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THE WTO AGREEMENT ON RULES OF ORIGIN
Implications for South Asia

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ABSTRACT

From neutral trade policy devices employed to identity country of origin of commodities, the rules of origin are emerging as protectionist tools. Nation-states, as they are increasingly denied of conventional trade policy tools, are reasserting themselves by evolving new and less visible weapons of intervention. The misuse of rules of origin as protectionist tools is widely reported from PTAs among developed countries, such as EEC and NAFTA. More recently, non-preferential rules of origin are also being used for protectionist purpose. It is such protectionist adaptation of the rules of origin that prompted the WTO to launch the HWP to evolve common rules of origin for all countries. The present study is a critique of the harmonization work programme. The central objective of the ARO and also the HWP is to ensure that the rules of origin are employed without/ or with least trade distorting effects. But, as our study shows, it would be too optimistic to expect such an outcome from the HWP. On the contrary, even if it is successfully completed, the HWP is likely to leave considerable scope for misuse of rules of origin for protectionist purpose. Further, the new multilateral regime, even if it succeeds in establishing semblance of an order in the arena of rules of origin, is likely to have unequal effects on members. The moot question is as to whether the adopted harmonised rules match the trading interests of the developing nations. The picture emerging from our analysis of outstanding disputes is not very encouraging for the developing countries. They belong mainly to the traditional areas of western protectionism against developing countries. The fear that the developed countries are trying to manipulate rules of origin to compensate for the loss of tariff and other conventional barriers, therefore, cannot be ruled out.

Key Words: World Trade Organisation, Protectionism, Rules of Origin, Harmonisation Work Programme, Nationality of Products, Wholly Obtained Goods, Substantial Transformation, Trade in Textile Articles

JEL Classification: F02, F13, F14, F15

Introduction

The history of 'rules of origin', i.e., the criteria for determining the national source of origin of products, must be as old as the practice of discriminatory commercial policy by nation states[1]. As modern nation states got consolidated and as they began to employ discriminatory commercial policy tools there arose the need to identify the country of origin of commodities. Rules of origin have become an essential part of any trade policy regime, for commercial policy tools, more often than not, discriminate among countries. Administration of quotas, preferential tariffs, anti-dumping actions, countervailing duties, government procurement, etc, requires clearly defined rules of origin. The rules of origin are also important for application of labeling and marketing requirements as well as for collection of trade statistics. But, the process of determining origin might have been relatively easy and dispute free until recently, because production of individual commodities rarely involved more than one country. It is the growing internationalization of production and consequent involvement of more than one country in the production of most commodities that made the origin of commodities a contested terrain.

Even though rules of origin are supposed to be used as devices to support implementation of trade policy instruments, their misuse, which has become quite rampant in recent times, transform them into trade policy instruments *per se*[2] . It is a widely acknowledged fact that as the GATT rounds succeeded in reducing the height of the tariff walls and the incidence of other overt barriers, the contracting parties, especially the industrialized ones, tended to resort to less transparent, covert measures of protection. It is such misuse the rules of origin that necessitated the Uruguay Round (The WTO) agreement on rules of origin (hereafter ARO). The ARO requires WTO members to ensure that their rules of origin are transparent; that they do not have restricting, distorting, or disruptive effects on international trade; that they are administered in a consistent, uniform, impartial and reasonable manner and that they are based on positive standards. The long-term goal of the agreement is to harmonise non-preferential rules of origin so that the same criteria are applied by the WTO members whatever the purpose for which they are applied.

The distinction that the ARO makes between preferential and non-preferential rules of origin is important to be emphasised here because the former are excluded from the harmonization work programme of the ARO. The preferential rules of origin are those applied in the context of preferential trading arrangements (PTAs) such as customs unions, free trade areas or even non-reciprocal arrangements like the Generalized System of Preferences (GSP). Whereas the non-preferential rules of origin are those used in non-preferential commercial policy instruments such as most favoured nation tariffs, anti-dumping and countervailing duties, safeguard measures, origin marking requirements, and any discriminatory quantitative restrictions or tariff quotas. The non-preferential rules also include those used for government procurement and trade statistics.

Defined in a general sense the proposed study is intended to be a broad critique of the WTO proposals on common rules of origin. The critique, however, is undertaken mainly from the point of view of implications of the new rules for south Asian countries, especially India. The introduction of the Harmonised rules of origin would essentially mean a two-way movement away from *status quo*. First, the exporting member countries would encounter a shift in the rules of origin of the importing countries towards the new harmonised rules of the WTO. Needless to say that this will have implications for market access and export competition. For any member country it would also mean replacement of the domestic rules of origin with the common rules of the WTO with all its attendant implications for import policy administration. The present study would make an attempt to analyze the implications of both the above dimensions of change being introduced by the common rules of origin from the point of view of south Asian countries. If the points of conflict in the harmonisation programme were to be taken as an indication, the rules of origin pertaining to textiles would be a major area of disagreement between developing and developed countries. In view of the contentious nature of the rules of origin pertaining to textiles, and the big stakes involved for South Asia, the study would place special emphasis on textiles and garments.

This report is organized in five Sections. In Section 2 we discuss economics and politics of rules of origin. In Section 3 we examine the structure of the ARO and review the progress of the Harmonization Work Programme (HWP). Section 4 is devoted to a critique of the HWP, mainly from the point of view of the South Asian Countries. In Section 5 we put together important observations and arguments of the study.

Section 2

Economics and Politics of Rules of Origin

The rules of origin have never been so controversial as they have become in recent times. Their rise to prominence can be attributed to three important reasons. First, on account of growing internationalisation of production origin determination is becoming increasingly difficult and dispute prone. Second reason is the increasing incidence of discriminatory trade policy tools and the consequent need to determine the country of origin so that they can be effectively targeted. Third one is the growing tendency to make use of the rules of origin as protectionist tools *per se*, instead of using them as devices supporting more overt trade distorting policy tools.

Internationalisation of Production and 'Nationality' of Origin

Internationalisation of production is making determination of 'nationality' of products increasingly difficult. If a product were produced almost entirely in one country, as in the case of many primary commodities, the nationality of origin would be quite obvious. This perhaps was the case of most products traded internationally until a few decades ago. This is also the message emanating from Tables 1 and 2, which show that even now there is large number of countries without well-defined non-preferential rules of origin. The fact that large number of countries did not have non-preferential rules, and that even those countries, which had them, were having under evolved rules, suggests that they were not widely used in trade policy praxis[3]. The fact that origin disputes were rare in the past also strengthens the above argument.

Table 1: Review of Notifications on Rules of Origin (As on 15 November 2002)

Item	Number of Members
Members that have notified Non-Preferential Rules of Origin	42
Members that have notified that they do not have Non-Preferential Rules of Origin	41
Members that have not notified Non-Preferential Rules of Origin	46
All Members	129
Members that have notified Preferential Rules of Origin	84
Members that have notified that they do not have Preferential Rules of Origin	4
Members that have not notified Preferential Rules of Origin	42
All Members	130

Source: WTO (2002): Eighth Annual Review of the Implementation and Operation of the Agreement on Rules of Origin, 3 December, G/RO/55.

But, as a result of the process of internationalization of production few products are produced now exclusively in one country. The involvement of multinational companies also tends to complicate the question of origin. When 'nationality' of products is less obvious, there arises the need for the rules of origin determination. It is possible, depending on the purpose, to device different methods to determine origin. In fact, currently a variety of methods and their combinations

are in vague among countries of the world. The first attempt to evolve a common approach for setting rules of origin was the Kyoto Customs Convention, which laid down some common principles in 1977 (Stephenson and James 1995: 83-84). According to the Kyoto convention the country of origin of a product is the country where last 'substantial transformation' takes place. The last substantial transformation is defined as the one that gives the commodity its essential character. Indeed, such broad principles of 'substantial transformation' are amendable to a variety of interpretations. In order to impart clarity and practical significance to the principle of substantial transformation, the Kyoto convention prescribed different methods of determining substantial transformation such as; (a) change in tariff heading (CTH) as a result of domestic processing of imported goods in the originating country; (b) prescribed minimum percentage of value addition in the originating country; and (c) occurrence of specified processing operations in the originating country. Each of these methods is known to have specific advantages as well as limitations (Palmeter 1993, Stephenson and James 1995). The CTH method, which is considered to be least cumbersome is too dependent on the system of trade classification used, none of which are developed with a view to capture the issue of transformation. The value addition method suffers from lack of predictability besides the obvious bias against countries with lower wage rates. The method of specified operations is not amenable for making general principles and tends to vary from industry to industry. Further, all the methods require periodic revision for adapting the origin granting framework to changes in technology. The methods outlined by the Kyoto convention, however, were not binding on the members of the Customs Cooperation Council (CCC), which administers the convention[4].

Table 2: Members Notifying Nonexistence of Rules of Origin

Members that have notified that they do not have Non-Preferential Rules of Origin	Members that have notified that they do not have Preferential Rules of Origin
Bolivia, Brazil , Brunei Darussalam, Burundi, Chad , Chile, Costa Rica, Cyprus, Dominica , Dominican Rep., El Salvador, Fiji , Guatemala, Haiti, Honduras Iceland, India, Indonesia , Jamaica, Kenya, Macao, China , Malaysia, Maldives, Malta , Mauritius, Mongolia, Namibia, Nicaragua, Oman, Pakistan Panama, Papua New Guinea , Paraguay , Philippines, Singapore, Suriname, Thailand, Trinidad & Tob. Uganda (G/RO/N/12), United Arab Emirates (G/RO/N/17), Uruguay (G/RO/N/12)	Burundi Chinese Taipei Hong Kong, China Macao, China

Source: WTO (2002): Eighth Annual Review of the Implementation and Operation of the Agreement on Rules of Origin, 3 December, G/RO/55.

Discriminatory Regimes and Origin Rules

The history of discriminatory policies in the post GATT period, perhaps, is as old as 1947, when the General Agreement was signed. The General Agreement provided for the Most Favoured Nation (MFN) treatment among its contracting parties. Obviously, contracting parties had to evolve some mechanism for identifying products originating from MFN and non-MFN sources. However, it was the Rome treaty and

the formation of the European Economic Community in 1957 that paved way for the emergence preferential trading arrangements (PTAs), which had tended to proliferate in the recent past. The PTAs, by definition, are discriminatory in nature. They offer preferential treatment to a group of designated partners; i.e., for members in the case of customs unions and free trade areas, and for eligible beneficiaries in the case of non-reciprocal arrangements such as the GSP. In any case, functioning of PTAs requires rules of origin to determine whether a consignment of goods is eligible for preferential treatment or not (Hirsch 2002). Therefore, proliferation of PTAs has necessarily been accompanied by proliferation of rules of origin (Stephenson and James 1995). The rules of origin are particularly important in the context of free trade areas, which are vulnerable to the problem of trade deflection (James 1997). In free trade areas, unlike in customs unions, member countries are not required to keep common external tariff. The existence of inter-country differences in external tariffs in a free trade area would obviously induce trade deflection, which is nothing but redirection of imports from third countries through the partner country with the lowest tariff, with a view to exploit the tariff differential between member countries. In fact, all imports to the FTA would tend to enter through the member country with lower external tariff regardless of where they are finally consumed. Such trade deflection, if left unchecked might also ultimately force member countries with higher external tariffs to lower their tariff levels, and convert the FTA effectively into a customs union with the common external tariff becoming that of the lowest tariff member of the FTA. Therefore, FTAs practice stringent rules of origin to prevent trade deflection.

Economic Effects of Rules of Origin

The third reason for the growing interest in the rules of origin is the widespread tendency to make use of them as protectionist tools *per se.* As

noted earlier, nation-states, as they are being deprived of the conventional tools of protection, are increasingly resorting to the contingent forms of protection. Almost all contingent forms of protection require well-defined rules of origin as a complementary mechanism for determining country of origin of products so that they are well targeted. For instance, rules of origin are required to target measures such as countervailing duties, and anti-dumping actions against countries or firms, which are found to be engaging in such unfair trade practices. Rules of origin are also required for preventing circumvention of anti-dumping and countervailing actions through product shifting and other perceived abuses (Klieinfeld and Gaylor 1994)[5]. However, preferential as well as non-preferential rules of origin are supposed to be used as neutral tools, causing no direct or indirect trade distorting effect on their own. But, as more recent developments indicate, they are being widely used as trade barriers, designed specifically to protect domestic producers (James 1997:119, Vermulst and Waer 1990). It is to the economics of the use of rules of origin as trade policy tools *per se* that we turn now.

The literature on the economic effects of rules of origin is in its early stages of development. This conspicuous lag in the development of the literature can be attributed to the assumption of trade-neutrality of the rules of origin. The commercial policy literature has tended to approach the rules of origin as trade-neutral tools, employed to support other policy tools with more direct effects on the trade flows. Naturally, the literature focussed on the effects of trade policy tools like tariffs and quotas, which affected trade flows rather directly. Further, the studies on preferential rules dominate the available literature on rules of origin. An overriding theme of this literature has been the question of consistency with the underlying policy goals of the PTA. In terms of welfare objectives, the PTAs should ideally seek maximisation of net trade creating effects. The efficacy of the rules of origin, therefore, is judged in terms of the above goal of trade creation.

As stated earlier, the rules of origin are required to ensure that the benefits of preferential tariffs are confined to the members of the PTA and that the non-members are excluded. In free trade areas they are also supposed to check trade deflection (James 1997:118-9). Both these goals are best served by making the rules of origin more stringent. But, there are some obvious tradeoffs. Generally speaking, stricter the origin rules lower would be the possibility of net trade creation. The FTAs are supposed to generate trade-creating effects because they generate the tendency to shift imports from inefficient home sources to efficient member sources. Higher the compliance cost of rules of origin, lower will be the incidence of such trade creating impulses. In fact, because of the high compliance cost, efficient producers within the FTA might even choose not to claim the privilege of preferential tariffs. In any case, higher compliance costs would limit the FTAs ability to reach potential levels of trade creation. Strict regimes of rules of origin might also add to the trade diversion effects of the FTA. Trade diversion occurs when preferential tariffs induce shifts in imports from efficient external suppliers to relatively inefficient member sources. A strict regime of rules of origin, with stringent local content requirements, might force the final goods producers within the PTA to source their inputs from higher cost internal sources, thus adding to the trade diversion effects of the PTA. This policy of protecting the regional intermediate goods producers might raise the cost of production of producers of final goods, forcing them also to petition for protection. Therefore, according to (Hoekman 1993) such regimes of rules of origin – especially in the form of local content requirements – could lead to cascading of protection along the production chain. Consumers, needless to say, would be at the receiving end of such protectionist policies.

Incidentally, if the origin conferring system were cumulative, it would help reduce the negative effects of the rules of origin

(Hoekman1993). If the origin system were cumulative, local content or value added required for originating status would be calculated at the level of the PTA, and not at the level of individual member countries. In other words, it would make the origin system more liberal. In short, the success of a PTA, in terms of net-trade creation and welfare, would depend a great deal on its rules of origin[6].

In the case of non-reciprocal PTAs such as the Generalised System of Preferences (GSP), which is meant to promote exports from developing country beneficiaries, higher the compliance cost of rules of origin lower would be the use of the tariff margin by the beneficiaries. Many studies on GSP schemes have pointed out the restrictive role played by the rules of origin (Brenton and Manchin 2002, Inama 1995). Similar criticisms have been leveled against the EEC's special preferential arrangements with the African countries (Brenton and Manchin 2002)). Recently, a World Bank study (Mattoo, *et.al*. 2002) has highlighted the extremely restrictive role of the rules of origin in the much-publicized Africa initiative of the United States (The Africa Growth and Opportunity Act -AGOA). In many such affirmative preferential arrangements, the poor countries, which are meant to be helped, find it extremely difficult to meet the origin requirements. The AGOA, for instance, insists that apparel be assembled in eligible African countries and that yarn and fabric be made either in the United States or in African countries. In addition a number of customs requirements need to satisfied to claim the US concession.

In view of the recent developments in the literature it is important that we add a caveat here. The traditional analyses of customs unions based on trade creation and diversion are known to suffer from some important limitations, including the failure to take into account the interaction effects between final and intermediate goods markets. The complementarities between final and intermediate goods are particularly

important for a discussion on the effects of rules of origin. The overall impact of the rules of origin would depend quite a lot on the interaction between final and intermediate goods market (Krishna and Krueger 1995 and Ju and Krishna 1998)

To summarize the discussion so far, it is now widely recognized that the rules of origin, more often than not, violate the trade neutrality assumption. This is obvious from what we have seen in the case of PTAs. It is possible to keep the preference margin unchanged and still manipulate the trade flows by changing the rules of origin. Further, there could be situations, wherein the cost of compliance of the rules of origin exceeds the preference margin, offsetting the tariff margin and also thereby making the policy of preferential treatment absolutely meaningless. There could also be situations when preferential rules have detrimental effects on non-members. It is widely acknowledged that the trade diversion effects caused by preferential tariffs adversely affect the non-members. The rules of origin, especially in the form of local content requirements, as we have already seen, can add to such woes of non-members. The local content requirements might force downstream producers in the FTA to source their inputs from higher cost regional producers of intermediates. Thus, for non-member producers of intermediates the rules of origin of the FTA might act as a stiff NTB, the tariff equivalent of which could very well be higher than the common external tariff of the FTA. Therefore, as Hoeckman (1993) has pointed out, for non-members the upper bound of the tariff equivalent of an origin rule could very well be higher than the MFN tariff of the FTA. The rule that upper bound of a rule of origin is the MFN tariff applies only for intra-trade flows. Further, the tendency to use the rules of origin as NTBs against non-member suppliers of intermediates is reported to be becoming fairly widespread (James 1997:119). This tendency is reinforced by the global liberalization process under the auspices of the

WTO, which had reduced the MFN barriers, and hence the margin of preferences of the FTAs, old as well as new. The European Union, for instance, is known to have been designing very tough origin regulations for certain strategic industries to ward off competition from non-member producers (Vermulst and Waer 1990). The very same criticism is applicable to NAFTA as well, the origin system of which is notoriously protectionist, especially in the case of textiles and clothing. The NAFTA rules of origin in the area of textiles and clothing grant unjustifiably high protection to the upstream producers, severely restricting market access for external suppliers.

Non-preferential Rules of Origin

Even though our discussion on the economic effects of rules of origin were so far on the preferential rules of origin, many insights drawn from the same are applicable to the non-preferential rules as well. In preferential trading arrangements, most often the rules of origin were seen as a factor offsetting the effect of preference margin, particularly when viewed from the point of view of members/beneficiaries. In the case of producers from outside the PTA the rules of origin would generally add to the height of the barrier to the PTA market. Same is the case of non-preferential rules of origin; they tend to add to the trade distorting effect of the principal trade policy tool used such as quantitative restrictions under the Multi-Fibre Agreement (MFA). The rules of origin can be used to increase the restrictieveness of the MFA quotas. Take for instance the hypothetical case of an African country importing fabrics from India and making printed fabrics to be exported to the United States. If the rules of origin in USA do not recognize making of printed fabrics from fabrics as substantial transformation, which in any case it does not, the African country would not be granted the origin status and would be denied the opportunity to use its MFA quota. In fact, given such rules of origin export of printed yarn from the African country

might be accounted against India's MFA quota. Therefore, such rules of origin can prove to be trade distorting, in more than one way.

The rules of origin designed to support measures like anti-dumping duties, or countervailing duties, serve the objective of targeting the designated sources of supply. Obviously, identification of the country of origin of a product against which an anti-dumping or a countervailing duty is to be imposed would depend on rules of origin. Interestingly, as rules of origin vary the country of origin of the product and hence the country of incidence of such duties might also vary. In other words, even while retaining the anti-dumping duty or countervailing duty regime without change, the rules of origin can be manipulated to distort trade. What is significant to be underlined here is the possibility of converting the rules of origin as trade policy tool *per se*.

Domestic Origin vs. Foreign Origin

Another issue related to our discussion on non-preferential rules of origin is the criteria applied to determine whether a good is of domestic origin or not. Can the same set of rules used to determine the foreign country of origin of a product be applied to determine whether a product is of domestic origin or not? The criteria, in fact, differ in many countries. However, the ARO insists that the rules of origin that the WTO members apply to imports and exports should not be more stringent than the rules of origin they apply to determine whether a good is domestic or not (Article 1, ARO). In other words, the rules of origin to determine whether or not a good is of domestic origin should be either as stringent or more stringent than the rules of origin applied to exports and imports. In any case, origin rules applied to determine whether a product is of domestic origin or not would have far reaching implications for commercial policy. They could be effectively used to protect selected domestic sectors/ industries (Vermulst 1997:467-70)[7] . In view of its importance, we may illustrate the argument in some detail here.

Suppose that US government is keen to protect domestic producers of upstream textile products such as yarn and fabrics. The government can frame the rules of origin to determine the 'domestic status' in such a way so that textile and clothing producers in US use yarn or fabrics produced in US. Textiles and clothing products produced in US using imported yarn or fabrics could be denied 'domestic status' by way of rigid origin rules with stringent domestic content requirements. So much so that in order to ensure the 'domestic status' and thereby to avoid stiff tariff and other border measures, US producers of textile and clothing products would source their yarn or fabric inputs from US manufacturers rather than from lower cost external sources.

As for theoretical insights, the issue involved is quite similar to that of domestic content requirements practiced by developing countries, which specify requirements on the share of domestic content in production. Failure to meet these requirements results in a penalty tariff on inputs for domestic producers or a penalty tariff on the import of the final good if the final good is imported. Content protection policies have been previously analysed in the literature (Corden 1971, Krishna and Kruger 1995). Even though, the effects of content protection are context specific one of the most probable outcome is an increase in the level of protection granted to the domestic input producing industry. However, while content protection cause substitution towards domestic inputs, it also raises the cost and hence the price of the final good. Therefore, the content protection schemes might not be very attractive from the point of view of the domestic final good industry[8].

The established trend earlier in the world of commercial policy, especially in developed countries was to give more protection to final goods by way of escalation of trade barriers across processing chains. The escalation of tariffs across processing chains, and the consequent high level of effective protection granted to the final goods producers

by the developed countries continues to be a major source of worry for developing country exporters. However, in some sectors like textiles and clothing the developed countries are now keen to protect the upstream activities. The rules of origin are potential trade policy weapons in pursuing the goal of protecting the producers of intermediate goods. Generally a country, which wants to protect intermediate good producing industry, would prefer stringent rules of origin for the final good, tracing its origin to the country of production of the intermediate good. Whereas, a country, which do not produce the intermediate good, whose final goods industry is dependent on imports, is likely to favour more liberal rules of origin for the final good, and unlikely to support provisions tracing the origin of the final good to the intermediate good producing country.

'Privatisation' of Trade Policy

Another important feature of protectionism based on rules of origin is the so-called "privatisation" of trade policy. Individual industries, and concerned industrial lobbies play a very important role in determining the level of protection granted in the case of most of the new, contingent forms of protection, including rules of origin. In these cases, whether protection is finally granted or not, and the level of protection would depend largely on the persuasive skills and strengths of the industrial lobbies. The cumbersome administrative process involved, and the scope of involvement by the import competing interests, makes the system less predictable as well as less transparent when compared to the overt methods of protection (Palmeter 1993, Hoekman 1993). Contextually, U.S textile lobbies are known to have played an important role in framing highly restrictive US and NAFTA rules of origin in the area of textiles and clothing (Hoekman 1993).

Section 3

The WTO Agreement on Rules of Origin

The WTO agreement on rules of origin was adopted at Marrakesh as part of the final results of the Uruguay Round of Multilateral Trade Negotiations (MTN). As can be seen from Chart 1 the ARO is divided into four Parts, containing nine Articles, and two Annexes. Part I (Article 1) presents definitions and coverage, which excludes the preferential rules of origin from the scope of the harmonisation work programme. Part II deals with disciplines to govern the application of rules of origin during the transition period (Article 2) and disciplines after the transition period (Article 3). Part III, which contains Articles 4 to 8 presents the proposed procedural arrangements on notification, review, consultation and dispute settlement. Article 4, which deal specifically with the institutional structure, deserve special mention. It provides for the establishment of the Committee on Rules of Origin (CRO) and the Technical Committee on Rules of Origin (TCRO). The CRO, composed of representatives from each of the members, is supposed to be the key organizational arm of the ARO in implementing its objectives. The TCRO established under the auspices of the WCO is supposed help the CRO by providing it with technical inputs. Part IV (Article 9) is devoted exclusively to the harmonisation work programme. Annex I of the ARO is on TCRO and provides details on the technical work, which are not, mentioned in part III of the agreement. Annex II is a common declaration with regard to preferential rules of origin to which the mainstream articles of the ARO do not apply.

As a broad principle the ARO (Article 9) maintains that the country to be determined as the origin of a particular good should be either the country where the good has been wholly obtained or, when more than one country is involved, the country where last substantial transformation of non-originating materials has been carried out. This is perfectly in agreement with the recommendations of the Kyoto Convention. An important initial task to be undertaken by the TCRO is to develop a harmonised definition of the goods that are to be considered as wholly obtained in one country. In such cases, as we have seen earlier, the 'nationality' of origin will be fairly obvious. However, to support the harmonised definition of goods wholly obtained in one country, the TCRO is also entrusted to evolve a harmonised definition of minimal operations or processes that do not themselves confer origin to a good.

Chart 1: Structure of ARO

Part I: Definitions and Coverage
Article 1 – Rules of Origin

Part II: Disciplines to Govern the Application of Rules of Origin
Article 2 - Discipline during the Transition Period
Article 3 - Disciplines after the Transition Period

Part III: Procedural Arrangements on Notification, Review, Consultations and Dispute Settlement
Article 4 - Institutions
Article 5 - Procedures for Introduction of New RO
Article 6 - Review
Article 7 - Consultation
Article 8 - Dispute Settlement

Part IV: Harmonisation of Rules of Origin
Article 9 - Objectives & Principles

Annex I:
Technical Committee on Rules of Origin

Annex II:
Common Declaration on Preferential Rules of Origin

When more than one country is involved in the production of a good the consideration of substantial transformation is prescribed to be evoked. The general principle for determining substantial transformation prescribed is that of Change in Tariff Heading (CTH) in the Harmonised System (HS) nomenclature. The TCRO is entrusted with the job of suggesting minimum change within the nomenclature that meets the criterion of substantial transformation on a product-by-product basis. However, as we have already indicated the HS nomenclature is not developed on the basis of the criterion of substantial transformation. As such, the CTH method may not be the appropriate rule in the case of all products to judge whether there has been substantial transformation. Therefore, the TCRO is entrusted to suggest supplementary criteria in the case of products where the exclusive use of HS nomenclature does not allow for the expression of substantial transformation. The supplementary methods suggested are the *advalorem* criterion and the method of prescribing manufacturing or processing operations.[9]

The TCRO is expected to complete the above tasks in a phased manner taking into account the chapters and sections of the H.S nomenclature and submit the results to the CRO on a quarterly basis. It is up to the CRO to consider the interpretations of the TCRO before endorsing them. After completing the technical work outlined above, the CRO would consider the question of overall coherence of the draft rules of origin formulated at the level of individual products. Finally, the authority to adopt the harmonisation work programme and to make it an integral part of the ARO is that of the Ministerial Conference.

Review of the Harmonisation Work Programme

Harmonisation of the rules of origin is one of the most ambitious, and perhaps the most technically oriented tasks that the WTO had undertaken since its inception in 1995. The CRO and the TCRO, the

two committees entrusted with the job, in fact, have made commendable progress in fulfilling their respective responsibilities. However, in spite of several years of intense negotiation and massive amount of work that had gone in, the task of harmonisation remains far from complete. The HWP was supposed to be over in July 1998, after three years of it's launching in July 1995. The deadline was extended several times by the General Council, but the extended deadlines were passed without the completion of the HWP. The General Council at its meeting in December 2002, extended the deadline for the completion of negotiations on the 94 core policy issues until July 2003. The General Council also agreed that the CRO, following resolution of the core policy issues, should complete its remaining technical work by the end of 2003 (WTO 2003:G/L/593/Add.1).

An important achievement of the HWP so far has been the Integrated Negotiating Text, which lay down the overall architecture of the harmonised non-preferential rules of origin. The Integrated Negotiating Text, which was subjected to several rounds of revision, has dealt with goods that are to be considered as being wholly obtained in one country, minimal operations, substantial transformation through change in tariff classification and/or supplementary criteria. The Integrated Negotiating Text contains, besides the general rules, two appendices; first one on harmonised rules pertaining to wholly obtained goods, and the second one dealing with product specific rules of origin.

Except for two important outstanding issues, there is broad consensus among members regarding harmonised definitions of the goods, which are to be considered wholly, obtained in one country. Appendix 1(WTO 2002:G/RO/45/Rev.2) presents an exhaustive list of goods that are to be considered as being wholly obtained in one country such as:

(a) Live animals born and raised in that country;

(b) Animals obtained by hunting, trapping, fishing, gathering or capturing in that country;

(c) Products obtained from live animals in that country

(d) Plants and plant products harvested, picked or gathered in that country

(e) Minerals and other naturally occurring substances extracted or taken in that country

(f) Scrap and waste derived from manufacturing or processing operations or from consumption in that country and fit only for disposal or for the recovery of raw materials.

(g) Articles collected in that country which can no longer perform their original purpose there nor are capable of being restored or repaired and which are fit only for disposal or for the recovery of parts of raw materials.

(h) Parts or raw materials recovered in that country from articles which can no longer perform their original purpose nor are capable of being restored or repaired

(i) Goods obtained or produced in that country solely from products referred to in (a) through (h) above.

When we add the definition of minimal operation and process (Rule 2), to the above list of wholly obtained goods we get a fairly comprehensive harmonised definition of the wholly obtained goods. Minimal operations and process are defined as follows.

" Operations or processes undertaken, by themselves, or in combination with each other, for the purposes listed below, are considered to be minimal and shall not be taken into account in

determining whether a good has been wholly obtained in one country: (1) ensuring preservation of goods in good condition for the purposes of transport and storage; (2) facilitating shipment or transportation; (3) packaging or presenting goods for sale" (WTO 2002:G/RO/45/Rev. 2).

However, there is no consensus on the issue of origin of recovered parts from collected articles (which can no longer perform their original purpose – e.g. discarded computers). The two options are to confer origin either to the country where the articles are collected, or to the country where the parts are extracted. But, the above rules were not acceptable to some members because recovery of parts from collected articles might also release radioactive, hazardous and toxic waste, the disposal of which could emerge as a major environmental problem. Another problem that eludes consensus is the question of origin of fish and other products taken from the Exclusive Economic Zone (EEZ). There is agreement among members that the origin of fish and other products taken from the territorial sea (not exceeding 12 nautical miles) of a country should be the coastal state. It is also being agreed upon that the origin of fish and other products taken from the high seas should be the country whose flag the vessel that carries out these operations is entitled to fly. However, disagreement persists in the case of fish and other products taken from the exclusive economic zone (EEZ) (WTO 2002:G/RO/52). While countries like India maintain that the origin of fish and other products taken from EEZ should be the coastal state, USA, EEC, Japan, Canada, and some other countries insist that the origin should go to the country of the flag of the vessel (WTO 2002:G/RO/52). The interest of the latter group of countries is to have an international fishing area as large as possible with origin of the products determined by the flag of the ship, whereas the former group want to keep full control over the resources of their waters (Nell 1999).

Product Specific Rules of Origin

Most of the road-blocs to the HWP are to be seen in the attempt to evolve product specific rules of origin, which put forward specific criteria for substantial transformation. In June 1999, when TCRO submitted the final results of its technical work in this regard, there were 486 outstanding product specific issues to be considered by CRO. The CRO could resolve many of them after that. However, since the rest of the outstanding issues were difficult to be dealt with at the committee level, the CRO had referred them to the General Council for discussion and decision. Out of 94-core policy issues referred to the General Council 92 were related to the product specific rules. Among the two other issues referred to the General Council, one was the question of origin of fish and other products taken from the EEZ. The other was the implication of the implementation of the Harmonised Rules of Origin for other WTO agreements. The agreement on rules of origin would have implications for almost all other WTO agreements. Over the past several years the CRO had held intensive discussions on the issue and decided to submit the same to the General Council along with the Chairman's proposals.

Regarding the outstanding product specific issues, it is difficult to make generalization on the nature of disputes and the position taken by the members. Indeed, what will or will not qualify for substantial transformation is the central question of conflict almost in every case. But a perusal of the positions taken by members across product groups brings out lack of consistency in their approach to the question of substantial transformation. Information presented in Table 3 would help us illustrate the conflicting positions taken by countries. For instance, the US, which insists on stringent norms in the area of textiles and textile articles, is rather reluctant to accept such a rigid approach in the case of many tropical products. India's position in the cases cited above

is exactly the opposite of those of the US. India, which opposes harsh norms in the area of textile and textile articles, is all for stricter norms for tropical products. Such inconsistency in approach by which countries refuse to follow general norms and broad principles in a consistent manner is widely noted among the WTO membership. There is no dearth of examples for illustrating such inconsistencies in the position of members.

Table 3: Conflicts over Defining Substantial Transformation: An Illustration

Process	India	USA
Green Coffee is processed through roasting into roasted coffee	It is not substantial transformation	It is substantial transformation
Cocoa beans transformed into cocoa paste by roasting, winnowing, alkalization and grinding	It is not substantial transformation	It is substantial transformation
Fruits or vegetables are processed through extraction into juices	It is not substantial transformation	It is substantial transformation
Crushing/grinding of spices	It is not substantial transformation	It is substantial transformation
Making dyed or printed yarn from yarn	It is substantial transformation	It is not substantial transformation
Making dyed or printed fabrics from fabrics	It is substantial transformation	It is not substantial transformation

Source: WTO (2002): Report by the Chairman of the Committee on Rules of Origin to the General Council, G/RO/52, 15 July.

The reasons behind such inconsistencies in the position of countries are not far to seek. The most important among them is the influence of trading interests. Negotiating positions of countries across product sectors are determined by the corresponding national trading interests rather than by any common principle to be adopted in a uniform manner.

The question as to whether the outstanding issues would be solved and whether, therefore, HWP would be concluded before the latest deadline set for the purpose (end of 2003) defy easy answers. The remaining outstanding issues represent hard fought and long held positions of member countries involving big stakes. As such they are unlikely to be resolved at the level of TCRO or CRO. An early resolution of the outstanding issues might, therefore, require involvement of the General Council or even the Ministerial Conference. In any case, a comprehensive evaluation of the outcome of the HWP will have to wait until the outstanding issues are resolved and the HWP completed.

Section 4

Harmonisation Work Programme: A Critique

Obviously, it is now premature to attempt a comprehensive critique of the unfinished HWP. Such a study should probably wait till the Ministerial Conference finally adopts the harmonised rules of origin. However, the progress made so far, as outlined in the previous section, prompts a critical analysis of the HWP, which is undertaken here primarily from the point of view of the South Asian countries.

In Section II we have identified factors that tend to make the hitherto inconsequential rules of origin a contested terrain. None of the factors identified, viz., internationalisation of production, increasing incidence of discriminatory trade policy tools that require well defined rules to determine nationality of origin of commodities, and the growing tendency to make use of rules of origin as protectionist tools *per se* are likely to decline in importance in the foreseeable future. On the contrary, each of them are likely to grow in importance over time making the rules of origin sites of growing trade policy conflicts among nations. The ARO, therefore, has come none too early. It is important that the ARO succeed in its fundamental goal of establishing a multilateral regime for rules of origin, lest the anarchy that is likely to break out in the sphere of rules of origin would endanger the process of trade liberalization. It is advisable; therefore, that a critique of the ARO address the question as to whether such a regime would be established and also whether the tendency to use rules of origin as discriminatory policy tools *per se* would be checked. A related and perhaps equally important question would be that of the nature of the multilateral regime on rules

of origin that is in the making. It is one thing to establish an international regime and quite another to ensure that it is non-discriminatory in nature. The latter question is particularly important when seen from the point of view of developing countries, such as those in South Asia, which lack political and economic clout to influence the outcome of international trade negotiations.

In our opinion the ARO and the HWP are likely to fall short of expectations with respect to both the objectives outlined above. In spite of the multilateral regime visualized by the ARO, the rules of origin are likely to be misused widely for protectionist proposes. Further, as our analysis show, the regime that is in the making is likely to be biased against the interests of the developing countries including those of South Asia.

The central limitation of the ARO and the HWP we wish to highlight here is their inability in addressing the most important issue that they were suppose to address, viz., the tendency to use rules of origin as discriminatory trade policy tools *per se*. Take first the case of discrimination among foreign suppliers. The most important source of such discrimination in today's world, undoubtedly, is the preferential trading arrangements (PTAs). But, as we have already seen the preferential rules of origin are not in the purview of the HWP. The Annex II of the ARO, which presents the common declaration with regard to preferential rules of origin, can hardly compensate for the exclusion of the preferential rules from the HWP. The misuse of rules of origin, as a protectionist tool is quite rampant among the PTAs. In fact, as we have argued at length earlier, it was the proliferation of PTAs that had led to the proliferation of rules of origin. It is quite common for individual countries to join several PTAs, representing a hierarchy of privileges and preferences. All these, it is widely argued, contribute to the

uncertainties and risk of traders. It is no exaggeration to say that originating status would vary not only according to destination of exports but also depending on the preferential regime that the exporters choose to avail

The excuse for the exclusion of preferential rules of origin could be that they affect only the members/beneficiaries of the PTA. But, as we have already seen in Section II, rules of origin of PTAs could act as stiff non-tariff barriers against non-members. The PTAs can employ rules of origin, as many of them do, to scale up barriers to imports from non-members. This, it needs to be underlined is against the spirit of the article XXIV of GATT, which permits establishment of PTAs. The purpose of such preferential agreements, as article XXIV makes clear, "should be to facilitate trade between the constituent territories and not to raise barriers to the trade of other members". As such, if the declared objective of the WTO of eliminating trade distorting effects of rules of origin is to be achieved, it should be addressing the question of preferential rules, if not now, in the near future. The developing countries should perhaps insist first on documenting all preferential rules of origin and then on periodic negotiations for making them less stringent.

Coming more specifically to the impact on South-Asian countries, the exclusion of preferential rules from the harmonisation programme would not be very advantageous in improving their market access to the PTAs among developed countries. The PTAs such as EEC, EFTA and NAFTA will continue to misuse rules of origin to protect domestic production as they do now. The phasing out of overt trade barriers might also lead to more extensive use of rules of origin as trade policy tools in such PTAs. But, the exclusion of preferential rules from the HWP would enable the South Asian countries also to make preferential rules of their choice in the PTAs that they establish. This is particularly

important because the PTAs involving South Asian countries are of relatively new origin. Since new PTAs are likely to be characterised by relatively high inter-country differences in tariffs, they are likely to be more vulnerable to trade diversion (Panchmukhi and Das 2002). However, it is advisable that the PTAs among the developing countries also desist the temptation to revise the rules of origin periodically to make them more stringent.

Another reason for our pessimistic note on the proposed international regime on rules of origin is the inbuilt need for periodic revision of rules of origin and the scope that it entails for 'privatization' of trade policy making. This criticism is applicable to, both preferential and non-preferential rules of origin. Internationalisation of production and accompanying technological changes would require periodic revision of the rules of origin, especially in product groups where technologies and production processes change fast. Such periodic revision will be all the more important in the case of products, rules of origin of which are defined in terms of specific processes. The process of technological change also presupposes periodic revision of the tariff nomenclature. The harmonised rules of origin are supposed to be based on the Harmonized System of trade classification. The HS is subject to periodic revision so that it is sensitive to changes in technology and structural transformation of trade. The changes in the HS nomenclature, therefore, will be another reason for undertaking periodic revision of the rules of origin. Interestingly, therefore, the HWP and the conflicts that it entails are likely to be a permanent feature of the WTO in the future. The need for periodic revision and the consequent uncertainty regarding the rules of origin might strengthen the tendency of 'privatisation' of trade policy. It would also add to the burden of negotiators from developing countries, including South Asian nations. As (Satapathy 1998a) pointed out the HWP has turned out to be a costly

affair, as it has also been long drawn out, not only for the world body but also for the member countries. Even though Article 6 of the ARO provides for the introduction of amendments to the harmonised rules, procedures for the same are yet to be evolved. In view of the threat of misuse and 'privatisation', it is important that detailed procedures for moving the amendments are clearly laid out.

It is contextual here to mention the increasing incidence of violation of transition disciplines spelt out in Article 2 of the ARO. Given the long drawn out nature of the negotiations it is difficult to predict as to when the harmonised rules would be getting implemented. Till then the transition disciplines assumes special importance. In the transition period members are not expected to introduce new rules of origin, or changes in the existing regimes, which are likely to be used as instruments to pursue trade objectives directly or indirectly. However, instances of violation of such interim disciplines are increasing. An instance worth special mention here has been the changes introduced by the United States of America to its rules of origin for textile and apparel products, which entered into force on 1 July 1996. The US action, highly protectionist as it has been, had given rise to demand for consultation from the part of many members including India and the EEC (WTO 2002:G/RO/D/4). Incidentally, the issue taken later to the dispute settlement body by India was settled in favour of the US (Pratap 2003). Further delay of the HWP is likely to lead to such rules of origin based protectionist moves from member states. There is, therefore, a clear case for negotiating an understanding to keep *status quo* (A stand still understanding) in the case of rules of origin till the HWP is completed.

Regarding the second proposition, there are many reasons why we fear that the new multinational regime would be biased against the

interests of developing countries. We have already mentioned two of them, viz., exclusion of preferential rules of origin, and the threat of periodic revision of rules of origin that leaves scope for the so called 'privatization' of trade policy making. Both these factors, given the size and strength of PTAs among developed countries, and the bargaining power of industrial lobbies from the west, are likely to have adverse implications for developing countries. Coming to more substantial reasons, since the non-preferential rules of origin under the HWP are supposed to be common to all WTO members, the scope of discrimination would appear to be limited. But, as we shall try to illustrate, the proposed regime of common rules of origin is no guarantee for equal treatment.

Before explaining as to how the common rules can be discriminatory, it is important to note that the new regime deny special and differential treatment to the developing countries. Individual developing countries will not have the right to make deviation from the common rules to suit their stage of development. Interestingly, this is in contrast to most other agreements of WTO, which are known to factor-in the question of development into their framework. In our opinion, developing countries have a case for demanding the right to deviate from common rules of origin, wherever such concessions are justifiable in terms of special and differential treatment.

Coming back to the question of discrimination, it should be emphasized that while harmonised rules are common for individual product groups across countries, they differ significantly between product groups. In some product groups, the common rules are very simple while in some others very stringent. This difference across product groups arises out of varying perceptions regarding what will or will not qualify for substantial transformation. As we have already seen there are no universal rules or commonly accepted criteria for determining

substantial transformation. The criteria proposed by the TCRO and the CRO vary significantly across products. As such general discussions on common criteria of substantial transformation would not throw much light on the question of regional impact. In fact, a clear idea on the regional impact would require product specific studies to be undertaken with respect to all important commodity groups of the region. In the present study, our focus, considering their overwhelming significance to the region, is on textiles and clothing products.

An illustration in terms of textiles and clothing is particularly important in the context of the WTO Agreement on Textiles and Clothing. The ten-year period over which the MFA quotas are supposed to be phased out is ending on December 31, 2004. The consequent rehabilitation of the textiles and clothing sector to the GATT fold from 1 January 2005, when all bilateral quotas vanish, is expected to usher in a new era of free trade and expanding markets. The South Asian countries are also expected to make significant gains from the MFA phase out (Wijayasiri 2003).

But, the initial euphoria is fading as we move closer to January 1, 2005. It is now clear that in the post integration phase the developed countries would be resorting to the tariffs in a big way to protect their textiles and clothing producers (Bagchi 1998). It is also becoming obvious that the developed countries would be resorting to a variety of covert protectionist tools, such as anti-dumping and countervailing duties (Bagchi, 1998, Wijayasiri 2003) to ward off competition from the third world. What is more significant in our context is the likelihood of rules of origin emerging as a highly potent protectionist weapon. We have already seen indications of the same in NAFTA as well as in section 334 of the Uruguay Round Agreements Act, 1996 of the United States. The U.S move, supported by the developed countries, is to influence the

HWP so that the home spun and highly protectionist rules of origin are imposed on the community of nations.

Free trade owes many of its virtues to specialization. But, an important feature of the U.S proposals on rules of origin in textiles and clothing, which we highlight here, is their anti-specialization bias. Over many centuries textiles and clothing industries had evolved quite an intricate pattern of international specialization. There are countries and regions, which specialize in one or many combinations of activities such as spinning, weaving, bleaching, texturing, dyeing, printing, coating, impregnating, embroidery, making of made up articles, assembly of garments, etc. There are countries, which do not produce any yarn or fabric but maintain a strong presence in the industry and trade by virtue of their comparative advantage and specialization in other activities. But, if developed country proposals are accepted, many such activities/ avenues of specialization will not by themselves meet the criteria of substantial transformation/origin status. The situation would be so bad that the origin of yarn and fabrics, regardless of dyeing, printing and so many other processing operations done elsewhere would be traced back to the country of spinning or weaving. A brief account of some origin disputes presented in Table 4 would make the competing positions clear. Keeping in tune with the history of evolution of the industry, and its present international structure, India and other developing countries in general recognize each such activity/avenue of specialization as substantial transformation requiring shift of origin. Whereas, the developed countries, led by the U.S, refuse to recognize many key processes/avenues of specialization as substantial to cause shift in origin. For them, origin of textiles and clothing products should be traced back, as far as possible, to the country of origin of yarn or fabric.

Table 4: Selected Origin Disputes in Textiles and Clothing

Process	India	U.S
Dyeing or printing of yarn	Permanent dyeing or printing alone can be considered as substantial transformation	A yarn of one country that is dyed and/or printed in another country should not be considered as originating in the latter country
Dyeing or Printing of fabrics	Permanent dyeing or printing alone can be considered as substantial transformation	Neither dyeing nor printing alone nor dyeing and printing together result in substantial transformation
Coating fabrics with rubber or plastics	Coating of rubber or plastics can be considered as substantial transformation	Coating of fabrics with rubber or plastics cannot be considered as origin conferring
Making embroidered flat products from fabric	Substantial transformation if the value of non-originating materials does not exceed 50 per cent of the ex-work price of the product	Country of origin shall be the same as the country of origin of fabric
Parts knitted or crocheted to shape are processed through assembling into apparel	Considers as substantial transformation	Not considering as substantial transformation

Source: WTO (2002) Report of the Chairman of the Committee on Rules of Origin to the General Council, G/RO/52, 15 July

If U.S proposals of non-preferential rules were accepted it would give a discriminatory advantage to the domestic producers vis-à-vis foreign sources of yarn and fabrics. Take for instance the case of U.S manufacturers of printed fabrics. If they import fabrics for printing from India they could be denied the domestic status. Their products could be treated as of foreign origin and made liable to pay the customs duty. As such, regardless of the price advantage of the Indian source, the US firms might source their inputs from within the country.

The implications of such a regime would be highly trade distorting if the MFA survives in the present form or in new *avtars*. The export of textile articles from other developing countries, which source yarn or fabrics from India or Pakistan would be counted against the bilateral quotas of India and Pakistan! The new rules might also make administration of trade more cumbersome and costly. A related problem is that of targeting trade policy tools such as anti-dumping and countervailing duties. Suppose anti-dumping action is to be taken against a country 'A' exporting printed fabrics and made-up articles using fabrics imported from another country 'B'. According to the U.S proposals the anti-dumping and countervailing duties would be charged on the country of origin which would be 'B' not 'A'. Further, in the case of many products of textiles and clothing it will be difficult to trace the country of origin of yarn or fabrics used in their making. In fact, the country of origin of a product produced by a given firm might go on changing according to the changes in the source of inputs. Accordingly, the manufacturer will also be forced to change the marking of origin. Last but not the least is the bias against specialisation: countries specialising in processing operations such as dyeing, printing, etc. will be denied originating status. In the process it would also make protection of intellectual property rights related to the processing activities (eg. IPRs on designs) difficult. Such countries, which are denied originating status, might also fail to attract investment.

Admittedly, the impact of common rules would vary significantly across South Asian countries. Upstream protection in developed countries would tend to affect India and Pakistan more than other countries in the region. That big stakes are involved for both India and Pakistan is clear from data presented in Table 5 & 6 (See also Spinanger and Verma, 2003)**.** As relative share of countries in world exports show India and Pakistan are leading exporters of yarn and textile products. Further, yarn and textile products are leading items in the export baskets of India and Pakistan. Smaller countries in the region, however, do not export much yarn or fabrics. But, the fact that they specialize in downstream products is no consolation for countries like Bangladesh or Sri Lanka. Some of the processes in which they specialize might not be origin conferring. Therefore, if US proposals are accepted they will also be under pressure to make many adjustments to cope up with the new rules.

Obviously, in textiles and clothing India prefers more liberal rules of origin than those proposed by the developed countries. But, this does not mean that it would be in the interest of India to demand relatively liberal rules of origin across all product groups. There are many product groups in which India and for that matter other South Asian countries prefer stricter rules of origin than those proposed by developed countries. For instance, as we have illustrated in Table 3, India, which opposes harsh norms in the area of textiles and textile articles, is all for stricter norms for tropical products. In the case of most tropical products and their derivatives, India prefers to have rules, which trace the origin to the country in which the plant grew. Whereas, for developed countries, even such minor processing activities such as crushing or grinding of spices is origin conferring!

Table 5: South Asia in World Trade of Yarn and Textile Products

Product Code	Country	Share of the Product in the Country's Total Exports	Share of the Country in the Total World Exports of the Commodity
(1)	(2)	(3)	(4)
Textile Yarn (651)	India	4.41	4.91
	Pakistan	13.23	3.54
	Sri Lanka	NI	NI
	Bangladesh	NI	NI
Cotton Fabrics, Woven(652)	India	2.78	4.93
	Pakistan	14.09	6.01
	Sri Lanka	NI	NI
	Bangladesh	NI	NI
Woven Man-made Fib Fabric (653)	India	1.09	1.32
	Pakistan	5.8	1.69
	Sri Lanka	NI	NI
	Bangladesh	NI	NI
Knitted, ETC, Fabric (655)	India	NI	NI
	Pakistan	0.93	0.61
	Sri Lanka	NI	NI
	Bangladesh	NI	NI
Spec Textile Fabrics, Products (657)	India	0.25	0.44
	Pakistan	NI	NI
	Sri Lanka	NI	NI
	Bangladesh	NI	NI
Textile Articles NES (658)	India	2.41	5.55
	Pakistan	13.68	7.55
	Sri Lanka	NI	NI
	Bangladesh	2.96	0.87

Notes: NI stands for not included. NI for Column 3 means that the product concerned is not among top 10 export products (at SITC 3-digit level) of the country concerned. NI for column 4 means that the country is not among top ten exporters of the commodity.

Source: UNCTAD Handbook of Statistics, 2001

Table 6: South Asia in World Trade of Clothing Products

Product Code	Country	Share of the Product in the Country's Total Exports	Share of the Country in the Total World Exports of the Commodity
(1)	(2)	(3)	(4)
Men's Outwear Non-knit (842)	India	NI	NI
	Pakistan	4.09	1.09
	Sri Lanka	7.52	1.1
	Bangladesh	23.61	3.37
Women's Outwear Non-knit (843)	India	5.33	4.45
	Pakistan	NI	NI
	Sri Lanka	17.85	1.96
	Bangladesh	13.04	1.4
Under Garments Non-knit (844)	India	2.39	6.04
	Pakistan	NI	NI
	Sri Lanka	5.26	1.75
	Bangladesh	18.97	6.17
Outer Garments Knit Nonelastic (845)	India	NI	NI
	Pakistan	2.98	0.62
	Sri Lanka	7.22	0.82
	Bangladesh	10.14	1.12
Under Garments Knitted (846)	India	2.57	3.03
	Pakistan	5.65	1.6
	Sri Lanka	9.4	1.46
	Bangladesh	8.96	1.36
Headgear, Non-Textile Clothing (848)	India	1.2	3.76
	Pakistan	4.9	3.67
	Sri Lanka	2.12	0.87
	Bangladesh	NI	NI

Notes: NI stands for not included. NI for Column 3 means that the product concerned is not among top 10 export products (at SITC 3-digit level) of the country concerned. NI for column 4 means that the country is not among top ten exporters of the commodity.

Source: UNCTAD Handbook of Statistics, 2001

Even though, tropical products are produced mostly in developing countries they end up specializing mainly in the lower stages of the processing /value chain. This pattern of specialisation is explained mainly in terms of escalation of tariff and other barriers across processing chains in developed country markets. Interestingly, the liberal rules of origin proposed by the developed countries in the area tropical products would tend to reinforce the above legacy of specialisation. Therefore, the developing countries have sound reasons for demanding stricter rules of origin for tropical products. Further, their argument that the country where the plant grew, which determine many an essential attribute of the tropical products and their derivatives, should be recognised has implications for possible geographical indications in such products. This assumes special significance in the context of the demand that the additional protection conferred for geographical indications for wines and spirits be extended to other products, particularly those of interest to the developing countries. Interestingly, the EEC has been stubborn in the negotiations that the origin of wine, whether produced from grapes or grape must, shall be the country in which the grapes grew (WTO, 2002: G/RO/52).

It is clear that commercial policy objectives of countries, and therefore, their preferences regarding rules of origin would vary across product groups. Therefore, for studies on the implications of the new regime there are no short cuts other than detailed product specific studies of alternative proposals of rules of origin. Nevertheless, a perusal of positions taken by countries in the harmonisation negotiations prompts us to reiterate the observations made in section II. Mostly, countries, when they want to protect intermediate good producing industry, prefer stringent rules of origin for the final good, tracing the origin to the country of production of the intermediate goods. Whereas, if the final good industry is dependent on import of intermediates, particularly

when import competing production of intermediates is absent, they favour more liberal rules of origin for the final good, and do not support provisions tracing the origin of final goods to the intermediate good producing country. But, obviously, common rules would mean that all countries couldn't have rules of origin of their choice. The choice among alternative proposals, especially in the absence of theoretically informed norms, will depend much on the balance of political and economic power of contending parties. The question, therefore, boils down to the ability of individual nations, or their groups such as that of developing countries, to influence the process of rule setting. Interestingly, the picture emerging from our analysis of outstanding issues is not very encouraging for the developing nations.

Regarding the harmonised definition of wholly obtained goods, it is important that we mention the issue of control of maritime resources, which is of overwhelming significance to South Asia. Among countries in South Asia, India, Pakistan, Sri Lanka, and Bangladesh posses long coastlines. As such it is in their interest to keep full control over the resources of their waters. India's position in this regard that the origin of fish and other products taken from the exclusive economic zone should be the coastal state represents an interest, which the countries of the region can hardly compromise.

Interestingly, most of the outstanding product specific issues, as shown in Table 7, are of export interest to developing countries, including those of the South Asian region. Agricultural products (45) and Textiles and Textile Articles (24) together account for 69 out of the 92 product specific issues transferred to the General Council by the CRO. Even other areas, listed as disputed are also of export interest to developing countries. It cannot be dismissed as an instance of sheer coincidence that the lion's share of the outstanding issues belongs to the traditional

Table 7: Product Specific Rules: Distribution of Outstanding Issues

H.S Chapters	Description	No. of Outstanding Issues
1- 24	Live Animals, Animal Products, Vegetable Products, Animal or Vegetable Fats, Oils, Prepared Food Stuffs, Beverages, etc.	45 (49)
25-27	Mineral Products	2 (2)
28-40	Chemicals and Plastics	3 (3)
41-43	Raw Hides, Skins, Leather, Travel Goods, etc.	2 (2)
50-63	Textiles and Textile Articles	24 (26)
64-67	Footwear, Headgear, Umbrellas, etc.	4 (4)
72-74	Iron and Steel, Copper and Articles thereof	2 (2)
84, 85, 90	Machinery and Electrical Appliances, Optical Instruments, etc.	9 (10)
91	Clocks and Watches and Parts thereof	1 (1)
All Chapters		92 (100)

Source: WTO (2002) Report by the Chairman of the Committee on Rules of Origin to the General Council, G/RO/52, 15 July.

areas of western protectionism. It may also be underlined that agriculture, textiles and textile articles, which account for 75 per cent of the outstanding issues were outside the GATT disciplines until recently. As a result of the Marrakesh agreement both agriculture and textiles are being brought back to the purview of free trade disciplines. As such developed countries are required to phase out overt trade barriers in those areas of world trade. There is also a widely held fear that the developed countries would be trying to compensate for the loss of such

overt measures by resorting to the contingent forms of protection. Even though it is too early to say whether such bunching of outstanding disputes signify a reemergence old agricultural and textile protectionism, such fears cannot be completely ruled out.

Conclusion

From neutral trade policy devices employed to identity country of origin of commodities, the rules of origin are emerging as protectionist tools. Ironically, it is the success of the ideology of free trade, and the gradual elimination of overt trade barriers such as tariffs that made such covert trade barriers including rules of origin so popular among policy makers. Nation-states, as they are increasingly denied of conventional trade policy tools, are reasserting themselves by evolving new and less visible weapons of intervention. The misuse of rules of origin as protectionist tools is widely reported from PTAs among developed countries, such as EEC and NAFTA. More recently, non-preferential rules of origin are also being used for protectionist purpose. It is such protectionist adaptation of the rules of origin that prompted the WTO to launch the HWP to evolve common rules of origin for all countries.

The central objective of the ARO and also the HWP is to ensure that the rules of origin are employed without/ or with least trade distorting effects. But, as our study shows, it would be too optimistic to expect such an outcome from the HWP. On the contrary, even if it is successfully completed, the HWP is likely to leave considerable scope for misuse of rules of origin for protectionist purpose. We say so for the following reasons. First, none of the factors identified, viz., internationalization of production, increasing incidence of discriminatory trade policy tools, and the growing tendency to make use of rules of origin as protectionist tools *per se*, that tend to make rules of origin a contested terrain, are likely to decline in importance in the foreseeable future. Second, the

preferential rules of origin, which are more important protectionist sites than the non-preferential rules, are excluded from the HWP. Third, the need for periodic revision of harmonised rules of origin, especially in the absence of well defined procedures for introduction of amendments, leaves scope for 'privatisation' of trade policy making even at the international level.

Further, the new multilateral regime, even if it succeeds in establishing semblance of an order in the arena of rules of origin, is likely to have unequal effects on members. This is so because even though the harmonised rules are common rules, they differ significantly across product groups. There is no generally accepted norm for deciding what will or will not qualify for substantial transformation. The rigor and stiffness of the test of last substantial transformation, which is also the test for originating status, vary significantly from one product group to another. What rules will be finally adopted for each product in the HWP would depend on hard bargaining as well as on balance of power between interested parties. Therefore, the moot question is as to whether the adopted harmonised rules match the trading interests of the developing nations. An answer to the questions presupposes detailed product specific analysis of alternative proposals of rules of origin. The picture emerging from our analysis of outstanding disputes is not very encouraging for the developing countries. The outstanding disputes belong mainly to the traditional areas of western protectionism against developing countries. The fear that the developed countries are trying to manipulate rules of origin to compensate for the loss of tariff and other conventional barriers, therefore, cannot be ruled out.

A perusal of developed country proposals, particularly in the area of textiles and clothing, smacks of the protectionist intend. The developed countries, perhaps as a part of their preparations for the MFA

phase-out in 2005, are trying to impose highly protectionist rules of origin on the WTO membership. The developed country proposals in textiles and clothing if implemented would be detrimental to the South Asian Countries. They would deny the South Asian countries their share of the gains of liberalization of trade in textiles and clothing. Similarly, the developed country proposals in the area of tropical products would tend to pre-empt future attempts to establish geographical indications in such products. The message of textiles and clothing underlines the need for more in-depth studies on new proposals of rules of origin pertaining to other important areas of trade as well. It also calls for continuous engagement with the issues of rules of origin from the part of South Asian countries.

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Notes

1. Article 1 of the ARO defines rules of origin as those laws, regulations and administrative determinations of general application applied to determine the country of origin of goods except those related to granting of tariff preferences.

2. For instance, the high cost of compliance with the rules of origin of an importing country (administrative and technical costs involved, and the need to keep the proof of origin) by itself can act as a trade deterrent. Similar is the case of uncertainties associated with the determination of origin status that add to the risk of exporters as well as importers. A more direct use of rules of origin as a protectionist tool emanates from the imposition of stringent local content requirements. The local content requirements invariably increase the consumption of factors of production originating in the territories of contracting parties. A regime of stringent rules of origin can also be used to attract investments into the markets of the contracting parties (Hirsch 2002).

3. That many countries did not have formal, well-defined rules of origin does not mean that they did not have any mechanism to identify the nationality of origin of commodities. Since nationality of origin of most products traded was fairly obvious and uncontentious they probably did not require well-defined rules of origin.

4. The Customs Cooperation Council is now renamed as the World Customs Organization.

5. The exporters of finished products subjected to an anti-dumping order may just shift the components or materials to another country for manufacturing the finished product and circumventing the dumping order. This is what is alleged to have happened in the case of the US anti dumping order against colour television receivers from Korea (Palmeter 1990:32).

6. The above conceptualization of the rules of origin can also be used to rank alternative origin systems according to their impact on the net trade creation effects of the PTA. For instance, according to Stephenson and James (1995), an origin system based on the CTH rule would result in higher net trade creation than those based on process rule or value-added rule. There are, however, few studies, which take up the above question at the empirical level.

7. Vermulst (1997:467) speaks about the difference in rules of origin employed to determine the domestic status in the context of anti-dumping duties and government procurement. Also see footnotes to Articles 1 and 2 of the ARO.

8. Further, since the demand for inputs is a derived demand the adverse impact on the final goods industry would get ultimately transferred to the input producing industry as well.

9. If the advalorem criterion is prescribed the method for calculating this percentage shall also be indicated. And if the criterion of manufacturing or processing operation is prescribed, the operation that confers origin on the product concerned shall be precisely specified.

References

Bagchi Sanjoy (1998), "Will there be Free Trade in Textiles?", *Economic and Political Weekly*, Vol. XXX III, No. 27, 4 July .

Brenton Paul and Manchin Miriam (2002) "Making EU Trade Agreements Work: The Role of Rules of Origin", Centre for European Policy Studies, Working Document No.183, Brussels.

Corden W. M (1971), *The Theory of Protection*, Clarendon Press, Oxford.

Dhar Biswajit and Kallummal Murali (2002), "Note on Harmonisation of Non-preferential Rules of Origin", Unpublished Mimeo, Centre for WTO Studies, Indian Institute of Foreign Trade, New Delhi.

Hirsch Moshe (2002) "International Trade Law, Political Economy and Rules of Origin", *Journal of World Trade* 36 (2): 171-188

Hockman Bernard (1993) "Rules of Origin for Goods and Services: Conceptual and Economic Consideratoins", *Journal of World Trade*, Vol. 27, No.4, August

Inama Stefano (1995) " A Comparative Analysis of the Generalised System of Preferences and Non-preferential Rules of Origin in the Light of the Uruguay Round Agreement", *Journal of World Trade*, Vol. 29, February, No. 1.

James E. William (1997) "APEC and preferential Rules of Origin: Stumbling Blocks for Liberalisation of Trade", *Journal of World Trade*, Vol. 31, No.3

Ju Jiandong and Krishna Kala (1998), "Firm Behaviour and Market Access in a Free Trade Area with Rules of Origin", National Bureau of Economic Research, Working Paper 6857.

Kleinfeld George and Gaylor Diane (1994) "Circumvention of Antidumping and Countervailing Duty Orders through Minor Alternations in Merchandise", *Journal of World Trade*, Vol. 28, February, No.1

Krishna Kala and Krueger (1995), "Implementing Free Trade Areas: Rules of Origin and Hidden Protection", National Bureau of Economic Research, Working Paper 4983

Mattoo Aaditya, Roy Devesh and Subrahmanian (2002), "The Africa Growth and Opportunity Act and Its Rules of Origin: Generosity Undermined, " World Bank Policy Research Working Paper 2908, October

Moore Lynden (1995) "The Competitive Position of Asian Producers of Textiles and Clothing in the U.S Market", *The World Economy*, Vol. 18, July, No. 4

Nell G Philippe (1994) "Rules of Origin: Problems and Solutions to the Swiss Non-Participation in the European Economic Area", *Journal of World Trade*, Vol. 28, December, No. 6

Nell G. Philippe (1999) "WTO Negotiations on the Harmonised Rules of Origin: A First Critical Approach", *Journal of World Trade*, Vol. 33, June, No.3.

Niaoye Ma and Han-da Shey (1996) "China and the United States: Rules of Origin and Trade Statistics Discrepancies", *Journal of World Trade*, Vol. 30, No. 2, April.

Palmeter N David (1990) "The U.S Rules of Origin Proposal to GATT: Monotheism or Polytheism", *Journal of World Trade*, Vol. 24, April, No.2.

Palmeter N David (1993) "Pacific Regional Trade Liberalization and Rules of Origin", *Journal of World Trade*, October No. 5.

Panchmuki V. R and Das R Upendara (2001), "Conceptual and Policy Issues in Rules of Origin: Implicatons for SAPTA and SAFTA," *South Asia Economic Journal*, 2:2.

Pratap Ravindra (2003) "WTO and Rules of Origin: Issues for India", *Economic and Political Weekly*, August 16-22.

Satapathy C (1998b) "Rules of Origin: New Weapon against Free Trade in Textiles?" *Economic and Political Weekly*, September 15-12

Satapathy C (1998a) " Rules of Origin: A necessary Evil?", *Economic and Political Weekly*, August 29

Simpson P John (1994) "North American Free Trade Agreement-Rules of Origin, *Journal of World Trade*, Vol. 28, February, No.1

Spinanger Dean and Verma Samar (2003), "The Coming Death of the ATC and China's WTO Accession: Will Push Come to Shove for Indian T&C Exports" in Winters L Alan and Mehta S. Pradeep (ed.) *Bridging the Differences: Analysis of the Five Issues of the WTO Agenda*, CUTS, Jaipur.

Stephenson M Sherry and James E William (1995) "Rules of Origin and Asia-Pacific Economic Co-operation"" *Journal of World Trade*, Vol. 29, April, No. 2.

Vermulst A Edwin (1997) " Rules of Origin as Commercial Policy Instruments? – Revisited" in Vermulst et. al (1997) *Rules of Origin in International Trade: A Comparative Study*, The University of Michigan Press.

Vermulst Edwin and Waer Paul (1990) "European Community Rules of Origin as Commercial Policy Instruments", *Journal of World Trade*, Vol. 24, June, No3.

Wijayasiri Janaka (2003) "Textiles and Clothing: Possible Scenarios After 2004", Annual Conference of South Asian Civil Society Network on International Trade (SACSNITI), Kathmandu, Nepal.

WTO (1998) Proposal by India, G/RO/W/30, 7 May.

WTO (2002) Eighth Annual Review of the Implementation and Operation of the ARO, G/RO/55, 3 December.

WTO (2002) Integrated Negotiating Text for the HWP, G/RO/45/Rev.2, 25 June.

WTO (2002) United States – Rules of Origin for Textiles and Apparel Products: Request for Consultations by India, G/RO/D/4, 22 January.

WTO (2002), Report of the Chairman of the Committee on Rules of Origin to the General Council, G/RO/52, 15 July.

WTO (2003) Report of the CRO to Council for Trade in Goods, G/L/593/Add.1, 10 July.

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