



PECC Trade Forum

Notes on Rules of Origin with Implications for Regional Integration on Southeast Asia

Paul Brenton

**April 22-23, 2003
Washington DC, USA**

Pacific Economic Cooperation Council

4 Nassim Road Singapore 258372 Tel: +65 67379822 Fax: +65 67379824 Email: info@pecc.org

www.pecc.org

Notes on Rules of Origin with Implications for Regional Integration in South East Asia¹

Paul Brenton

Poverty Reduction and Economic Management
International Trade Department
The World Bank
MSN MC2-202;
1818 H Street St. NW
Washington DC 20433
Tel: (202) 473-4255 Fax: (202) 522-7551
E-Mail: pbrenton@worldbank.org

Introduction

Ascertaining the country of origin of imported products is necessary to be able to apply basic trade policy measures such as tariffs, quantitative restrictions, anti-dumping and countervailing duties and safeguard measures as well as for requirements relating to origin marking, public procurement and for statistical purposes. Such objectives are met through application of basic or non-preferential rules of origin. Countries which offer zero or reduced duty access to imports from certain trade partners will often apply another and different set of preferential rules of origin to determine the eligibility of products to receive preferential access. The justification for preferential rules of origin is to prevent trade deflection, or simple transshipment, whereby products from non-participating countries are redirected through a free trade partner to avoid the payment of customs duties.² Hence the role of preferential rules of origin is to ensure that only goods originating in participating countries enjoy preferences. Therefore, they are integral parts of preferential trade agreements such as bilateral and regional free trade agreements and the non-reciprocal preferences that industrial countries offer to developing countries.

¹ The views expressed are those of the author and should not be attributed to the World Bank. I am very grateful for the comments and suggestions of Han Herderschee and Kathie Krumm.

² The incentive for trade deflection is obviously greater the higher are tariffs in the preferential trade partners. If additional transport costs, administrative burdens and the costs of risk and uncertainty outweigh the costs of the tariff then there will be no trade deflection.

However, rules of origin can be manipulated to achieve other objectives, such as protecting domestic producers of intermediate goods. Restrictive rules of origin raise the costs of supplying the markets of preferential partners by requiring changes in production which lead to the use of higher cost inputs and through the expenses which are incurred in proving conformity with the rules. These costs entail that only a proportion of products which are eligible for preferential treatment will actually be granted preferential access and will constrain market access relative to what is promised on paper in the trade agreement. The impact of preferential trade agreements on market access and hence trade flows is a function of both the extent of preferential tariff liberalisation and the rules of origin. The rules of origin are therefore a key element determining the magnitude of the economic benefits that accrue from trade agreements and who gets them.

This note seeks to review the key features of preferential rules of origin and their economic impact. The paper briefly discusses the specification of the rules, presents the nature of the rules of origin applied in a number of existing trade agreements and highlights the importance of the costs of administering the system of rules of origin and the expenses incurred by firms to prove conformity to these rules. Such costs will be greater if there is a degree of uncertainty or unpredictability in the application of the system of rules of origin and in particular with regard to the acceptance of certificates of origin by customs officials in the foreign market. These costs act to reduce the value of the tariff preferences that are made available through free trade and preferential trade arrangements.

The Definition of Preferential Rules of Origin

Preferential rules of origin define the conditions that a product must satisfy to be deemed as originating in a country which is eligible for preferential access to a partner's market. When a product is produced in a single stage or is wholly obtained in the partner then the origin of the product is relatively easy to establish. Proof that the product was produced in the preferential trade partner is normally sufficient. For all other cases the rules of origin define the methods by which it can be ascertained that the particular product has undergone *sufficient* working or processing or has been subject to a *substantial* transformation (in

general these terms can be used interchangeably) in the free trade partner and that it has not simply been transhipped from a non-qualifying country or been subject to only minimal processing. The specification of rules of origin has become even more important in recent years as technological progress and globalisation have led to the increasing fragmentation of the production process into different stages or tasks which are undertaken in different countries. In practice the higher the level of working that is required by the rules of origin the more difficult it is to satisfy those rules and the more restrictive those rules are in constraining market access relative to what is required simply to prevent trade deflection.

Unfortunately there is no simple and standard rule of origin which can be identified as performing the role of preventing trade deflection. A number of different rules are available each of which can have different implications for a producer of a given product. Three main methods are used to establish if sufficient processing or substantial transformation has been undertaken: (i) change of tariff classification (ii) value added (iii) specific manufacturing *process*. These three methods are summarised in Table 1 and are discussed in a little more detail in Appendix 1 together with some examples of their application.

As we shall see below there are some agreements, such as the AFTA, which apply a single method across all products, however, many trade agreements use all 3 methods, which leads to complex sets of rules of origin. Typically, detailed rules specify which method applies to which product or product group. In the proposed Singapore-US FTA, for example, there are over 240 pages of product specific rules of origin. In certain agreements the rules of origin for a particular product will specify that two or more of the methods must be satisfied, for example, change of tariff heading *and* a certain proportion of domestic value-added. Clearly, satisfying multiple requirements to confer origin is more restrictive. In certain agreements (for example, those involving the EU) the rules will stipulate alternative methods for particular products, satisfaction of any of which will confer origin. For example, change of tariff heading *or* the specified amount of domestic value-added. Such an approach is more liberal and gives greater flexibility to producers in obtaining origin.

No one rule dominates others. Each has its advantages and disadvantages. However, it is clear that different rules of origin can lead to different determinations of origin. Thus, producers who are eligible for preferential access to different markets under different schemes with different rules of origin may find that their product qualifies under some schemes but not others. Whilst it is difficult to derive specific recommendations with regard to the best practice approach to the design of rules of origin certain general propositions can be made:

- ✍ The rules of origin should be simple but precise, transparent and, to the extent possible, predictable and stable.
- ✍ They should be designed to have the least trade distorting impact and should not become a disguised non-tariff barrier to trade.
- ✍ As much as possible the rules should be consistent across products and across agreements. The greater the inconsistencies the greater the complexity of the system of rules of origin both for companies and for officials administering the various trade schemes.

There are several other typical features of the rules of origin of preferential trade schemes which can influence whether or not origin is conferred on a product and hence determine the impact of the scheme on trade flows. These are cumulation, tolerance rules and absorption. The treatment of duty drawback and of outward processing outside of the free trade or preferential trade partners can also be important.

Cumulation. The basic rules of origin define the processing that has to be done in the individual beneficiary or partner to confer origin. Cumulation is an instrument allowing producers to import materials from a specific country or regional group of countries without undermining the origin of the product. In effect the imported materials from the identified countries are treated as being of domestic origin of the country requesting preferential access. There are three types of cumulation, bilateral, diagonal and full, which are described in more detail, with some examples, in Appendix 2.

The most basic form is bilateral cumulation which applies to materials provided by either of two partners of a preferential trade agreement. In this case originating inputs, that is materials which have been produced in accordance with the relevant rules of origin, imported from the partner qualify as originating materials when used in a country's exports to that partner. Second there can be *diagonal cumulation* on a regional basis whereby parts and materials from anywhere in the specified region which qualify as originating can be used in the manufacture of a final product which can then be exported with preferences to the partner country market. Finally, there can be *full cumulation* whereby any processing activities carried out in any participating country in a regional group can be counted as qualifying content regardless of whether the processing is sufficient to confer originating status to the materials themselves.

Full cumulation allows for more fragmentation of production processes among the members of the regional group and so stimulates increased economic linkages and trade within the region. Under full cumulation it may be easier for more developed higher labour cost countries to outsource labour intensive low-tech production stages to less developed lower wage partners whilst maintaining the preferential status of the good produced in low-cost locations. Diagonal cumulation by requiring more stages of production and/or higher value added to be undertaken in the lower cost country may make it more difficult for the products produced by outsourcing to qualify for preferential access. Under full cumulation all of the processing carried out in participating countries is assessed in deciding whether there has been substantial transformation. Hence, full cumulation provides for deeper integration amongst participating countries.

Tolerance or De Minimis. Such rules allow a certain percentage of non-originating materials to be used without affecting the origin of the final product. It should be noted that this rule applies to the change of tariff heading and the specific manufacturing rules but does not affect the value added rules. Thus, the tolerance rule can act to make it easier for products with non-originating inputs to qualify for preferences under the change of tariff heading and specific manufacturing process rules.

Absorption Principle. This provides that parts or materials which have acquired originating status by satisfying the relevant rules of origin for that product can be treated as being of domestic origin in any further processing and transformation. In other words any non-originating materials are no longer taken into account when assessing the nature of further operations. This is of particular relevance to the value-added test. For example, in the production of a particular part origin is conferred since imported materials constitute 20 per cent of the final price of the part and are less than the maximum 30 per cent import content rule of origin. This part will then be treated as 100 per cent originating when incorporated into a final product. The 20 per cent import content of the part is not taken into account when assessing the import content of the final product. The converse of this is that if the part does not satisfy the relevant rule of origin then it is deemed to be 100 per cent non-originating.

Duty drawback leads to the waiving or repayment of duties on non-originating inputs which are used in the production of a final product which exported to a free trade or preferential trade partner. Some agreements contain explicit no-drawback rules which will affect decisions relating to the sourcing of inputs by firms exporting within the trade area and will reduce the previous incentives towards the use of imported inputs from non-participating countries towards the use of originating inputs from participating countries. Increasingly important are rules concerning *territoriality* and the treatment of outward processing by companies located within the free trade area to locations outside of the area. These rules determine whether processing outside of the area undermines the originating status of the final product exported from one partner to another.

Rules of Origin in Existing Free Trade and Preferential Trade Agreements

Table 2 provides a simplified look at the key features of the rules of origin applied in a number of regional and bilateral trade schemes. The table contrasts the nature of the rules applied as well as the use of cumulation mechanisms, tolerance rules and absorption. The table shows that all 3 methods of determining origin are employed in agreements involving the EU and in NAFTA, although typically it is change of tariff classification which is most commonly applied within these agreements. These agreements contain

detailed product specific rules. In EU agreements where change of tariff classification is required it is usually at the heading level, whilst in the NAFTA there is more widespread use of change at the chapter level.

Some agreements, ANZERTA, AFTA and ANZSCEP, rely solely on the value-added method and hence do not specify detailed product by product rules of origin.. It is interesting to note that the recent Singapore-Japan free trade agreement is based upon product specific rules using all 3 methods of determining origin, although change of tariff heading dominates and for a large number of products either the change of tariff heading or a domestic content of 60 per cent can be satisfied. The proposed US-Singapore FTA has rules of origin which are very similar to those of the NAFTA which means that product specific and sometimes very complex rules are specified (see Appendix 4 for examples).

The column showing the use of the value-added methods highlights the variation in the permitted amount of non-originating import content across the different agreements. In the Canada Chile agreement, for example, for products subject to the value added criterion there is a requirement of between 25 and 35 per cent (according to the method of valuation used) of domestic content. In the proposed US-Chile agreement, where the rules are similar to those of the NAFTA but are not identical for all products, the required domestic content is between 35 and 55 per cent. Thus, products produced in Chile which are granted duty free access to Canada may not receive such treatment in the US due to the more liberal rules of origin applied in the Canada-Chile agreement.

The Table also shows that all the agreements contain provisions regarding cumulation but also that there is considerable variation in the nature of cumulation. For example, the EU allows for diagonal cumulation in the Pan-European Area of Cumulation encompassing the EFTA, Central and Eastern European and Balkan countries, whilst there is full cumulation amongst the African and Caribbean countries under the Cotonou agreement. Similarly, for tolerance rules, which are widely applied in agreements which are not based on the sole use of the value added method, there are considerable differences

across agreements even those involving the same country. Under the Pan-European agreements non-originating materials up to 10 per cent of the value of the final product can be used, whilst under the Cotonou Agreement the level of tolerance is set at 15 per cent. It is worth noting that different rules of tolerance are often established for the textiles and clothing sector, often a lower tolerance level or the tolerance level is defined by weight rather than value, which tend to reduce its usefulness for these products.³ Finally, the table shows the widespread use of the absorption principle.

Thus, this simple and brief look at the nature of the rules of origin applied in a number of existing free and preferential trade agreements highlights that the methods of defining origin and provisions relating to cumulation, tolerance and absorption are widely applied. However, there is little commonality across agreements in the precise nature of the rules that are adopted. In general recent agreements involving the EU and the US are based upon detailed, often complex, product specific rules of origin. The restrictiveness of these rules would appear to vary across sectors. For example, the rules for clothing products requiring production from yarn can be particularly difficult to satisfy for small less-developed economies. As such the impact of these agreements will not be uniform across sectors.

The Economic Implications of Preferential Rules of Origin

Preferential rules of origin should be treated as commercial policy instruments. The specification and implementation of rules of origin can be a major determinant of the impact of free trade and preferential trade agreements. In practice rules of origin are controversial since the available evidence suggests that the utilisation of preferences tends to be substantially less than full. That is, a substantial proportion of actual exports which are eligible for preferences do not enter the partners market with zero or reduced duties but actually pay the MFN tariff.

³ Nevertheless, the tolerance rule may be important since in the NAFTA there are chapter specific rules for clothing products relating to the originating status of ‘visible linings’ which appear to be motivated to limit the impact of the tolerance rule – see Appendix 4 for more details.

Compliance with rules of origin can affect the sourcing and investment decisions of companies. If the optimal input mix for a firm involves the use of imported inputs which are proscribed by the rules of origin of a free trade agreement in which the country participates then the rules of origin will reduce the value of the available preferences. The firm will have to shift from the lowest to a higher cost source of inputs in the domestic economy which will reduce the benefits of exporting under a lower tariff. In the extreme if the cost difference exceeds the size of the tariff preference then the firm will prefer to source internationally and to pay the MFN tariff. The ability to cumulate inputs from a partner under bilateral, diagonal or full cumulation will tend, in increasing order, to open the possibilities for identifying low cost sources of inputs which do not compromise the qualifying nature of the final product. Nevertheless, if the lowest cost supplier is not a member of the area of cumulation then the benefits of the preferential scheme will always be less than indicated by the size of the preferential tariff.

Rules of origin can also distort the relative prospects of similar firms within a country. For example, a clothing producer in say Moldova may have established an efficient manufacturing process on the basis of importing fabrics from Turkey. A less efficient producer who uses imported EU fabrics may be able to expand production on the basis of preferential access to the EU market under the GSP (with bilateral cumulation). The more efficient firm may not be able to expand since its product does not qualify for preferences due to the use of non-qualifying fabrics and there may be substantial costs in changing suppliers of fabrics.

These problems will be exacerbated in sectors where economies of scale are important. A producer which supplies both preferential and non-preferential trade partners, or faces different rules of origin in different preferential partners, will have to produce with a different input mix for different markets if they are to receive preferential access. This may undermine the benefits from lower average costs that would arise if total production were to be based on a single set of material inputs and a single production process. Rules of origin may be an important factor determining the investment decisions of multinational firms. Such firms often rely on imported inputs from broad international

networks which are vital to support the firm specific advantages that they possess, such as a technological advantage in the production of certain inputs. More generally, if the nature and application of a given set of rules of origin increases a degree of uncertainty concerning the extent to which preferential access will actually be provided then the level of investment will be less than if such uncertainty were reduced.

A reason which has been used to justify strict rules of origin is that they are viewed as encouraging the development of integrated production structures within developing countries to maximize the impact on employment and to ensure that it is not just low value-added activities which are undertaken in the LDCs. There are problems with this view. First, such rules discriminate against small countries where the possibilities for local sourcing are limited or non-existent. Since most LDCs are small countries they are particularly disadvantaged by restrictive rules of origin relative to larger developing countries. Regional cumulation provisions have been introduced to reduce the constraining effect of the current rules of origin. Nevertheless, they still hamper the choice of sourcing.

Second, there is no evidence that strict rules of origin over the past 20 years have done anything to stimulate the development of integrated production structures. In fact such arguments have become redundant in the light of technological changes and global trade liberalisation which have led to the fragmentation of production processes and the development of global networks of sourcing. Globalisation and the splitting up of the production chain does not allow the luxury of being able to establish integrated production structures within countries. Strict rules of origin act to constrain the ability of firms to integrate into these global and regional production networks and in effect act to dampen the location of any value-added activities.

The Costs of Administering Preferential Rules of Origin

Rules of origin whilst an essential element of free trade agreements add considerable complexity to the trading system for both traders, customs officials and trade policy officials. For companies there is not only the issue of complying with the rules on

sufficient processing but also the cost of obtaining the certificate of origin, and any delays that arise in obtaining the certificate, as well as the costs of actually proving compliance with those rules of origin. The costs of proving origin involve satisfying a number of administrative procedures so as to provide the documentation that is required and the costs of maintaining systems that accurately account for imported inputs from different sources to prove consistency with the rules. The ability to prove origin may well require the use of, what are for small companies in developing and transition economies sophisticated and expensive accounting procedures. Without such procedures it is difficult for companies to show precisely the geographical breakdown of the inputs that they have used.

There is limited information on these costs but the available studies suggest that the costs of providing the appropriate documentation to prove origin can be around 3 per cent of the value of the export shipment for companies in developed countries.⁴ The costs of proving origin may be even higher, and possibly prohibitive, in countries where customs mechanisms are poorly developed. Thus, even if producers can satisfy the rules of origin, in terms of meeting the technical requirements, they may not request preferential access because the costs of proving origin are high relative to the duty reduction that is available.

An important feature of most preferential trade schemes is the requirement of direct consignment or direct transport. This stipulates that goods for which preferences are requested are shipped directly to the destination market and that if they are in transit through another country then documentary evidence may be requested to show that the goods remained under the supervision of the customs authorities of the country of transit, did not enter the domestic market there and did not undergo operations other than unloading and reloading. In practice it may be very difficult to obtain the necessary documentation from foreign customs.

⁴ Herin, J (1986). This study also found that the costs for EFTA producers of proving origin led to one quarter of EFTA exports to the EU paying the applied most favoured nation (MFN) duties.

Rules of Origin and the Utilisation of Trade Preferences

Difficulties that may arise in satisfying the rules of origin and the costs of proving conformity with those rules are suggested by the relatively low utilisation rates that are observed in preferential trade schemes. For example, under the EU's GSP scheme in the year 1999 only one third of EU imports from developing countries which were eligible for preferences actually entered the EU market with reduced duties. This primarily reflects the treatment of textiles and clothing products, which accounted for over 70 per cent of EU imports from countries covered by the GSP but where the utilisation rate (the ratio of imports receiving preferences to eligible imports) was only 31 per cent.

Under the EU's Everything But Arms Agreement almost all of Cambodia's exports to the EU are eligible for zero duty preferences, yet in 2001 only 36 per cent of those exports obtained duty free access. Brenton (2003) shows that this lack of take-up of preferences entailed that on average Cambodia's exports to the EU paid a tariff equivalent to 7.7 per cent of the value of total exports. The main suspect for this under-utilisation of trade preferences is the rules of origin.

Brenton and Manchin (2002) show that a large amount of EU imports of clothing products from Eastern European countries made from EU produced fabrics still enter the EU market under an alternative customs regime, outward processing, even though there is no fiscal incentive to do so since EU tariffs had been removed under free trade agreements. This probably reflects the costs and uncertainties in proving origin that would be necessary under the normal preferential customs procedures.

In Asia there are some suggestions of under-utilisation of AFTA preferences reflecting the costs of proving conformity with the rules of origin and uncertainties concerning the application of the system. It appears that the rules of origin maybe subject to different interpretations in different ASEAN countries leading to inconsistent application of the rules throughout the region.⁵

⁵ http://www.us-asean.org/ctc/thai_customs_workshop/pwc.ppt

Preferential Rules of Origin Increase the Complexity of the World Trading System

Difficulties arise when the same product may have different countries of origin for customs purposes depending upon the market, and the rules of origin, for which it is destined. For example, at present clothing companies in certain African countries can obtain duty free access to the US market under African Growth and Opportunity Act - AGOA (with liberal rules of origin) but exactly the same product will be denied duty free access to the EU under the Everything But Arms Agreement (because of the requirement that the product be manufactured from yarn under the EU rules of origin). A company in Singapore could find that its product can enter ASEAN markets duty free, by satisfying the maximum import content requirement of 60 per cent, but does not satisfy the origin rules of the Singapore-Japan agreement. This considerably complicates production and investment decisions.

Complicated systems of rules of origin increase the complexity of customs procedures and the burden upon origin certifying institutions. This can absorb scarce administrative resources. In a period where increasing emphasis has been placed upon trade facilitation and the improvement of efficiency in customs and other trade-related institutions, the difficulties that preferential rules of origin create for firms and the relevant authorities in developing countries is an important consideration. Hence, less complicated rules of origin stimulate trade between regional partners by reducing the transactions costs of undertaking such trade.

Preferential Rules of Origin and Regional Integration in East Asia

Regional integration under the AFTA is governed by rules of origin requiring a non-originating import content of less than 60 per cent of the FOB price of the product where the value of non-originating materials is based upon the CIF import price or the earliest ascertained price for products of undetermined origin. The AFTA provides for, in effect, full cumulation, since the domestic content can be an aggregate of value-added in any ASEAN member state. However, the AFTA rules of origin do stipulate that the final process of manufacture is carried out in the exporting member state, although what constitutes 'the final process' is not defined.

Recent developments have seen the signing of bilateral FTAs between ASEAN members, primarily Singapore, and non-member countries with different rules of origin to those applied in ASEAN. Table 2 shows that the Singapore-Japan free trade agreement uses all three methods of determining origin. For many clothing products, for example, there is a yarn forward rule similar to that used in EU agreements and similar in effect to that used by the US in the NAFTA and in proposed agreements with Singapore and Chile. For certain other products the rules in the Japan-Singapore agreement are different to those in EU and US agreements.

Given the current trend towards an increasing number of trade agreements in the region and the prospect of the implementation of a series of AFTA+ agreements for the ASEAN countries, including an agreement with China, we make here a number of observations on issues that may be of relevance with regard to the rules of origin in such agreements and how the choice of rules of origin could affect the attainment of objectives specified by ASEAN relating to the promotion of regional production networks, support for the development of small and medium sized enterprises and achieving progress in the development of the lower income member countries:

~~✎~~ The rules of origin should be designed to have a neutral or minimal impact on trade flows whilst preventing trade deflection. Rules of origin are not an efficient or transparent means of supporting the production of intermediate products within the area or reducing the effectiveness of competition in final products. Simple, consistent and predictable rules of origin are more likely to foster the growth of cross-country production networks in the region. Different rules for the same product in different agreements is likely to hamper such a development.

~~✎~~ In general rules of origin which vary across products and agreements add considerably to the complexity and costs of participating in and administering trade agreements. The burden of such costs fall particularly heavily upon small and medium sized firms and upon firms in low income countries. Complex rules of origin, such as those applied by the US and the EU on clothing products, will

tend to discriminate against small low income countries where the possibilities for local sourcing are more limited.

~~✍~~ Restrictive rules of origin targeted at sensitive products are not an effective mechanism for dealing with the adjustment difficulties faced by particular sectors. Longer transition periods to duty elimination (but with a firm commitment to implement) and suitably designed and implemented safeguard measures are more transparent and efficient.

~~✍~~ The complexity of the system of rules of origin is important in relation to the issue of trade facilitation. It appears that customs clearance in Asia is slow relative to that in Europe and North America.⁶ There is a risk that proliferating free trade agreements with differing rules of origin will further complicate customs procedures and compromise progress on trade facilitation in the region.

~~✍~~ The trend towards an increasing number of bilateral agreements centred on the ASEAN countries makes consideration of cumulation mechanisms an important issue. In Europe, the EU has sought to overcome the difficulties associated with the previous hub and spoke system⁷ of free trade agreements by allowing for widespread diagonal cumulation amongst all of the EFTA, Central and Eastern European countries and countries in the Balkans. It is also worth noting that the agreements which comprise the Pan-European area of cumulation tend to have the same rules of origin based upon the Single List of the EU.

~~✍~~ Common rules of origin in Asia would also facilitate the spread of full cumulation to new agreements, which again would be an important factor allowing for the development of regional production networks. Full cumulation provides for deeper integration and allows for more advanced countries to outsource labour-

⁶ Janet Tay Consultants (2002)

⁷ Under the hub and spoke system activity tends to become focused on the hub (in this case the EU) with the principal trade being between the hub and the spokes and very little trade between the spokes. Cumulation can mitigate such an outcome.

intensive production stages to low-wage partners. Full cumulation with simple rules of origin will make it easier for regionally based firms to exploit economies of scale that are available. Such cumulation would also allow low income countries the greatest flexibility in sourcing inputs.

~~✍~~ Even with cumulation, in certain cases the current 40 per cent value-added rule may be difficult to comply with in certain sectors and particularly in low wage low income members. Greatly flexibility in the AFTA rules of origin would be introduced if change of tariff heading were also available to producers in low income countries to confer origin as an alternative to the value added rule.

~~✍~~ This all suggests that a coordinated approach to rules of origin in the proliferating number of bilateral free trade agreements in South-East Asia may be useful in avoiding a highly complex and extremely difficult to administer system of rules of origin in the region. The provision of clear and consistent rules of origin, with minimal costs to firms in adhering to them, will be fundamental to improvements in market access and the facilitation of trade in the region.

Rule	Advantages	Disadvantages	Key Issues
Change of Tariff Classification (in the Harmonised System)	<ul style="list-style-type: none"> ? Consistency with non-preferential rules of origin. ? Once defined, the rule is clear, unambiguous and easy to learn. ? Relatively straightforward to implement. 	<ul style="list-style-type: none"> ? Harmonised System not designed for conferring origin, as a result there are often many individual product specific rules, which can be influenced by domestic industries ? Documentary requirements maybe difficult to comply with. ? Can be conflicts over the classification of goods which can introduce uncertainty over market access 	<ul style="list-style-type: none"> ? Level of classification at which change required – the higher the level the more restrictive. ? Can be positive (which imported inputs can be used) or negative (defining cases where change of classification will not confer origin) test^a – negative test more restrictive.
Value Added	<ul style="list-style-type: none"> ? Clear, simple to specify and unambiguous. ? Allows for general rather than product specific rules 	<ul style="list-style-type: none"> ? Complex to apply – requires firms to have sophisticated accounting systems. ? Uncertainty due to sensitivity to changes in exchange rates, wages, commodity prices etc. 	<ul style="list-style-type: none"> ? The level of value added required to confer origin ? The valuation method for imported materials – methods which assign a higher value (eg CIF) will be more restrictive on the use of imported inputs
Specific Manufacturing Process	<ul style="list-style-type: none"> ? Once defined, clear and unambiguous ? Provides for certainty if rules can be complied with 	<ul style="list-style-type: none"> ? Documentary requirements can be burdensome and difficult to comply with. Leads to product specific rules. ? Domestic industries can influence the specification of the rules. 	<ul style="list-style-type: none"> ? The formulation of the specific processes required – the more procedures required the more restrictive. ? Should test be negative (processes or inputs which cannot be used) or a positive test (what can be used) – negative test more restrictive.

^a A positive determination of origin typically takes the form of ‘change from any other heading’, as opposed to a negative determination of origin, such as ‘change from any other heading except for the headings of chapter XX’; It is worth noting that change of tariff classification, particularly with a negative determination of origin, can be specified to have an effect identical to that of a specific manufacturing process – see Appendix 4 for an example.

Table 2: Rules of Origin in Existing Free Trade and Preferential Trade Agreements								
		Change of Tariff Classification (principal, secondary level)	Value Added		Specific Manufacturing Process	Cumulation	Tolerance	Absorption
			Domestic or Import Content	Implied Import Content				
A. Agreements Involving the EU								
EU	PanEuro	Yes (4,2)	Yes - Import (50-30%)	50-30%	Yes	Bilateral Diagonal	Yes 10% ^b	Yes
EU	GSP	Yes (4,2)	Yes - Import (50-30%)	50-30%	Yes	Bilateral Diagonal ^a	Yes 10% ^b	Yes
EU	Cotonou	Yes (4,2)	Yes - Import (50-30%)	50-30%	Yes	Full	Yes 15% ^b	Yes
EU - Chile		Yes (4,2)	Yes - Import (50-30%)	50-36%	Yes	Bilateral	Yes 10%	Yes
EU - Mexico		Yes (4,2)	Yes - Import (50-30%)	50-30%	Yes	Bilateral	Yes 10%	Yes
EU – South Africa		Yes (4,2)	Yes - Import (50-30%)	50-30%	Yes	Bilateral Diagonal (ACP) Full (SACU)	Yes 15%	Yes
B. Agreements in the Americas and with US								
NAFTA		Yes (2,4,6)	Yes – Domestic (60-50%)	50-40%	Yes	Bilateral	Yes 7% ^b	Yes ^c
Canada - Chile		Yes	Yes – Domestic (35-25%)	75-65%	Yes	Bilateral	Yes 9%	Yes
US-Israel			Yes – Domestic (35%)	65%		Bilateral ^c	Not App	Yes
C. Agreements In Asia/Pacific and with Asian countries								
AFTA			Yes – Import (60%) ^d	60%		Full	Not App	
ANZERTA			Yes – Domestic (50%) ^d	50%		Full	Not App	
Singapore - Japan		Yes (4,)	Yes – Domestic (60%)	40%	Yes	Bilateral	Yes	No
Singapore - New Zealand (ANZSCEP)			Yes - Domestic (40%) ^d	60%		Bilateral	Not App	
Singapore - US		Yes (2,4,6)	Yes – Domestic (55-35%)	65-45%	Yes	Bilateral	Yes 10% ^b	No

^a Within Andean, ASEAN, CACM, SAARC only and subject to a 50 per cent value added requirement in the country of export.

^b alternative rules for textiles and clothing products, often in terms of weight rather than value

^c up to a maximum of 15 per cent of the value of the product

^d with the additional requirement that the last stage of manufacture be performed in the exporting country

^e excluding automotive products

Source: WTO (2002) and individual agreements

Appendix 1: Methods for Determining Sufficient Processing or Substantial Transformation

Change of tariff classification. Origin is granted if the exported product falls into a different part of the tariff classification to any imported inputs that are used in its production. This approach is used in the vast majority of current preferential trade agreements and features in both EU agreements and the NAFTA.⁸ This “tariff-shift” method is also the basis of the efforts by the WCO to harmonise non-preferential rules of origin and as such brings a degree of consistency to the world trading system. Application of this approach has been facilitated by the widespread adoption of the Harmonised System. There is however, the issue of the level of the classification at which change is required. Most agreements specify that the change should take place at the heading level (that is at the 4-digit level).

However, the Harmonised System was not designed as a vehicle for conferring origin, its purpose being to provide a unified commodity classification for defining tariff schedules and for the collection of statistics. Thus, in particular cases it can be argued that change of tariff heading will not identify sufficient processing whilst in other cases it can be that substantial transformation can occur without change of tariff heading. As a result in many agreements there is a different rule for different products. For example, in the NAFTA whilst around 40 per cent of tariff lines require change of tariff heading for most tariff lines (54 per cent) it is change of chapter (2- digit level) that is required.⁹ The requirement of change of chapter is more restrictive than change of heading. For a small number of products in the NAFTA it is only change of sub-heading that is required.

Thus, whilst in principle the change of tariff classification could provide for a simple uniform method of determining origin in practice instead of a general rule there are many individual rules and as such the determination of the rules of origin can be influenced by domestic industries in a way that reduces the impact on competition of preferential trade agreements. Nevertheless, the change of tariff classification rule, once defined, is clear,

⁸ WTO(2002) shows that of 87 FTAs and other preferential trade agreements investigated, 83 used change of tariff classification in the determination of origin.

⁹ This information comes from Estevadeordal et al (2003).

unambiguous and easy for traders to learn. It is *relatively* straightforward to implement. In terms of documentary requirements it requires that traders keep records that show the tariff classification of the final product and all the imported inputs. This may be undemanding if the exporter directly imports the inputs but may be more difficult if they are purchased from intermediaries in the domestic market. Given the nature of the rule and the fact that the classification of products is not always simple there can be disputes between traders and customs officials concerning the classification of goods which can reduce the certainty of this approach for producers.

It is important to note here that the change of tariff classification can provide both a positive test of origin, by stating the tariff classification of imported inputs that can be used in the production of the exported good (for example, those in a different heading), but also can provide a negative test by stating cases where change of tariff classification will not confer origin. For example, in the NAFTA, the rule of origin for Tomato Ketchup states that a change to Ketchup (HS 210320) from imported inputs of any chapter will confer origin except subheading 200290 (Tomato Paste). In other words any Ketchup made from imported fresh tomatoes will confer origin but Ketchup made from tomato paste imported from outside of the area will not qualify for preferential treatment even though there has been a change of tariff classification.¹⁰

Thus, the change of tariff classification is best applied as a general rule, for example by requiring change of tariff heading for all products, and a positive determination of origin. This is generally not the case and further whilst change of tariff heading is used in the majority of preferential trading agreements it is seldom the only method applied. In many agreements, including those involving the EU and the US, change of tariff classification is applied to some products whilst the other methods described below will be applied to other products. This typically leads to considerable complication in the determination of origin in preferential agreements. Further, for certain products rules will be stipulated which require satisfaction of more than one method to confer origin. In some agreements for some

¹⁰ The apparent reason for this rule in the NAFTA is to protect producers of tomato paste in Mexico from competition from producers in Chile.

products two or more methods will be stipulated and satisfaction of any one of the methods will be sufficient to confer origin.

Value Added. This requirement can be defined in two ways either as (1) the minimum percentage of the value of the product that must be added in the exporting country or (2) the maximum percentage of imports in the value of the product. In practice it is the latter which is more commonly used, reflecting the fact that it is a feature of the many agreements of the EU. WTO (2002) concludes that on average a threshold on domestic content of between 40 to 60 per cent is the norm with the average import requirement of between 60 and 40 per cent. In the EU agreements there are various thresholds on import content ranging from 30 to 50 per cent. In the NAFTA there is a domestic content requirement of either 50 or 60 per cent according to the method used to value the product (we return to the issue of valuation below). A liberal example is the Canada-Chile agreement which has a domestic content requirement of either 25 or 35 per cent depending on the valuation method.

In general these percentage value rules are rarely applied as the sole test of origin and are typically applied with the change of tariff classification. Exceptions are ANZCERTA, SPARTECA and AFTA which have percentage requirements without any additional need for change of tariff heading, although all three agreements do require that the last process of manufacture be undertaken in the exporting country.

As in the case of change of tariff classification, the value added rule has the advantage of being clear, simple and unambiguous in its definition. However, in actual application the value added rule can become complex and uncertain. First, there is the issue of the valuation of materials, which may be based upon ex-works, f.o.b, c.i.f, or into-factory prices. Each method of valuation will give a different, here ascending, value of non-originating materials. Second, the application of this method can be costly for firms who will require sophisticated accounting systems and the ability to resolve often complex accounting questions. Lengthy and costly audits are inherent in a scheme based on value added since there will have to be mechanisms to verify the claims of exporters requesting preferences.

Finally, under the value added method the rules of origin are sensitive to changes in the factors determining production cost differential across countries, such as exchange rates, wages and commodity prices. For example, operations that confer origin in one location may not do so in another because of differences in wage costs. An operation which confers origin today may not do so tomorrow if exchange rates change. This all tends to increase the complexity and the uncertainty of trading under a preferential scheme. The value added method will tend to penalise low labour cost locations which will find it more difficult to add the necessary value relative to higher cost locations and is likely to cause particular problems of compliance for companies in developing countries which lack the sophisticated accounting systems necessary under this method.¹¹

Specific manufacturing process. This rule defines certain manufacturing or processing operations that a product must undergo in the exporting country to confer origin (positive test) or manufacturing or processing procedures that do not confer origin (negative test). The formulation of these rules can require the use of certain originating inputs or prohibit the use of certain non-originating inputs. Rules based upon specific manufacturing processes are widely used (in 74 of the 83 preferential trade agreements analysed by WTO(2002)), often in conjunction with other change of tariff classification and/or the value added criterion, and are a particular feature of the rules applied to the textiles and clothing sectors.

The main advantages of the specific manufacturing process rules is that once defined they are clear and unambiguous so that from the outset producers are able to clearly identify whether their product is originating or not. However, there are also a number of drawbacks with this system. First, the documentary requirements, including an up-to-date inventory of production processes, maybe burdensome and difficult to comply with. Second, the setting of specific process rules often involves the participation of local industries in providing the technical information that is required. This can allow for these industries to influence the actual rules adopted in a way that protects their own interests.

¹¹ In the context of AFTA this suggests that in general firms in LDC members will find it more difficult than firms in higher wage members to satisfy the 40 per cent value added rule.

Examples of rules of origin and their implications for conferring origin.

1. A producer imports cotton fabric (HS5208) which is then dyed, cut and made-up into cotton shirts (HS6105). The value of the imported materials amounts to 65 per cent of the value of the shirts. In this case the product would be originating under the change of tariff heading rule. The product would not be originating under a value added rule requiring an import content of no more than 60 per cent (or a domestic content of more than 40 per cent). A specific manufacturing process requirement that the product have been manufactured from yarn (the production stage before fabric) would entail that the product would not be originating.¹²
2. A doll (HS9502) is made from imported plastics and imported ready made garments and footwear. The value of the imported materials amounts to 50 per cent of the value of the doll. In this case the doll would be originating under a value added rule requiring an import content of no more than 60 per cent but would not be originating under the change of tariff heading since garments and accessories for dolls are normally classified under the same tariff heading as dolls.

¹² This yarn-forward rule is common in EU agreements for all clothing products. The US typically applies an even stricter process rule that the clothing be made from cotton, entailing that both spinning and weaving as well as making up into clothing are required in the exporting country to confer origin on the product.

Appendix 2: The Different forms of Cumulation that may be Applied in Free trade and Preferential Trade Agreements

Cumulation. There are three types of cumulation, bilateral, diagonal and full. The most basic form is bilateral cumulation which applies to materials provided by either of two partners of a preferential trade agreement. In this case originating inputs, that is materials which have been produced in accordance with the relevant rules of origin, imported from the partner qualify as originating materials when used in a country's exports to that Partner.

Example: Under the EU's GSP scheme the rule of origin for cotton shirts states that origin is conferred to a beneficiary country if the shirt is manufactured from yarn. That is non-originating yarn may be imported but the weaving into fabric and cutting and the making up into a shirt must take place in the beneficiary. The EU's GSP scheme allows for bilateral cumulation so that fabric which originates in the EU (that is fabric which has been produced in accordance with the rule of origin for fabric, in the case of the EU scheme this is that it has been produced from the stage of fibres) can be treated as originating in the beneficiary country. Thus, originating fabrics can be imported from the EU and used in the production of shirts, which will qualify for preferential access to the EU.¹³

Second there can be *diagonal cumulation* on a regional basis so that qualifying materials from anywhere in the specified region can be used without undermining preferential access. In other words, parts and materials from anywhere in the region which qualify as originating can be used in the manufacture of a final product which can then be exported with preferences to the partner country market. Diagonal cumulation is widely used in EU agreements but is not applied by the NAFTA. In Europe a pan-European system of rules of origin with diagonal cumulation has been developed which governs EU free trade

¹³ However, the EU is often not the least cost supplier of inputs and so the benefits of this type of cumulation can be limited. If the extra cost of using EU sourced inputs rather than the lowest cost inputs from elsewhere exceeds the available benefit from preferential access then cumulation will have no effect and there will be no improvement in market access.

agreements with the Countries and Central and Eastern Europe. Diagonal cumulation is allowed under the EU's GSP scheme but within a limited set of regional groups which have pursued their own regional trade agreements.

Example: Under the EU's GSP scheme diagonal cumulation can take place *within* four regional groupings: ASEAN, CACM, the Andean Community and SAARC. Diagonal cumulation allows *originating* materials from regional partners to be further processed in another country in the group and treated as if the materials were originating in the country where the processing is undertaken.¹⁴ However, this flexibility in sourcing is constrained by the requirement that the value-added in the final stage of production exceeds the highest customs value of any of the inputs used from countries in the regional grouping. Thus, for example, with diagonal cumulation shirt producers in Cambodia can use fabrics from Indonesia (providing they are originating, that is produced from the stage of fibres) and still receive duty free access to the EU. Similarly, producers in Nepal can import originating fabric from India.

However, UNCTAD (2001) shows how the value added requirement mentioned above can render regional cumulation of little value. For example, value-added in the making up of clothing in Bangladesh ranges from between 25 and 35 per cent of the value of the product so that the import content of the fabrics from India is around 65 to 75 per cent. In this case the value-added requirement placed on regional cumulation is not met and origin of the made-up clothing is not conferred on Bangladesh but on India. Regional cumulation still allows clothing produced in Bangladesh from Indian fabrics preferential access to the EU but not at the zero rate (for which Bangladesh is eligible) but at the rate for which India is eligible, which is a 20 per cent reduction from the MFN rate, that is a tariff of 9.6 per cent.

¹⁴ For both bilateral and regional cumulation there can be an additional requirement that the processing carried out be more than "insufficient working or processing". This is typical in EU agreements but not those of other countries, and requires that more than packing, mixing cleaning and preserving and simple assembly of parts take place.

Finally, there can be *full cumulation* whereby any processing activities carried out in any participating country in a regional group can be counted as qualifying content regardless of whether the processing is sufficient to confer originating status to the materials themselves. Full cumulation allows for more fragmentation of production processes among the members of the regional group and so stimulates increased economic linkages and trade within the region. Under full cumulation it may be easier for more developed higher labour cost countries to outsource labour intensive low-tech production stages to less developed lower wage partners whilst maintaining the preferential status of the good produced in low-cost locations. Diagonal cumulation by requiring more stages of production and/or higher value added to be undertaken in the lower cost country may make it more difficult for the products produced by outsourcing to qualify for preferential access.

Under full cumulation all of the processing carried out in participating countries is assessed in deciding whether there has been substantial transformation. Hence, full cumulation provides for deeper integration amongst participating countries. Full cumulation is rare and is currently applied in the EU agreements with the EFTA countries, in the EU agreements with Algeria, Morocco and Tunisia and under the Cotonou Agreements between the EU and the ACP countries. It is also applied in ANZERTA, SPARTECA and AFTA.

Example 1: a clothing product made in one country from fabric produced in an regional partner which in turn was made from non-originating yarn would be eligible for duty free access to the EU under full cumulation but not under diagonal cumulation since the fabric would not be deemed to be originating (the rule of origin for the fabric requires manufacture from fibres).

Example 2: country A provides parts (say chassis for bicycles) to country B which are then processed (painted and prepared) and sent to country C for final assembly using other locally produced parts (tyres and seat) before being exported to Country D. Countries B, C and D participate in the same FTA, Country A is not a member. The value

of the final product (bicycle) exported from Country C to Country D comprises 25 per cent of parts from country A, 25 per cent of value added in Country B and 50 per cent of parts and value added in Country C. The value of parts from Country A comprises 50 per cent of the value of the intermediate product exported from Country B to Country C. If there is a 40 per cent maximum import content for all products then the bicycle exported from Country C to D would qualify for preferential access under full cumulation (only the 25 per cent of parts from Country A is non-originating) but would not qualify under diagonal cumulation (the value of non-originating materials in the product exported by Country B exceeds 40 per cent and so this intermediate product would not be treated as originating, and the total of non-originating materials in the final product is now calculated as 50 per cent of the final price of the bicycle (the value from both Countries and B).

Appendix 3: The Tolerance Rule

Tolerance or De Minimis rules allow a certain percentage of non-originating materials to be used without affecting the origin of the final product. Under the NAFTA non-originating materials can be used even if the rule on sufficient processing is not fulfilled provided their value does not exceed 7 per cent of the value of the final product. Under the EU's GSP scheme the threshold is 10 per cent but under the Cotonou Agreement between the EU and the ACP countries the tolerance rule allows 15 per cent of non-originating materials that would otherwise not be accepted to be used. It should be noted that this rule applies to the change of tariff heading and the specific manufacturing rules but does not affect the value added rules. The tolerance rule does not act to lower the limitation on the use of imported materials. The non-originating materials will always be counted in import content calculations.

Example: In the case of the doll given above in which the use of dolls clothing accessories denied origin to the final product under the change of heading rule (since the accessories are normally classified under the same heading), origin would have been conferred under the EU GSP for example, if the value of the dolls clothing and accessories was less than 10 per cent of the value of the doll.

Thus, the tolerance rule can act to make it easier for products with non-originating inputs to qualify for preferences under the change of tariff heading and specific manufacturing process rules. However, the tolerance rules applied to the textiles and clothing sector are often different and generally less favourable than the general rules on tolerance. In many cases the rule is applied in terms of the maximum weight rather than value of non-originating materials that are tolerated and in cases where the value threshold is maintained it is set at a lower level than in the general rule.

Appendix 4: Complex Rules of Origin in the Proposed Singapore – US Free Trade Agreement – the Example of Clothing Products¹⁵

The proposed Singapore-US FTA contains product specific rules of origin covering over 240 pages of text. These rules are very similar to those of the NAFTA. In general, for each product there is a change of tariff classification requirement although the level of the required change, 2, 4 or 6 digit level, varies across products. In many cases a value added or specific manufacturing process requirement is added to the change of tariff classification requirement. In a large number of cases the change of tariff classification contains a negative requirement. In practice this can act in an equivalent way to a specific manufacturing process requirement. For example, in EU agreements the rules of origin for cotton shirts stipulate ‘manufacture from yarn’, that is that imported cotton fabric cannot be used. In the Singapore – US FTA a more restrictive effect is achieved by a change of tariff heading rule which states ‘change to subheading 610120 (*cotton shirts*) from any other chapter except from heading 5106 through 5113, 5204 through 5212 (*this includes cotton yarn and cotton fabrics*)’. This precludes the use of imported cotton fabric, imported yarn and imported cotton thread. The rule requires that production of the cotton thread, the spinning into yarn, the weaving into fabric and the cutting and making up into clothing must all be undertaken locally or in the partner.

The rules of origin for clothing products in the proposed Singapore-US FTA provide an example of how complex the rules can become and how difficult they must be for producers to satisfy and prove compliance. The following example is for men’s or boys overcoats made of wool

620111 A change to subheading 620111 from any other chapter, except from heading 5106 through 5113, 5204 through 5212, 5307 through 5308 or 5310 through 5311, Chapter 54 or heading 5508 through 5516, 5801 through 5802 or 6001 through 6006, provided that:

(a) the good is both cut and sewn or otherwise assembled in the territory of one or more of the Parties, and

¹⁵ Information taken from <http://www.ustr.gov/new/fta/Singapore/consolidatedtexts/3%20-%20rules%20of%20origin%20annex%203a.PDF>

(b) the visible lining fabric listed in Note 1 to Chapter 62 satisfies the tariff change requirements provided therein.

The requirements of Note 1 are that

Chapter Rule 1: Except for fabrics classified in 54082210, 54082311, 54082321, and 54082410, the fabrics identified in the following sub-headings and headings, when used as visible lining material in certain men's and women's suits, suit-type jackets, skirts, overcoats, carcoats, anoraks, windbreakers, and similar articles, must be formed from yarn and finished in the territory of a party: 5111 through 5112, 520831 through 520859, 520931 through 520959, 521031 through 521059, 521131 through 521159, 521213 through 521215, 521223 through 521225, 540742 through 540744, 540752 through 540754, 540761, 540772 through 540774, 540782 through 540784, 540792 through 540794, 540822 through 540824 (excluding tariff item 540822aa, 540823aa or 540824aa), 540832 through 540834, 551219, 551229, 551299, 551321 through 551349, 551421 through 551599, 551612 through 551614, 551622 through 551624, 551632 through 551634, 551642 through 551644, 551692 through 551694, 600110, 600192, 600531 through 600544 or 600610 through 600644,

There is also a second general rule for the chapter which is applicable

Chapter Rule 2: Apparel goods of this Chapter shall be considered to originate if they are both cut and sewn or otherwise assembled in the territory of one or more of the Parties and if the fabric of the outer shell, exclusive of collars or cuffs, is wholly of one or more of the following:

- (a) Velveteen fabrics of subheading 580123, containing 85 percent or more by weight of cotton;
- (b) Corduroy fabrics of subheading 580122, containing 85 percent or more by weight of cotton and containing more than 7.5 wales per centimeter;
- (c) Fabrics of subheading 511111 or 511119, if hand-woven, with a loom width of less than 76 cm, woven in the United Kingdom in accordance with the rules and regulations of the Harris Tweed Association, Ltd., and so certified by the Association;
- (d) Fabrics of subheading 511230, weighing not more than 340 grams per square meter, containing wool, not less than 20 percent by weight of fine animal hair and not less than 15 percent by weight of man-made staple fibers; or
- (e) Batiste fabrics of subheading 551311 or 551321, of square construction, of single yarns exceeding 76 metric count, containing between 60 and 70 warp ends and filling picks per square centimeter, of a weight not exceeding 110 grams per square meter

The basic rule of origin stipulates change of chapter but then provides a list of headings and chapters from which inputs cannot be used. Thus in effect the overcoat must be manufactured from the stage of wool fibres forward. In addition, Chapter Rule 1 stipulates that the visible lining used must be produced from yarn and finished in either party. This rule may well have been introduced to constrain the impact of the tolerance

rule which would normally allow 7 per cent of the weight of the article to be of non-originating materials. In overcoats and suits the lining is probably less than 7 per cent of the total weight. The second chapter rule seems to provide very specific exemptions to the rules of origin for materials which are in short-supply or not produced in the US or in Singapore, see category (c) for example, and reflects firm specific lobbying to overcome the restrictiveness of these rules of origin when the original NAFTA rules of origin were defined.

REFERENCES

Brenton, P (2003) 'Integrating the Least Developed Countries into the World Trading System: The Current Impact of EU Preferences under Everything But Arms', Policy Research Working Document, World Bank, forthcoming in the *Journal of World Trade*

Brenton, P and M Manchin (2003) 'Making EU Trade Agreements Work: The Role of Rules of Origin', *The World Economy*, forthcoming

Estevadeordal, A, and K Suominen (2003) 'Rules of Origin in FTAs in Europe and the Americas: Issues and Implications for the EU-Mercosur Inter-Regional Association Agreement, mimeo, Inter-American Development Bank

Herin, J (1986) 'Rules of Origin and Differences Between Tariff Levels in EFTA and in the EC', EFTA Secretariat, Geneva

Janet Tay Consultants (2002) *Facilitating Trade: The East Asian Experience in a Comparative Context*

UNCTAD, Commonwealth Secretariat (2001) *Duty and Quota Free Market Access for LDC's: An Analysis of Quad Initiatives*, www.unctad.org/en/docs/poditctabm7enpdf

WTO(2002) 'Rules of Origin Regimes in Regional Trade Agreements', WT/REG/W/45