United Nations University
CRIS
Comparative Regional Integration Studies

UNU-CRIS Occasional Papers

0-2005/6

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Luis Jorge Garay[2]

Philippe De Lombaerde[3]

[1] The authors wish to thank Steve Woolcock and participants at the LSE/UNU-CRIS workshop in Brussels (December 2004) for comments on a previous draft, and US and EU officials for providing useful information. Only the authors are responsible for remaining errors. A shorter version of this paper is forthcoming in: Steve Woolcock (ed.), *Interaction of Regional and Other Levels of Governance in the International Trading System*, UNU Press, Tokyo, 2005.

[2] Associate Research Fellow, UNU-CRIS, Bruges.

[3] Research Fellow, UNU-CRIS, Bruges. E-mail: pdelombaerde@cris.unu.edu.

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Luis Jorge Garay and Philippe De Lombaerde

1. Introduction

It has been argued that the proliferation of regional trade agreements (RTAs) since the 1990s has been accompanied by the design and implementation of less transparent, more restrictive and often divergent rules of origin (ROs). These more complex preferential ROs have led to higher transaction costs (OECD, 2003) and are perceived to have limited the use of formally offered trade preferences (European Commission, 2003a) and, therefore, the trade-expanding effect of preferential agreements (World Bank, 2005:27,57). It has been stressed that these preferential rules reflect specific sectoral interests of the regional hegemonic economic powers (Krishna, 2002) and that they have been used as neo-protectionist instruments (Vermulst, 1992; LaNasa, 1996; Schiff and Winters, 2003; Moïsé, 2003b).

Transaction costs are also specifically related to the phenomenon of overlapping or partially overlapping RTAs (the so-called *spaghetti bowl* effect) (Schiff and Winters, 2003; OECD, 2003). Differences and inconsistencies between different provisions at the regional level tend to increase complexity and the lack of transparency.

At the same time, international production chains have become (and are still becoming) more important in manufacturing (World Bank, 2005:46).[4] Even with a constant set of ROs, this implies a greater impact of these rules on trade and production.

For these reasons, the harmonisation of ROs has been named as one of the most important challenges for the work on trade facilitation in the framework of the WTO (Moïsé, 2003a, 2003b).

The aims of this paper are: (i) to discuss the RO provisions for trade in goods in recent RTAs, (ii) to analyse the role of the two dominant rule-makers (EU and US), (iii) to identify the characteristics of the two dominant regulatory models, (iv) to elucidate the influence of these two models on third regions, and (v) to discuss the interaction between the regional and the multilateral level of rulemaking, where slow progress has been registered with respect to the harmonisation of non-preferential rules. Before developing these issues in detail, the economic and conceptual framework for analysing ROs is briefly sketched.

2. The economics of preferential rules of origin

Rules of origin perform different functions in regional trade agreements (RTAs). From a formal and administrative point of view, the rules confer origin to goods from particular countries, if they fulfil a set of criteria classifying their origin, so that a tariff benefit can be applied to the imported good. The importing country can base the preferences on an agreement with the exporting country or region (RTA), or on an autonomous granting of preferential access to its market. The criteria that are thereby used are diverse (see below).

[4] The import content of manufactured exports varies between >45% (on average) in East Asia and the Pacific, and around 25% in South Asia (World bank, 2005:47).

Contrary to the case of a free trade agreement (FTA), in a customs union (CU) with freely circulating goods and a common external tariff (CET), preferential ROs are in principle not needed. In practise, however, CUs might apply a system of preferential ROs, mainly because many CUs are not perfect (e.g. not covering the whole tariff universe, having border controls in place, etc.). In addition, CUs may obviously want to use ROs to distinguish between different extra-regional origins.

A rule of origin consists of the requirement of a certain *transformation* deemed sufficient –*substantial transformation*– so that a good traded between member countries in an FTA can be categorized as originating in the region, and can benefit from preferential treatment of trade within the FTA.

ROs are intended to avoid the proliferation of the phenomenon known as *trade deflection*: the importation, under preferential conditions, from third countries through the member country with the lowest external tariff. From this perspective, the level of stringency of the RO should be associated with the difference between the national tariffs of the member countries applied to imports from third countries. The same incentive is created by GSP regimes for firms located in non-beneficiary countries. Requiring a minimum level of substantial transformation aims to prevent such practices by limiting the applicability of trade preferences to those goods that satisfy ROs.

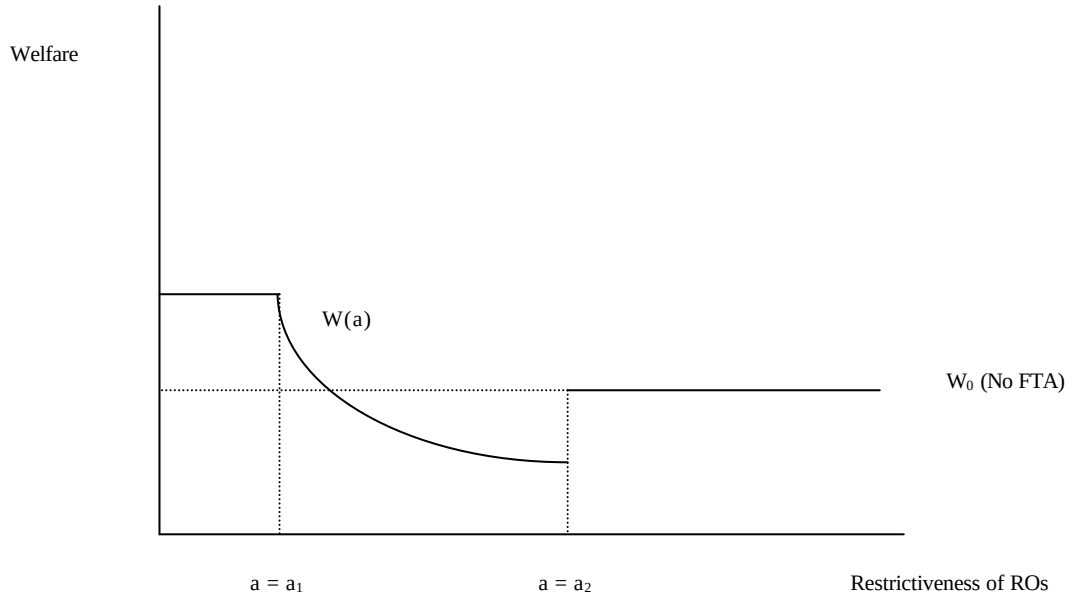
According to the specialized bibliography, a "small" content requirement may increase the use of local factors of production, as long as the elasticity of substitution between local and imported factors is *not* too low, and the content requirement does *not* grant excessive market power to local producers. However, additional increases in the content requirement may actually reduce the use of local factors of production. When the benefit of increased employment and earnings of national firms is greater than the welfare loss due to increased prices, the "desirable" regional content would be positive (Medrano, 1997).

Standard economic analysis of ROs focuses on the value content (or equivalent) requirements. Technical requirements and origin certification are supposed to cause costs which unfortunately have not been subject of any specific analysis. Under perfect competition the welfare analysis of preferential ROs can be summarised as in figure 1.[5] The reference level of welfare is W_0, corresponding to a situation without FTA. The figure shows the impact of signing an FTA with value-added based ROs with different levels of restrictiveness (a). With non-binding levels of value content ($a < a_1$) the production costs are not affected but the price level goes down with the implementation of the FTA; the consumer surplus gains are greater than the loss of tariff revenue. A net positive welfare effect is obtained (classical case of trade creation). The ROs become binding when $a > a_1$. The production cost and the price level in the importing country will gradually rise and the latter is therefore higher than the world price. This reduces the net positive welfare effect of the FTA. When the tariff loss exceeds the gains in consumer surplus, the net welfare effect can become negative. However, when the value content restriction becomes so high that it is not profitable anymore to import under it ($a > a_2$), the importing country starts to source from third countries (at the world price + tariff) and the welfare level falls back to the level in a situation without FTA.

In terms of trade flows and consistent with the previous analysis, ROs have an additional and independent effect on trade patterns, either reinforcing or acting against the patterns induced by trade preferences. Their effect can thus be substantial, and even greater if one assumes that trade deflection in manufactures is often accompanied by FDI deflection.

[5] The assumptions include: small countries (no terms of trade effects), constant returns to scale, zero tariffs on imported inputs. For a complete analysis, see Krishna and Krueger (1995), Krishna (2002). For further developments, including the introduction of multi-stage production, see Rodriguez (2001) and Duttagupta and Panagariya (2003).

Figure 1: Restrictiveness of ROs and welfare in an FTA under conditions of perfect competition: importing country perspective



Source: Based on Krishna (2002:9).

If we relax the assumptions of the perfect competition model and allow for imperfect substitution between imported and domestic inputs, for the possibility that domestic producers increase their market power, and for the presence of multiple (overlapping) RTAs, then ROs may have additional negative effects on welfare.

Among a large variety of effects of the ROs, one can mention the following:

> (1) technological inefficiencies in the face of imperfect substitution between inputs, or in the face of oligopolistic competition;
> (2) discriminatory treatment, not only between sectors, but also between types of producers within a sector, by relatively favouring those firms whose production process has a greater capacity for adapting to meet the requirements imposed by a RO;
> (3) cascading restrictions on regional trade, towards activities or stages late in the production process;
> (4) inequality in the distribution of benefits between factors of production, activities and countries –in terms of production, consumption, and domestic and foreign investment–.
> (5) inconsistency and transparency losses as multiple ROs and tariff elimination schedules are reproduced in presence of simultaneous overlapping FTAs (Garay and Estevadeordal, 1996).

The cumulation of ROs leads to welfare increasing (intra and extra-regional) trade creating, trade reorientating, trade expanding effects, and to welfare reducing trade diverting effects (Gasiorek et al., 2003:12).

On the other hand, the potential importance of operating and administrative costs for the certification and verification of at least certain ROs should not be underestimated, both at the level of national customs, as well as for the producers themselves, which would make the losses in efficiency that might be produced in the system as a whole more acute.

The issue of origin has taken on greater importance, among other reasons, because of: (i) the growth of international trade and the proliferation of FTAs in the world; (ii) the increasingly widespread practice of using inputs made in different countries in the multi-stage production processes of large and medium-sized enterprises (Pawlak, 1995); (iii) the need to avoid the proliferation of opportunistic agents –"*free-riders*"– which exploit in their own interest the benefits of free trade, without meeting established conditions.

In the face of the variety of problems related to the specification and application of ROs, a wide circle of specialists has proposed the appropriateness of avoiding them by the establishment of a CET among the member countries. However, if one of the reasons behind forming an FTA instead of a CU is based on the presence of substantial differences between member countries with regard to tariff policy towards third parties, it is clear that ROs can be used to enable the coexistence of such tariff differences with preferential liberalization of intra-regional trade.

So, if it is decided to reconcile the different tariff policies for the purpose of achieving a CET, an intermediate policy somewhere between the "desirable" policies for each of the members would have to be agreed upon. In this case, the economic evaluation of the adoption of a "sub-optimal" CET –individually and collectively– as an alternative to the application of another "sub-optimal" policy such as an FTA with a RO regime, will depend on a comparative evaluation, in terms of welfare, of the "sub-optimal" policies under consideration. The judgment about the relative benefit of each is an empirical question that should be resolved on a case-by-case basis.

For this reason, various authors have proposed intermediate systems that allow for a choice between policy mechanisms in accordance with the goals and needs of the member countries (Wonnacott, 1996a). The complexity of designing a "second order" protection policy is one reason why, as stated by Pawlak (1995): "*the world business community has not established an international standard for determining the origin of goods manufactured in more than one country, despite the fact that trade among countries which are members of regional agreements represents more than four-fifths of the total volume of world trade*".

The existence of "sub-optimal" policies on tariffs, quotas or regional content requirements can be explained, at least in part, by the presence of imperfections in the political markets and by costs associated with the redistribution of benefits/costs between economic agents (which prevent those who benefit from trade liberalization from duly compensating the losers) (Garay and Quintero, 1997). In addition, the flexibility of the substantial transformation rule leaves indeed ample opportunities for it to be captured by interest groups (LaNasa, 1996).

However, the theory of endogenous protection[6] is not sufficiently developed in order to stipulate without ambiguity the direction of the influence of each and every possible operating factor such as: (i) the concentration of domestic sellers-producers; (ii) barriers to entry that restrict external and internal competition; (iii) the presence of "disadvantaged" interest groups –e.g., unions, syndicates–; (iv) the scale of production and employment; (v) the degree of exportability/importability of domestic

[6] The "theory of endogenous protection" stipulates that protection results from an interaction between the demand by interest groups that bear the costs of lobbying with the benefits derived from the enjoyment of protection, and the supply by the policymakers to those who provide with them some specific benefit, not necessarily economic. In this context, the theory seeks to take into account factors besides the conventional ones to explain protection under conditions of imperfect competition and in the presence of non-economic objectives.

production; (vi) the technical relationships in the production process –e.g., relative factor intensity, qualification of the labour force–. As Posner states: *"This illustrates the essential deficiency of economic theory on regulation in its current form. In the best of cases, it is a list of relevant criteria for predicting when an industry obtains favourable legislation. It is not a coherent theory that postulates clear and verifiable hypotheses*".[7]

As a result, it is to be expected that any attempt to evaluate economically ROs suffers from even more serious errors and limitations than does the same analysis of endogenous protection, due, among other reasons, to the complexity of predicting the impact, in terms of protection, of introducing a certain RO in an economy under conditions of imperfect competition.

When ROs are part of RTAs between countries with differences in development levels, specific aspects of the political economy of ROs should also be taken into account. If structural differences coincide with strong dependencies of raw materials and other inputs, usually ROs are agreed upon without difficulties (for example, Mexico-US within NAFTA, Uruguay-Argentina and Uruguay-Brazil within Mercosur). However, if the negotiating parties are at the same time of considerable commercial importance, the ROs are more sensitive in the negotiations (for example, US-Brazil, CAN-Mercosur) (Guzman Manrique, sd). The use of positive lists in these cases will tend to favour existing producers.

3. Typology of rules of origin

Different criteria are used in RTAs to confer preferential origin to imported goods. In addition, specific trade agreements usually combine criteria even at the product level. Under the aegis of the World Customs Organisation, the Technical Committee on Rules of Origin has standardised these criteria (table 1). The essential rules apply to product categories, be it that they are defined on different levels of aggregation of the Harmonised System. In addition, a number of general (regime-wide) criteria are considered.

For goods that are wholly obtained or produced (from locally available raw materials or locally produced components) in the exporting country, the determination of the origin is straightforward. More difficult is the determination of the origin of goods with a production process covering two or more countries. In that case, origin is conferred on the basis of a minimum amount of working or processing in the exporting country (substantial transformation), according to the list rules.

At least three basic criteria have been used to determine whether a substantial transformation has occurred: (i) a change in tariff classification (CT) between the final good and the input and materials from third countries used in the production process; (ii) a minimum content of national or regional value-added (VC) to the manufactured product, whichever applies; (iii) the conduction of certain technical processes or the use of certain inputs in production (technical requirement, TR) (table 1).

The *first criterion* (CT) consists of a certain *change in tariff classification* of manufactured goods and the foreign input and materials used in their production. For example, a change at the level of the tariff heading (CTH) –that is, at the level of the first four digits of the Harmonized System of Tariff Nomenclature[8]– constitutes the basis for the system of preferential RO in cases like the European Community and ALADI.

[7] Cited in: Trefler (1993:142).

[8] The HS was developed by the Customs Cooperation Council (CCC) and implemented by the International Convention on the Harmonised Commodity and Description Coding System on 1 January 1988. It is important to note that the HS was not developed to be used in the determination of origin, but for statistical and commodity classification purposes.

The CT can also be used sequentially, like in the case of textiles in NAFTA. In this case, the inputs used to produce a final good should also fulfil a CT criterion. This obviously raises the level of restrictiveness of the rules and the potential for trade diversion. As Moïsé noted, sequential CTs closely resemble a TR (Moïsé, 2003b).

Among the principal problems encountered in its application, a noteworthy one relates to the absence of sufficient elements for determining those specific changes in tariff classification that guarantee an equivalent "substantial transformation" in the production of each and every item in the tariff universe. This is basically due to the fact that the Harmonized System was not designed for the purpose of serving as the sole instrument for the qualification of origin of merchandises.

Besides the "positive" CT criterion, a "negative" criterion can be formulated whereby cases are identified where a CT does not confer origin. This negative criterion is usually formulated as an exception to a positive CT rule (ECT). Negative usually more restrictive. Some of these negative rules can in practise be considered as functional alternatives for excluding sensitive goods from a preferential trade agreement.

The *second criterion* (VC) involves a percentage defined as a maximum content of foreign inputs and raw materials –coming from third countries– for the manufactured good to be considered as originating in the integrated zone, or, alternatively, the minimum percentage of regional value-added required in its production to grant the good its originating character.

This criterion suffers from problems such as the following: (i) it tends to penalize the use of more efficient cost-reduction techniques; (ii) it is highly sensitive to changes in determining factors of the cost of production between countries, such as, for example, relative exchange rates, wages and labor costs; (iii) it increases the cost of the administrative compliance procedure, given the need for strict and expensive accounting, operational and financial procedures, both at the national customs level and at the level of the producers themselves; (iv) it reproduces inequalities in the distribution of benefits between countries, not only by favouring countries with more vertically integrated, and generally more complex production facilities –as in the case of industrialized countries– but also by relatively penalizing those countries with low wages and salaries, such as those that are relatively less developed.

In addition, there is a problem associated with the reliable classification, according to its specific origin, of intermediate materials and inputs used in production, and with the precise accounting of their respective values in the regional content value of the final product, to avoid inappropriately considering all of the input as originating or non-originating –phenomena known as "*roll-up*" or "*roll-down*"–.

The *third criterion* (TR) refers to the realization of certain technical operations or the use of certain inputs or raw materials in production, as a requirement for granting qualification of regional origin for a good processed in the region.

Apart from the technical difficulties of having access to an updated inventory of production techniques at any time, its specification is discretionary due to the absence of classificatory elements that objectively guarantee the equivalence of degrees of transformation in the production of different goods. The TR criterion usually has the highest compliance cost, compared to VC and CT (World Bank, 2005:70).

Due to the practical impossibility of relying on a single criterion for determining the regional origin of each and every existing good, and based on the serious practical limitations for achieving a rigorous application of the value-added criteria, there is increasing receptiveness to proposals formulated for simplifying the classification of origin as much as possible.

Generally, regimes of origin include some additional (regime-wide) clauses to facilitate its administration and the empirical verification of origin requirements. (i) The *de minimis* clause establishes that for those cases in which the value of non-originating materials which do not satisfy the requirement of a change in tariff classification constitutes less than a given percentage of the transaction value of the manufactured good, such good shall *not* lose its status as originating in the region. (ii) The *roll-up* clause (or: *absorption principle*) which allows an intermediate good that has acquired origin by satisfying processing requirements –in spite that it incorporates some imported materials for third countries– to be considered as fully original in the calculation of the value added of its subsequent transformation into another good. (iii) The *cumulation principle* which allows a member country to use non-originating materials from another (member) country without losing the preferential status of its final product.

Consider a set of countries (A, B, C, …) that signed an FTA. A bilateral cumulation clause permits to use materials and goods that originate in a member country A in a production process in B and export the resulting output back to A as if all these inputs were originating in B. Diagonal cumulation allows the qualification of any good originating in any member country (A, C, D, …) and used as inputs in B as a good originating in the exporting member country B. Full cumulation allows to consider as originating in B (for exportation to A) also processed inputs imported from A, C, E, … that are non-originating in these countries.

RO regimes include further *duty drawback* provisions (clauses which prohibit the refunding of tariffs on non-originating inputs that are included in a processed good which is further exported to another member country's market), lists of operations insufficient to confer origin, and certification provisions.

Table 1: Typology of ROs (Kyoto Convention)

Coverage	Primary criterion	Secondary criterion	Tertiary criterion
Product-specific	Wholly obtained/produced		
	Substantial transformation	Change in Tariff Classification (CT)	Chapter (HS-2) (CTC)
			Heading (HS-4) (CTH)
			Sub-heading (HS-6) (CTS)
			Item (HS-8-10) (CTI)
		Exception attached to particular CT (ECT)	
		Value Content (VC)	Domestic/Regional Value Content (RVC) (min %)
			Import Content (MC) (max %)
			Value of Parts (max %)
		Technical Requirement (TR)	
Regime-wide	*De minimis* rule (max %)		
	Roll-up/Absorption Principle		
	Cumulation	Bilateral	
		Diagonal	
		Full	

Source: *Consolidated Text*, Technical Committee on Rules of Origin, World Customs Organization (WCO), Brussels.

4. Mapping preferential rules of origin worldwide

From a cross-section of RTAs, the change in tariff classification appears to be the most widely used criterion (Table 2). In a sample of 93 RTAs (FTAs and CUs), the criterion is used in 89 cases (Estevadeordal and Suominen, 2003a:5). Import content, value of parts and technical criteria are also very often used in FTAs. The table also shows that most of the RTAs use a combination of different ROs, which does obviously not contribute to transparency and consistency.

De minimis rules, bilateral cumulation and roll-up clauses are also generally found in RTAs (table 3). Diagonal cumulation is almost exclusively a matter of the European RTAs.

Table 2: Frequency of Various Product-Specific Criteria

PTAs	Criterion				
	CT	Value Content			TR
		MC	RVC	VP	
Customs Unions (sample size = 6)	6	2 (40-60%)	2 (35-60%)	-	-
FTAs and other PTAs (sample size = 87)	83	68 (30-60%)	7 (25-65%)	67	74

Note: CT = change of tariff classification; MC = import content; RVC = regional value content; VP = value of parts; TR = technical requirement.
Source: Estevadeordal and Suominen (2003a:5)

Table 3: Frequency of General RO Provisions

PTAs	*De minimis*	Type of cumulation			*Roll-up*
		Bilateral	Diagonal	Full	
Customs Unions (sample size = 6)	3	6	0	0	2
FTAs and other PTAs (sample size = 87)	85	87	58	8	81

Source: Estevadeordal and Suominen (2003a:6)

The dominance of a particular criterion or combination of criteria, characterising sub-sets of RTAs allows for the identification of families (clusters) of agreements around a few poles (models). A purely empirical screening of the rules used in different RTAs reveals the existence of two important clusters: one around the EU (the so-called *Pan-Euro model*) and one around the US/NAFTA (Table 4). The CACM regime is relatively close to the latter. In the following sections the European and American regimes will be looked at in more detail.

The RO regimes in the rest of the world (mostly Asia and Africa, and which we will therefore call the *Indian Ocean model*) are usually more transparent and simpler. The value criterion is applied across-the-board, sometimes complemented with a change of tariff heading criterion.

Table 4: RO Regimes

Regimes	Selectivity	CTC	CTH	CTS	CTI	ECT	VC	TR	Application
PAN-EURO	SS		¦				¦ *	¦	Europe Agreements, Euro-Med Agreements, EU-Croatia SAA, EU-FYROM SAA, EU-South Africa FTA, EU-Mexico FTA, EU-Chile FTA, ACP, EU GSP, EFTA-Mexico, EFTA-Singapore
LAIA	AB		¦				¦ **		CAN, CARICOM
MERCOSUR	INT		¦				¦ ***	¦	MERCOSUR-Bolivia, MERCOSUR-Chile
CACM	SS	¦	¦	¦		¦	?	?	
NAFTA	SS	¦	¦	¦	¦	¦	¦ ****	¦	Mexico-Costa Rica, Mexico-Chile, Mexico-Bolivia, Mexico-Nicaragua, Mexico-Northern Triangle, Chile-Canada, G-3, US-Singapore, (US-Chile), (FTAA)
INDIAN-OCEAN	AB		?				¦ *****		ASEAN, ANZCERTA, SAFTA, SPARTECA, ECOWAS, COMESA, Namibia-Zimbabwe FTA

SS = sectoral selectivity; AB = across the board; INT = intermediate; ¦ = characteristic criterion; ? = less characteristic criterion.
* MC 30-50%, ex-works
** MC 50%
*** MC 40%; RVC 60%
**** RVC 50-60% (60 FOB, 50 cost prod.)
***** MC 30-70%; RVC 25-35%
Source: Based on Estevadeordal and Suominen (2003a).

5. The Pan-European model

5.1. Presentation

The so-called Pan-European model of ROs, emerged in the 1990s as an effort to harmonise the origin rules embedded in different FTAs celebrated by the EU since the 1970s.[9] The origin protocols with the EFTA countries entered into force in 1972-1973, whereas the EEA agreement and the Europe Agreements (with the associated CEECs) were signed in the beginning of the 1990s.[10]

Upon the request of the Copenhagen European Council (of 21-22 June 1993), in 1994 the Commission submitted a report presenting a strategy for harmonising the preferential ROs to reduce the under-utilisation of trade preferences and to maximise the gains from trade in a European context. It was understood that both a more intense trade and better export opportunities for CEECs were essential components for (economically and politically) stabilising Central and Eastern Europe after the regime changes that took place in 1989-1990.

[9] The EU is the only regional bloc that also adopted a common set of non-preferential ROs.
[10] The Europe Agreements refer to a set of bilateral agreements with the CEECs with the objective to prepare them for eventual accession.

The Commission proposed a three-step harmonisation programme:

(i) harmonisation of ROs among the five Visegrád countries, with the perspective to include Bulgaria, Romania in the regional cumulation scheme later;
(ii) implementation of diagonal cumulation between EU, EFTA and the CEECs;
(iii) implementation of full cumulation.

The European Council of Essen (9-10 December 1994) adopted the proposal but made the third stage conditional upon an evaluation of its expected consequences for EU industries. In 1997, harmonised protocols replaced the pre-existing ones, covering an area comprised of the EU, the EEA, Switzerland and the associated CEECs.

For each heading of the HS, the Protocols define what should be considered as sufficient working or processing for non-originating materials to qualify as originating goods. Whereas the previous protocols explicitly privileged the change of tariff heading criterion at the 4-digit level (although with many exceptions), the new harmonised protocols do not provide a general rule. The criterion is established for each tariff heading. In many cases (about 25% of HS tariff headings), two criteria are proposed, of which at least one should be fulfilled. The first criterion can be CT (CTH for more than 60% of HS tariff items), import content or a technical criterion.[11] If there is a second criterion, it refers to the import content. There is a particular feature of the EU ROs in the sense that even when a given RO requires a CT at a heading-level or at a chapter-level, it allows the use of inputs of the same heading reducing the degree of stringency of the requirement. This is the so-called "soft rule of origin".

In addition to these criteria, *de minimis* operations (e.g. not conferring origin if considered as such), a (conditional) *de minimis* rule of 10% (e.g. non-originating materials up to 10% of the ex-works price do not alter the origin of the good) with some exceptions like textiles and apparel products, *roll-up*, and restrictive provisions on outward processing are established. Duty drawback is precluded at least 2 years after signing the FTA. Bilateral and diagonal cumulation is foreseen. Since 1999, the corresponding provisions have been merged. Full cumulation was initially limited to the EEA.

The EU's method of certification of origin provides two alternative procedures: a two steps issuance by the government's agency once a certification has been issued by the exporter or a competent agency or an invoice declaration for approved exporters with a recognized record as a frequent exporter issued by the custom authorities.

The Euro-Med Trade Ministerial Meeting held in Palermo on 7 July 2003 endorsed the "Pan-Euro-Mediterranean protocol on rules of origin", by which the system of diagonal cumulation will be extended to all Mediterranean partner countries: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Syria, Tunisia and the West bank and Gaza Strip (and the Faroe Islands).[12] The system will gradually be implemented, conditional upon the replacement of the current protocols in the trade agreements between the EU and the Mediterranean countries and the signature of FTAs among the Mediterranean countries containing identical ROs. The southward expansion of the Pan-Euro zone was initiated with

[11] No change specifies for almost 20% of the tariff universe.
[12] Cyprus and Malta were also included in the protocol. The inclusion of the Mediterranean partners in the pan-European system was decided in principle at the EU-Mediterranean Trade Ministerial of March 2002 in Toledo. These advances are part of the economic and financial partnership dimension of the Barcelona process, initiated by the establishment of the Euro-Mediterranean partnership at the Conference in Barcelona in November 1995. The declaration supported the creation of an FTA by 2010 to be established through the completion of the Euro-Mediterranean Association Agreements (EMAs).

the negotiations of FTAs with Morocco, Tunisia and Algeria, all containing full cumulation provisions.[13]

The generalisation of the system of diagonal cumulation requires the fulfilment of the following conditions: (i) FTAs with identical ROs should be in place both between the EU and the Southern Mediterranean countries and among these countries, (ii) all administrative procedures have to be harmonised, and (iii) all draw-back provisions should be withdrawn (Gasiorek *et a*l., 2002:10-11).

5.2. Discussion

The lack of a transparent coexistence of different rules implied an important cost for the companies involved in international trade with the EU before the harmonisation process. Especially the rules incorporated in the Europe Agreements were regarded as being too restrictive (Driessen and Graafsma, 1999:20-21). For small countries (e.g. most of the signing parties in the Agreements), depending heavily on imported inputs, the rules were often difficult to meet and the possibilities for cumulation were limited (limited to within the Visegrad countries, on the one hand, and within the Baltic countries, on the other).

Estimations of direct administrative costs of origin certification in the EC-EFTA FTA were found to be considerable. According to Koskinen (1983), these costs amounted to 1,4-5,7% of (the value of) exports; according to Herin (1986) 3-5% of FOB export value.

The harmonisation process has had clear positive effects in terms of transparency and the possibilities to cumulate. One of the most outstanding features of the European Union regime of origin is indeed its high level of standardization and harmonization across the multiple FTAs signed since 1997, and the remarkable similarity and continuity since the first protocol published in 1973.

As it is shown by Estevadeordal and Suominen (2004), the degree of restrictiveness of the EU ROs appears to be directly related with the tariff phase-out: the fastest the tariff liberalization schedule, *ceteris paribus*, least restrictive the ROs. As a consequence, there is a tendency to maintain relatively high protection –via rules of origin– after intra-regional trade liberalization to those goods with the slowest tariff dismantling under the FTA.

Also it appears to be the case that the tariff elimination rhythm under the EU FTAs is faster when the degree of competitiveness of the EU's partner country is lower and/or its distance and transport costs to the EU countries are higher. This is the case of Chile which obtained the fastest phase-out of tariffs among the latest extra-European FTAs (South Africa, Mexico and Chile).

In relation to the degrees of stringency of the EU FTAs, their strict similarities across agreements should be noted. In those authors' words: "*Two issues stand out. First, the average restrictiveness value for the EU RO … corresponds to the change of heading plus regional value content criteria, respectively. As such, … (the importance) of the change of heading rule in the EU's RoO regimes. Second, the data reveal important variation in the degree of restrictiveness across economic sectors within the two regimes as well as striking similarities in the variation of cross-sectoral restrictiveness within each agreement*".

Furthermore, the EU RO is almost uniform (in terms of degree of restrictiveness) in near 15 out of 21 sections of the HS, that makes it look more like a first-generation RO than a new-generation one. Nevertheless, EU FTAs regimes provide specific sectoral transition periods and adjustments between

[13] Bilateral agreements have been signed with Israel (in 1995), Tunisia (1995), Morocco (1996), the Palestinian Authority (1997), Jordan (1997), Egypt (2001), Algeria (2001), and Lebanon (2002).

partner countries but they are rather of minor importance and concentrated on few products, and also they tend to reduce the level of stringency of the RO corresponding to the single list.

Driessen and Graafsma evaluate the EU RO system generally as complex, although they recognise that significant progress has been made in terms of internal logic and sourcing opportunities, compared to the pre-existing protocols. According to them, considerable trade-deflection is likely in different production sectors because of substantive origin criteria and the drawback prohibitions for CEECs (Driessen and Graafsma, 1999:37-39). The drawback provisions are seen as a concession of CEECs to the EU.

The most restrictive rules are found in the following sectors: live animals, vegetable products, textiles and apparel, food and beverages, and optics (table 5). The first three belong also to the sectors with the most restrictive rules in NAFTA (see below).

Table 5: HS sections showing highest levels of restrictiveness in Paneuro and NAFTA ROs

	NAFTA [average = 5,1]	
Paneuro [average = 4,5]	1. Live animals 2. Vegetable products 11. Textile and apparel	4. Food, beverages and tobacco 18. Optics
	3. Fats and oils 5. Mineral products 6. Chemicals 8. Leather goods 14. Jewellery 20. Works of art, misc.	

Note: rules are considered as highly restrictive with restrictiveness indicators = 5 [minimum = 1, maximum = 7]. See table 7 for the methodological details.
Source: Based on Estevadeordal and Suominen (2003a:28).

A number of studies were performed to analyse the economic effects of extending the Pan-European model to the Mediterranean partner countries. According to Hoeller *et al.* (1998), the relatively high "local" content requirements in the EMAs (often 60%), restrict the (in principle, duty-free) access to the European market for manufactures. In practice, and given the cumulation provisions, this frequently means increasing the content of EU inputs.

Restrictive ROs have been linked to the underutilisation of EU preferences and, consequently, their insufficient developmental impact (World Bank, 2005:52). As shown in Table 6, preferential imports count only for about 50-55% of total imports from beneficiary countries.

Table 6: Preferential imports as a proportion of total imports from beneficiary countries (in value) 2001

	GSP	**Non-GSP**
1998	14,53 %	46,01 %
1999	14,06 %	46,41 %
2000	12,01%	42,49 %
2001	12,34 %	44,83 %

Note: The percentages do not add up horizontally because a number of countries belong to both the GSP and another preferential arrangement.
Source: European Commission (2003a:tables T1, T2, T3)

Candau *et al.* (2004) found that, in general, underutilisation of EU preferences does not have an important impact on protection encountered by non-EU exporters. They did find, however, that the utilization is generally correlated with the tariff margins, suggesting significant compliance costs. They found exceptionally low utilization rates for textile and wearing under GSP (and EBA), and identify the restrictive ROs as main causes for this. Brenton and Ikezuki (2004) confirmed that the low preference utilisation rates by EUs commercial partners in textiles can be linked to the restrictiveness of the ROs.

Using gravity models, Gasiorek *et al.* (2002) estimated that the absence of diagonal cumulation reduces bilateral trade volumes by between 40-45%.[14] A CGE analysis showed that RO cumulation is expected to lead to positive effects on production levels (+2 to 3%) and welfare (+ 0,5%), and, logically, increases in intra-regional trade. Estevadeordal and Suominen (2004) demonstrated also that cumulation has a significant impact on intra-regional trade.

In 2003, the European Commission launched a major project to prepare the revision of the European system of rules of origin. A Green Paper was produced and a wide-ranging consultation process was started. The objectives of the Green Paper were summarised as follows: *"[p]referential origin rules need to be fundamentally reviewed, especially in view of the level of duties likely to emerge from the new round of multilateral trade negotiations, the role to be played by preferential origin rules in free trade agreements and the policy of market access and supporting sustainable development. Management procedures and supervisory and safeguard mechanisms also need to be designed to make sure that preferential arrangements are used properly and shield the business community and the financial interests at stake from abuses of the system. The purpose of this Green Paper is to help the Commission to formulate guidelines in response to these objectives, taking account of the various interests at stake and the contributions expected from those involved in the preferential arrangements"* (European Commission, 2003a:4).

The consultation process involved mainly businesses (companies and business organisations) involved in international trade (approx. 70% of respondents) and authorities (EU, third countries and regions; approx. 30% of respondents). It ran from January until March 2004. The key findings were summarised as follows (European Commission, 2004):

(1) "The present origin rules do not fit current economic reality for the following reasons:
   - they do not correspond to the global production model of the market,
   - they reflect past defensive policy aims,
   - they do not correspond to the new manufacturing and processing operations which are currently taking place,
   - they do not reflect technological advances,
   - they should take more into consideration actual market, trade, industry and agriculture conditions.

(2) The current origin rules are seen as too complex, restrictive and they lack transparency.
(3) There is a clear call for rationalisation and simplification of the origin rules.
(4) The current system should be changed in order to provide an adequate level of assurance that the products for which preferential treatment is claimed do actually satisfy the origin rules.

[14] The analysis was carried out with aggregate flows. Is is likely that more disaggregated flows would reveal more variation.

(5) The system of paper-based certificates should be replaced by an electronic document.
(6) There is a need for increased Community monitoring and greater coordination and cooperation to ensure compliance with the rules of origin.
(7) There was support for the introduction into preferential agreements of clauses on suspensions of preferences and financial liability" (European Commission, 2004:4).

At this point, it is still too early to foresee a major change in the origin regime in place. It is likely that further initiatives will be taken to make the rules more transparent and to optimise the administrative and technical aspects of the regimes. It is not clear, however, whether expressed goals like "supporting development" and "taking into consideration actual market, trade, industry and agriculture conditions" are always compatible.

The consultation process sheds probably some light on the political economy of European ROs; the distribution of respondents (see above) probably reflects relatively well the political weights of the different interest groups influencing the European decision making process on ROs. It is not surprising then that, according to the majority of the respondents, European preferential rules reflect the objectives of European industrial policy (rather than trade or development policies) (European Commission, 2004).[15]

6. The NAFTA Model and origin regimes in the Americas

6.1. Presentation of origin regimes in the Americas

Basic characteristics

Regional integration agreements in the Americas include the Latin American Integration Association (ALADI), the Central American Common Market (CACM), the Andean Community (CAN), the Common Market of the South (MERCOSUR), the Caribbean Community (CARICOM), and the North American Free Trade Agreement (NAFTA), as well as other "new-generation" FTAs signed in recent years. ALADI has served as a model for MERCOSUR, the Andean Community, and CARICOM. NAFTA has been used as a model for Mexico's agreements with Bolivia, Costa Rica, and Colombia and Venezuela (the so called Group of Three –G3–), for Chile's agreements with Canada and Mexico, and for United States' FTAs with Chile and Central America. The CACM stands at an intermediate point between the two. NAFTA-type FTAs (new generation FTAs) such as the G3 agreement by Colombia, Mexico, and Venezuela and Mexico's bilateral treaties tend to be more comprehensive than the ALADI type in that they cover issues such as services, investment and public procurement.

They also contain more specific and detailed origin regimes. Traditional integration schemes in Latin America have relied on rules that are less selective and more uniform than those found in NAFTA-type agreements, which employ a multiplicity of families of rules at the tariff item level. What follows compares the principal features of three regimes that are used as reference frameworks: ALADI, NAFTA, and the CACM (Garay and Cornejo, 1999).

ALADI. The ALADI origin regime is outlined by Resolution 78 which establishes as a generic requisite for a good to qualify as of regional origin, a change in tariff classification at the heading level (4-digit level) of the Harmonized System (HS) or a regional value added of no less than 50% of its FOB export value. This is applied to all items of the tariff schedule, with the exception of a few cases. In spite of its simplicity the ALADI regime has not defined the qualification criteria and administrative procedures with sufficient operational rigor to ensure its strict observance (Devlin, Garay and Estevadeordal, 1997).

[15] On UNICE's position on ROs and customs policy, in general, see: UNICE (2000).

Although the main elements of the origin regimes of MERCOSUR and the Andean Community are similar to those of Resolution 78, there are some noteworthy differences. The Andean Community has an origin regime similar to that of Resolution 78, and it also admits special requirements in exceptional cases (Decisions 231 of 1987, 293 of 1991, updated by Decision 416 of 1997 of the Commission of the Andean Community). In addition, it grants Bolivia and Ecuador preferential treatment. The Andean Community used some special requirements in the 1970s as part of its import-substitution and industrial sector planning strategies. In 1997 important provisions were introduced regarding origin administration to the member countries' competent government authorities in this area, detailed sanctions applicable to certification agencies, and regulations on the criteria and procedures for setting specific origin requirements –SOR– (Garay and Cornejo, 1999).

The framework of reference of the MERCOSUR ROs is also Resolution 78 of ALADI. For some goods, the MERCOSUR regime demands a 60 percent level of added value and, in addition, a change in tariff heading. Furthermore, MERCOSUR Decision 16/97 sets specific origin requirements for a list of goods from the chemical, iron and steel, data processing, and communications This type of requisites is applied on an exceptional basis and prevails over the general criteria. The MERCOSUR regime provides for some type of differential treatment to some products with origin in Paraguay. This differential treatment applies to a limited number of products and years. Likewise, in the agreements signed by MERCOSUR with Bolivia and Chile a differential treatment is also envisaged with less demanding conditions set for the goods coming from Paraguay and Bolivia.

NAFTA. The NAFTA regime is distinguished by its complexity, specificity and detail, in marked contrast to the ALADI regime[16]. (1) It is a system of specific rules at the tariff-item level combining some or even all of the four qualification criteria. (2) It defines more than one rule for determining a good's origin; in these cases apply a family of ROs. At least 70% of the tariff items are covered by families of ROs. (3) It uses the CTH criteria in a much more versatile fashion than do the other regimes. (4) It uses the regional content criterion for around a third of all items, either alone or, more frequently, in combination with one of the other criteria. (5) It establishes a minimum regional content value of 50 or 60 percent, depending on the method, and calculations use the net cost or transaction value method. (6) It includes concepts not used in earlier regimes, such as the *de minimis* clause, accumulation, *roll up* and the introduction of self-certification by exporting companies.

Near 45% of the tariff universe is subject to a rule of origin based on a CTH –17 percent of the cases as the only component, another 17 percent accompanied by another component: an exception to CTH and 7 percent accompanied by two components: VC and TR–. Furthermore, for almost 42 percent of the tariff universe a RO based on a CTC applies –25 percent of the cases as the only component, 6 percent accompanied by an additional component: an exception to the CTC and another 6 percent by two components: an exception to CTC and TR– and other 8 percent on a CTS at a subheading level –2 percent of the cases as the only component and 4 percent accompanied by an additional component: VC– .

The NAFTA regime of origin is the framework and guideline of the so called new-generation regimes of origin in the Americas.

CACM. The CACM regime is a combination of the ALADI and NAFTA systems. The main criterion is the CT one, but it is applied more flexibly than under ALADI Resolution 78. Instead of being applied uniformly at the HS four-digit level, it is measured in terms of changes in chapter, heading, and subheading. In a number of cases the CACM regime allows exceptions to be made to the primary change

[16] This level of detail in NAFTA rules can be seen in the official Mexican bulletin *General Rules for the Application of the Customs Provisions of the North American Free Trade Agreement*, in which the rules of origin count almost 100 pages.

in tariff heading that is specified. Only with regard to some specific goods does it set additional specific criteria, such as regional content and technical requirements. To date, these have rarely been applied. Use is made of concepts such as the *de minimis* clause; there is no provision for differential treatment for less-developed countries. The CACM regime also introduces a series of rules and procedures to ensure correct administration of and due compliance with the ROs.

Differences between regimes

The principal differences among these regimes have to do with whether they follow uniform or differentiated application of the rules, apply multiple criteria, and use value-added tests (table 7).

Diversity. The change of tariff classification criterion (CT) is applied uniformly in the ALADI regime at the HS four-digit level, regardless of the type of merchandise. In contrast, under NAFTA and the new-generation regimes the required CTC varies between goods: a change in chapter, heading, subheading, or even tariff item may be required.

Multiplicity. The origin regimes in MERCOSUR, the CACM, the Andean Community, and ALADI are basically defined in terms of the CTC or, alternatively, a given level of regional content; in some exceptional cases a combination of criteria is used for specific lists of goods. In contrast, the NAFTA and the new generation regimes are based on a multiplicity of criteria, which prevents any one criterion from being singled out as the guiding principle for determining origin. In part, this multiplicity reflects the high degree of detail and selectivity contained in new generation FTAs.

Alternation. In ALADI, MERCOSUR, the CACM, and the Andean Community alternation[17] is uniform, with the additional feature that each rule is based exclusively on a single qualification criterion: for example, the first criterion is based on a change in tariff heading and the alternate one on a specific regional content value. In contrast, NAFTA and new generation regimes frequently offer a variety of alternate rules for determining a good's origin, without each rule necessarily being based on a single qualification criterion. In practice, however, the levels of stringency within alternative rules which constitute a family differ as a result of the different requirements of the criteria used to determine origin.

Calculation Method. ALADI, MERCOSUR, and the Andean Community require the FOB or CIF transaction value of the merchandise to be used in calculating its regional or national content. These values are well known, and they require neither the exporter nor the customs authorities to keep special records or employ additional controls. On the other hand, NAFTA and new-generation regimes tend to use two alternate methods for calculating regional content: net cost and transaction value. Estimating the value of regional content using the net cost method requires detailed records of and information on merchandise promotion and sales costs. The CACM regime stands midway between these two groups in that it uses two methods to determine regional content: transaction value, defined in accordance with the WTO's Customs Valuation Code, and normal price, calculated from the FOB price of the exported goods and the CIF price of third-country components.

The new generation agreements contain novel concepts aimed at, among other goals, increasing the flexibility of the tariff classification change criterion by introducing *de minimis* clauses facilitating the regional integration of production processes by allowing the cumulation of regional components in calculating regional content values and streamlining the origin certification process by enabling exporting companies to issue their own certificates.

They also specify verification, control, and sanction procedures and activities with greater detail and precision –aspects that an origin regime must address and that were not dealt with adequately in some "first-generation" agreements–. Although, it should be noted, some of these stipulations or innovations

[17] Alternation is to be understood as the application of more than one rule in classifying the origin of a given good.

can increase the cost of administrating the ROs for both the public and private sectors, they do guarantee adequate rigor in the application of the regime.

Table 7: Origin regimes in the Americas

REGIME OF ORIGIN	CRITERION (1)	CRITERION (2)	OTHERS (3)	SPECIFICITY	MEMBER COUNTRIES TREATMENT	OTHER CLAUSES	METHOD OF CALCULATION	ADMINISTRATION
1. ALADI	Change in tariff classification at a heading level (4- digit level), **or**	Regional value added no less than 50% of FOB value	_	Uniform for the tariff universe, based on a single qualification criterion	No differential treatment	_	Based on a FOB or a CIF value of transaction	No rigorous administrative procedures
a. Andean Community	Idem ALADI, **or**	Idem ALADI	Specific requirements in exceptional cases	Idem ALADI, except for some exceptional cases	Preferential treatment for less developed countries (Bolivia and Ecuador)	_	Idem ALADI	Imposes detailed sanctions applicable to certification agencies
b. Mercosur	Idem ALADI, **or**	Regional value added no less than 60%	Specific requirements for a list of goods (like chemicals, iron, steel, data processing and communication)	Idem ALADI, except for a list of goods	Preferential treatment to some products with origin in Paraguay	_	Idem ALADI	
2. NAFTA	Change in tariff classification in a more versatile fashion than the other regimes, from a change at a tariff item level up to a change at a chapter level (8, 6, 4 or 2 digit level)	Regional value added of 50% or 60%, **and/or**	Technical requirements in terms of specific process of production or inputs	Diverse, **not** uniform between goods, based on a multiplicity of criteria and a variety of alternative rules	No differential treatment	*De minimis*, accumulation and *roll up*	Net cost or transaction value	Specifies verification, control and sanction procedures in detail and precision. Introduces self-certification by exporting companies
3. CACM	Idem NAFTA, **or**	Regional value added content for some specific goods, **or**	Technical requirements for exceptional goods	Diverse, not uniform, based basically on a change of tariff classification	No differential treatment for less developed countries	*De minimis*	Midway between ALADI and NAFTA: transaction value according to WTO's Custom Valuation Code, and normal price	Stipulates some rules and procedures to reinforce verification and control

6.2. Discussion

Comparing origin regimes in the Americas

Upon the recent proliferation of FTAs under the scheme of open regionalism a tendency towards the adoption of origin regimes has been observed which stand between the classic, referred to as first-generation, and the new generation. In principle it would seem that differential regimes have been taking shape in the case of the FTAs established in recent years by some countries or regional groups, which may turn out to be decisive in the integrationist dynamics of the American Hemisphere. These countries or groups could be conceived as a kind of "poles" of FTAs systems in the region.

A "pole" is understood to be the set of FTAs that use as a frame of reference in the definition of their origin regime the negotiations carried out under a specified FTA, in such a way that its contents are very similar in their regulatory aspect as well as in the specification of the ROs at the level of tariff subheading.

Currently, there are around twenty five different origin regimes in the region; for this reason a way to progress in the comparison consists in determining whether a "representative" origin regime exists and its level of "representativity", for a set of FTAs that may comprise a "pole". And then to apply the same procedure between regimes considered as "poles".

Therefore, it is necessary to begin by assigning, at the tariff subheading level (6-digits of the HS) a vector of numerical ordinal values (one value per component of requirement) to each one of the RO criteria established in the FTAs to be compared. Then, for each component at the tariff subheading level, to compare statistically the corresponding values in the different agreements (for example, for a specified subheading to compare statistically the values assigned to the CT in the five agreements that comprise the eventual pole-regime of the Mexican FTAs). This comparison is operationalized, at the level of each tariff subheading, through the statistical mode (the value repeating more often) of the values stipulated for a specific component in the FTAs considered. The comparison is repeated for all the components and it is established whether a representative value exists for each one of them, or not (in statistical terms). The degree of "representativity" is given by the frequency of the mode: as from a certain threshold, a greater frequency is associated to a greater representativity.

Accordingly, to identify a charcteristic RO within an FTAs-pole the resulting ordinal values are calculated for each component of the rules compared at the subheading level: CT, ECT, VC, TR.

To illustrate, if the change of tariff classification in each one of the five (FTAs) agreements of the Mexican-pole regime were: 4, 4, 3, 4 and 4, its statistic mode would be 4 as it is the value repeating more often. Additionally, the frequency of the mode would be 80% since the modal value repeats four times from a total of five cases compared.

A resulting value is representative when the frequency of the statistical mode is not inferior to a specified percentage of the number of cases considered (for example, 66.7% or 75% in the case where three or four regimes are compared, respectively). The greater its frequency, the closer the mode will be to the arithmetic mean and, consequently, the greater its statistical representativity –and the higher the degree of similarity between the resulting rule and the rules of the agreements under comparison–.

A rule is representative when identical rules exist between the compared regimes and/or when its resultant components have high frequency modes. In general, it is to be expected that the larger the quantity of identical components (equal value for all the regimes being compared), the higher will be the degree of representativity of the resulting rule. In principle, a rule comprised by three identical components and the remaining with a high frequency, is less representative than one integrated by four identical components, but is more representative than one comprised by two identical components and the remaining two with a high frequency.

To facilitate the determination of the degree of representativity of the resulting rules it is convenient to classify them according to the greater or lesser similarity existing between the standing rules of the pole-regimes being compared, at the subheading level or tariff item. This grouping is defined in five categories according to its degree of similarity/disimilarity: identical, highly similar, fairly similar, similar and scarcely similar.

It is worth to stress that there are significant similarities among the new-generation regimes of origin in terms of the structure of their most important families of ROs. In the case of NAFTA, G3 and Mexico-Costa Rica FTAs, this is ratified at both the aggregate and sectoral level (e. g. 2-digits ISIC), with the exceptions of the chemical, petroleum and plastic manufacturing sectors. For instance, 16 families of ROs cover 88 percent of the tariff items (8-digit of the HS); 5 of them cover at least 65 percent of the items.

Furthermore the regional content criterion is included in families of ROs applying to 42 percent of the items in the case of NAFTA and 38 percent in the two other FTAs under consideration (Garay and Estevadeordal, 1996).

This degree of consistency is greater when only the G-3 and the Mexico-Costa Rica Agreement are compared; between them, the first eight families correspond and cover 63% of the subheadings (6-digit) of the tariff universe.

In addition, it should be noted that the degrees of stringency between the G-3 and the NAFTA rules – taking the tariff subheading as the basic unit of analysis– are significantly correlated[18], both at the level of the economy and at the sectoral level (2-digit of the classification ISIC, rev.2).

Notwithstanding the high degree of correspondence between types of families of ROs among new generation agreements, in comparing the degree of stringency of the ROs between the G-3 and the NAFTA, it is found that at least *a priori*, the average degree of stringency of the G-3 ROs tends to be lower than that of the NAFTA rules (with a statistical difference between average degrees of stringency significant at the 0.01% level of confidence) (Garay and Quintero, 1997).

These same characteristics tend to be replicated in the case of the FTAs recently signed by US with various Latin American countries such as Chile and some Central Americans: high degree of correspondence of their ROs but relatively lower level of stringency of origin requirements in relation to NAFTA.

As a result, it can be argued that the first new generation regime of origin of NAFTA tends to be reproduced in others FTAs subsequently signed by countries like US and Mexico during the last decade. But at the same time there is a clear tendency to simplify the new generation regime by reducing the cases subject to alternative rules, stressing the change of tariff classification as a predominant qualification criterion and reducing the degree of stringency, at least *ex ante*, in relation to the NAFTA original regime of origin.

Garay and Cornejo (2001a, 2001b) point to the same conclusion, by showing that a representative pole-regime of origin exist for the FTAs subscribed not only by Mexico but also by Mercosur with other countries of the American Hemisphere, since only 3% of the subheadings may not be assigned to a representative RO of the corresponding pole regime, and that to 80% of the sub-headings corresponds a representative rule of the pole regime that is either identical (the Mexico pole case in 60% of the cases or the Mercosur pole in 72%) or at least it features a high degree of similarity between the regimes compared.

Following these authors, it is worth highlighting some of the distinctive main features of the comparison/differentiation between the four decisive origin regimes currently in effect in the Americas – NAFTA, MCCA, Mercosur pole FTAs and Mexico pole FTAs–:

(1) 44% of the subheadings compared (4538 subheadings from the tariff universe at the 6-digit of the HS) have a representative RO for the regimes compared. The existence of only nine representative ROs for the four regimes being compared is to be highlighted.

(2) The degree of "representativeness" of the distinctive rules of the four origin regimes may be specified as follows: a representative rule, which is identical in the four regimes is applied to 4% of the subheadings of the tariff universe, a highly similar rule between regimes corresponds to another 6%; a fairly similar rule applies to another 20% and a similar or barely similar rule is applied to another 14%. Moreover, a certain trend would seem to exist showing a relatively higher level of "similarity" between the regimes of origin in the case of goods with less technological complexity.

[18] With positive Pearson correlation coefficients (greater than 0,3) with a level of confidence of 0,01%.

(3) The main ROs representative of the four regimes are: CTC (without exception or VC or TR requisites) applicable to 44% of the subheadings with a representative rule –-that is, 877 subheadings–; CTH (without any other requisite) applicable to 32% of the subheadings as representative rule; CTC with exception to raw materials included in certain subheadings and with TR, applicable to 11% of the subheadings with representative rule.

(4) For the remaining subheadings of the universe it is not possible to assign a representative RO for the regimes considered because there is at least one origin rating criterion for which a representative value does not exist. The absence of representativeness does not necessarily imply a discrepancy in all the components of the rule, rather, on the contrary, in the majority of cases the discrepancy is present in only one or two of its criteria.

(5) For the 2530 subheadings without a representative rule the cause for the dissimilarity occurs in 71% of the cases related to the CT criteria and, to a much lesser extent, to the ECT. Besides, in only 327 of such subheadings the discrepancy is generated around two or more criteria.

(6) The MCCA origin regimes and the one representative of the MERCOSUR pole tend to be the most dissimilar among the origin regimes considered. In particular, both regimes differ specially in the employment of the CT criteria (MERCOSUR pole 59%, and MCCA 55%) and, to a lesser extent, in the ECT (MERCOSUR 26% and MCCA 27%). The remaining differences in the criteria of origin rating are of scarce relative importance.

(7) The NAFTA regime differs substantially from other regimes only in 23% and 10% of the subheadings without a representative rule in terms of the CT and the ECT criteria, respectively. The Mexico pole regime stands out for having the lesser dissimilarities as it differs significantly from other regimes in only 5%, 10% and 6% of the subheadings without a representative rule in terms of the CT, the ECT and VC criteria, respectively (Garay and Cornejo, 2001a).

ROs and US Protectionism

The US authorities have been aware of the possible trade restricting effects of ROs for some time. In 1987, a well-known publication of the United States International Trade Commission was presented before the U.S. House of Representatives, which identified some of the principal problems with the criteria for determining origin, and presented four basic principles for rules of origin: (1) uniformity, (2) simplicity, (3) predictability, (4) expeditious administration (USITC, 1987). In addition, it recommended adopting a focus based on the execution of a certain production process for conferring origin upon the resulting good, but which unfortunately suffers from the disadvantage of requiring a detailed, up-to-date inventory of the available processes for manufacturing the universe of goods.

From the beginning of the 90s there were signals that ROs might gradually be used more as instruments of protection (Nogués and Quintanilla, 1992:305). The major protectionist effects of NAFTA ROs were found in clothing, automobiles and color televisions (Schiff and Winters, 2003:79).

Cadot *et al.* (2004) sustain that NAFTA ROs have a preference diluting effect in terms of market access for Mexico and that the effect is progressive (affecting relatively more the final goods). They show that the restrictive use of ROs should not necessarily be seen as the result of protectionist pressures for US competitors, but as the result of pressures from the side of US producers of intermediary inputs trying to create a captive market in Mexico.

The administrative costs of the origin certificates in NAFTA were estimated at around 1,8% of the value of exports. The trade distortion effect of the ROs were estimated to be equivalent to an average tariff of around 4,3% (World Bank, 2005:70).[19]

The NAFTA regime shows the highest levels of *ex ante* trade restrictiveness in the world. It is worth mentioning that the regime tends to prevent trade deflection and to maintain relatively high protection after intra-regional trade liberalization to those goods with high tariff protection from third countries before the FTA (Estevadeordal, 2000). The *strategic nature* of origin policy can be claimed through the direct relationship between the degree of *a priori* stringency of ROs and the tariff level applied to third parties for at least the "key" member countries in the respective FTAs and with the preference margin granted to intra-regional trade, and through the differentiation in degrees of stringency for certain types of goods (Garay and Quintero, 1997; Garay, 2002).

As an illustration, in the case of NAFTA emphasis should be placed on the significant direct correlation (i.e. Spearman rank correlation) between the degree of stringency and the U.S. tariff level applied to third parties (in special for the items for which the Mexican tariff level is higher than the U.S. level), both at the level of the economy and industrial sector as a whole, and at the level of seven of nine manufacturing sectors (ISIC, 2 digits). For near 80% of the tariff universe, the NAFTA ROs would seek to preserve, at least partially, the level of U.S. protection against foreign competition, by imposing stricter requirements on imports from Mexico when the U.S. tariff applied to third parties is higher.

In addition, for the general average, the manufacturing sector and five out of nine industrial sectors (ISIC, 2 digits), an inverse statistical relationship is observed (Spearman correlation at the 0.01% level of confidence) between the degree of stringency of the NAFTA RO and the margin of preference that the U.S. concedes to Mexico**,** but specifically for those items for which the Mexican tariff level is higher than the US tariff level to third countries.

These characteristics of the U.S. protection policies and the NAFTA origin regime coincide with what is often argued in specialized circles, in the sense that the design of such policies has responded to a large extent to the lobbying power of the various interest groups in the US economy and that, therefore, it has been shaped in large part by goals of a *strategic nature*. It was not gratuitously that the chief US negotiator for the NAFTA origin regime stated (Simpson, 1997): "*The failures of NAFTA basically stem from well-intentioned efforts to respond to the needs of various groups, without duly considering the consequences for the operation of the NAFTA as an agreement intended to liberalize and stimulate trade*".

Furthermore, as Garay and Quintero (1997) argument: *"In both the descriptive statistical and basic econometric analyses, it was not possible to prove the simple hypothesis on the goal of seeking to avoid or attenuate the eventual* deflection of trade*, either for the G-3 origin regime or for the NAFTA. In contrast, there seems to be enough basis to claim the* strategic nature *of origin policy through the direct relationship between the degree of* a priori *stringency of rules of origin and the tariff level applied to third parties for at least the "key" member countries in their respective FTAs and –although to a lesser extent, especially in the case of the G-3– with the preference margin granted to intra-regional trade, and through the differentiation in degrees of stringency for certain types of goods. In this sense, … the NAFTA's origin policy aims to reinforce the trade policy of liberalizing the flow of goods between the U.S. and Mexico, thereby acquiring the character of a trade policy as such. Additionally, it is observed –especially for items for which the Mexican tariff to third countries exceeds Colombia's– that the G-3 rules of origin tend to preserve, at least partially, the Mexican level of protection against foreign*

[19] Based on Ansom et al. (2004) and Carrere and de Melo (2004).

competition, by imposing requirements on imports from Colombia that are stricter, when the tariff Mexico applies to third parties is higher[20]*".*

On the basis of the NAFTA experience, Simpson proposed some basic recommendations for designing the Free Trade Area of the Americas –FTAA–. Among those relating to origin, the following are noteworthy (Simpson, 1997): (1) eliminating the requirement of regional content value, because it is the principal cause of the exaggerated requirements of storage, processing and auditing of information in the agreement, which render it "Byzantine in its complexity"; (2) using simple ROs based on change in tariff classification as a transition to a CU, avoiding changes at any level of aggregation that goes beyond 6 digits; (3) creating partial customs unions to ensure the elimination of ROs in the corresponding sectors and allowing continual progress towards a true CU.

Given the leadership assumed by the United States in negotiating FTAs with different countries of the American Hemisphere, and the fact that the reproduction of an origin regime of the new-generation type has been adopted as a commercial strategy (not as complex, diverse, specific and stringent than the original NAFTA regime of origin), the growing predominance of this type of origin regime in the commercial bi- and multilateral relations is evident for an important number of countries and regional groups in the Hemisphere.

In the event an FTAA and/or an FTA negotiation between the US and MERCOSUR would be concreted, this trend would be further reinforced to the extent that an origin regime more similar to one of the new-generation (NAFTA and Mexico-pole type) would be adopted for the Hemisphere.

Meanwhile, an origin regime relatively dissimilar would continue in effect (with the above-mentioned specific differences) for the trade between an important group of countries, especially among the MERCOSUR countries and between these and the Andean countries and Chile.

Recently, some empirical work has been done on the ROs used in the framework of the Africa Growth and Opportunities Act, signed in 2000. Mattoo *et al.* (2002) and Walmsley and Rivera (2004) found that its medium term effects would be much more important without restrictive conditions on market access and that ROs are the most important category of these restrictions. Clothing is a particularly problematic sector.

7. Comparing the Pan-Euro and American regimes: a summary

In order to compare the EU ROs and the new-generation and first-generation FTAs in the Americas, the following representative regimes have been selected: new EU RO regimes (FTA with South Africa, Mexico and Chile), NAFTA – Mexico-pole type and MERCOSUR-pole type, respectively.

(1) In the case of the first component of the RO (CT criterion) of the first alternative rule, the EU regime is highly concentrated on the change at a heading level (CTH, 4-digit level HS), 60 percent of the tariff universe in comparison with 45 percent and 100 percent in the cases of new-generation and first-generation regimes. The following requirement in terms of importance is change at a chapter level (CTC): 14 percent in the EU regime and 42 percent in the new-generation regime –none in the first-generation case–.
As a difference, the EU regime does not establish a CT criterion for almost 25 percent of the tariff subheadings of the HS; for more than 85 percent of these cases it imposes a wholly-obtained or a ceiling of 40-50 percent of non-originating materials.

[20] This general tendency would be counteracted to a certain extent in the specific case of those raw materials and some non-durable goods for which the tariff Mexico applies to third parties exceeds the respective Colombian tariff.

(2) Almost 25 percent of the tariff universe is subject to a value added (VC) or import content (MC) requirement under the EU's origin regime, in contrast to the 8 percent and 34 percent under the new-generation and first-generation regimes in the Americas. The VC requirement is applied basically to those cases subject to no CT or to a CTH under the EU ROs and in high proportion to those cases subject to a CTH under the new-generation regime. This requirement is applied as an additional component to the CTH.

(3) Near 21 percent of the tariff universe is subject to a TR criterion under the EU FTAs, 15 percent and 43 percent under the new-generation and first-generation regimes in the Americas. This criterion is highly concentrated as an additional component to the CT at the chapter and heading level under the EU ROs and new-generation regime. It is applied with the CTH under the first-generation regime.

(4) Nonetheless, as argued by Estevadeordal and Suominen (2004): "*The figures reveal the rich diversity of combinations of different RO criteria across sectors particularly in the EU- and NAFTA- based RO regimes; MERCOSUR RO are more uniform … . Even though NAFTA RO diverge at the sectoral level from the EU model, the differences are seldom marked but derive from the particular combination of RO. Particularly notable are the prevalence of the exception to CTH and VC criteria in combinations with the CTH criteria. Both NAFTA and the EU RO regimes rely heavily on TR in the textile sector, which can have important implications to production patterns. … However, NAFTA and EU models do diverge in a dimension that is beyond the scope of the figures: NAFTA uses the regional value content as the main VC RO, whereas the EU mainly employs the import content criterion*".

(5) The *ex ante* degree of restrictiveness of the NAFTA RO regime is higher than the one of the EU regime (10 percent higher on average), except in 4 out of 20 sectors such as: live animals, vegetable products, electrical equipment and optics. The first-generation RO regime shows the lowest *ex ante* degree both on average and at the sectoral level.
The degree of restrictiveness varies among sectors up to the point that while it tends to be uniform in sections 13 to 21 of the HS for EU's RO regime, it varies significantly and tends to be relatively higher under the new-generation regime. This situation is reversed in the case of section 4 (foodstuffs).

(6) All alternative RO regimes establish a *roll up* clause and allow *cumulation* (bilateral but not diagonal accumulation with the exception of the EU FTA with South Africa and Poland), two of them incorporate a *de minimis* clause –e. g. 10-15 percent in the EU's FTAs and 7 percent in NAFTA– and preclude *drawback* after a given date –e. g. 2 years in the EU FTA with Mexico and 5 years for Mexico under NAFTA–.

(7) In terms of the certification method, there are important differences. While the new generation RO regime allows self-certification, the first-generation requires a certification by a public entity or a private entity approved as a certifying agency by the government. The EU's RO regime establishes a two-step private and public certification.

Table 8 summarises the degrees of restrictiveness of the different RO families (clusters), using the methodology developed at the IDB.

Table 8: Restrictiveness and facilitation index numbers: Paneuro, NAFTA and Mercosur clusters

	Restrictiveness	**standard deviation**	**Facilitation index**

	index (RI)	(RI)	(FI)
Paneuro cluster			
Paneuro	4,81	1,37	2
EEA	4,81	1,37	3
EFTA-Croatia	4,81	1,37	1
NAFTA cluster			
NAFTA	5,15	1,16	3
US-Chile	4,37	1,61	3
Canada-Chile	4,61	1,43	3
G-3	4,94	1,46	2
Mexico-Nicaragua	4,77	1,31	3
Mexico-Costa Rica	4,77	1,31	3
Mexico-Bolivia	4,96	1,37	3
Mercosur cluster			
Mercosur	2,00	0,00	1
Mercosur-Chile	2,98	1,85	1
Mercosur-Bolivia	3,02	1,84	1
CACM			
CACM	2,00	0,00	3
LAIA cluster			
LAIA	4,00	0,00	1
Andean Community	2,00	0,00	1
CARICOM	2,00	0,00	1

Methodological note: The restrictiveness index (RI) shows the ex ante restrictiveness of an RO regime. The numbers in the table are unweighted averages of RIs calculated at the HS 6-digit level. Ordinal values are attached to different ROs: 1 (CTI), 2 (CTS), 3 (CTS + VC), 4 (CTH), 5 (CTH + VC), 6 (CTC), and 7 (CTC + TR). Implying that: 1 = RI = 7. See also Estevadeordal (2000) and Garay and Cornejo (2002) for an alternative algorithm. The facilitation index (FI) evaluates the ex ante effect of the regime-wide rules. The minimum value of FI is zero (de minimis = 5% and no other regime-wide rules apply. The values 1 to 4 reflect the application of 1, 2, 3 or 4 of the following additional rules: diagonal cumulation, full cumulation, drawback, self-certification (in any order). The value of 5 is reached with a de minimis = 5% and all other rules apply. Thus: 0 = FI = 5.
Source: Estevadeordal and Suominen (2003a:35).

8. The Indian Ocean RO regimes

The RO regimes of the preferential trade areas in the rest of the world include ASEAN, ANZCERTA, SAFTA, ECOWAS, COMESA, SADC and the Namibia-Zimbabwe FTA. These regimes are characterised by relatively simple rules, applied across the board. Usually a value content criterion is used, sometimes the CTH criterion. The MC varies from 30 to 70%; the VC rule from 25 to 35% (Estevadeordal and Suominen, 2003a; table 9).

Table 9: Restrictiveness and facilitation index numbers: Indian Ocean regimes

	Restrictiveness index (RI)	standard deviation (RI)	Facilitation index (FI)
AFTA	4,00	0,00	1
ANZCERTA	4,00	0,00	2
SADC	4,68	1,40	2
COMESA	2,00	0,00	1

ECOWAS	3,00	0,00	1

Methodological note: See table 7,
Source: Estevadeordal and Suominen (2003a:35).

The SADC case is sometimes used to illustrate that these regimes might undergo the influence of the development of the more complex (and restrictive) regimes of the EU and the US/NAFTA. SADC rules initially consisted of a CTH, RVC of minimum 35%, or an MC of maximum 60% of total inputs.[21] However, they were revised and include now more restrictive content requirements and technical requirements were also added (Flatters, 2002). According to Schiff and Winters (2003:8), the revision shows the influence of the rules embedded in the EU-South Africa agreement and the EU-ACP trade preferences.

9. The extra-regional expansion of the NAFTA and EU models

The US/NAFTA model expanded primarily southwards on the American continent. Given the leadership assumed by the United States in negotiating FTAs with different countries of the American Hemisphere, besides that many Latin American countries already have FTAs with other countries in the Hemisphere under the "new generation" origin regime, which can be further reinforced if the FTAA (Free Trade Area of the Americas) succeeds, it can be argued that the NAFTA-type or "new generation" regime of origin is becoming the predominant for trade between the American countries. This same tendency is observed for the case of those FTAs that the United States is negotiating with countries of other Continents like Australia and Singapore. Contrary to the EU, the Us has shown more flexibility regarding ROs, especially in the framework of extra-regional agreements. The US-Jordan and US-Israel FTAs, for example, rely basically on the VC rule (Moïsé, 2003b). The agreements with Israel show therefore levels of restrictiveness significantly below the NAFTA level resembling thus more the Indian Ocean model. The US-Singapore and Chile-Korea FTAs show more complexity (table 10).

At the same time the EU origin regime is becoming established between those Latin American countries which sign a FTA with the European Union –as there are the cases of Mexico and Chile, and probably MERCOSUR in the foreseeable future–, as well as other countries like South Africa (De Lombaerde, 2003). The EU exported its model also indirectly via the EFTA-Mexico and EFTA-Singapore agreements (although the latter is slightly less restrictive) (VC criterion) (table 10).

Further expansion of the dominating models is to be expected with the negotiation and conclusion of new agreements by the EU (EPAs, EU-Mercosur FTA, GCC, EU-CACM, EU-CAN, …) and the US (SACU and bilaterals with Thailand, Colombia, Peru, Ecuador, Panama, …). The level of restrictiveness of the ROs contained in these agreements has already been signalled as one of the important determinants of the development effectiveness of these agreements (World Bank, 2005:32).

As a consequence, in order to harmonize the regimes of origin on a multilateral basis it should be unavoidable to proceed in a two-track strategy. On the one hand, a progressive harmonization of the two most important prevailing regimes in the world: NAFTA-type ("new generation") and EU model, and, on the other, an adoption of common criteria, methodology and administrative procedures for the preferential and non-preferential origin regimes.

Table 10: Restrictiveness and facilitation index numbers: extra-regional EU centered and US/NAFTA centered agreements

[21] These rules were similar to the COMESA ROs.

	Restrictiveness index (RI)	standard deviation (RI)	Facilitation index (FI)
EU centered agreements			
EU-Mexico	4,82	1,36	2
EU-South Africa	4,81	1,37	4
EFTA-Israel	4,81	1,37	2
US/NAFTA centered agreements			
US-Israel	3,00	0,00	2
Canada-Israel	4,00	0,00	4
Mexico-Israel	4,00	0,00	3
Chile-Korea	4,69	1,08	3

Methodological note: See table 7,
Source: Estevadeordal and Suominen (2003a:35).

10. Linkages between preferential rules and the multilateral trade system

Preferential ROs are linked to the multilateral trade system in different ways. The proliferation of new preferential rules contained in the various FTAs that have been signed since the 90s has not made the international trade rules more transparent and is likely to have had some trade diversion effects. ROs under "new generation" regimes tend to vary among FTAs depending on the underlying "sensitivity" to intraregional competition and on member countries' strategic goals. The proliferation of FTAs and GSP regimes has generated a problem of multiple ROs, which entail costs of origin administration for both governments and individual manufacturing and exporting companies and which give rise to inefficiencies in resource allocation and specialization patterns. Any important initiative to make preferential rules more transparent or, taking it a step further, to come to a harmonized system of preferential rules will obviously have to be launched at the multilateral level. And the harmonisation process of non-preferential rules will logically be the obligatory point-of-departure. While this process might thus contribute to the harmonisation of preferential ROs, it is also the case that, at the same time, preferential rules in recent RTAs also influence (and complicate) the negotiation process on non-preferential rules harmonisation.

Although one might think that ROs will become of less importance given the general trend towards lower tariffs and the elimination of quotas, it should be recognised that rules of origin derive their importance not exclusively from their capacity to determine the applicability of these traditional trade barriers, but that they are also relevant for other issues on the current and future broader trade agenda such as trade marks and origin marking (TRIPs), TRIMs, SPS, public procurement, exclusive economic zones, anti-dumping, etc.

10.1. Harmonization of non-preferential rules

The GATT General Agreement established that each importing country will define the rules of origin to be used in the application of the most favoured nation treatment and to other non-preferential commercial policy instruments.

Given a variety of distortions that are to be reproduced by a multiplicity of regimes of origin, in November 1982 the Ministers agreed in studying the regimes of origin applied by Member Countries. An agreement concerning a general framework for the rules of origin was reached as part of the final results of the Uruguay Round of Multilateral Trade Negotiations (MTN).

The 1994 Agreement on Rules of Origin (ARO) of Marrakesh, reached at the Uruguay Round of multilateral trade negotiations foresaw the initiation of a work programme to harmonize non-preferential ROs.[22] Before the Uruguay Round, no multilateral rules existed in the framework of GATT.

The Agreement came into force on January 1st, 1995. Article 1.2 of the Agreement, which defines the parameters and the scope of its application, refers to all rules of origin[23] used in "non-preferential commercial policy instruments, such as in the application of: most-favoured nation treatment under Articles I, II, III, XI and XIII of GATT 1994; anti-dumping and countervailing duties under Article VI of GATT 1994; safeguard measures under Article XIX of GATT 1994; origin making requirements under Article IX of GATT 1994; and any discriminatory quantitative restrictions or tariff quotas [as well as] rules of origin used in government procurement and trade statistics".

The work programme launched in 1994 was scheduled to be completed within three years of initiation (art. 9, 1994 ARO).[24] For this purpose, a Committee on Rules of origin and a Technical Committee on Rules of Origin, under the auspices of the Customs Co-operation Council (CCC), were established (art. 4, 1994 ARO). This deadline and subsequent deadlines were not met. The lack of consensus in agriculture, textiles and clothing explain to a large extent the failure of the process so far (Schiff and Winters, 2003:31). On the other hand, progress in the harmonisation process is not independent from the discussion on other issues like TRIPs (trademarks, origin marking), SPS, anti-dumping, etc.

Apart from a set of principles that should guide the work (objectivity, predictability, coherence, non-pursuing strategic trade objectives, based on positive standards, etc.), the agreement expressed a preference for the CT criterion to establish the substantial transformation of goods when more than one country is concerned in its production. The harmonisation process is thus conducted on a product sector basis, defined as chapters or sections of the Harmonised System (HS) nomenclature. If and only if the CT criterion cannot be used (in principle, for technical reasons), a harmonised rule should be sought as either an *ad valorem* percentage or a technical requirement (manufacturing or processing operations).

The new work programme after July 1998 focused on problematic areas, including: the analysis of the implications of the harmonized rules of origin on other WTO agreements, discussion on product-specific rules, outstanding issues on product-specific rules, definitions, etc.

Whereas APEC has for obvious reasons been absent from the debates on preferential ROs, it has been actively supporting the harmonisation process of non-preferential rules since the agreement on the 1995 Osaka Action Agenda.

The harmonisation process has been criticised because the effective participation of the different countries is not guaranteed. According to Lal Das, for example, because of a lack of human and technical resources, the participation of developing countries is sub-optimal, resulting in a harmonisation process which does not fully take their interests into account and finally give rise to an unbalanced set of rules (Lal Das, 2003).

[22] The harmonised set of ROs will be established by the Ministerial Conference as an annex to the ARO, and will thus technically and formally be part of the legal text of the GATT 1994.

[23] Rules of origin are defined in the Agreement on Rules of Origin as, "... those laws, regulations, and administrative determinations of general application applied by any Member to determine the country of origin of goods provided such rules of origin are not related to contractual or autonomous trade regimes leading to the granting of tariff preferences going beyond the application of paragraph 1 of Article 1 of GATT 1994" (Article 1.1 of the Agreement on Rules of Origin).

[24] For information on progress of the process, see WTO (2003, 2004).

Only when the harmonisation process will be finalised, it will be possible to systematically compare preferential and non-preferential rules.

10.2. Regulation and harmonisation of preferential rules

Several analysts have already called for multilateral rules, complementary to Article XXIV, for the treatment of NTBs and the definition of ROs in FTAs. Wonnacott (1996b) proposed to eliminate the ROs below a certain tariff level. Serra *et al.* (1997) proposed as a rule that ROs should not be more restrictive than before the FTA. Schiff and Winters (2003) evaluated the former proposal as too mild and the latter as not practical. These authors rather favour a single set of ROs, agreed internationally, or a rule stating that a country's preferential ROs should be identical to its non-preferential rules; this would reduce the use of ROs for protectionist purposes. Estevadeordal and Suominen (2004) also called for harmonised ROs taking non-preferential rules as a model.

At the same time, bi-regional business sector initiatives like the Transatlantic Business Dialogue (TABD) have addressed issues related to ROs.[25] It is not impossible that these might play a functional and more prominent role in future harmonisation initiatives.

Although the Agreement on Rules of Origin was complemented by a "Common Declaration with Regard to Preferential Rules of Origin", significantly, no mention was made of the need for harmonization in this area. The text is limited to defining preferential rules, and a series of general principles applying to the application and the reform of rules (clarity, transparency, publicity, objectivity, based on positive standards, notification). The principles of neutrality and non-discrimination of the ARO were not reiterated in the Common Declaration.

Efforts to establish basic principles for greater harmonization of the rules applied by FTAs and those to be agreed on by the WTO should therefore be pursued. Although this will be a complex task, a number of basic, transparent principles for the harmonization process can be applied.

It would be advisable to select principles like the following: select a specific objective to RO as an instrument of trade liberalization; minimize the number of criteria to be applied in determining the origin of a product, giving preference, for example, to a CT for reasons of simplicity and transparency; where a choice between origin criteria exists –the lesser the number of cases, the better–, ensure that the alternatives (in such cases unavoidable) require an equivalent degree of transformation; guarantee as much as possible transparency and simplicity in the procedures required for the verification of the observance of origin criteria; promote a multilateral agreement within the framework of the WTO to apply a common methodology for the specification of ROs between preferential and non-preferential trade liberalization (Garay and Estevadeordal, 1996). In particular, preferential ROs should use non-preferential (WTO/World Customs Organization) rules as a reference point. ROs should not be used when the differences between FTA members' third-country tariffs are minimal or when their tariff levels are low. Efforts should be made to harmonize external tariffs on a sectoral basis in areas where the nature of production processes and the internationalization of production make administrating ROs particularly complex.

11. Conclusions

The proliferation of RTAs has led to a proliferation of preferential ROs. These rules have become more complex and less transparent over time, resulting in higher transaction costs. Moreover, they are apparently increasingly used for protectionist purposes, especially by industrialised countries in sectors like textiles and clothing, automotive products and agriculture (provided they are included in

[25] See e.g. UNICE (2000:51-61).

the RTAs). The prevailing ROs therefore lead to the underutilisation of trade preferences by exporting countries in the South and they imply important governance costs for the developing countries.

The EU and NAFTA rules, which are the most restrictive rules in the world and which typically show high degrees of variation between product categories, represent the dominating models. They are still increasing their influence in the rest of the world. Therefore, N-S models are usually more restrictive than S-S models. The relatively recent proliferation of inter-regional agreements are important transmission channels for the diffusion of these models.

There is clearly a need for multilateral regulation of preferential ROs. The *de facto* proximity (similarity) of the EU, US and NAFTA models (or, more precisely, "new generation" models) provides opportunities for harmonisation initiatives. *De jure* harmonisation of preferential ROs will not be reached in the short run, however. This depends on (i) how the harmonisation process of non-preferential rules evolves, (ii) how the origin concept will be treated in other areas of multilateral rulemaking such as trademarks, origin marking, anti-dumping, SPS, etc., and (iii) protectionist pressures in specific sectors.

The regulation and/or harmonisation process might benefit from new and detailed analyses of the costs of the existing amalgam of preferential rules of origin.

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