1	6.4

Source: Kelly et.al. 1988, Table A3
Reprinted from: C.Hine (1990)

II.2 Tariff Barriers Faced by India

Our estimates based on UNCTAD data are on trade measures which provide tariff rates according to tariff line numbers reveal that the weighted average tariffs against India has been lowered in the post-Tokyo Round period from an average rate of 56 per cent to 52 per cent[15]. It has been estimated by Kelly et.al. (1988) that for some 33 per cent of tariff lines in the EEC the most favoured nation (MFN) tariffs exceed 10 per cent. These estimates also reveal that the tariff peaks in EEC tend to be concentrated in food stuffs, textiles, clothing, footwear and some petrochemicals. Our estimates of the average weighted MFN tariff rates against India presented in Table 2.2 also support the above results. For some 17 per cent of tariff lines in EEC the MFN tariff rates, existing against India in the post Tokyo round period, exceed 10 per cent. As the table reveals in five categories having the highest tariff rates, the tariff rates range between 10 to 381 per cent. In foodstuffs and beverages it remained at a high level of 381 per cent even in the post-Tokyo round. 'Textiles and Textile' articles, and vegetable products which contributed approximately 32 and 13 per cent of exports earning from EEC in 1983 had tariff rates of 10 per cent and 32 per cent respectively. As far as the trend of tariff protection is concerned the rates on India's most important items of exports in order of importance namely to textile group, natural or cultured pearls, vegetable products, prepared food products as a group, have been reduced by 7, 0.15, 5, 9 and 1 per cent respectly in the post-Tokyo round. On the whole it appears that even in the case of India, the incidence of tariff barriers on her main items of exports to EEC are quite high.

Table 2.2

India and EEC : Export (Shares), Revealed Comparative Advantage, Tariff Rates
1983, 1987 and 1990

	Harmonised Commodity Description	Percentage share to India's Total Exports			Rank in terms of Export earning			EEC and Member Countries Import From India as a Percent of Import from the World			India's Revealed Comparative Advantage			MFN Tariff Rates (PERCENT)	
		EEC-12(90)	EEC-12(87)	EEC-10(83)	EEC-12(90)	EEC-12(87)	EEC-10(83)	EEC-12(90)	EEC-12(87)	EEC-10(83)	EEC-12(90)	EEC-12(87)	EEC-10(83)	PRE-TOKYO ROUND	POST-TOKYO ROUND
1	Live Animals; Animal Products(1-5)	2.58	2.47	2.33	11	10	7	0.31	0.22	0.21	0.77	0.66	0.64	13.18	13.17
2	Vegetable Products(6-14)	5.58	9.51	11.56	4	4	3	0.62	0.69	0.80	1.54	2.07	2.42	37.76	32.32
3	Animal or Vegetable Fats and Oils and Etc.(15)	1.24	0.45	1.33	12	15	12	1.21	0.31	0.68	3.00	0.94	2.05	8.77	8.77
4	Prepared Foodstuffs;Beverages(16-24)	3.67	3.03	11.13	8	7	4	0.38	0.24	0.84	0.93	0.71	2.54	390.3	381.44
5	Mineral Products(24-27)	4.55	2.65	6.32	5	8	6	0.18	0.08	0.09	0.46	0.23	0.28	2.25	2.24
6	Products of the Chemical or Allied Industries(28-38)	3.85	3.07	1.48	7	6	11	0.20	0.13	0.07	0.50	0.39	0.21	9.74	7.14
7	Plastics and Articles thereof;(39-40)	0.38	0.35	0.19	16	17	19	0.03	0.03	0.02	0.08	0.08	0.05	9.39	6.02
8	Raw Hides and Skins,Leather and its Products(41-43)	12.05	13.48	9.40	3	2	5	4.93	3.33	2.76	12.34	10.00	8.35	5.37	4.21
9	Wood and Articles of Wood(44-46)	0.30	0.34	0.34	19	19	17	0.08	0.08	0.07	0.20	0.23	0.22	6.43	5.22
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	0.10	0.10	0.16	20	20	20	0.01	0.01	0.02	0.03	0.03	0.05	4.73	3.51
11	Textiles and Textiles Articles(50-63)	36.98	39.87	31.02	1	1	1	2.10	1.78	1.60	5.22	5.34	4.85	17.27	10.37
12	Footwear Etc.(64-67)	4.16	4.00	2.05	6	5	9	1.77	1.30	0.79	4.40	3.91	2.40	8.12	6.87
13	Articles of Stone(68-70)	0.36	0.35	0.26	17	18	18	0.10	0.08	0.07	0.25	0.24	0.22	6.86	4.16
14	Natural or Cultured Pearls(71)	13.39	11.34	14.38	2	3	2	2.66	1.83	1.84	6.61	5.51	5.58	0.37	0.22
15	Base Metals and Articles of Base Metal(72-83)	3.60	2.61	2.31	9	9	8	0.18	0.12	0.11	0.44	0.35	0.32	7.5	3.72
16	Machinery and Mechanical Appliances(84-85)	2.92	2.34	1.62	10	11	10	0.06	0.04	0.04	0.14	0.13	0.12	7.1	4.95
17	Vehicles, Aircraft, Vessels Etc.(86-89)	0.84	0.55	0.35	14	13	16	0.03	0.02	0.01	0.07	0.05	0.04	9.62	6.94
18	Optical, Photographic, Etc.(90-92)	0.92	0.47	0.64	13	14	14	0.12	0.04	0.06	0.30	0.11	0.19	9.56	5.84
19	Arms and Ammunition; Parts Etc.(93)	0.01	0.01	0.01	21	21	21	0.03	0.02	0.05	0.07	0.07	0.14	4.63	3.52
20	Miscellaneous Manufactured Articles(94-96)	0.58	0.43	0.64	15	16	13	0.11	0.08	0.15	0.28	0.25	0.46	7.98	5.37
21	Works of Art, Collectors' Pieces Etc.(97-99)	0.31	0.70	0.63	18	12	15	0.08	0.13	0.16	0.20	0.38	0.47	79.38	72.91

Source : MFN (Most Favoured Nation) Tariff Rates were computed from UNCTAD Data Base on Trade Measures
For others: Data from Eurostat, Official Publication.

Note : Revealed Comparative Advantage has been computed as the ratio of share of ith product in total import by EEC from India to share of ith product in total import by EEC from the World.

II.3 Non-tariff Restrictions

Non-tariff barriers cover a wide range of measures those that are applied at the border such as quotas, voluntary export restraints, variable levies, import deposit, declaration with visa etc., and those applied internally, such as discriminatory public purchasing, technical standards biased in favour of local producers and subsidy payments. However, estimates provided by Laird and Yeats, (1988) reveal that proportion of trade subject to various non-tariff barriers in the EEC appears to be similar to that of the US, though growing at a slower rate than in the US and Japan (Table 2.3).

Data on coverage, however, gives no indication of how severely trade has been affected. It does not cover trade which could not occur due to some non-tariff measure. But it gives a rough idea about the protectionist pattern. Though EEC and US coverage of non-tariff barriers are fairly similar, impact is not the same since different measures are employed.

Non-tariff measures in EC countries: A list of non-tariff measures and their application in EC countries has been provided in table 2.4. The table records the number of incidence of various non-tariff measures in particular country during the period 1980-86. It is evident from the table that Denmark used wider varieties of non-tariff measures as compared to the rest. France utilised eight types of non-tariff measures. The incidence of non-tariff measures in Germany, Belgium and is lower as compared to others. The table reveals there were 24 varieties of non-tariff measures which the EC utilised. However, there may be other forms of non-tariff measures unrecorded in the UNCTAD Data Base due to

Table 2·3

Percentage of Trade Covered by Non-Tariff Measures

Country	1981	1983	1986	1986 from developed countries	1986 from developing countries	1986 from socialist countries
Denmark	6.7	8.0	7.9	6.1	20.9	4.7
Ireland	8.2	9.7	9.7	8.6	15.8	14.7
United Kingdom	11.2	13.4	12.8	12.9	24.7	1.1
Germany	12.6	15.4	14.3	14.9	28.6	9.2
Italy	11.8	13.6	15.4	11.5	21.3	14.1
France	17.2	18.7	18.2	17.3	17.4	28.1
Greece	15.7	18.8	18.6	18.0	12.3	25.2
Netherlands	16.2	21.0	20.1	22.6	27.1	12.1
EC(10)	13.4	15.6	15.8	14.4	23.2	8.5
US	11.4	13.7	17.3	16.6	19.1	12.1
Japan	24.4	24.5	24.3	29.4	17.4	13.1

Source: Laird and Yeats, 1988, Tables 4.2 and 4.3

Note: Calculations for 1981, 1983 and 1986 employ constant 1981 trade weight.

Table 2. 4

Non-Tariff Barriers operating in the EC countries @
1979 To 1986

Description of NTBs	Belgium	Denmark	Germany	Greece	France	Ireland	Italy	U.K
1 Advelorem Charges (AC)								
2 Advalorem Tariff with Spe. Min.(ATP)		2						
3 Authorization Dep. on Certification (ADC)			9					
4 Basic Import Price (BIP)		2						
5 Declaration with Visa (DWV)					12			
6 Entry Control Measures (ECM)					12			
7 Global Quota (GQ)		1						
8 Import Deposit (ID)				699				
9 Intra-Community Surveillance (ICS)	50	26		14	54	54		
10 Licence for Surveillance (LS)	11	9		143	55	147	209	74
11 LIcence (L)		9						
12 MFA Quota (MQ)	6	74			9		7	5
13 Multi-Fibre Arrangement (MFA)		220						
14 Prohibition of Indirect Import (PIM)	9				52	6	3	3
15 Prohibition (P)						1		
16 Quota by Country (QC)	1		1	238	239	5	66	70
17 Quota (Q)	1	1		1	19		1	
18 Reference Import Prices (RIP)		3						
19 Retrospective Surveillance (RS)		1						
20 Seasonal Advalorem Tariff (SAT)		4						
21 Tariff with Quota (TQ)		2	1	57				
22 Technical Requirement (TR)								
23 Variable Component (VC)		25						
24 Variable Levy (VL)		2						

Source: Computed from UNCTAD Data Base on Trade Measures.
Note : @ Figures indicate Number of Tariff Lines subject to NTBs for the whole or part of the period.

lack of information. The most commonly applied non-tariff measures in the EC are licence for surveillance, quota, prohibition of indirect imports and MFA in textiles. The diverse pattern of use of non-tariff measures and information on that regard also act as important non-tariff barriers to exports.

Our study on the non-tariff barriers facing India's export to EC has been limited to the period 1981-86 due to data limitations. However, in recent years the community has appeared to utilise anti-dumping measures as to blunt the competitive edge of Japanese and other Asian producers (Hine 1991). many new voluntary export restraint agreements were reported for the EC in 1987-88 (GATT), despite the standstill and roll back commitments in the Urguary Round negotiations.

The trends of non-tariff measures in EC: An attempt has been made to understand the trend of non-tariff protection in EC. Table 2.5 tabulates the number of non-tariff barriers in eight EC countries, from 1980 to 1986. The figures in the table correspond to number of non-tariff barries imposed by a particular country taking together all non-tariff measures and all tariff lines. The table reveals that incidence of non-tariff barriers is the highest in Greece, followed by France, Denmark, Italy, Ireland, UK, Belgium and Germany, respectively. It is clearly visible that the incidence of non-tariff measures increased more or less continuously during 1980 to 1985 and fell in 1986.

Table 2.5

Incidence of Non-Tariff Barries in EC Countries:
Number of Cases of Non-Tariff Barriers$

Year	Belgium	Denmark	Germany	Greece	France	Iraland	Italy	U.K.
1980	56	67	9	14	101	0	7	58
1981	68	378	9	431	196	204	295	204
1982	68	383	9	376	418	24	297	204
1983	69	404	10	396	435	205	290	202
1984	78	385	11	390	449	205	289	461
1985	78	388	11	1068	498	209	321	207
1986	41	388	2	1013	390	200	293	150

Source: Computed from UNCTAD Data Base on Trade Measures.

$ This records Number of Cases of NTBS occured during the year.

II.4 Non-tariff Barriers Facing India's Export in EC Countries

In this section an attempt has been made to highlight and analyse the nature and types of non-tariff barriers restricting Indian exports to EC countries. This study captures the period from the end of the Tokyo round to that before the Uruguay Round, roughly - from 1980 to 1986. The details of non-tariff descriptions according to tariff line numbers were available from UNCTAD Date Base on Trade Measures Limitation in using this Date Base is that, while it provides the 1983 value of import from India for the EEC as a whole the non-tariff descriptions, are given country wise. Therefore, estimates of coverage and frequency of non-tariff barriers are not possible. However, an attempt has been made to provide country wise details of non-tariff barriers facing India's exports. Data from UNCTAD Data Base were sorted according to the Harmonised commodity classification code at the two digit level and aggregated into 21 broad categories. The country wise details of non-tariff barriers are presented briefly in Table 2.6. An examination of the table reveals that textiles and textile articles, vegetable products, prepared foodstuffs, beverages, and footwear have highest incidence of non-tariff barriers and are facing non-tariff restrictions in almost all countries of the European Community. As could be seen from Table 2.2 these items contribute 21, 13, 11 and 2 per cent respectively of India's total exports to the EC. Secondly these items have significant revealed comparative advantage (RCA) in the EC in 1983. Other importing commodities having revealed comparative advantage and subject to various non-tariff barriers are 'natural or cultured pearls' (the highest rank), 'raw hides and skins', 'leather and leather goods and live animals and animal products' whose shares to Indian

Table 2.6

Structure of Non-Tariff Barriers in EC : 1979 TO 1986

Sl. No.	Harmonised Commodity Classification	Number of Tariff Lines	Belgium@	Denmark@	France@	Germany@	Greece@	Ireland@	Italy@	U.K@
1	Live Animals; Animal Products(1-5)	36		QC,TQ,VL(3) L			ID(16), LS(4)			
2	Vegetable Products(6-14)	101	Q	TQ,SAT,L(18) RIP(2),VL(3)	LS(9),QC DWV(6)	TR,ADC(5)	ID(47),QC Q		LS	
3	Animal or Vegetable Fats and oils and Etc.(15)	10		GQ,RIP,L ATP,VL(10),VC(26)	QC		ID			
4	Prepared Foodstuffs;Beverages(16-24)	78			LS(24),Q(2) DWV(3)	ADC(4),Q	ID(61) LS			
5	Mineral Products(24-27)	36	LS (4)		Q(5),ECM		ID(10)			
6	Products of the Chemical or Allied Industries(28-38)	122			QC(4),ECM(4)		ID(22)			
7	Plastics and Articles thereof;(39-40)	29					ID(10)			
8	Raw Hides and Skins,Leather and its Products(41-43)	29					ID(11)		QC	
9	Wood and Articles of Wood(44-46)	26					ID(21)			
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23			Q		ID(13),LS Q			
11	Textiles and Textiles Articles(50-63)	313	QC,ICS(50) PIM(9),MQ(6)	MFA(220) MQ(74)	LS,Q(6),ICS(54) PIM(54),MQ(9),ECM(6)		ID(261),LS(137) QC(237),Q,TQ(57),ICS(14)	LS(147),P ICS(54)PIM(6)	LS(184),Q,ICS PIM(3),MQ(7)	LS(74),QC(70),ICS PIM(3),MQ(5)

Source: Tabulated from Unctad Data Base on Trade Measures

Cond...

Note: Figures within Bracket indicate number of Tariff Lines subject to particular NTB.
Only one Tariff Line is subject NTB in Cases where numbers are not given.
For abbreviation of NTBs please see Table 3.5

Table 2.6

Structure of Non-Tariff Barriers in EC : 1979 TO 1986

Sl. No.	Harmonised Commodity Classification	Number of Tariff Lines	Belgium@	Denmark@	France@	Germany@	Greece@	Ireland@	Italy@	U.K@
12	Footwear Etc.(64-67)	20		LS(6)	QC		ID(18)	LS(4)	LS(5)	PIM(3)
13	Articles of Stone(68-70)	41			LS(4),QC(3) Q		ID(39)		LS	Q
14	Natural or Cultured Pearls(71)	24	LS(5)				ID(23)			
15	Base Metals and Articles of Base Metal(72-83)	93		LS(3),RS(2) BIP	LS(5),DWV(2)		ID(53)		LS	Q
16	Machinery and Mechanical Appliances(84-85)	145			LS(5),QC(4) DWV		ID(26) Q		LS(14)	
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19			LS(3)		ID(11)	Q(5)		
18	Optical, Photographic, Etc.(90-92)	65	LS(2)		LS(5),QC(5) Q(4),PIM,ECM(4)		ID(25)			
19	Arms and Ammunition; Parts Etc.(93)	4					ID(3)		LS(3)	
20	Miscellaneous Manufactured Articles(94-96)	15					ID(7)			
21	Works of Art, Collectors' Pieces Etc.(97-99)	32					ID(27) Q(2)			

Source: Tabulated from Unctad Data Base on Trade Measures

Note: Figures within Bracket indicate number of Tariff Lines subject to particular NTB.
Only one Tariff Line is subject NTB in Cases where numbers are not given.
For abbreviation of NTBs please see Table 3.5

are exports are about 2, 9.5 and 2 per cent respectively. The table also indicates that in Greece almost all the items of India's exports were subject to import deposits. Country-wise details of non-tariff barriers with their time of imposition and termination is given in the appendix A.

II.5 Incidence of Non-tariff Barriers: A Commodity-wise Analysis

Textiles and Textile Articles: This category is the most important item in terms of export earnings from EC, contributing about 31, 40 and 37 per cent of total earnings respectively in the year 1983, 1987 and 1990. Table 2.7 and 2.8 reveal that India's exports of garment and cotton textiles has increased enormously in 1990. Export of Garments subject to quota increased by 38 per cent as against 72 per cent increase in non-quota garments. Export of cotton textiles subject to quota increased by 92 per cent as against 45 per cent increase in non-quota exports.

The textiles and its products category is subject to both tariff as well as non-tariff barriers in EC. The weighted average tariff rate has been reduced from 38 per cent to 32 per cent in the post Tokyo round. But the importance of non-tariff barriers has increased over the period. (1981-86). Textile is not only subject to MFA but several other non-tariff barriers. Except Germany all the EC countries imposed various non-tariff barriers on this category. Some items of this category are subject to non-tariff barriers which are specially meant for India like

Table 2.7

India's Country Wise Garment Exports in EC

(Rs.Crore)

Country	Quota Exports			Non Quota Exports			Total Exports		
	1989	1990	% Increase	1989	1990	% Increase	1989	1990	% Increase
Germany	346.0	485.0	40	99.0	173.0	75	445.0	658.0	48
UK	290.0	371.0	28	56.0	131.0	134	346.0	502.0	45
France	145.0	214.0	48	51.0	81.0	100	196.0	295.0	51
Benelux	98.0	137.0	46	33.0	66.0	-33	131.0	203.0	55
Italy	78.0	114.0	19	39.0	26.0	57	117.0	140.0	20
Denmark	26.0	31.0	67	7.0	11.0	100	33.0	42.0	27
Spain	15.0	25.0	40	7.0	14.0	100	22.0	39.0	77
Ireland	5.0	7.0	250	1.0	2.0	180	6.0	9.0	50
Portugal	0.4	1.4	200	0.5	1.4	400	0.9	2.8	211
Greece	1.0	3.0		0.1	0.5		1.1	3.5	218
Total	1004.4	1388.4	38	293.6	505.9	72	1298.0	1894.3	46

Source : European Commission
Reproduced From Iyer Parameswaran (1991)

Table 2.8

India's Country Wise Cotton Textile Exports In EC

(Rs.Crore)

Country	Quota Exports			Non Quota Exports			Total Exports		
	1989	1990	% Increase	1989	1990	% Increase	1989	1990	% Increase
Germany	80.7	152.7	89	35.1	63.4	81	115.7	216.1	87
France	56.2	83.0	48	7.3	17.3	137	63.5	100.3	58
Italy	56.3	111.4	98	33.6	43.2	29	89.9	154.6	72
Benelux	25.9	56.1	116	34.7	44.2	27	60.6	100.2	65
Denmark	10.3	19.6	91	4.1	4.5	10	14.4	24.1	68
S.Ireland	98.8	4.1	139	1.0	0.4	-63	2.7	4.5	66
UK	1.7	204.6	107	87.1	117.7	35	185.9	322.2	73
Greece	0.7	1.9	158	0.4	2.1	407	1.2	4.0	249
Spain	5.6	10.0	78	5.2	8.7	66	10.9	18.7	72
Portugal	0.2	3.1	1435	0.1	0.5	275	0.3	3.5	1000
Total	336.4	646.5	92	208.6	302.0	45	545.1	848.2	74

Source : European Commission
Reproduced From Iyer Parameswaran (1991)

prohibition of indirect import in U.K. Italy, Ireland, France and Belgium. The other non-tariff barriers are, quota, quota by country, Tariff with quota, MFA quota, Intra Community surveillance etc.

In spite of numerous non-tariff barriers, Indian exports of textiles has remained significant though there has been a declining trend between 1983 and 1987 India's market share of textiles and textile articles has increased from 1.6 per cent in 1983 to 2.1 in 1990. The satisfactory growth can partly be explained by the high revealed comparative advantage in this category (4.8, 5.3 and 5.2 in 1983, 1987 and 1990 respectively)[16]. The other factor to consider is that non-tariff barriers like quota has not appeared to be a binding constraint to her export in these years. As could be understood from table 2.9 that quota for almost all of the items in this category were under utilised before 1990. In 1990, however, India could reach her quota level and it is expected that growth of exports of textiles will not expand due to quota constraint in the coming years unless quota is increased. The obvious indication is already understood from the fact that quota export of garments increased by 38 per cent as against 92 of cotton textiles partly due to the fact that there were more under utilised quota under cotton textiles when compared with that of garments.

Natural or cultured pearls: This category is second most important item in terms of its contribution to India's exports. Its share in India's export earnings has fell from 14.38 per cent in 1983 to 11.34 in 1987 but has subsequently increased to 13.39 per cent in 1990. India's share in the EC market has also increased from 1.84 in 1983 to 2.66 in 1990. Average tariff rate for this category has been reduced from 0.37 per cent to 0.22 per cent in the post Tokyo round.

Table 2.9

India's Quota Utilsation in the EC

Category/Description	1988	1989	1990
1 Cotton Yarn	45.00	43.00	108.00
2 Cotton Fabric	86.00	82.00	112.00
4 T-Shirts	94.00	116.93	124.49
5 Jerseys & Pullovers	-	83.92	103.87
6 Trousers and Gents' Shirts	98.45	105.95	109.38
7 Ladies Blouses	94.62	102.81	113.07
8 Gents' Shirts	109.81	114.74	114.56
15 Ladies Jackets	62.57	49.78	37.47
20 Bedlines	66.00	70.00	104.00
26 Ladies'Dresses	78.82	72.96	88.73
27 Ladies Skirts	104.86	97.13	97.71
29 Ladies Coordinate Suits	97.80	103.11	98.62
30 Tarlelinen	19.00	18.00	20.00

Source: Apparel EPC. and Cotton Textile EPC.
Rrproduced from: Iyer Parameswaran (1991)

This category is facing two types of non-tariff barriers, namely licence for surveillance in Belgium and import deposit in Greece. Belgium imported a sizeable proportion (76 per cent of her imports while the import of Greece was negligible. Again in Belgium only five tariff lines out of 24 were subject to this restriction implying that the incidence of NTB in this category is low.

Vegetable Products: Export of this item from India was continuously falling. In relative terms its share in Indian exports (or world exports) to EEC has fallen from 11.56 (0.8) per cent in 1983 to 9.51 (0.69) per cent in 1987 and to 5.58 (0.62) per cent in 1990. Vegetable products from India to the EC is subject to high tariff (32.32 per cent) as well as various non-tariff measures. This item is second worst affected by non-tariff measures. In the EC except UK and Ireland almost all countries have taken resort to various non-tariff measures at least on some of the tariff lines to restrict import. The non-tariff measures applied on this category of product have been import deposits, licence, variable levy, ad valorem charges, declaration with visa etc. Study by Sampson and Yeats (1977) estimated the effective rate of protection on preserved fruits and vegetables to be as high as 262 per cent taking only the tariffs and levies. Meanwhile the tariff rate has not been reduced substantially but the incidence of other non-tariff measures has increased. Therefore, the effective protection would be much more higher to Sampson and Yeats' estimates in the earlier period. Thus, it could be argued that the non-tariff measures in the EC is one of the most important and factor towards India's declining share of exports of vegetable products.

Prepared Foodstuffs and Beverages: In relative importers share this item was fourth in Indian exports to the EC in 1983. Its position fell to 7th in 1987 and 8th in 1990. India's share in total (world) exports to the EC drastically fell from 0.84 per cent in 1983 to 0.24 per cent in 1987 but has improved to 0.38 per cent in 1990. Prepared foodstuffs and beverages is amongst the most protected categories in the EC covered by tariffs. In the Tokyo round negotiations the tariff rate was marginally reduced from 390 per cent to 381 per cent. This item is also subject to various non-tariff measures of which the major are licence for surveillance in France, authorisation depending on certification in Germany, import deposit in Greece and licence, variable levy and variable component in Denmark. Therefore, inspite of having significant revealed comparative advantage India's exports of prepared foodstuffs and beverages have been declining.

Raw hides and skins, leather and its products: India's relative export growth of this group of products has been very impressive in the 1980s. This is clearly seen from the country's share in the total imports made by the EC. India's share to total imports under this category from world has increased from per cent 2.76 in 1983 to 3.33 per cent in 1987 and further to 4.93 per cent in 1990. The impressive export performance of India has been backed by its growing revealed comparative advantage and low tariff rates in the EC. The average tariff rate against import of this category in the EC was as low as nearly 5 per cent in the pre-Tokyo round and reduced to 4 per cent in the post-Tokyo round. The incidence of non-tariff measures was also low; eleven tariff lines in Greece and one tariff line in Italy have been found to be under import deposit and quota by country respectively.

The other groups of commodities showing increasing trend of exports to the EC are, mineral products, base metal and articles of base metals, footwear and products of the chemical or allied industries. Table 2.1 and 2.2 reveal that incidence of tariff rate imposed by the EC in these categories are not too high, ranging between 2 and 7 per cent. As far as incidence of non-tariff measures is concerned it has been marginal in all the groups except footwear. In footwear, out of 20 tariff lines India's exports in 18 were subject to import deposit from 1985 onwards in Greece. From 1985 onwards 6, 5 and 4 tariff lines were subject to licence for surveillance in Denmark, Italy and Ireland respectively, and 3 tariff lines were subject to prohibition of indirect imports in UK. In spite of these barriers India's share in the total import of footwear by the EC has increased from 0.79 per cent in 1983 to 1.30 per cent in 1987 and further to 1.77 per cent in 1990.

Other commodity groups in which declining export shares were observed in he 1980s are works of art; collection pieces (Harmonised 97 to 99) and wood, and articles of wood (Harmonised 44-46). The declining share of the former is partly due to high tariff rate (72.01) per cent in post Tokyo Round. the incidence of non-tariff measures were only observed in Greece in which almost all tariff lines were subject to import deposit from November 1985. The tariff rates as well as non-tariff measures operating against import of wood and articles of wood in the EC were marginal. So there might be other factors responsible against the relatively unsatisfactory export growth of this category.

Commodity groups in which relative export share have been remained more or less stable in the 1980s are 'machinery and machinery appliances', 'live animal and animal products' 'optical, photographic goods etc' and 'pulp of wood or of other fibrous cellulosic' and 'arms and ammunition; parts etc.' An examination of table 2.2 and 2.4 reveal that average tariff rates in these groups of commodities have been low (in the range 3.51 to 4.95) except for live animals and animals products (13.17 per cent) but the incidence of non-tariff measures gives a mixed picture.

It is important to note that the integration process towards a single market for the twelve European Community member states started in full swing in 1986 according to white paper plan and proposals. Detailed data on non-tariff barriers since 1986 are also not available. Therefore, in the next section an attempt has been made to analyse the distinguishable events of Europe 1992 and their implication for LDC with special reference to India.

SECTION III

Implications of Single European Market on Trade

III.1 The Economic Effect of Removing Non-tariff Barriers Within a Customs Union:

Standard customs union theory predicts that non-member suppliers would be affected by the formation of a customs union through trade creations and trade diversion. Customs union theory focuses on tariff as the main form of protection.

But what is the impact of prohibition - through non-tariff barriers? Pelkmans and Winters (1988) have noted that the impact of removing a particular non-tariff barriers depends on whether the barrier is revenue generating (like quota) or cost increasing (e.g., long waiting times at the border). In the later case the welfare effect may differ from that of quantity of imports under a tariff. Thus, in case of trade creation, the net gain is not just equal to the dead weight loss prior to elimination of the barrier, but the amount of dead weight loss plus the cost saving across the whole volume of intra-union trade.

Standard analysis of trade diversion demonstrates that it is damaging to the importing country within the union as well as to the world. But if a cost increasing barrier is removed then welfare implications of trade diversion need not be damaging. The importing country, and hence the union, may not be made worse off; it merely forgoes greater potential gains (from freeing external suppliers) rather than actually losing' (Pelkman and Winters, 1988, p.19). However, Sapir (1989) has emphasized that if there are tariff barriers as well, then cost reduction effect may not be sufficient to ensure that importing country on the net will gain from trade diversion. A simple geometrical presentation may make the view clear.

Assume that there are two customs union members who are small countries (domestic and partner) and face a perfectly elastic supply curve PQ. The common external tariff faced by them in PP_t and the domestic country imports Md from the rest of the world. The partner country does not supply any imports because its supply curve EP starts from above p_t. Now suppose that cost is reduced by eliminating NTBs like border control so that the partner country's

SITUATION UNDER TARIFF

NO TARIFF

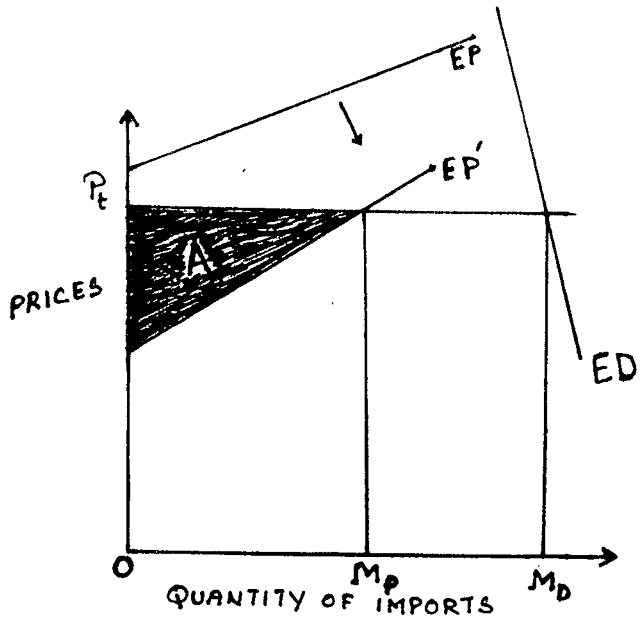

Fig-1(a)

A- Net Gain to the Union

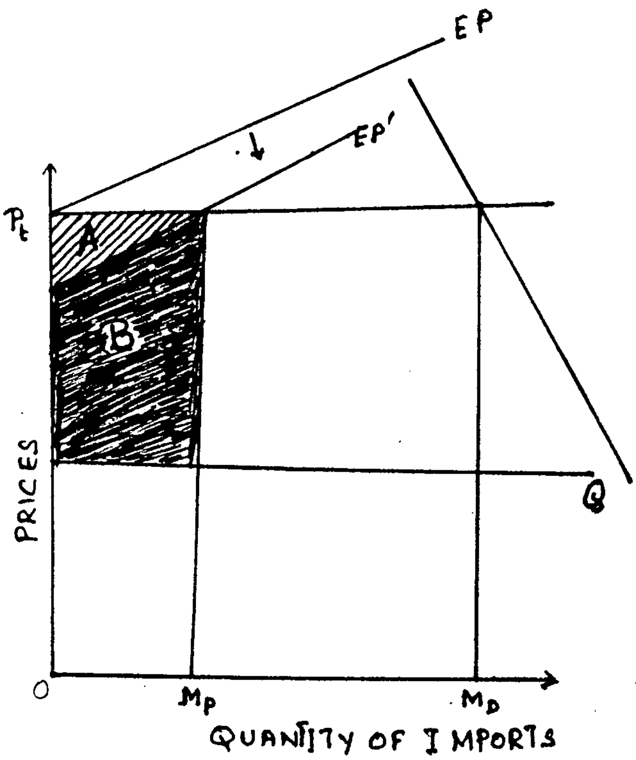

Fig-1(b)

B- Net Loss to the Union

excess supply curve shifts to EP. Therefore, now the partner country supplies M_p to the home country. Diversing this quantity of trade from the rest of the world to the customs union. The welfare to extent consequence of this trade diversion is that for the home country no loss welfare but for the member country a gain in producers' surplus of area A (Fig.1a). Thus a welfare gain of area A to the union as a whole. However, if it was a revenue generating barrier like tariffs the home country has a loss of welfare to the extent of area A+B. But to the partner a gain of producers' surplus of area A (Fig.1b)Therefore, assuming compensation is possible the net loss to the union is the area B. Therefore, trade diversion arising from removal of cost increasing barrier may lead to welfare loss to the union. The alternative possibility of welfare gain to the customs union from a removal of a cost increasing barrier could arise if the partner country had been exporting to the home country on a sufficient scale, if the tariff had been smaller or the effect of unit cost reduction had been sufficiently larger. In the large country customs union case, the welfare impact to the customs union of a trade diversion will operate also through a terms of trade gain against the rest of the world.

Thus, the preceding analysis makes it clear that, the welfare gains from trade creation would be larger when a cost increasing barrier rather than a revenue generating one is removed within a customs union, secondly, elimination of cost-increasing barrier could lead to trade diversion accompanying welfare gain for the importing country as well as for the union as a whole. Thirdly, in cases where both the revenue generating as well as cost increasing barrier exists simultaneously the net effect will depend on the relative strength of the cost saving and revenue loss due to trade diversion. The implications from the extra customs union countries are that in the second case there would be a loss of trade for them without damage to the union. Secondly, the welfare gains to the union might be even larger if the non-tariff barriers were removed for the outside union countries as well.

III.2 The Need for Eliminating Barriers

The elimination of the barriers in the intra-Community flow of goods, services, capital and people assuring a large and single market of some 325 million of people with an annual Gross Domestic Product (GDP) of $2.7 trillion, exports worth $860 million and imports of $708 billion[17]. The elimination of physical barriers, e.g., customs post must benefit the EC traders through disappearance of formalities and delays at the frontier. This will make the movement of goods and services speedier which in turn, would save considerable costs and would add to their competitiveness. For example, study undertaken by Paolo Cecchine estimated that the total saving from the abolition of administrative formalities and border controls would be as much as 13 to 24 billion.

The elimination of border controls is not sufficient for creating a genuine common market and to reap the fruits of true economies of scale as different national product regulations and standards can create barriers by not only adding to costs, but could also distorting production patterns and discouraging business co-operation. Until such barriers are removed Community manufactures are bound to be restricted to the national markets instead of the community-wide markets resulting in hardly any gain from economies of scale. To be able to be internally competitive as well an important requirement is that of a home market of a large size[18].

The removal of fiscal barriers has also been part of the integration process. Because without harmonisation of types and rules of taxation the economic integration and a single market programme can not succeed. Thus, various measures have been taken to harmonise the excise, value added tax and customs system existing at the national levels.

III.3 The Proposed Measures for the Single European Market

The ground work for analysing the events of EC's single Market Programme has been prepared in the previous section. The commission white paper entitled 'completing the single market' outlined as many as 300 measures which it felt are needed to create a fully integraed market. As already mentioned these consist of removing the physical, fiscal and technical barriers to intra-EC trade. While 90 per cent of these laws have so far been adopted by all member states the list of opt-outs from common policy goals is growing, especially in the UK. There are 120 EC laws, which were enacted with the 1992 deadline in mind are yet to be incorporated into their legal system of many member states. Our intention is not to question the implementation of all the EC measures towards single market programme within deadline but to analyse the implication of these measrues towards the developing countries trade with special reference to India accepting that EC 1992 programme will be achieved in time. Some of the specific measures are dicussed in detail:

1. Removal of Physical Barriers: Of the large number of measures under removal of physical barriers noted by the white paper some are of minor importance from the extra - EC point of view, though they may have some indirect impact via increasing EC's cost competitiveness, efficiency and increased income. However, some elements may be identified which are important for the developing countries as a whole and of course for India as well.

2. Dismantling Frontier Controls: Dismantling frontier control would assure free movement of goods accross the internal frontiers within the community. This will reduce border cost for intra-community flow of goods and services by 3 to 4 per cent of intra-community trade (EC Commission Estimate) though others put it as high as 7 per cent (Pelkmans and Winters 1988). A Point to note is that reduction in border cost and speedier movement of intra-EC trade will work as general disadvantage for non-EC suppliers who will continue to face the full customs procedures (Hine 1991). The consequence may be trade diversion towards the community member countries and to the foreign multinational establishing manufacturing units within EC. Thus, for the LDCs as a whole this would work as a general disadvantage.

3. Barriers to movement of goods: There are some barriers to intra-EC trade which are especially applicable to developing countries, with some on cars and electronic goods from Japan. According to article 115 of the treaty which made provision for special bilateral arrangements for an individual member state with individual non-member. The most important of such arrangements is the control of textile and clothing under the Multi Fibre Arrangement (MFA), the others being footwear, electronic goods and a variety of minor irritants to EC producers. The main item on which special arrangements exist are bananas. Sugar and rum from traditional suppliers. The EC 1992 programme aiming at removing or freezing Article 115 is likely to have major implication on extra EC trade. But the effect of this is likely to be reduced owing to substitution of national quota by quota for the EC as a whole which will

probably raise average EC barriers. Quotas may be removed on important import items or replacement by measure with equivalent effect. Evidence suggest that use of voluntary export restraints against LDCs is rising. Kelley et.al. (1988) noted that VERs excluding MFA in the EEC increased from 69 in 1987 to 138 in May 1988. During the same period, VERs against the developing countries increased from 25 or 36 per cent of the total to 65 or 47 per cent of the total. The more important point to note is that 50 to 86 per cent of this additional VER in the EC were targeted against sectors of crucial importance to LDCs like agriclture, textiles and clothing, electronics and footwear. Therefore, increased resort to antidumping actions and VERs biased against LDCs specific sectors contributing a major share of exports might adversely affect their export perormance for countries like India. Some have argued that substitution of national quota by EC quota would help optimal utilization of quota. But countries like India may not benefit 100 per cent level in quota utilization in 1990. However, if restraint levels for the restricted categories are made community wide instead of earlier country specific then this will ensure flexibility to utilise quotas in areas where demand is high.

4. Removing Barriers to Intra-EC Movement of Labour and Professionals: It aims at the abolition of all police and customs formalities for people crossing intra-community borders- minimising police checks but safeguarding against terrorism drugs and crimes. The removal of barriers to intra-EC movement of labour and professionals stems from a series of changes in domestic policies.

To ensure free Movement of labour is to be encouraged by having comparable courses, recognising degrees and diplomas and easier movement of labourers and professionals across the community will help to reduce labour cost and thus improving EC's cost competitiveness.

III.5 Removing Technical Barriers:

Elimination of technical barriers is of vital importance for EC integration. Technical harmonisation will enable industries to utilise economies of scale and become more competitive.

For quicker harmonisation of national standards the unanimity principle of Article 100 has been substituted by mutual recognition, while the framework of article 100 will remain applicable for health and safety requirements. The community is to define the basic health and safety standards which goods must reach if they are to be traded within community. Once these standards are approved for a particular product there will be no restriction on the movement of the product throughout the community, thus opening up opportunities hitherto restricted to the markets of individual member states. Concern has, however, been expressed that the community in the process of harmonising the standards, may raise new external barriers and this may affect in particular developing countries, which are not generally as technically advanced as the member nations of the community (Parthasarathy N. 1990). Meeting harmonised regulation will enable goods to move across the member states in the EC but a point to note is that the European market is far from homogeneous in tastes and preferences. Thus products with the same brand name for the entire Europe is a limited possibility particularly, in items such as food. Outside community suppliers are also predicting that the technical regulation will be a general disadvantage to them. In view of the above EFTA countries have already negotiated special arrangements for exchange of information to replace national standards with EC standards. Thus, the emerging non-tariff barrier namely, the technical standardization will affect different non-EC suppliers differently and developing countries will be in a more disadvantageous position compared to other non-EC supliers. However, there is an indication that the EC will give time as well as technical and financial support to the developing countries to adjust themselves to common European standards. India is also expected to benefit from this support.

6. Public Procurement

The post integration public procurement in the EC aims at ensuring that all major purchases are advertised through out the community and contracts are awarded without any discrimination. It is expected that India must benefit from the Europeanisation of the multi-billion dollar public procurement.

The post integration system will help India to do away with practice of tying development assistance to purchases from donor country. It is expected that India must be able to bid for a substantial share in public procurement (which constitutes 15 per cent of EC's GDP) in the areas she has sizeable comparative advantage. The evolution of 'Euro-standards' is likely to be influenced primarily by Germany, UK, France and Italy. Therefore, caution should be maintained in upgrading quality. But for quality to be upgraded along with the evolving standards there is a need for upgradation of Indian test laboratories and artification mechanism to encompass not only the final product but also the manufacturing process and quality control of raw materials.

7. Removal of Fiscal Barriers

Removal of fiscal barriers appear prominently in EC'92 programme. Article 99 of the treaty specifically provided that the commission should make proposals for the approximisation of indirect taxation as it is needed for the completion of internal market. The harmonisation of tax rate though an internal matter, has important implications for extra-EC trade. Variation in tax rates across member countries affects intra-EC movement of goods. Thus, harmonisation of tax rate will lead to greater mobility of goods and reduce costs and will affect third countries including India. There has been indication that Community will reduce or abolish excise duties on all products barring a few. India is likely to benefit from such tax reduction/ elimination on products such as tea and coffee depending upon her competitiveness vis-a-vis other competitors.

Since mid-eighties the integration process in European Community has got new momentum with the agenda for creating a single market by the end of 1992. In this process of integration the structure of trade relation both within EC and EC Versus others is undergoing through changes. The implication of these changes is difficult to assess due to data limitation and, more over, the process is yet not completed. However, attempt has been made to understand the probable implication of these changes on LDCs especially on India. Some important findings can be highlighted as follows.

In the pre-integration period India's trade was mostly bilateral in nature with each EC member country. In bilateral trade. India faced many non-tariff restrictions. The scenario prior to 1987 was that India's most important items of export were subject to various NTBs in EC countries. But India's export to EC may have been growing partly due the liberalisation policies of India in the 1980s. India's market share to EC's total import increased from 0.33 per cent in 1983 to 0.40 per cent in 1990. However the process of integration for a single market for the entire community together with the built in pyramid of preferences put a country like India at the bottom of the preference scale.

Footno tes

1. Commission of the European Communities: Completing the Internal Market - White Paper from the Commission to the European Council, Milan, 28-29 June, 1985, COM.

2. Pelkman, jaeques et.al: Europes Domestic Markets, 1988.

3. See ibid 1.

4. Warner Report (1970): Report to the council and the Commission on the Realization by stages of Economics and monetary which in the Community, Bull, EC-II, Supplement.

5. Pelkman, Jacques ibid.

6. After 1973 trade within the community was increasingly restricted by NTBs. This is a principal explanation for the wide price defferences that exist between EC markets, for example in medical and pharmaceutical products it is estimated that prices in Germany are almost 2.5 times those in neighbouring France (Commission 1988) Quoted from C.Hine (1991).

7. Greece joined the community in 1983.

8. Portugal and Spain become member states in 1986.

9. The Maastricht treaty on European Union aimed at introducing a common European currency by 1999 at the latest, recognising, rights of European citizens; providing new powers for European Community and increased powers for European Parliament and introducing a common foreign and security policy.

10. Ibid 1

11. For a detailed description of the measures proposed adopted and their current status please see a series of six booklets published by Commission of European Communities in June 1991, No. ISBN92 - 826 - 3559-7.

12. LouisEmmerij (1991):

13. Ibid 12

14. Ibid 12

15. Our study for the pre-integration Europe mainly covers periods prior to 1987.

16. Louis Emmerji (1991) p.3-4.

17. Article XXIV made specific provision for contracting parties regarding establishing customs union.

18. The weighted average tariff rates were calculated tacking the 1983 trade weights.

$$T = \frac{t_i x_i}{x_i}$$

where, t_i = tariff rate in tariff lines i from India to EC,

x_i = value of export in tariff line i from India to EC.

The high tariff rates in India was due to mainly a very high tariff rate on items of beverages and tobacco.

19. It is important to note that the bulk of India's textiles and clothing exports to EC is governed by the Indo-EC bilateral Textile Agreement (1986-91). Under this agreement nine clothing and four textiles categories are subject to quota and the rest are quota free.

Appendix A.1

Details of Non-Tariff Barriers facing Indias Exports in Belgium
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a Date of Imposition- Date of Termination -	Number Of Tariff Lines comprising India's Export	Licence for Surveillance# Jan 81 Existing	Quota By Country# Jan 81 Existing	Quota# Mar 83 Existing	Intra-Community Surveillance# Jul 80 Jul 85	Intra-Community Surveillance# Jul 85 Dec 86	Intra-Community Surveillance# Jul 80 Dec 86	Prohibit-ion of In-direct Imp.*# Nov 84 Jan 85	MFA Quota# Jan 79 Existing
1	Live Animals; Animal Products(1-5)	36								
2	Vegetable Products(6-14)	101			1					
3	Animal or Vegetable Fats and oils and Etc.(15)	10								
4	Prepared Foodstuffs;Beverages(16-24)	78								
5	Mineral Products(24-27)	36	4							
6	Products of the Chemical or Allied Industries(28-38)	122								
7	Plastics and Articles thereof;(39-40)	29								
8	Raw Hides and Skins,Leather and its Products(41-43)	29								
9	Wood and Articles of Wood(44-46)	26								
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23								
11	Textiles and Textiles Articles(50-63)	313		1		48	20	2	9	6
12	Footwear Etc.(64-67)	20								
13	Articles of Stone(68-70)	41								
14	Natural or Cultured Pearls(71)	24	5							
15	Base Metals and Articles of Base Metal(72-83)	93								
16	Machinery and Mechanical Appliances(84-85)	145								
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19								
18	Optical, Photographic, Etc.(90-92)	65	2							
19	Arms and Ammunition; Parts Etc.(93)	4								
20	Miscellaneous Manufactured Articles(94-96)	15								
21	Works of Art, Collectors' Pieces Etc.(97-99)	32								

Source: Tabulated from Unctad Data Base on Trade Measures

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

\# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.2

Details of Non-Tariff Barriers facing India's Exports in Denmark
1978 TO 1986

SL. NO.	Harmonised Commodidty Classification a	Number Of Tariff Lines comprising India's Export	Licence for Surveillance#				Quota by Country#	Tariff with Quota*#	Seasonal Advl. Tariff#	MFA#
	Date of Imposition ---		Jul 78	Sept 82	Jan 85	Jul 81	Jan 82	Jan 83	Jan 81	Jan 81
	Date of Termination --		E X I S	T I N G	Jan 86	Existing	Existing	Existing	Existing	Existing
1	Live Animals; Animal Products(1-5)	36					1	1		
2	Vegetable Products(6-14)	101						1	4	
3	Animal or Vegetable Fats and oils and Etc.(15)	10								
4	Prepared Foodstuffs;Beverages(16-24)	78								
5	Mineral Products(24-27)	36								
6	Products of the Chemical or Allied Industries(28-38)	122								
7	Plastics and Articles thereof;(39-40)	29								
8	Raw Hides and Skins,Leather and its Products(41-43)	29								
9	Wood and Articles of Wood(44-46)	26								
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23								
11	Textiles and Textiles Articles(50-63)	313								220
12	Footwear Etc.(64-67)	20	6							
13	Articles of Stone(68-70)	41								
14	Natural or Cultured Pearls(71)	24								
15	Base Metals and Articles of Base Metal(72-83)	93		1	1	1				
16	Machinery and Mechanical Appliances(84-85)	145								
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19								
18	Optical, Photographic, Etc.(90-92)	65								
19	Arms and Ammunition; Parts Etc.(93)	4								
20	Miscellaneous Manufactured Articles(94-96)	15								
21	Works of Art, Collectors' Pieces Etc.(97-99)	32								

Source: Tabulated from Unctad Data Base on Trade Measures

Contd...

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.2

Details of Non-Tariff Barriers facing India's Exports in Denmark
1978 TO 1986

SL. NO.	Harmonised Commodidty Classification a (Date of Imposition --- / Date of Termination --)	Number Of Tariff Lines comprising India's Export	MFA Quota# Jan 79 Existing	MFA Quota# Jan 79 Dec 82	MFA Quota# Jan 82 Existing	MFA Quota# Jan 83 Dec 86	Global Quota# Apr 80 Existing	Reference Import Price# Jan 81 Existing	Licence# Jan 81 Existing	Adv. Tariff with Speci. Minimum# Jan 81 Existing	Advelorem Charges# Jan 85 Jan 86	Basic Import Price# Jan 78 Existing	Retros. Surveill-ance# Jan 85 Dec 86	Variable Levy# Jan 81 EXISTING	Variable Compo--nent# Jan 81 EXISTING
1	Live Animals; Animal Products(1-5)	36							1					3	
2	Vegetable Products(6-14)	101						2	18					12	
3	Animal or Vegetable Fats and oils and Etc.(15)	10									2				
4	Prepared Foodstuffs;Beverages(16-24)	78					1	1	11	2				10	26
5	Mineral Products(24-27)	36													
6	Products of the Chemical or Allied Industries(28-38)	122													
7	Plastics and Articles thereof;(39-40)	29													
8	Raw Hides and Skins,Leather and its Products(41-43)	29													
9	Wood and Articles of Wood(44-46)	26													
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23													
11	Textiles and Textiles Articles(50-63)	313	45	13	3	13									
12	Footwear Etc.(64-67)	20													
13	Articles of Stone(68-70)	41													
14	Natural or Cultured Pearls(71)	24													
15	Base Metals and Articles of Base Metal(72-83)	93										1	2		
16	Machinery and Mechanical Appliances(84-85)	145													
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19													
18	Optical, Photographic, Etc.(90-92)	65													
19	Arms and Ammunition; Parts Etc.(93)	4													
20	Miscellaneous Manufactured Articles(94-96)	15													
21	Works of Art, Collectors' Pieces Etc.(97-99)	32													

Source: Tabulated from Unctad Data Base on Trade Measures

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

\# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.3

Details of Non-Tariff Barriers Facing India'S Exports in France
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a	Number Of Tariff Lines comprising India's Export	Licence for Surveillance#				Quota by Country#		Quota#					
	Date of Imposition --		Jan.81	Jan.85	Apl.83	Jan.84	Jan.81	Jan.81	Jan.81	Jan.81	Jan.81	Jan.83	Mar.83	Jul.80
	Date of Termination --		EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	Dec.85	Existing	Mar.83	Dec.85	Existing	Feb.85	Jul.85
1	Live Animals; Animal Products(1-5)	36												
2	Vegetable Products(6-14)	101	9				1							
3	Animal or Vegetable Fats and oils and Etc.(15)	10					1							
4	Prepared Foodstuffs;Beverages(16-24)	78	23		1				1	1				
5	Mineral Products(24-27)	36							4		1			
6	Products of the Chemical or Allied Industries(28-38)	122						4						
7	Plastics and Articles thereof;(39-40)	29												
8	Raw Hides and Skins,Leather and its Products(41-43)	29												
9	Wood and Articles of Wood(44-46)	26												
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23							1					
11	Textiles and Textiles Articles(50-63)	313	16	23	3	24			160		3		1	62
12	Footwear Etc.(64-67)	20					1							
13	Articles of Stone(68-70)	41	4				3					1		
14	Natural or Cultured Pearls(71)	24												
15	Base Metals and Articles of Base Metal(72-83)	93	5											
16	Machinery and Mechanical Appliances(84-85)	145	4	1			4							
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19	2	1										
18	Optical, Photographic, Etc.(90-92)	65	2	3			1	4	4					
19	Arms and Ammunition; Parts Etc.(93)	4												
20	Miscellaneous Manufactured Articles(94-96)	15												
21	Works of Art, Collectors' Pieces Etc.(97-99)	32												

Source: Tabulated from Unctad Data Base on Trade Measures

Contd...

Note: a Figures within Bracket are Harmonised Commodity Code.
* Applicable for India only
\# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.3

Details of Non-Tariff Barriers Facing India'S Exports in France
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a	Number Of Tariff Lines comprising India's Export	Intra-Co-mmunity Surveilliance#		Prohibion of In-direct Imp.*#			Quota#			Entry Control Measure	Declarat-ion With Visa#
	Date of Imposition --		Jul.80	Jul.85	Mar.83	Nov.82	May85	Jan.79	Nov.85	Jan.83	Jan.86	Jan.81
	Date of Termination --		Dec.86	Dec.86	Nov.83	Dec.85	Dec.85	EXISTING	EXISTING	Jan.86	Existin	Existing
1	Live Animals; Animal Products(1-5)	36										
2	Vegetable Products(6-14)	101										6
3	Animal or Vegetable Fats and oils and Etc.(15)	10										
4	Prepared Foodstuffs;Beverages(16-24)	78										3
5	Mineral Products(24-27)	36									1	
6	Products of the Chemical or Allied Industries(28-38)	122									4	
7	Plastics and Articles thereof;(39-40)	29										
8	Raw Hides and Skins,Leather and its Products(41-43)	29										
9	Wood and Articles of Wood(44-46)	26										
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23										
11	Textiles and Textiles Articles(50-63)	313	36	18	7	44		3	2	4	3	
12	Footwear Etc.(64-67)	20										
13	Articles of Stone(68-70)	41										
14	Natural or Cultured Pearls(71)	24										
15	Base Metals and Articles of Base Metal(72-83)	93										2
16	Machinery and Mechanical Appliances(84-85)	145										1
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19										
18	Optical, Photographic, Etc.(90-92)	65					1				4	
19	Arms and Ammunition; Parts Etc.(93)	4										
20	Miscellaneous Manufactured Articles(94-96)	15										
21	Works of Art, Collectors' Pieces Etc.(97-99)	32										

Source: Tabulated from Unctad Data Base on Trade Measures

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.4

Details of Non-Tariff Barriers Facing India's Exports in Germany F.R.
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a Date of Imposition -- Date of Termination --	Number Of Tariff Lines comprising India's Export	Technical Requirement# Jan.84 Existing	Quota# Mar.83 Existing	Authorization Depending on Certification# Jul.80 Jul.85
1	Live Animals; Animal Products(1-5)	36			
2	Vegetable Products(6-14)	101	1		5
3	Animal or Vegetable Fats and oils and Etc.(15)	10			
4	Prepared Foodstuffs;Beverages(16-24)	78		1	4
5	Mineral Products(24-27)	36			
6	Products of the Chemical or Allied Industries(28-38)	122			
7	Plastics and Articles thereof;(39-40)	29			
8	Raw Hides and Skins,Leather and its Products(41-43)	29			
9	Wood and Articles of Wood(44-46)	26			
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23			
11	Textiles and Textiles Articles(50-63)	313			
12	Footwear Etc.(64-67)	20			
13	Articles of Stone(68-70)	41			
14	Natural or Cultured Pearls(71)	24			
15	Base Metals and Articles of Base Metal(72-83)	93			
16	Machinery and Mechanical Appliances(84-85)	145			
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19			
18	Optical, Photographic, Etc.(90-92)	65			
19	Arms and Ammunition; Parts Etc.(93)	4			
20	Miscellaneous Manufactured Articles(94-96)	15			
21	Works of Art, Collectors' Pieces Etc.(97-99)	32			

Source: Tabulated from Unctad Data Base on Trade Measures
Note: a Figures within Bracket are Harmonised Commodity Code.
* Applicable for India only
# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.5

Details of Non-Tariff Barriers facing India's Exports in Greece
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a	Number Of Tariff Lines comprising India's Export	Import Deposit#				Licence for Surveillance#			Quota by Country#	Quota#				Tariff with Quota*#	Intra-Community Surveillance#	
	Date of Imposition ---		Nov 85	Jan 86	Nov 85	Non 85	Jan 81	Feb 83	Feb 83	Mar 83	Jan 81	Jan 83	Jan 81	Jan 81	Jan 81	Jul 80	Jul 80
	Date of Termination --		E X I S	T I N G	Dec 85	Apr 86	Existing	Nov 84	Jan 84	Feb 85	E X I S	T I N G	Mar 83	Dec 85	Jun 81	Jul 85	Dec 86
1	Live Animals; Animal Products(1-5)	36	10				4										
2	Vegetable Products(6-14)	101	46		1					1	1						
3	Animal or Vegetable Fats and oils and Etc.(15)	10	1														
4	Prepared Foodstuffs;Beverages(16-24)	78	61					1									
5	Mineral Products(24-27)	36	9			1											
6	Products of the Chemical or Allied Industries(28-38)	122	18	1	2	1											
7	Plastics and Articles thereof;(39-40)	29	6		4												
8	Raw Hides and Skins,Leather and its Products(41-43)	29	11														
9	Wood and Articles of Wood(44-46)	26	21														
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23	13						1				1				
11	Textiles and Textiles Articles(50-63)	313	225	5	31		123	2	12		222		4	7	57	12	2
12	Footwear Etc.(64-67)	20	18														
13	Articles of Stone(68-70)	41	39														
14	Natural or Cultured Pearls(71)	24	23														
15	Base Metals and Articles of Base Metal(72-83)	93	53														
16	Machinery and Mechanical Appliances(84-85)	145	23		3							1					
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19	11														
18	Optical, Photographic, Etc.(90-92)	65	25														
19	Arms and Ammunition; Parts Etc.(93)	4	3														
20	Miscellaneous Manufactured Articles(94-96)	15	7														
21	Works of Art, Collectors' Pieces Etc.(97-99)	32	27									2					

Source: Tabulated from Unctad Data Base on Trade Measures
Note: a Figures within Bracket are Harmonised Commodity Code.
* Applicable for India only
\# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.6

Details of Non-Tariff Barriers facing India's Exports in Ireland
1979 To 1986

SL. NO.	Harmonised Commodidty Classification a	Number Of Tariff Lines comprising India's Export	Licence for Surveillance#		Quota#		Intra-Community Surveillance#		Prohibition of indirect imp.*#	Prohibition#
	Date of Imposition ---		Jan 81	Jan 81	Jan 81	Jan 83	Jul 85	Jul 80	Apr 85	Jun 83
	Date of Termination --		Existing	Dec 84	Dec 85	Existing	Dec 86	Dec 86	Dec 85	Jan 84
1	Live Animals; Animal Products(1-5)	36								
2	Vegetable Products(6-14)	101								
3	Animal or Vegetable Fats and oils and Etc.(15)	10								
4	Prepared Foodstuffs;Beverages(16-24)	78								
5	Mineral Products(24-27)	36								
6	Products of the Chemical or Allied Industries(28-38)	122								
7	Plastics and Articles thereof;(39-40)	29								
8	Raw Hides and Skins,Leather and its Products(41-43)	29								
9	Wood and Articles of Wood(44-46)	26								
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23								
11	Textiles and Textiles Articles(50-63)	313	142	1			2	52	6	1
12	Footwear Etc.(64-67)	20	4							
13	Articles of Stone(68-70)	41								
14	Natural or Cultured Pearls(71)	24								
15	Base Metals and Articles of Base Metal(72-83)	93								
16	Machinery and Mechanical Appliances(84-85)	145								
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19			5					
18	Optical, Photographic, Etc.(90-92)	65								
19	Arms and Ammunition; Parts Etc.(93)	4								
20	Miscellaneous Manufactured Articles(94-96)	15								
21	Works of Art, Collectors' Pieces Etc.(97-99)	32								

Source: Tabulated from Unctad Data Base on Trade Measures

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

\# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.7

Details of Non-Tariff Barriers facing India's Exports in Italy
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a Date of Imposition --- Date of Termination --	Number Of Tariff Lines comprising India's Export	Licence for Surveillance# Jan 81 Existing	Licence for Surveillance# Jan 81 Dec 84	Licence for Surveillance# .85 Existing	Quota by Country# Jan 81 Dec 84	Quota# Jan 81 Existing	Quota# Jan 81 Mar 83	Intra-Co-mmunity S-urveillance# Jul 80 Jul 85	Intra-Co-mmunity S-urveillance# Jul 85 Dec86	Prohibit-ion of In-direct Imp.*# Sept 84 Nov 85	MFA Quota# Jan 79 Dec 82
1	Live Animals; Animal Products(1-5)	36										
2	Vegetable Products(6-14)	101	1									
3	Animal or Vegetable Fats and oils and Etc.(15)	10										
4	Prepared Foodstuffs;Beverages(16-24)	78										
5	Mineral Products(24-27)	36										
6	Products of the Chemical or Allied Industries(28-38)	122										
7	Plastics and Articles thereof;(39-40)	29										
8	Raw Hides and Skins,Leather and its Products(41-43)	29				1						
9	Wood and Articles of Wood(44-46)	26										
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23										
11	Textiles and Textiles Articles(50-63)	313	162	1	26		62	4	43	18	3	7
12	Footwear Etc.(64-67)	20			5							
13	Articles of Stone(68-70)	41	1									
14	Natural or Cultured Pearls(71)	24										
15	Base Metals and Articles of Base Metal(72-83)	93			1							
16	Machinery and Mechanical Appliances(84-85)	145	14									
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19										
18	Optical, Photographic, Etc.(90-92)	65	1		2							
19	Arms and Ammunition; Parts Etc.(93)	4										
20	Miscellaneous Manufactured Articles(94-96)	15										
21	Works of Art, Collectors' Pieces Etc.(97-99)	32										

Source: Tabulated from Unctad Data Base on Trade Measures

Note: a Figures within Bracket are Harmonised Commodity Code.

* Applicable for India only

Figures indicate the number of Tariff Lines subject to particular NTB

Appendix A.8

Details of Non-Tariff Barriers facing India's Exports in the United Kingdom
1979 TO 1986

SL. NO.	Harmonised Commodidty Classification a Date of Imposition --- Date of Termination --	Number Of Tariff Lines comprising India's Export	Licence for Surv-eillance#	Quota#			Intra-Community Surveillance#			Prohibition ion of in-direct Imp.*#	MFA Quota#	
			Jan 81 Existing	Jan 81 Existing	Jan 81 Mar 83	Jan 81 Dec 85	Jul 80 Jul 85	Jul 85 Dec 86	Jul 80 Dec 86	Mar 85 Sept 85	Jan 79 Existing	Jan 79 Dec 82
1	Live Animals; Animal Products(1-5)	36										
2	Vegetable Products(6-14)	101										
3	Animal or Vegetable Fats and oils and Etc.(15)	10										
4	Prepared Foodstuffs;Beverages(16-24)	78										
5	Mineral Products(24-27)	36										
6	Products of the Chemical or Allied Industries(28-38)	122										
7	Plastics and Articles thereof;(39-40)	29										
8	Raw Hides and Skins,Leather and its Products(41-43)	29										
9	Wood and Articles of Wood(44-46)	26										
10	Pulp of Wood or of other Fibrous Cellulosic(47-49)	23										
11	Textiles and Textiles Articles(50-63)	313	74	29	38	2	52	43	1		3	2
12	Footwear Etc.(64-67)	20								3		
13	Articles of Stone(68-70)	41			1							
14	Natural or Cultured Pearls(71)	24										
15	Base Metals and Articles of Base Metal(72-83)	93										
16	Machinery and Mechanical Appliances(84-85)	145										
17	Vehicles, Aircraft, Vessels Etc.(86-89)	19										
18	Optical, Photographic, Etc.(90-92)	65										
19	Arms and Ammunition; Parts Etc.(93)	4										
20	Miscellaneous Manufactured Articles(94-96)	15										
21	Works of Art, Collectors' Pieces Etc.(97-99)	32										

Source: Tabulated from Unctad Data Base on Trade Measures
Note: a Figures within Bracket are Harmonised Commodity Code.
* Applicable for India only
# Figures indicate the number of Tariff Lines subject to particular NTB

Appendix B.1

India's Exports to EC and it's Member Countries
1980 To 1990

(In 1000 ECU)

YEAR	E C	BELG-LUX	DEN	GER	GREE	SPAIN	FRANCE	IRE	ITALY	NETHER	PORT	U.K.
1980	1795363	170807	51279	439506	-	-	242767	23192	190569	105878	-	571365
1981	1880013	201876	69396	497367	6841	-	220679	24457	204828	98854	-	555715
1982	2571749	250695	83730	522183	7511	-	664751	19049	224369	112809	-	686652
1983	2195639	293864	72147	540313	12657	-	242999	18354	206116	188425	-	620764
1984	2905352	245000	75538	621701	10033	-	274515	19798	317703	355119	-	985945
1985	2672323	245743	60054	651517	11225	-	471859	20348	300376	171440	-	739761
1986	2395065	268304	43892	653824	11479	38078	260330	15729	255826	152189	16523	678891
1987	2761651	296627	43262	758045	11389	56131	294126	18130	352525	143021	32881	755514
1988	3255703	458435	53259	856610	20522	87102	333102	17394	387054	149695	23259	869271
1989	4180338	666982	78951	1067320	21781	151811	413699	19032	477012	211601	25431	1046718
1990	4542304	606912	88797	1156817	23234	199374	509666	20974	524208	261058	39060	1112204
Point to point Growth Rate												
1980-90	9.73	13.52	5.64	10.16	14.55	51.27	7.70	-1.00	10.65	9.44	24.00	6.89
1980-83	6.94	19.82	12.05	7.13	36.02	-	0.03	-7.50	2.65	21.18	-	2.80
1983-87	5.90	0.23	-12.00	8.83	-2.60	-	4.89	-0.31	14.36	-6.66	-	5.03
1987-90	18.04	26.95	27.09	15.13	26.83	52.58	20.11	4.98	14.14	22.21	5.91	13.76
Average Annual Growth Rate												
1980-90	8.34	12.59	0.31	9.62	13.76	-	4.15	-1.83	10.45	6.58	-	6.17
1983-90	9.53	15.43	1.56	11.31	12.55	-	7.80	0.49	12.17	-0.92	-	6.10

Source: Eurostat of Exports and Imports, Various Issues.
Note : "-" implies countries were not the member of EC.

Appendix B.2

India's Imports from EC and it's Member Countries
1980 To 1990

(IN 1000 ECU)

YEAR	E C	BELG-LUX	DEN	GER	GREE	SPAIN	FRANCE	IRE	ITALY	NETHER	PORT	U.K.
1980	2298255	262801	17418	543557	-	-	251448	7439	176149	156527	-	882916
1981	3362620	485215	19783	894735	2420	-	350229	12338	235942	202714	-	1159244
1982	3991093	604548	31061	884660	3735	-	565819	10015	293356	161442	-	1436457
1983	3822746	647707	40334	932363	1533	-	315138	9544	299337	206437	-	1370353
1984	1470715	84936	13886	405779	8210	-	151798	12433	221477	94007	-	478189
1985	1603105	72133	25654	545027	7596	-	181312	17015	239556	81567	-	433245
1986	5706272	832872	82622	1587218	1696	158462	971630	19075	347404	332719	13226	1359348
1987	5678294	893386	57544	1561556	2285	112092	743120	16272	392846	350666	10988	1537539
1988	5637067	1169263	44313	1415379	6934	76330	561457	6648	332502	334195	15383	1674663
1989	7083005	1473801	66874	1472134	7414	117087	1083786	10891	424959	356971	16855	2052233
1990	3570550	160188	25726	1193976	21551	132381	333369	3809	274737	621106	31199	772508
POINT TO POINT GROWTH RATE												
1980-90	4.50	-4.83	3.98	8.19	27.50	-4.40	2.86	-6.47	4.55	14.78	23.93	-1.33
1980-83	18.48	35.08	32.30	19.71	-20.41	-	7.82	8.66	19.33	9.66	-	15.78
1983-87	10.40	8.37	9.29	13.76	10.49	-	23.92	14.27	7.03	14.16	-	2.92
1987-90	-14.33	-43.61	-23.54	-8.56	111.28	5.70	-23.45	-38.37	-11.24	20.99	41.60	-20.50
AVERAGE ANNUAL GROWTH RATE												
1980-90	7.90	6.45	9.90	9.25	17.56	-	9.00	-3.20	5.55	13.22	-	3.09
1983-90	14.19	16.62	7.39	14.02	23.92	-	17.22	-11.30	4.58	24.88	-	9.27

Source: Eurostat of Exports and Imports, Various Issues.
Note : "-" implies countries were not the member of EC.

Appendix B.3

India's Trade Balance with EC and Member Countries
1980 To 1990

(In 1000 ECU)

YEAR	E C	BELG-LUX	DEN	GER	GREE	SPAIN	FRANCE	IRE	ITALY	NETHER	PORT	U.K.
1980	-502892	-91994	33861	-104051	-	-	-8681	15753	14420	-50649	-	-311551
1981	-1482607	-283339	49613	-397368	4421	-	-129550	12119	-31114	-103860	-	-603529
1982	-1419344	-353853	52669	-362477	3776	-	98932	9034	-68987	-48633	-	-749805
1983	-1627107	-353843	31813	-392050	11124	-	-72139	8810	-93221	-18012	-	-749589
1984	1434637	160064	61652	215922	1823	-	122717	7365	96226	261112	-	507756
1985	1069218	173610	34400	106490	3629	-	290547	3333	60820	89873	-	306516
1986	-3311207	-564568	-38730	-933394	9783	-120384	-711300	-3346	-91578	-180530	3297	-680457
1987	-2916643	-596759	-14282	-803511	9104	-55961	-448994	1858	-40321	-207645	21893	-782025
1988	-2381364	-710828	8946	-558769	13588	10772	-228355	10746	54552	-184500	7876	-805392
1989	-2902667	-806819	12077	-404814	14367	34724	-670087	8141	52053	-145370	8576	-1005515
1990	971754	446724	63071	-37159	1683	66993	176297	17165	249471	-360048	7861	339696

Source: Eurostat of Exports and Imports, Various Issues.
Note : "-" implies countries were not the member of EC.

Appendix B.4

Percentage Distribution of India's total Export to EC
1980 To 1990

(Percent)

YEAR	E C	BELG-LUX	DEN	GER	GREE	SPAIN	FRANCE	IRE	ITALY	NETHER	PORT	U.K.
1980	100.00	9.51	2.86	24.48	-	-	13.52	1.29	10.61	5.90	-	31.82
1981	100.00	10.74	3.69	26.46	0.36	-	11.74	1.30	10.90	5.26	-	29.56
1982	100.00	9.75	3.26	20.30	0.29	-	25.85	0.74	8.72	4.39	-	26.70
1983	100.00	13.38	3.29	24.61	0.58	-	11.07	0.84	9.39	8.58	-	28.27
1984	100.00	8.43	2.60	21.40	0.35	-	9.45	0.68	10.94	12.22	-	33.94
1985	100.00	9.20	2.25	24.38	0.42	-	17.66	0.76	11.24	6.42	-	27.68
1986	100.00	11.20	1.83	27.30	0.48	1.59	10.87	0.66	10.68	6.35	0.69	28.35
1987	100.00	10.74	1.57	27.45	0.41	2.03	10.65	0.66	12.77	5.18	1.19	27.36
1988	100.00	14.08	1.64	26.31	0.63	2.68	10.23	0.53	11.89	4.60	0.71	26.70
1989	100.00	15.96	1.89	25.53	0.52	3.63	9.90	0.46	11.41	5.06	0.61	25.04
1990	100.00	13.36	1.95	25.47	0.51	4.39	11.22	0.46	11.54	5.75	0.86	24.49

Source: Computed from Eurostat of Exports and Imports, Various Issues.
Note : "-" implies countries were not the member of EC.

Appendix B.5

India's Share to EC and Member Countries' Import from the World
1980 To 1990

(Percent)

YEAR	E C	BELG-LUX	DEN	GER	GREE	SPAIN	FRANCE	IRE	ITALY	NETHER	PORT	U.K.
1980	0.35	0.33	0.36	0.32	-	-	0.25	0.29	0.27	0.19	-	0.67
1981	0.32	0.36	0.44	0.34	0.09	-	0.20	0.26	0.25	0.17	-	0.58
1982	0.41	0.42	0.48	0.33	0.07	-	0.56	0.19	0.26	0.18	-	0.65
1983	0.33	0.48	0.39	0.31	0.12	-	0.21	0.18	0.23	0.27	-	0.54
1984	0.38	0.35	0.35	0.32	0.08	-	0.21	0.16	0.30	0.43	-	0.73
1985	0.32	0.33	0.25	0.31	0.08	-	0.33	0.15	0.25	0.19	-	0.52
1986	0.30	0.38	0.19	0.34	0.10	0.11	0.20	0.13	0.25	0.19	0.17	0.53
1987	0.33	0.41	0.19	0.38	0.10	0.14	0.22	0.15	0.33	0.17	0.28	0.57
1988	0.35	0.57	0.24	0.40	0.20	0.18	0.21	0.13	0.33	0.17	0.16	0.53
1989	0.39	0.72	0.32	0.44	0.15	0.25	0.23	0.12	0.34	0.21	0.15	0.59
1990	0.40	0.62	0.35	0.43	0.15	0.30	0.27	0.13	0.37	0.24	0.20	0.63

Source: Eurostat of Exports and Imports, Various Issues.
Note : "-" implies countries were not the member of EC.

CHAPTER 3

PROTECTION IN THE UNITED STATES AND JAPAN

In this chapter we analyse the pattern of trade barriers facing Indian exports in USA and Japan. Part-I deals with barriers against Indian exports to USA while Part-II attempts to analyse the trade barriers imposed on India's exports to Japan.

PART-I

PROTECTION IN THE UNITED STATES

Since the very early days of the post world war period USA has been taking the initiative to strengthen international economic relations to ensure a more liberal trading system. The Trade Expansion Act enacted in 1962 brought into light the leading role of USA. In the Kennedy Round of trade negotiations the country played a crucial role in the tariff cutting process. The U.S. Tariff rate in industrial product were cut down by 35 per cent. Through a series of thirty bilateral agreements and eight multilateral trade negotiations, tariffs have been reduced to about 20 per cent of their 1930 average level (see Table 3.1).

Though tariff reduction has been the main thrust of US trade policy since the mid 1930's considerable changes have taken place in the nature and extent of U.S. support for this trade liberalization. As tariffs in the industrial countries

Table 3.1

Duty Reduction since 1934 under the U.S. Trade Agreements Program

GATT Conference	Proportion of Dutiable Imports Subject to Reductions (percent)	Average Cut in Reduced Tariffs (percent)	Average Cut in All Duties (percent)	Remaining Duties as a Proportion of 1930 Tariffs@ (percent)
1. Pre-GATT, 1934-47	63.9	44.0	33.2	66.8
2. First Round, Geneva, 1947	53.6	35.0	21.1	52.7
3. Second Round Annecy, 1949	5.6	35.1	1.9	51.7
4. Third Round, Torquay, 1950-51	11.7	26.0	3.0	50.1
5. Fourth Round Geneva, 1955-56	16.0	15.6	3.5	48.9
6. Dillion Round Geneva, 1960-62	20.0	12.0	2.4	47.7
7. Kennedy Round, Geneva, 1964-67	79.2	45.5	36.0	30.5
8. Tokyo Round, 1974-79	n.a.	n.a.	29.6	21.2

Source: Real Phillipe Lavergne, The Political Economy of U.S. Tariffs, Ph.D. thesis, University of Toronto, 1981.

Note : @ These percentages do not take account of the effects of either structural changes in trade or inflation on the average tariff level

: Adapted from Robert E.Baldwin (1984)

continued to fall during the 1950s and 1960s the importance of non-tariff barriers to trade as trade policy devices increased. During the 1960s non-tariff barriers such as quantitative restrictions were extended from primary product sectors like agriculture and petroleum to manufacturing activities such as cotton textiles and steel. The increased use of various non-tariff barriers, stemmed both from the efforts of particular sectors to secure protection and from the concerns of governments about balance of payments problems and various social and economic policy objectives. US trade policy also kept pace with this change in attitude. The growing protectionism in the early seventies has been evident in US policies particularly in the wake of growing Japanese penetration and huge influx of imports from developing countries into the USA[1].

The protective device most commonly used by the USA is the threat of restriction ending with a voluntary export restraint. The other measures includes quota in different forms and a number of private technical barriers like standard specifications and various laws including antidumping duties, countervailing duties, customs valuation etc. Many of the barriers and practices are incompatible with GATT principles (e.g., unilateral action under section 301). Other practices which cast doubt on the multilateral commitment of the US include the inordinate time taken to bring US legislation into conformity with GATT panel rulings (the customs user fee is a good case in point[2]), as well as the lukewarm attitude to international standard setting, its non-adherence to the relevant annexes of the Kyoto Convention on origin rules and its refusal to guarantee the compliance of its states with international obligation undertaken by the Federal government. The studies related to various NTBs in USA and their protective equivalents have been surveyed in Chapter 1. Section 1 analyses India's trade with USA, section II examines the nature, extent and types of NTBs existing in the USA against imports from India.

SECTION I

India's Trade with USA

The United States of America is the leading developed market economy in the world with a population of 234 million. The United States of America is the second largest trading partner of India absorbing 17 per cent of her total exports and supplying 10.9 per cent of her total imports in 1991-92. India's exports to US have increased by 6.5 times in the eighties from Rs 397 crores in 1980-81 to Rs 304 crores in 1990-91. Similarly imports from the US increased by 3.2 times from Rs 152 crores in 1980-81 to Rs 524 crores in 1990-91. In 1980-81 the deficit of Rs.112 crores was greater than India's exports to the United States of America see Table 2. India's share in US imports from the world was 0.95 per cent in 1983[3].

Giving the importance of the US as trading partner, barriers existing or being imposed on imports from India have serious implications for India's export performance, particularly when India is in search of potential exports avenues to solve her serious balance of payments crisis. Therefore, the barriers existing in the US economy towards import of Indian goods need to be identified and examined carefully for policy suggestions. In this section we attempt to

Table 3.2

India's Balance of Trade with Japan and USA
(1980-81 to 1990-91)
(Rs.000)

	Japan			USA			ANNUAL GROWTH RATE (%)			
							Japan		USA	
Year	Export	Import	Balance	Export	Import	Balance	Export	Import	Export	Import
1980-81	3968856	7487815	-3518959	7393999	15186104	-7792105				
1981-82	7037589	8864695	-1827106	9345226	14197175	-4851949	77.32	18.39	26.39	-6.51
1982-83	8330692	10878973	-2548281	9272020	14265057	-4993037	18.37	22.72	-0.78	0.48
1983-84	8283058	14469143	-6186085	14627687	18418733	-3791046	-0.57	33.00	57.76	29.12
1984-85	10245676	12400204	-2154528	17608316	17005863	602453	23.69	-14.30	20.38	-7.67
1985-86	11639255	17739947	-6100692	19686584	20636787	-950203	13.60	43.06	11.80	21.35
1986-87	13343994	25915002	-12571008	23256102	18860782	4395320	14.65	46.08	18.13	-8.61
1987-88	16116622	21261955	-5145333	29160118	20016828	9143290	20.78	-17.96	25.39	6.13
1988-89	20960686	26308777	-5348090	36092643	32392558	3700085	30.06	23.74	23.77	61.83
1989-90	27260699	28197013	-936314	44673305	42634457	2038848	30.06	7.18	23.77	31.62
1990-91	30372468	32445464	-2072996	47896211	52447131	-4550920	11.41	15.07	7.21	23.02
Compound Growth rate (1980-81 To 1986-87)	19.89	15.78		21.40	12.88					

Source : DGCI&S, Calcutta, Various Issues.

understand the relative importance of tariff barriers after the Tokyo Round as compared to the earlier period and to identify the non-tariff barriers operating against Indian export and their composition together with their trade coverage and frequency of application. (We also attempt to analyse whether these barriers are really acting as constraints to export growth to the US in chapter 4)

SECTION-II

Composition of India's Exports to USA

India's exports to the United States of America have long been concentrated on a few items (see table 3.3). The fifteen main items contributed 85 per cent on an average during the period 1980-81 to 1986-87. Even within these fifteen major items 'pearls, precious & semi-precious stones' (SITC 667) and 'outer garments of textile fabrics for women, girls' and infants' (SITC 843) accounted for 32 per cent and 13 per cent respectively.

These fifteen SITC categories contributed 81, 87 and 86 per cent of India's total export to the US in 1980, 1983 and 1986 respectively implying that India's export commodity basket to the US showed no sign of becoming less concentrated.

Table 3.3

India's Export to USA: Share of principal Categories
1980-81 To 1986-87

SITC NO Commodity Description	EXPORTS 1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	AVG.SH.
667 Pearls and Precious Stones	21.595	25.884	34.130	37.150	31.563	37.120	37.858	32.186
843 Outer garments of text. fab	11.689	10.902	10.378	14.814	13.777	12.528	13.870	12.566
292 Crude vegetable materials,	8.197	10.458	5.126	3.340	5.942	3.792	2.406	5.609
659 Floor coverings etc.	4.819	4.683	5.063	4.350	5.354	6.053	5.770	4.378
896 Works of Art, collectors' p	4.471	4.979	4.633	4.062	4.632	3.733	3.233	4.249
057 Fruits and nuts excluding o	2.388	2.290	3.062	6.298	5.204	5.498	4.760	4.214
654 Textile fabrics, woven, exc	6.176	5.527	3.259	2.364	2.680	2.369	2.030	3.487
844 Under garments of textile f	2.480	2.953	2.585	2.560	3.973	3.601	3.322	3.068
036 Crustaceans and molluses, e	3.512	3.517	4.502	3.301	3.329	2.180	1.918	2.945
071 Coffee and coffee substitut	5.838	3.348	3.146	1.849	1.250	2.308	2.038	2.825
652 Cotton fabrics	3.574	2.374	1.572	1.529	3.188	2.402	2.467	2.444
611 Leather	2.136	2.923	2.702	1.451	1.898	1.673	1.242	2.004
075 Spices	1.353	0.898	0.994	1.407	1.054	3.988	4.124	1.858
612 Manufactures of leather etc	1.420	2.197	2.505	2.068	2.564	2.638	1.462	1.792
658 Made-up articles, wholly or	1.681	1.978	1.611	1.337	1.706	1.782	1.454	1.650
851 Footwear	0.595	0.693	0.624	0.507	1.017	0.872	1.181	0.784
699 Manufactures of base metals	0.966	0.912	0.672	0.743	0.731	0.565	0.655	0.749
695 Tools for use in the hand o	1.156	1.077	0.824	0.484	0.498	0.347	0.310	0.671
531 Synthetic organic dyestuffs	0.947	0.644	0.623	0.608	0.616	0.289	0.702	0.633
678 Tube, pipes,and fittings, o	1.106	0.653	0.562	0.386	0.555	0.769	0.310	0.620
691 Structures and parts of str	0.775	0.910	0.558	0.469	0.470	0.505	0.521	0.601
625 Rubber tyres etc...	0.735	0.197	0.100	0.298	0.754	0.895	0.810	0.541
278 Other crude minerals	0.925	0.515	0.563	0.166	0.651	0.738	0.091	0.521
831 Travel goods, etc...	0.370	0.596	0.262	0.286	0.467	0.547	0.594	0.446
074 Tea and mate	0.910	0.569	0.513	0.260	0.309	0.230	0.289	0.440
All Commodities	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Derived from DGCI&S, Calcutta, Various Issues.

Tariff Barriers to Exports to the US.

Though tariffs as regulatory devices were reduced significantly in successive Rounds of GATT negotiations, they were not eliminated totally. Value of the US imports from the rest of the world facing 10 or more than 10 percent tariff rate in the pre and post Tokyo Round were 14 and 10 percent respectively. While the value of imports from India facing 10 or more than 10 percent tariff rate was 19 percent in the pre Tokyo Round and 14 percent in the post Tokyo Round. However, A close look over the table 3.4 reveals that India's principal exports to the US, generally belong to product groups which do not attract high tariffs except for 3 major categories of 'synthetic organic dyestuffs etc.,' (SITC 531), "Outer garments, Women's, girls' and infants' of textile fabrics other than knitted or crocheted" (SITC 843), and "made-up articles wholly or chiefly of textile materials" (SITC 843). Even in these categories tariffs were reduced substantially from 25.2, 21.5, and 15.4 per cent respectively to 16.5, 15 and 9.2 per cent respectively after the post Tokyo Round. After the Tokyo Round the number of tariff lines having more than 10 per cent tariff rate was reduced to 256 from 608 in the earlier period. While this indicates a move towards liberalisation of trade, the growth of non-tariff measures to trade gives a different picture.

Non-tariff Barriers to Exports of India to the USA:

The non-tariff barriers facing India's export to the United States of America reported in the GATT Tariff Tapes are, seasonal specific tariff, variable levy, Global quota, specific taxes, prohibition (wild life), quota, automatic licensing, countervailing duties, counter vailling investigation, monitoring, and

Table 3.4

Tariff Barriers facing Exports of India: in USA

SITC NO Commodity Description	Average Tariff Rate PRE-MTN	POST-MTN	Revealed Comparative Advantage
011 Live animals chiefly for food	2.91	0.59	2.57
042 Rice	8.86	3.57	32.01
054 Vegetabes,Fresh,frogen or simply preserved, etc	4.90	2.03	4.06
052 Dried fruit etc	0.60	0.60	5.86
058 Fruit,Preserved and Fruit Preparations	6.47	3.66	0.66
057 Fruits and Nuts,fresh or dried	0.02	0.02	46.54
061 Sugar and honey	10.00	5.80	1.35
062 Sugar confectionery etc..	17.65	17.62	0.88
071 Coffee and coffee substitutes	0.00	0.00	0.93
074 Tea and mate	0.00	0.00	6.63
075 Spices	1.71	1.43	8.63
121 Tobacco, unmanufactured;tobacco refuse	0.00	0.00	1.59
243 Wood, shaped or simply worked	0.00	0.00	4.20
247 Other wood in the rough or roughly squared	0.00	0.00	0.90
263 Cotton	0.00	0.00	0.65
264 Jute and other textile bast fibres,n.e.s.	0.01	0.00	23.36
265 Vegetable fabres, except cotton and jute	0.01	0.00	74.32
278 Other crude minerals	7.06	2.91	59.14
291 crude animal meterials,n.e.s.	2.29	1.16	0.75
292 Crude vegetable materials,n.e.s.	0.46	0.46	16.11
332 Petrolium products	0.30	0.30	3.17
411 Animal oils and fats	3.98	3.98	6.72
422 Other fixed vegetableoils	5.00	5.00	1.47
512 Organic chemicals	15.24	14.31	0.84
514 Nitrogen-function compounds	18.75	16.75	0.85
516 Other organic chemicals	13.75	11.01	2.81
522 Inorganic chemicals elements, oxides etc..	3.81	1.03	0.95
531 Synthetic organic dyestuffs,etc....	25.15	16.49	2.21
532 Dyeing and tanning extracts,and synthetic tanning materials	4.00	3.10	0.73
533 Pigments, paints etc..	14.11	12.60	1.01
541 Medicinal and farmaceutical products	1.22	0.51	2.91
551 Essential oils,perfume and flavour materials	1.44	0.18	1.26

contd...

Table 3.4

Tariff Barriers facing Exports of India: in USA

SITC NO Commodity Description	Average Tariff Rate PRE-MTN	POST-MTN	Revealed Comparative Advantage
553 Perfumery, cosmetics, etc..	4.46	4.38	2.03
611 Leather	5.46	3.98	5.55
612 Leather manufactures	9.23	8.96	1.00
651 Textile Yarn and Thread	10.31	4.12	48.52
652 Cotton Fabrics Woven EX Narrow or Spec.Fabrics	11.27	7.25	3.09
654 Tulle, Lace, Embroidery, Ribbon, Trimmings	2.32	1.08	10.83
656 Tulle, lace, embroidery, etc..	22.08	11.72	10.97
657 Floor Coverings, Tapestries, etc.	16.06	6.66	1.23
658 Made-up articles, of textile materials	15.43	9.26	2.37
659 Floor Covering,etc.	11.80	5.38	14.16
662 Clay construction materials eyc..	12.30	12.02	3.61
667 Pearls,precious and semi-precious stones, etc	3.93	0.02	12.77
678 Tubes,pipes and fittings of iron or steel	4.59	3.14	0.03
679 Iron and steel castings, etc	9.94	5.77	8.11
681 Silver, platinum and other metals fo platinum group	15.82	8.26	0.89
691 Structures of ion and steel	0.00	0.00	29.04
695 Tools for use in the hand or machines	9.96	6.51	0.80
697 Household eqipments of base metals	5.87	3.91	3.70
842 Outer garments of textile fabrics (men and boys)	20.29	19.81	1.00
843 Outer garments of textile fabrics (wimen,girls and babies)	21.50	15.01	3.66
847 Clothing accessories, of textile fabrics, n.e.s.	24.99	24.93	1.10
882 Photographic film, etc..	999.90	999.90	0.84
896 Works of Art, Collectors Pieces and Antiques	6.31	5.28	1.94
899 Manufactured Articles.n.e.s.	5.66	2.92	0.82

Source: Calculated from UNCTAD Data Base on Trade Measures.

Note : Weighted average Tariff Rates have been calculated from UNCTAD
: Data Base on Trade Measures.
: * Weighted average tariff rates for commodity groups having one or more than one percent export share and commodity groups having RCA are reported here.

MFA. There may be other barriers as well which are not recorded. Incidence of NTBs measured by coverage index reveals that 35 percent of India's exports to the USA was subject to NTBs. Our estimates further reveals that on the whole 33 per cent of America's imports from the rest of the world were subject to NTBs in 1983. This indicates that India's exports to the US face higher NTBs compared to the average.

There are thirty one (SITC 3 digit categories) which are subject to various non-tariff measures in the United States of America of which 10 items face more than one non-tariff barrier. A commodity specific study reveals that incidence of non-tariff intervention is the highest in the textile group. The barrier existing is multi-fibre arrangement, (nearly, all the (SITC 3 digit textile categories are subject to MFA). As already mentioned the tariff rates on textile items are also quite high as compared to others. Among the major textile items, 'made up articles and garments' were mostly subject to MFA, the coverage of which has been as high as 94 per cent and 74 per cent respectively as could be seen from table 3.5 The other major categories subject to non-tariff barriers were "fresh fruit and nuts excluding oil nuts" (SITC 057), "manufactures of leather" and "works of art, collectors, pieces and antiques." But the coverage and frequency of non-tariff barriers in these categories were very low. Category 057 was subject to a seasonal specific tariff while category 612 and 896 were subject to countervailing duties, monitoring and MFA. Other categories which were subject to various non-tariff measures in the US some of which are discussed below, cover a negligible proportion of India's export.

Table 3.5

Nature, Extent and Types of NTBs facing Indian Exports in USA : 1979 TO 1986

	Average Coverage Ratio	Average Frequency Ratio	India's Share in Own Export to USA	India's Share in USA Total Export	RCA 1983	Description of Non-Tariff Barriers
	P E R C E N T					
051 Vegetables, Fresh, chilled, frogen, etc.	100	100	0.020	3.85	4.06	SST
062 Sugar confectionary not containing Cocoa and other sugar preparations	99.3	66.7	0.598	0.84	0.88	VL,GL
073 chocolate and otherfood preparations containg cocoa	100	100	na	na	na	QC
112 Alcoholic beverages	66.6	66.6	0.012	0.669	0.02	ST
122 Tobacco manufactured	3.5	33.3	0.019	0.08	0.24	ST
262 Wool and other animal hair	37	75	0.001	0.03	0.03	MFA
263 Cotton	100	100	0.000	0.62	0.65	QC
291 Crude animmal materials	14.2	8.3	0.051	0.71	0.75	PH,Q
331 Petrolium, crude and partly refined	50	50	25.228	0.98	1.03	AL
332 Petrolium products	50	50	2.436	3.01	3.17	AL
553 Perfumary, cosmetics and toilets preparations	72.2	14.2	0.170	1.93	2.03	CVD
612 Manufactures of leather etc...	4.3	5.6	0.192	0.94	1.00	CVI,MON
642 Paper and paperboard, cut to size ...	4.4	9.5	0.023	0.22	0.23	ST
652 Cotton Fabrics Woven EX Narrow or Spec.Fabrics	49.4	92.8	0.753	2.92	3.09	MFA
653 Text Fabrics Woven EX Narrow, Spec, Not Cotton	31.1	58.8	0.033	0.08	0.08	MFA
654 Tulle, Lace, Embroidery, Ribbon, Trimmings	40.3	42.1	3.127	10.27	10.83	MFA
656 Tulle,lace embroidery, ribbons, etc.	96.5	75	0.404	10.4	10.97	MFA
657 Special textile fabrics nd related products	75.1	60.9	0.122	1.17	1.23	MFA
658 Made-up articles, wholly or chiefly of textile materials	94.4	67.2	0.536	2.24	2.37	MFA
659 Floor coverings, etc	74	57	3.213	13.42	14.16	MFA
678 Tube, pipes,and fittings, of iron or steel	26	16.6	0.013	0.03	0.03	ADD,CVI
679 Iron and steel castings, forgings, etc.	16.3	13	na	na	na	CVI
691 Structures and parts of structures, n.e.s., of iron, steel or allumini	100	100	0.566	27.53	29.04	ADD,CVD,ADI
694 Nails, screws, nuts, bolts, etc.	79	46	0.114	0.35	0.37	CVD,SUT,MON
697 Household equipmeny of base metals, n.e.s.	0.01	3	1.936	3.51	3.7	SUT,MON
713 Internal cumbestion piston engines, and parts thereof. n.e.s.	34.6	26.6	0.036	0.06	0.07	SUT
783 Road motor vehicles. n.e.s.	0.2	17	0.159	0.01	0.01	SUT
785 Motor cycles , motor scooters and other cycles, etc..	49.3	22	0.002	0	0	ATQ,SUT
847 Clothing accessories, of textile fabrics, n.e.s.	100	100	0.026	1.04	1.1	MFA
848 Articles of apparel and clothing accessories, etc...	16	29	0.004	0.07	0.07	MFA
851 Footwear	48.5	43.3	0.326	0.14	0.15	CVI,MON
896 Works of Art, collectors' pieces and antiques	0.01	4	1.668	1.84	1.94	MFA

Source: Calculated from UNCTAD Data Base on Trade Measures.

Note : For abbreviations please see appendix C.

: # Export shares from UNCTAD Data Base and DGCI&S need not be equal partly due to aggregation problem to convert to SITC from Tariff Lines.

There were three categories of export which were entirely subject to non-tariff measures in the US. These items are chocholates and other food preparation containing cocoa (SITC 073), 'structures and parts of structures, of iron and steel or aluminum' (SITC 691) and 'clothing accessories of textile fabrics (SITC 847 and 073) which were subject to country quota and India only exported $1000 (US dollar) in 1983 in one tariff line. Export under this category remained negligible throughout the entire period. The export share of SITC category 691 to India's export during the period (1980-87) was 0.6 per cent having fallen from 0.78 per cent in 1980-81 to 0.47 in 1983-84 and increased marginally to 0.52 percent in 1986-87. The non-tariff measures applicable to this category of exports were anti-dumping duty, countervailing duty and anti-dumping investigations and these may have contributed to the declining share of these categories' in Indian exports.

India's exports of footwear (SITC 851) is an important potential export item. However this item was subject to countervailing investigation and monitoring from 1981 to 1983. After the termination of these non-tariff measures in 1983 share of footwears in India's total exports to the United States of America increased from 0.5 per cent in 1983-84 to 1.2 per cent in 1986-87. Thus the impact of non-tariff measures as a constraint to export growth is clearly visible here. The trade restraining impact of these measures is further evident in case of exports of leather manufactures. Part (11.2 per cent) of the exports of leather manufactures were subject to countervailing investigation and monitoring in the US upto 1983. After complete elimination of these restriction, exports of leather manufactures grew from 2.1 per cent of total Indian export to the US in 1983-84 to 2.6 per cent in 1985-86. The impact of countervailing duties on Indian exports of tubes, pipes and fittings of iron or steel is evident when it was imposed in January 1986 and the share of this category fell from .77 per cent to .31 per cent in 1986-87.

PART-II
JAPAN

India's Trade with Japan

Japan with a population of 119 million is the third largest market of India's export. In 1991-92 Japan absorbed 9.8 per cent of India's total exports and supplied 9.9 per cent of India's total imports. In the eighties India's exports to Japan grew at an annual rate of 19.9 per cent (in Rupee term) while imports from Japan grew at a rate of 15.8 per cent. However, India's balance of trade position vis-a-vis Japan has always been negative though the deficit decreased from Rs 352 crores in 1980-81 to Rs 207 crores in 1990-91 (Table 3.2). The long persistent unfavorable balance of trade requires export growth at a speedier rate, which in turn requires identifying the external and internal constraints to export expansion. The external constraints are increased competition and various protective measures. In this section, the second aspect of the problem has been highlighted and both the tariff and non tariff obstacles have been examined. We analyse the importance of tariffs as an obstacle to India's export growth in Japan in the pre and post Tokyo Round situation in Section 3.I and Section 3.II which attempt to identify and estimate the coverage and frequency of non-tariff measures applied.

SECTION I

Commodity Compostion of India's Exports to Japan and Tariff Barriers to Export

India's export to Japan has been concentrated to a few items with fifteen main items contributing on an average to more than 90 per cent of the exports during the period 1980-81 to 1986-87 (see Table 3.6). Further two major items namely' iron ore and concentrate' (SITC 281) and 'crustacean and molluscs etc., accounted for 31 per cent and 26 per cent of export shares. The other major categories are 'pearls and precions stones' (SITC 667), 'Ores and concentrates of base metals' (SITC 287) 'Coffee and coffee substitutes' (071) and 'stone sand and gravel' (SITC 273) contributing 15, 2.6, 2.4 and 2.3 per cent of export earnings respectively.

Japan's foreign policy has the dual objective of securing imports needed for national growth and well-being and promoting the expansion of export. The use of tariffs as regulatory devices has diminished but has not been eliminated totally. The rates vary from zero in the case of raw materials like ores and concentrates and other essential items like coffee and coffee substitutes to much more than 20 per cent on some manufactured items such as processed fruits (see Table 3.7). Before the Tokyo Round 60 per cent of the tariff lines in which India exported, faced more than 10 per cent rate while in the post-Tokyo round 40 per cent of the tariff lines were subject to rates of more than 10 per cent. The share of India's exports to Japan facing a tariff rate of more than 10 percent in the pre

Table 3.6

India's Export to Japan :Share of Principal Categories
1980-81 TO 1986-87

SITC NO	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Avg. Share over the Period
281 Iron ore and concentrates	31.483	31.472	31.616	31.200	29.550	34.524	27.717	31.08
036 Crustaceans and molluses, etc.	25.204	27.249	30.695	26.675	23.740	24.009	25.138	26.10
667 Pearls precious and semi-precious stones	11.187	13.673	14.463	16.686	15.440	15.530	21.520	15.50
287 Ores and concentrates of base metals n.e.s.	3.861	2.806	1.728	2.130	3.444	2.941	1.859	2.68
071 Coffee and coffee substitutes	2.428	1.574	2.475	2.046	3.669	3.080	2.545	2.55
273 Stone, sand and gravel	2.551	1.824	1.764	2.126	2.762	2.554	2.819	2.34
263 Cotton	1.923	1.281	1.280	1.936	1.269	1.853	3.165	1.82
843 Outer garments of text. fab. (women's infants)	1.600	1.787	1.146	1.299	2.328	2.064	1.776	1.71
291 Crude animal materials,n.e.s.	1.885	1.676	1.581	1.666	1.675	1.284	1.394	1.59
652 Cotton fabrics	0.810	0.785	1.127	1.497	3.017	0.834	0.573	1.23
654 Textile fabrics, woven, excluding cotton or man-made	1.728	2.091	1.794	1.265	1.419	0.473	0.796	1.37
057 Fruits and nuts excluding oil nuts	1.342	0.877	0.932	1.302	1.334	1.259	1.745	1.26
611 Leather	1.295	1.631	1.055	1.189	1.269	1.359	0.962	1.25
424 Other fixed vegetable oils and fats,...	0.881	1.378	0.975	0.952	0.596	0.810	0.722	0.90
034 Fish, fresh(live or dead),chilled or frozen	0.877	0.743	0.397	1.165	0.967	0.763	0.702	0.80
292 Crude vegetable materials, n.e.s.	0.903	0.746	0.684	0.818	0.982	0.645	0.635	0.77
896 Works of Art, collectors'pieces and antiques	0.389	0.345	0.290	0.306	0.379	0.235	0.314	0.32
121 Tobacco, unmanufactured; tobacco refuse	0.920	1.186	0.702	0.358	0.144	0.072	0.065	0.49
075 Spices	0.479	0.353	0.360	0.450	0.588	0.550	0.475	0.47
074 Tea and mate	0.450	0.396	0.352	0.486	0.536	0.444	0.482	0.45
278 Other crude minerals	0.583	0.531	0.436	0.390	0.524	0.495	0.451	0.49
844 Under garments of textile fabrics...	0.423	0.371	0.311	0.248	0.542	0.442	0.328	0.38
523 Other inorganic chemicals, etc...	0.410	0.078	0.032	0.212	0.158	0.203	1.853	0.42
541 Medicinal and pharmaceutical products	0.229	0.313	0.332	0.287	0.341	0.496	0.456	0.35
663 Mineral manufctures	0.437	0.442	0.375	0.336	0.319	0.221	0.262	0.34
037 Fish, crustaceans and molluscs, prepared or preserved	0.002	0.044	0.132	0.124	0.130	0.087	0.127	0.09
All Categories	100.000	100.000	100.000	100.000	100.000	100.000	100.000	100.000

Source :Derived from DGCI&S, Calcutta, Various Issues

Table 3.7

Tariff Barriers facing Exports of India: in Japan
1983

SITC NO	Commodity Description	India's Share(%)# in own Export to Japan	India's Share(%)# in Japan's total Import	MFN Tariff Rate*(%) PRE-TOKYO	MFN Tariff Rate*(%) POST-TOKYO	Share in Japan's total Import	Revealed Comparative Advantage
281	Iron ore and concentrates	37.260	15.526	0.00	0.00	14.007	2.66
036	Crustaceans and molluses, etc.	23.011	18.591	5.06	3.06	7.224	3.19
667	Pearls precious and semi-precious stones	12.008	17.580	5.01	2.50	3.987	3.01
273	Stone, sand and gravel	2.199	10.753	0.14	0.11	1.194	1.84
263	Cotton	1.617	1.599	0.00	0.00	5.902	0.27
291	Crude animal materials,n.e.s.	1.526	3.907	2.52	1.28	2.280	0.67
071	Coffee and coffee substitutes	1.292	2.538	0.00	0.00	2.972	0.43
843	Outer garments of text. fab. (women's infants)	1.188	5.800	18.56	14.00	1.195	0.99
264	Jute and textiles bast fibres	1.182	54.761	19.51	19.51	0.126	9.38
057	Fruits and nuts excluding oil nuts	0.963	12.676	6.43	1.51	0.444	2.17
423	Fixed vegetable oils	0.872	93.239	4.70	4.00	0.055	15.98
611	Leather	0.851	23.339	10.87	9.06	0.213	4.00
672	Ingots and other primary forms of iron or steel	0.828	1.017	9.23	6.94	4.753	0.17
292	Crude vegetable materials, n.e.s.	0.818	3.934	0.97	0.92	1.213	0.67
652	Cotton fabrics	0.741	6.314	7.02	5.61	0.685	1.08
278	Other crude minerals	0.485	1.937	0.40	0.21	1.460	0.33
075	Spices	0.423	17.878	0.21	0.17	0.138	3.06
074	Tea and mate	0.389	11.492	34.51	33.24	0.197	1.97
659	Floor coverings etc.	0.240	6.293	16.40	12.64	0.223	1.08
261	Silk	0.211	10.469	0.00	0.00	0.118	1.79
248	Wood, simply what and railway sleepers of wood	0.202	7.047	15.12	14.83	0.167	1.21
282	Waste and scrap metal of iron or steel	0.147	16.606	0.00	0.00	0.052	2.85
058	Fruit, preserved and fruit preparations	0.104	27.414	0.11	0.11	0.022	4.70
516	Other organic chemicals	0.074	46.449	10.04	5.80	0.009	7.96
773	Equipment for distributing electricity	0.072	19.842	7.50	4.20	0.021	3.40
277	Natural abrasives, n.e.s.	0.057	12.693	9.48	5.26	0.026	2.17
271	Fertiliser, crude	0.010	8.028	10.00	5.80	0.007	1.38

Source: Calculated from UNCTAD Data Base on Trade Measures.

Note : Weighted average Tariff Rates have been calculated from UNCTAD
: Data Base on Trade Measures.
: * Weighted average tariff rates for commodity groups having one or more than one percent export share and commodity groups having RCA are reported here.
: # Export shares from UNCTAD Data Base and DGCI&S need not be equal partly due to aggregation problem to convert to SITC from Tariff Lines.

and post Tokyo Round were 5.98 percent and 4.58 percent respectively. The corresponding share of exports from the rest of the world to Japan facing more than 10 per cent tariff rates was 28.39 per cent in the pre Tokyo Round and 17.82 per cent in the post Tokyo Round.

The tariff structure on India's main items of export and those in which India has revealed comparative advantage is presented in Table 3.7. Major export item facing high tariff rates are 'Outer garments for women, girls and infants of textile fabrics (18.56 per cent in the pre-Tokyo Round and 14.00 per cent in the post Tokyo Round), Leather (10.87 in pre-Tokyo Round and 9.06 in the Post-tokyo Round) etc. The table also indicates incidence of high tariff rates (more than 10 per cent) on certain categories of export in which India has got revealed comparative advantage though they constituted a negligible proportion of India's trade.

SECTION II

Non-tariff Barriers to export

Japan has been taking resort to various non-tariff trade restrictive measures to regulate its import trade. These includes quantitative restriction in the form of global quota, health and safety regulations, import authorisation, licensing, state regulations, import pricing etc. The nature, types, frequency and coverage of non-tariff barriers are presented in table 3.8. The table identifies 56 commodity groups which are subject to one or multiple number of non-tariff barriers. Most of these categories had high incidence of non-tariff barriers.

From the table it appears that health and safety regulation is the most widely used form of non-tariff restriction. Detailed tabulation reveals that out of 467 tariff lines in which India exported in 1983, 127 were subject to health and safety regulations.

Health and safety regulations has been widely applied to imports of food and live animals, beverages, "raw hides, skins and furkins", crude fertilizers and crude minerals, crude animal and vegetable materials, organic chemicals dyeing stuffs etc.

The second most widely applied non-tariff restriction is import authorisation. Forty six tariff lines were subject to this restriction in 1983. These measures were mainly used to control import of textiles and textile articles. Among the textile categories textile fabrics (SITC 652, 653 and 654) were entirely under import authorisation.

The third most widely used non-tariff restriction in Japan was the global quota. Out of 467 tariff lines under which India exported in 1983, 31 tariff lines were subject to global quota. Global quota were imposed on products such as fruit and fruit preparations, certain categories of fish items, beverages, non-ferrous base metals, leather, floor coverings etc.

The other barriers apply to only a few tariff lines. Japan is controlling importation of certain items such as beverages and tobacco and certain categories of crude vegetable materials through state monopoly of imports and provision of sole import agency. Six tariff lines recorded in UNCTAD data base were subject to prohibition (with exception) in Japan. These belong to SITC 291 (crude vegetable materials), skins, feathers and other parts of birds, and products of zoologi cal and metallurgical interst and apparel and clothing accessories of furkins. Importation of coca leaves, Jaberandi leaves etc., natural gums and vegetable saps and extracts, certain inorganic compounds are subject to import permit together with other restrictions. A few items, such as sheep and goat skin, leather, footwears of leather etc., importation of which were subject to tariff with quota /advalorem tariff with quota. Importation of certain categories of fertilizers were subject to license.

Coverage and frequency index of non-tariff barriers to export to Japan:

The overall coverage of India's exports to Japan subject to various NTBs is 51 percent as against 39 percent of world exports to Japan. Non-Tariff barriers to India's exports to Japan is quite high (see Table 3.8). Most of the items subject to non-tariff barriers have coverage of 100 per cent. Among the major 15 items of export to Japan SITC 036, 071, 291, 652 and 034 have 100 per cent coverage implying that the entire export is under non-tariff restrictions. Except for category 654 and 034, all 15 major items were subject to more than one non-tariff restriction. Coverage and frequency of all other SITC categories subject to non-tariff barriers are provided in the table. Commodity groups in

Table 3.8

Nature, Extent and Types of NTBs facing Indian Exports in Japan
1979 TO 1986

SITC NO	Average Coverage Ratio	Average Frequency Ratio	India's Own Export to Japan	Share in Japan's Total Export	RCA 1983	Description of Non-Tariff Barriers
	PERCENT					
001 Live animals chiefly for fo	100	100	0.022	1.046	0.18	IA,GQ,HSR
011 Meat and ediable meat offal	100	100	0.007	0.358	0.06	IA,HSR
031 Fish,Fresh & Simply Preserv	100	100	0.000	0.164	0.03	GQ,IA,HSR
034 Fish,fresh,chilled or froze	100	100	0.000	0.169	0.03	IA,HSR
035 Fish,dried,salted or in bri	100	100	0.011	0.084	0.01	IA,HSR
036 Crustaceans and molluscs,ch	100	100	23.011	18.6	3.19	IA,HSR
053 Fruit,Preserved and Fruit P	100	100	0.038	3.751	0.64	HSR
054 Vegetables,fresh,chilled,ro	100	100	na	na	na	HSR
057 Fruits and Nuts,fresh or dr	100	100	0.960	12.68	2.17	HSR
058 Fruits,preserved,and fruit	100	100	0.104	27.414	4.7	HSR,GQ
071 Coffee and coffee substitut	100	100	1.290	2.54	0.43	HSR
074 Tea and mate	100	100	0.390	11.49	1.97	HSR
075 Spices	100	100	0.420	17.88	3.06	HSR
081 Feeding stuff for animals	100	100	0.018	0.177	0.03	HSR,IA
099 Food Preparations n.e.s.	100	100	0.001	0.024	0	IA,GQ,HSR
112 Alcoholic beverages	100	100	0.112	0.601	0.1	SMI,HSR,GQ
121 Tobacco, unmanufactured;tob	100	100	0.230	1.15	0.2	SIA,SMI,GQ,HSR
211 Hides and skins raw	100	100	0.003	0.929	0.16	HSR
223 Oilseeds and oleaginous fru	100	100	na	na	na	HSR
247 Other wood in the rough or	0.14	33	0.190	2.05	0.35	PE,HSR
271 Fertilizers,crude	100	100	0.010	0.028	1.38	HSR
277 Natural abrasives n.e.s.	62	50	na	na	na	HSR
278 Other crude minerals	4.6	14	0.490	1.94	0.33	HSR
287 Ores and concentrates of ba	2.9	80	37.26	15.526	2.66	GQ,HSR
288 Non ferrous base metal and	100	100	0.130	1.8	0.31	GQ
291 crude animal meterials,n.e.	100	100	1.530	3.91	0.67	IA,HSR,PE
292 Crude vegetable materials,n	100	100	0.820	3.9	0.67	L,HSR,IP,GQ,SMI,OIM
264 Jute and other textile bast	95	67	1.18	54.76	9.38	IA
423 Fixed vegetable oils,'soft'	100	100	0.870	93.24	15.98	HSR
513 Carboxylic acid,and their a	100	100	0.048	0.489	0.08	HSR,IP

contd...

Table 3.8

Nature, Extent and Types of NTBs facing Indian Exports in Japan
1979 TO 1986

SITC NO	Average Coverage Ratio	Average Frequency Ratio	India's Share in Own Export to Japan	India's Share in Japan's Total Export	RCA 1983	Description of Non-Tariff Barriers
	PERCENT					
514 Nitrogen-function compounds	100	100	0.028	0.317	0.05	HSR,IP.GQ
516 Other organic chemicals	100	100	0.074	46.45	7.96	HSR
522 Inorganic chemicals element	2.44	33	0.011	0.786	0.13	HSR
531 Synthetic organic dyestuffs	100	100	0.018	0.302	0.05	HSR
532 Dyeing and tanning extracts	100	100	0.003	3.995	0.68	HSR
541 Medicinal and farmaceutical	100	100	0.130	1.84	0.32	HSR,GQ,IP
551 Essential oils,perfume and	100	100	0.060	3.967	0.68	HSR
554 Soap,cleansing and polishin	100	100	0.000	0.016	0	HSR
562 Fertilizers, manufactured	100	100	0.001	0.392	0.07	L
582 Condensation, Polycondensat	100	100	0.000	0.007	0	HSR
583 Polymerization and Copolyme	75	86	0.001	0.010	0	HSR
611 Leather	28	64	0.850	23.340	4	ATQ,GQ
613 Fur Skins,Tanned or Dressed	86	80	0.001	0.004	0	P
629 Articles of Rubber,n.e.s.	100	100	0.000	0.000	0	HSR
635 Wood Manufactures, n.e.s.	66	33	0.008	0.107	0.02	HSR,GQ
651 Textile Yarn and Thread	43	56	0.190	1.610	0.28	HSR
652 Cotton Fabrics Woven EX Nar	99.8	80	0.741	6.314	1.08	IA
653 Text Fabrics Woven EX Narro	100	100	0.001	0.165	0.03	IA
654 Tulle, Lace, Embroidery, Ri	100	100	0.740	6.300	1.08	IA
657 Floor Coverings, Tapestries	3	20	0.102	4.163	0.71	IA
659 Floor Covering,etc.	53	80	0.035	0.925	0.16	TQ,GQ
861 Scientific,Medical,Optical,	100	100	0.009	0.810	0.14	HSR
863 Developed Cinematographic F	16	33	0.002	0.078	0.01	HSR
872 Medical Instruments and App	100	100	0.000	0.003	0	HSR
896 Works of Art, Collectors Pi	66	33	0.000			PE,GQ
899 Manufactured Articles.NES	99	67	0.037	0.967	0.17	PE,GQ

Source: Calculated from UNCTAD Data Base on Trade Measures.

Note : For abbreviations please see appendix C.

: # Export shares from UNCTAD Data Base and DGCI&S need not be equal partly due to aggregation problem to convert to SITC from Tariff Lines.

which coverage index is lower than frequency index imply that volume/value of export items facing non-tariff restrictions were lower perhaps because of the non-tariff barriers.

Footnotes

1. IIFT (1978): Non-tariff Measures in USA, Australia, Canada, New Zealand, Denmark and ireland, (Implications for India's Exports).

2. The laws enacted in 1985 and 1986 in United State made provisions for imposing user fees with respect to the arrival of merchandise, vessels, trucks, trains, private boats and plans, as well as passengers. The customs and Trade Act of August 1990 and Omnibus Budget reconciliation Act of October 1990 extend and modify these provisions, among other things. This legislation gives certain tendency to seek to use fees rather than taxes, as a source of revenue. One most significant customs user fee (CUF) is the Merchandise Processing Fee levied on all Imported Merchandise, except for products from the least developed countries. For more detail see: Service of the Commission of the European Communities: Report on UNICTED STATES Trade Barriers and Unfair Practices 1991. pp.19-21.

3. This is calculated from figures available in UNCTAD Data Base on Trade Measures.

4. The share of trade subject to tariff rates of 10 or more than 10 per cent was tabulated from UNCTAD Data Base on Trade Measures on the basis of 1983 Trade Weights.

Appendix - C
Non-Tariff Barriers : Abbreviations

Japan		USA	
Full Descrition	Abbreviation	Full Descrition	Abbreviation
Import Authorization	IA	Advelorem Tariffs With Quota	ATQ
Global Quota	GQ	Anti-Dumping Duties	ADD
Health and Safety Regulation	HSR	Anti-Dumping Investigation	ADI
Prohibition (with Exception)	PE	Automatic Licencing	AL
Other Import Measures	OIM	Countervailing Duties	CVD
State Monopoly Of Imports	SMI	Countervailing Investigation	CVI
Import Permit	IP	Global Quota	GQ
Sole Importing Agency	SIA	Monitoring	MON
Licence	L	Multifibre Arrangement	MFA
Advelorem Tariff With Quota	ATQ	Supplementary Tariffs	SUT
Tariff With Quota	TQ	Seasonal Specific-Tariffs	SST
		Variable Levy	VL
		Specific Taxes	ST
		Prohibition (Wild-Life)	PH
		Quota	Q
		Quota By Country	QC

CHAPTER 4

INCIDENCE AND IMPACT OF NTBS: INTER-COUNTRY COMPARISON AND HYPOTHESIS TESTING

Detailed descriptions of trade, tariffs and pattern of NTBs in the previous chapters made it clear that as in other developing countries India's exports have been concentrated in a few commodities in all the countries. However, the share of the main items of exports to these countries differs.The main commoditities are pearls, precious and semi-precious stones, textiles, crude vegetable materials, crude mineral resources and other primary commodities. In the EC 21 Harmonised 2 digit categories (each having one or more than one per cent of export share (See Appendix D) contribute as much as 86 per cent of total exports in 1990. In Japan and USA, as already reported fifteen major (SITC 3 digit) categories contributed on an average 91 per cent and 85 per cent of exports respectively during 1980-81 to 1986-87. India's exports to the USA and Japan grew in the 1980s at average annual rates of 21 and 19.89 per cent (in terms of Rupee) respectively and 8.54 per cent (in ECU) to the EEC. India's balance of trade situation vis-a-vis these countries is unfavorable in most years but improving. Still higher export growth is required for India to cope with this unfavorable balance of trade. But the changing world trade environment with more non-tariff intervention will make this task difficult. As tariffs have been reduced by successive rounds of multilateral trade negotiations the importance of non-tariff interventions has grown. Preceeding analysis suggests that application of non-tariff barriers has increased in the last two decades, but particularly in the eighties. Chapter 2,3 also suggest that incidence of NTBs in Japan & USA against India is higher compared to rest of the world. This is mainly due to India's export concentration in commodities in which these countries take resort to NTBs. The basic reasons behind adoption of trade barriers as already highlighted are the growing macro economic instabilities of industrial countries and the increasing weakness of these countries' governments in resisting protectionist pressures (Nogues 1991).

The nature of NTBs has also changed. The most widely used non-tariff restrictions in recent times are voluntary export restraints and antidumping and countervailing duties. Inter-country study suggests that Japan has more wide application of NTBs compared to USA. In Japan 56 SITC categories (with varying coverage) were subject to NTBs as against 32 categories in USA. The coverage of NTBs is also higher in Japan than in USA. But India's growth of exports to Japan in the 1980s does not differ much from that of USA. This may imply that NTBs applied in Japan and the USA have different implications. Non-tariff measures in the USA are more restrictive than in Japan. For example Japan applied most widely health and safety regulation ostensibly for checking certain files, beens, insects etc., and this may be less restrictive than the most commonly used NTB in the USA which is quantitative restrictions. Imposition of anti-dumping and counter vailing duty on certain items of exports restricted growth of Indian export of metal manufactures. In the EC the most widely used non-tariff restrictions were licence for surveillance, quantitative restrictions, and import deposits. Studying the impact of these individual non-tariff restrictions is difficult and has not been attempted due to data limitation. However, an attempt has been made in the following section to understand the overall impact of non-tariff restrictions.

Impact of non-tariff barriers

If NTBs are constraining export growth at all, then their impact must in the growth of the particular export items subject to NTB. This being the concept, the NTB impact index (NTBI) has been derived as the ratio of average annual export growth of a particular item during the period in which it was subject to NTB and average annual export growth when it was not.

$$NTBI = \frac{g_{ij}}{g_{ij}B}$$

Where

$g_{ij}B$ = Average annual export growth of commodity i from India to country j when commodity i was subject to NTB.

g_{ij} = Average annual export growth of commodity i from India to country j when there was no NTB.

The index thus derived for 10 major SITC categories of exports to the USA (see Table 4.1) indicates that NTBs did restrict India's exports growth. In all commodities except paper and paper board (SITC 642) export growth has

Table 4.1

Non-Tariff Barrier Impact Index (NTBI)

SITC No.	Product Description	Nature of NTB	Time Period of NTB	Coverage of NTB	NTBI#
062	Sugar confectionary etc.	VL,GQ	1982-86	99.30	3.74
112	Alcoholic beverages	ST	1983-86	100.00	5.24
122	Tobacco,manufactured	ST	1983-86	50.00	2.83
612	Manufactures of leather etc.	CVI,MON	1981-83	8.50	1.06
642	Paper and paperboard	ST	1983-86	6.70	-ve
678	Tubes,pipes and fittings	ADD,CVI,ADI	1985-86	78.00	63.53
679	Iron and steel casting etc.	CVI	1984	98.00	2.34
713	Internal combustion piston engines etc.	SUT	1983-86	52.00	150.71
785	Moter cycles.moter scooters etc.	ATQ,SUT	1983-86	0.20	0.35
851	Footwear	CVI,MON	1981-84	97.00	1.31

Source: Calculated from UNCTAD Data Base on Trade Measures.

Note: # NTBI has been estimated as the ratio of growth rate of export during the period without NTB to growth rate of export during the period with NTB.

been much higher under situation of no NTB compared to a situation when there was NTB. As the result suggests, the export of alcoholic beverages which was subject to specific taxes and export of tube pipes and fittings of iron and and steel which subject to anti-dumping duty and anti-dumping and counter vailing investigation during 1985 to 1986, were the worst affected. It has not been possible to extend this analysis to other commodities due to data limitation.

A conclusion drawn on the basis of results obtained from such a small sample may be misleading but even then our result does support the view that NTBs may have serious implication for exports growth. The growth restraining impact of NTBs on exports could be observed in the declining shares of commodities subject to NTBs. in US or Japanese total imports from the world.

Revealed Comparative Advantage and NTBs

Prof Ingo Walter (1971) calculated competitive position and non-tariff barrier factor for about 60 products in the group of manufactures and semi-manufactures which are of export interest to LDCs in particular. The study revealed that products which had already achieved competitiveness are also those which are most likelty to be subject to non-tariff barriers. We undertake a similar exercise for Indian exports to USA and Japan. In USA there were 32 SITC (3 digit level) categories in which India faced non-tariff restriction, of which fifteen categories had revealed comparative advantage. Mention should be made that there are 40 categories in which India had revealed comparative adantage in USA. In Japan we identified 56 SITC (3 digit level) categories in which Indian exports were subject to various non-tariff barriers. Out of 56 categories 12 categories had revealed comparative advantage. On the whole in Japan India had revealed comperative advantage in 21 SITC (3 digit level) categories. A quick look over the product groups both in Japan and USA in which there were NTBs indicates that these products of export interest chiefly of LDCs.

Factors Leading to Imposition of NTBs.

The pertinent question that arises out of the whole issue of imposition of non-tariff barriers on a particular commodity or commodity group, is identifying the factors leading to imposition of NTB on a particular commodity. Non-tariff measures rather than non-tariff barriers are used as a trade policy measure to protect a particular industry when the industry is not competitive. The other kind of reasoning is the balance of payments consideration due to foreign exchange crisis in the importng country. The second case mainly relates to LDCs. We took the first line of reasoning and tried to examine the exact nature of its influence on the decision as to impose NTB or not. The questions addressed are the following:

(i) How is the imposition of NTB related to Revealed Comparative advantage of the exporting country in the concerned commodity?

(ii) Does the imposition of NTB on exportation of a particular commodity depend on the exporting country's market share of the product in the importing country?

(iii) How is imposition of NTB related to growth of exports of a particular product from a particular country?

Based on these questions we formulate three hypotheses:

Hypothesis 1: Higher the revealed comparative advantage, higher is the coverage of non-tariff barriers.

Hypothesis 2: Higher the market share of the exporting country in the importing country, higher is the coverage of NTBs.

Hypothesis 3: Higher the import growth from a particular country, the higher will be the coverage of NTBs.

To test the above hypotheses the following model has been used.

The incidence of non-tariff barriers has been estimated by the percentage of trade to total trade subject to NTB in a particular SITC category as is described in the methodology (Chapter 1). Since in most cases the non-tariff barriers existed for the entire study period we took average of these coverages as dependent variable. Similarly average share of the market and average growth during the period were estimated for the product groups subject to NTBs. The revealed Comparative advantage were estimated for 1983 according to methodology described in chapter 1.

Structure and Impact of Non-tariff Trade Barriers: Case Study of India vis-vis EEC, Japan and USA

ERRATA

Subject	Page No	Read as
1. $F_j = (D_i\ N_i\ /N_t\ )x100$	47	$F_i = (\Sigma D_i\ N_i\ /\ N_t)x100$
2. $C_{jk} = ((D_{ik,t-m}\ xV_{ik})V_{ik}$,--(2)	48	$C_{ijk} = ((\Sigma D_{ijk,t-m}\ xV_{ijk,t-n})/\Sigma V_{ijk,t-n})x100$ Where $D_{ijk,t-m}$ = Dummy variable that takes a value of unity if a NTM is applied to Tariff Line i from k to j or zero otherwise. $V_{ijk,t-n}$ = Value of imports in Tariff Line i in the year t-n from k to j.
3. $T= t_ix_i/x_i$	93	$T = \Sigma t_ix_i/\Sigma x_i$

The model:

The basic model Can be described by the following equation:

$CR_{ij} = f(RCA_{ij}, SW_{ij}, GO_{ij})$ ....(1)

where;

i = stands for commodity groups.

j = stands for importing country.

CR_{ij} = Average percentage of export of commodity group i from India to country j subject to non-tariff barrier(s).

RCA_{ij} = Revealed comparative Advantage of India in commodity group i to country j.

GO_{ij} = Average share of import of commodity group i from India in country j.

Gw_{ij} = Average growth of export of commodity group i from india to country j during 1980-87.

The RCA_{ij} has been defined as the ratio of exporting country's export share of commodity i to its total export to country j, to share of commodity group in importing country's total import from the world.

Thus, RCA_{ij} can be expressed as

$$RCA_{ij} = \frac{I_{ij}}{\Sigma I_{ij}} \Big/ \frac{W_{ij}}{\Sigma W_{ij}} \qquad \text{..........} (2)$$

Where

I_{ij} = India's export of commodity group i to country j

W_{ij} = j's total import of commodity group i from the world.

$$RCA_{ij} = Sw_{ij} \frac{\Sigma W_{ij}}{\Sigma I_{ij}} \qquad \text{..........} (3)$$

Since $Sw_{ij} = \dfrac{I_{ij}}{W_{ij}}$

Since RCA_{ij} can be expressed as a multiple of Sw_{ij} we took the following equations to test the above mentioned hypotheses.

$$CR_{ij} = \alpha_1 + \beta_{1ij}\, SW_{ij} + \gamma_{1ij}\, GO_{ij} \quad \text{..........}(4)$$

$$CR_{ij} = \alpha_2 + \beta_{2ij}\, RCA_{ij} + \gamma_{2ij}\, GO_{ij} \quad \text{..........}(5)$$

Where α_1 and α_2 are intercept parameters and β_{1ij}, β_{2ij}, γ_{1ij} and γ_{2ij} are coefficients of independent variables.

The regression results (see table ५.२) reveal the following:

$$CR_{ij} = \underset{(3.37)}{43.10} + \underset{(1.82)}{2.28}\ Sw_{ij} - \underset{(-.026)}{0.004}\ GO_{ij} \quad \ldots (6)$$

j = America

$$CR_{ij} = \underset{(7.50)}{79.99} + \underset{(.6615)}{.46}\ SW_{ij} - \underset{(-1.18)}{.1242}\ GO_{ij} \quad \ldots\ldots (7)$$

j = Japan

$$CR_{ij} = \underset{(3.73)}{43.10} + \underset{(1.82)}{2.16}\ RCA_{ij} - \underset{(-0.027)}{0.004}\ GO_{ij} \ldots (8)$$

j = America

$$CR_{ij} = \underset{(7.50)}{79.98} + \underset{(0.66)}{2.71}\ RCA_{ij} - \underset{(-1.18)}{0.12}\ GO_{ij} \ldots (9)$$

j = Japan

t - statistics are displayed in parentheses.

The cross-section study for India vis-a-vis USA has been undertaken for 21 SITC categories which were subject to non-tariff barriers in the USA for average coverage during 1980-86 has been taken as dependent variable. The figures for revealed comparative advantage corresponds to mid-year of the study period i.e., 1983. We applied the ordinary least square and the estimated equation look like the following:

Firstly, the equations do not have very good fit. The explanatory power of the model is low which is understood from low R^2. The regression result suggests that incidence of NTBs is positively influenced by revealed comperative advantage. The share of market captured by the exporting countries has

Table- 4.2

The Regression Results

Dependent Variable	No. of obj.	Coefficients α_1 or α_2	β_1 or β_2	γ_1 or γ_2	R^2	d.w. Statistics	RSS	F Statistics
	$CR_{ij} = \alpha_1 + \beta_{1ij} SW_{ij} + \gamma_{1ij} GO_{ij}$ .... (4)							
CR_{ij} j=USA	21	41.13 (5.31)	2.34 (2.14)	0.004 (-.026)	0.268	1.80	26345	4.39
CR_{ij} j=Japan	29	79.99 (7.50)	0.46 (0.66)	-0.124 (1.18)	0.06	1.59	39876	0.83
	$CR_{ij} = \alpha_2 + \beta_{2ij} RCA_{ij} + \gamma_{2ij} GO_{ij}$ .... (5)							
CR_{ij} j=USA	21	43.10 (3.73)	2.16 (1.82)	-.004 (-.027)	0.16	1.66	24340	1.69
CR_{ij} j=Japan	29	79.98 (7.50)	2.71 (0.66)	-0.12 -(1.18)	0.06	1.59	39875	0.83

Note: Figures in the parantheses indicate t statistics.

significant impact on incidence of NTBs in case of USA but insignificant in case of Japan. Thus, our hypothesis 1 & 2 can not be rejected at the .05 level of significance in case of USA. In case of Japan, none of the hypothes s holds good. The relation between incidence of NTBs and export growth has been negative, though not significant, in both the cases. Therefore, the hypothesis of positive association between incidene of NTBs and growth of exports may be rejected.

As par the t-statistics in both the countries, the relationships are positive for RCA. The t-statistics shows that for USA the β coefficient is high and signifi.cant. But in case of Japan it is insignificant.

Probit Analysis

We also tried to examine the hypothesis of positive association between share of import supplied and the incidence of NTBs by utilising a probit model.

The model is useful in a situation when the explained variable is not quantifiable.

Case 1 - U.S.A.

Let Y_{ij} = export of commodity i from exporting country (i.e., India) to country j (j= Japan, USA), assumes a value of unity if it is subject to NTB(s) in the importing country or zero otherwise.

In notational terms:

Y_{ij} = 1 if subject to NTB(s)

= 0 otherwise

The model explains how the dummy dependent variable, i.e., occurrence of 'zero's and 'one's are influenced by the explanatory variables. In the first model one independent variable was considered.

The independent variable is India's share of export of commodity i to importing country's total import of i (W_{ij}).

The following equation was tested.

$$Y_{ij} = \alpha + \beta W_{ij} \quad ....(8)$$

where α and β are the intercept and slope parameters respectively.

The results are summarised as follows:

The estimated equation:

$$\underset{}{Y_{ij}} = \underset{(-23.775)}{-1.0729} + \underset{(1.8161)}{.0049}\, W_{ij} \quad ......(9)$$

Total No. of observations = 1331

Observations with value one = 197

Observations with value zero = 1134

α = -1.0729, t Ratio = -23.775

β = .0049, t Ratio = 1.8161

Maddala R-Square = .002389

Prediction success Table

Percentage of right predictions = .85199

Sum of squared Residuals = 167.44

Though the coefficients are significant at .05 level and there is a high percentage of right predictions; the results obtained are not very meaningful as the estimated equation implies that even if India supplies 100 per cent of the importing country's requirement the left hand side (Y_{ij}) remains negative. This suggests that commodities on which NTBs are levied are those of general importance to LDCs and India is included in the countries to which the barriers is applicable even though India's share in the country's total imports is small.

Case-II Japan

The same exercise undertaken for Japan gave a comparatively better result.

The estimated equation:

$$Y_{ij} = \underset{(-5.227)}{-0.3366} + \underset{(3.8477)}{.01226}\ W_{ij} \quad \ldots\ldots (10)$$

Total No. of Observations = 478

No of Observations at one = 196

No of observations at zero = 282

α = -0.3366 with t ratio = -5.227

β = .01226 with t ratio = 3.8477

Maddala R Square = .03281

Prediction Sucess Table

Percentage of right predictions = 0.61506

Sum of squared Residuals = 111.84

The estimated equation (10) implies that higher the share of import supply the higher is the probability of the commodity being subject to an NTB. The equation suggests that a more than 30 per cent share of Japanese import supply may lead to an imposition of NTB with a positive probability.

Concluding Remarks

In a world of growing economic interdependence, sustained economic development of almost every nations depends on the expansion of trade in goods and services.

The problem of expanding, diversifying and stabilizing the exports of developing countries has been the main thrust of attention both to development planners and to those concerned with an evolution of the international trading environment. Besides the supply factors LDCs' export expansion depends on the growing demand for its exports from the developed economies. Demand for LDCs' exports depends on the trade policy adopted by the Developed economies. A protectionist trade policy in the developed economies adversely affects the LDCs while a more liberal trade regime benefits both the LDCs and DCs.

This study attempted to analyse the nature, extent and types of non-tariff barriers to India's export to the EEC, Japan and the USA. The study also analysed India's trade relations with EEC, Japan and USA in the 1980s. It identified commodities on the basis of revealed comparative advantage in these countries. The entire study for the USA and Japan was undertaken at the SITC 3 digit level. While for EEC the study classified the commodities into 21 broad categories according to the harmonised commodity classification. The study revealed that in all the countries India's exports are concentrated to a few commodities.

Chapter 1 of the study analysed the nature, extent and types of non-tariff barriers from a general point of view. This chapter also identified major non-tariff barriers existing in the developed economy markets and gave their operational details. An intensive literature survey was undertaken which suggested that incidence of non-tariff barriers increased in the 1970s and 1980s. However, the trend of protectionism is ambiguous with falling tariff barriers and increasing non-tariff barriers. However, it was observed [(viz., Sampson & Yeats, (1977), and UN Food & Agricultural Organization (1979)] that tariff equivalents of some NTBs (e.g. variable levies) are so high that this may nullify the impact of tariff reductions. Since the restrictive effects of non-tariff barriers are not directly measurable, assessment regarding the overall trend of protectionism is difficult. Neither the frequency index of non-tariff barriers nor the coverage index of non-tariff barriers can indicate the restrictiveness of the barriers. As already mentioned in chapter 1 even the coverage index which weights the incidence of non-tariff barriers by value or volume is not without bias - it under-estimates the restrictiveness, if the non-tariff barriers are effective in limiting imports while it over-estimates the restrictiveness if the measure is not binding. (See Chapter 1).

Because of the intractable problems associated with measuring the degree of restrictiveness of non-tariff barriers ex ante, it is better to assess their impact on developing countries' export performance ex post. But here again it is difficult to seperate out the impact of non-tariff barriers from other factors. A study by Anne Krueger and Helen Hughes (1980) indicates that based on the export performance of the developing countries in manufactured goods during the 1970s, it is difficult to infer that increasing protection was the dominant factor at work. To be sure, developing countries would have found better (except possibility for the established exporters of textiles and clothing who received the rents under VERs) in the absence of protectionist measures".

The study calculated the tariff rate according to 3 digit SITC level for Japan and USA and presented the tariff rate for India's principal items of exports and those which have revealed comparative advantage. The tariff barriers to

India's trade with EC were also examined. The results suggest that tariffs have been reduced in the post-Tokyo Round compared to the levels in the pre-Tokyo Round.

Detailed analysis of specific products and countries indicates that even after tariff cuts in the Tokyo Round the EC MFN tariff structure is biased against the products of export interest to LDCs. But India is less affected because India gets generalised system of preference in 63 per cent of its exports to EEC. Tariffs in the USA and Japan do not pose serious problem to her principal exports. However, in certain categories like outer garments of textile fabrics (SITC 843), Leather (SITC 611), Tea and Mate (SITC 074) in Japan, SITC 843 in USA (SITC 121) the tariff rates are high.

The study analysed the process of European integration and its impact on LDCs with special reference to India. Detailed analysis reveals that the process of unification for a single European market with the preferential hierarchy it established puts a country like India at the bottom of its preference scale. Some measures like requirement of harmonised product standard (ISO 9000 is a case in point) may put countries like India in a disadvantageous position. The gain in competitiveness and complementarity among the EC members will also work against non-EC countries. However, India may be benefited from the post integration public procurement system which aims at ensuring that all major purchases are advertised throughout the community and contracts are awarded without discrimination. The study examined the non-tariff barriers to the EC during the period 1980-86 and found that India is also subject to various non-tariff barriers in the commodities which emerged as dominant exports to the

EC. The study provides detail tabulation of NTBs in 8 EC member countries and found that the incidence of NTBs is relatively higher in Greece, France and Denmark. Overall export performance to the EC gives a bright picture with growing market share in the EC in the late 1980s.

Detailed study regarding non-tariff barriers was undertaken for all commodity groups at the SITC 3 digit level in Japan and the USA. The Coverage and frequency indices were calculated. The study identified 56 commodity groups which are subjected to various non-tariff barriers in Japan. But few of these commodities are important in India's export basket to Japan. Only two principal items 'Ores and concentrates of base metals' (Coverage in 2.9%) and crustaceans and molluscs (SITC 036, coverage 100%) were subjected to non-tariff barriers in Japan. The coverage ratio of NTBs in Japan taking all items of exports from India together was 51 per cent. On the whole in Japan health and safety regulation was identified as most widely used non-tariff restriction. In most cases Japan used more than one non-tariff restriction.

In the US there are nearly 30 SITC 3 digit commodity groups subject to non-tariff barriers. Detailed study reveals that incidence of non-tariff barriers on India's principal items of export to the USA was low. However, most of the textile items were subject to MFA. On the whole the coverage of non-tariff barriers do not pose serious problem to India's major items of exports to USA.

The study also attempted to analyse the impact of non-tariff barriers. While studying the impact of a particular NTB is a difficult task due to data limitations, one straight forward way of looking at the problem is to see the impact of non-tariff barriers on growth. This study was limited to ten SITC categories exported to USA in which the NTB did not exist for the whole study period. The study found that growth of exports has been much higher in the years when no non-tariff barriers were levied. Those commodity groups include footwear, tubes, pipes and fittings of iron or steel (SITC 678) and tobacco.

The study attempted to idenify the factors leading to imposition of non-tariff barriers and it was found that most of the commodities in which India captures a major market share of the importing country were subject to NTBs. This hypotheses was not rejected at the .05 level of significance when the importing country was America. In case of Japan, the relationship was positive but not significant.

The second hypothesis that the incidence of NTBs is positively associated with the revealed comprative advantage was not rejected at the .05 level of significance when the importing country was America and in case of Japan the relation was insignificant but positive.

Lastly, contrary to our hypothesis of NTBs positive relationship between export growth and incidence of NTBs, our observation reveals an inverse trend though insignificant in both the cases.

Statistical analysis do not negate our hypotheses of positive associations between RCA and market share in the importing country on the one hand and incidence of NTBs on the other. Strangely, as against a priori postulate, a weakly negative relation is found between incidence of NTBs and export growth. This kind of relation may result from other factors which are not covered in this study. To understand the true nature of relationship a further disaggregated level of analysis with appropriately specified model is necessary.

The growth of non-price factors in trade has been very rapid. India should give more emphasis to counter these factors by better organisation of trade, improving quality of the product etc. A more detailed identification of factors on which NTBs are based is necessary so that exporter can be educated accordingly. This should ensure that manageable barriers do not become constraint on the growth of Indian export.

Appendix D

India's Exports to EEC : Shares, Revealed Comparative Advantage and Growth
1983 To 1990

HS Code	Nimexe-Harmonised	Commodity Description	Share (%) to India's Total Export to EEC EEC-12(90)	EEC-12(87)	EEC-10(83)	Rank EEC-12 1990	EEC-12 1987	EEC-10 1983	India's Revealed Comparative Advantage in EEC EEC-12(90)	EEC-12(87)	EEC-10(83)	India's Export Growth to EEC (Percent) EEC-12 1983-90	EEC-12 1983-87	EEC-10 1987-90
62	61	Articles of apperel and clothing sccessories, not knitted or	15.28	15.46	11.24	1	1	2	7.59	8.22	7.65	15.92	14.70	17.57
71	71+72	Natural or cultured pearls, precious or semi-precious stones	13.39	11.34	14.38	2	2	1	6.61	5.64	5.91	9.83	-0.20	24.78
42	42	Articles of leather; saddlery and harness; travel goods,	6.78	4.85	2.36	3	7	11	17.24	11.19	7.62	28.97	26.73	32.02
52	55	Cotton	6.28	9.19	3.53	4	3	9	8.62	9.88	3.99	20.46	34.55	3.95
41	41	Raw hides and skins (other than furskins) and leather	5.26	8.60	6.94	5	4	5	10.53	14.31	14.76	6.65	11.76	0.18
57+58	58	Carpets and other textiles floor coverings	4.89	6.32	9.58	6	5	3	10.32	13.21	19.52	0.79	-4.57	8.41
60+61	60	Knitted or crocheted fabrics	4.34	3.81	1.53	7	9	15	3.08	2.49	1.31	28.80	33.10	23.29
64	64	Footwear, gaiters and the like; parts of such articles	4.14	3.99	1.99	8	8	13	4.83	4.26	2.55	23.13	25.93	19.48
09	09	Coffee, tea, mate and spices	2.81	5.22	7.86	9	6	4	7.99	7.92	9.33	-4.23	-4.39	-4.01
03	03	Fish and crustaceans, molluses and other aquatic invertebrat	2.37	2.13	1.65	10	10	14	2.97	2.68	3.35	16.87	12.95	22.31
23	23	Residues and waste from the food industries; prepared animal	2.28	1.27	5.93	11	18	6	3.38	1.55	5.02	-3.25	-27.96	43.38
54+55	51+56	Man-made filaments	2.20	0.66	0.23	12	26	41	3.38	0.49	0.21	52.80	37.12	76.54
63	62+63	Other made-up textile articles; sets; worn clothing and	2.14	1.43	3.66	13	14	8	7.73	5.77	15.72	2.72	-16.35	35.07
84	84	Nuclear reators, boilers, machinery and mechanical appliance	2.10	1.84	1.13	14	11	19	0.16	0.15	0.12	21.14	19.54	23.32
27	27	Mineral fuels, mineral oils and products of their distillati	1.99	0.32	4.61	15	35	7	0.23	0.03	0.22	-1.63	-45.46	115.95
29	29	Organic chemicals	1.86	1.30	0.54	16	17	28	0.68	0.46	0.21	32.26	31.71	32.98
72+73	73	Iron and steel	1.62	0.36	0.19	17	34	46	0.36	0.08	0.05	50.86	24.47	94.96
25	25	Salt; sulphar; earths and stone; plastering materials,lime	1.46	1.37	0.99	18	15	23	3.18	2.76	1.68	17.32	14.99	20.49
15	15	Animal or vegetable fats and oils and their cleavage product	1.24	0.45	1.33	19	30	16	3.00	0.94	2.05	9.95	-19.07	65.45
32	32	Tanning or dyeing extracts; tannins and their derivatives; d	1.19	1.13	0.44	20	20	33	1.91	1.87	1.01	27.79	34.00	19.97
26	26	Ores, slag and ash	1.10	0.95	0.72	21	22	24	1.48	1.23	0.69	17.81	13.33	24.06
08	08	Edible fruit and nuts; peel of citrus fruits or melons	1.06	1.82	1.01	22	12	22	1.11	1.73	1.04	11.71	22.62	-1.33
50	50	Silk	1.02	1.33	1.07	23	16	20	12.32	20.61	16.65	10.19	12.01	7.82
		Total Share	86.79	85.15	82.91									

Source: Calculated from EUROSTAT, European Commission, Various Issues.

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