



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*



UNIVERSITÀ DELLA CALABRIA



CEPII



University of Dublin
Trinity College



UNIVERSIDAD
POLITECNICA
DE VALENCIA



What Are EU Trade Preferences Worth for Sub-Saharan Africa and Other Developing Countries?

Fabien Candau (University of Pau, France) and *Sébastien Jean* (CEPII, France)

Working Paper 05/09

TRADEAG is a Specific Targeted Research Project financed by the European Commission within its VI Research Framework. Information about the Project, the partners involved and its outputs can be found at <http://tradeag.vitamib.com>

TABLE OF CONTENTS

ABSTRACT.....3

NON-TECHNICAL SUMMARY.....3

RÉSUMÉ5

RÉSUMÉ COURT5

1. EUROPEAN TRADE POLICY: THE SCOPE AND DEPTH OF PREFERENTIAL AGREEMENTS9

2. THE USE OF EU'S PREFERENCES: PRIMA FACIE EVIDENCE12

 2.1. Related literature12

 2.2. The data15

 2.3. The coverage and utilisation rates of EU preferences16

3. PREFERENCE MARGINS, UTILISATION AND VALUE OF PREFERENCES20

 3.1. Utilisation by level of preference margin20

 3.2. Utilisation of preferences and "actual" average protection.....22

 3.3. The value of EU preferences27

4. CONCLUSION.....30

REFERENCES.....31

WHAT ARE EU TRADE PREFERENCES WORTH FOR SUB-SAHARAN AFRICA AND OTHER DEVELOPING COUNTRIES?

ABSTRACT

This study shows that EU preferences to developing countries were fairly well utilised in 2001, especially in sub-Saharan Africa. For several sub-Saharan African countries, the value of EU tariff preferences, even without accounting for tariff rate quota rents, is worth a significant proportion of their world exports. For non-African Least Developed Countries, in contrast, we find that the EBA initiative was only half-utilised approximately, although it is the only preferential regime available to most of them. It is difficult to reach a firm conclusion since 2001 was the first year of enforcement of Everything But Arms (EBA), and figures for 2002 show utilisation is on the rise, but rules of origin appear to limit significantly the value of this scheme. This also likely explains why the Generalised System of Preferences (GSP) scheme is significantly under-utilised in the manufacturing sector, even when the receiving country is not eligible to any other preferential regime.

NON-TECHNICAL SUMMARY

The EU plays a singular role with regards to developing countries exports, both because of the size of its market, and because of its numerous reciprocal and non-reciprocal preferential agreements. This work studies how effective EU's preferential agreements are in granting developing countries improved market access. How far are preferences indeed utilised by exporters, when entering the EU's market? What is their value for receiving countries? The EU case raises several methodological issues, due to the complexity of European trade policy, with numerous, frequently overlapping preferential arrangements. Our analysis focuses on non-reciprocal preferences granted to developing countries, and more especially on sub-Saharan African countries. Still, the empirical work covers all agreements and all partners.

Benefiting from a preferential scheme requires complying with several requirements, technical, administrative, or intended to establish the origin of the product. Given the cost and sometimes the complexity of these constraints, the benefit of preferential agreements cannot be considered as automatic, costless nor unconditional. Hence the need to assess to what extent EU trade preferences are indeed used by exporters, and what their value is.

48.9% of 2001 EU's imports were dutiable, i.e. concerned products for which the MFN duty is not zero. Among these dutiable imports, 56.5% were eligible to a preferential regime, and the benefit of a preferential regime was requested for 81.3% of eligible imports. The utilisation of one single regime considered in isolation is not necessarily meaningful, because many countries are eligible to several preferential regimes; when all preferences are considered together, however, the above figure shows that their utilisation rate is rather

high. This is in particular the case for Sub-Saharan African Least Developed Countries (LDCs): they made virtually no use of the Everything But Arms (EBA) initiative, because they preferred exporting using the Cotonou regime, which is already extremely favourable both in terms of rates and of associated constraints, and which exporters are accustomed to. For sub-Saharan Africa as a whole, the utilisation of the Cotonou scheme is as high as 94%.

Utilisation of other preferential schemes is lower, but still high in most cases. Significant underutilisation (utilisation rate below 75%) is found in three cases: for non-African LDCs in textile and clothing (46%), and for non-LDCs only eligible to the Generalised System of Preferences (GSP) in the textile-clothing sector (65%) and in other manufacturing products (70%). It is difficult to reach any conclusion as to the EBA initiative, since 2001 was the first year of its enforcement, and figures for 2002 show utilisation is (slowly) on the rise. For the GSP, this utilisation rate is weak, and this is likely due to the rules of origin attached to this scheme. Consistently with this explanation, we show that the above-mentioned cases are the only ones where high preferential margins (higher than 6 points) remain substantially underutilised.

When relying on import-weighted averages, we find that the MFN average duty is 3.6%, while the average preferential duty is 2.0% assuming full utilisation. Under-utilisation of preferences does not affect much the benefit of preferences since the average duty is 2.3% when this is accounted for.

We also calculate the value of preferences. Assuming full utilisation, tariff preferences granted by the EU in 2001 can be valued under simple assumptions to 182 M euros for African LDCs, to 521 M euros for non-LDCs in SSA, and to approximately the same level (510 M euros) for other LDCs. For all country groups except those only eligible to the GSP, this represents a significant proportion of the value of dutiable exports to the EU, as much as around 10% for sub-Saharan African countries and LDCs. Under-utilisation does not change this picture substantially, except for non-African LDCs, where the value of preferences is halved.

Classification JEL: F13, N77.

Keywords: Preferential trade agreements; Utilisation rate; Value of preferences; European Union; Sub-Saharan Africa.

**QUE VALENT LES PREFERENCES COMMERCIALES EUROPEENNES POUR
L'AFRIQUE SUBSAHARIENNE ET LES AUTRES PAYS EN DEVELOPPEMENT ?**

RESUME

Ce travail montre que les préférences commerciales accordées par l'Union Européenne aux pays en développement étaient relativement bien utilisées en 2001 (dans le sens où les importations éligibles s'effectuaient pour la plupart en demandant effectivement à bénéficier d'un régime préférentiel), en particulier par les pays d'Afrique subsaharienne. Pour plusieurs des ces pays, la valeur des préférences tarifaires européennes représentait une proportion significative de leurs exportations mondiales, même sans tenir compte des contingents tarifaires. Pour les pays les moins avancés non africains, en revanche, l'initiative "Tous sauf les armes" n'étaient guère utilisée que pour la moitié des exportations éligibles, alors qu'il s'agit pour la plupart d'entre eux du seul régime préférentiel auquel ils ont droit. Il est difficile d'en tirer une conclusion définitive, dans la mesure où 2001 est l'année de mise en place de cette initiative et où les chiffres pour 2002 montrent une progression de l'utilisation, mais les règles d'origine paraissent avoir significativement limité la valeur de ce régime préférentiel. Les règles d'origines expliquent probablement aussi pour le Système généralisé de préférences est significativement sous-utilisé dans le secteur manufacturier, même lorsque le pays bénéficiaire n'est éligible à aucun autre régime.

RESUME COURT

L'Union européenne joue un rôle particulier envers les pays en développement (PED), en raison à la fois de la taille de son marché et de ses accords préférentiels, réciproques ou non. Ce document analyse l'efficacité des accords préférentiels de l'UE pour favoriser l'accès au marché des PED. Les régimes préférentiels sont-ils effectivement utilisés par les exportateurs pour pénétrer le marché européen ? Quelle est leur valeur pour les pays bénéficiaires ? Le cas de l'UE soulève plusieurs problèmes méthodologiques, dus à la complexité de la politique commerciale européenne, avec de nombreux accords préférentiels, comptant souvent des bénéficiaires en commun. Notre analyse se concentre sur les préférences non réciproques accordées aux PED, et plus spécialement aux pays d'Afrique subsaharienne. Le travail empirique couvre cependant tous les accords et tous les partenaires.

Le bénéfice d'un régime préférentiel implique de respecter un certain nombre d'exigences techniques, administratives, ou destinées à établir l'origine du produit. Etant donné le coût et parfois la complexité de certaines de ces contraintes, le bénéfice de ces accords préférentiels ne peut pas être considéré comme automatique, ni sans coût ou sans condition. D'où l'intérêt d'étudier dans quelle mesure les préférences commerciales européennes sont effectivement utilisées par les exportateurs, et quelle est leur valeur pour eux.

48,9 % de la valeur des importations de 2001 de l'Union européenne étaient taxable, c'est-à-dire concernaient des produits pour lesquels le droit de douane sous la clause de la Nation la plus favorisée (droit NPF) est non nul. Parmi ces importations taxables, 56,5 % étaient éligibles à au moins un régime préférentiel, et le bénéfice de régime était effectivement requis pour 81,3 % des ces importations éligibles. L'utilisation d'un régime préférentiel considéré isolément n'est pas nécessairement une mesure pertinente, parce que beaucoup de pays sont éligibles simultanément à plusieurs régimes ; mais le chiffre ci-dessus montre que lorsque les régimes sont considérés dans leur ensemble, leur utilisation est en moyenne relativement élevée. C'est en particulier le cas pour les pays les moins avancés (PMA) d'Afrique subsaharienne : ils n'utilisent pratiquement pas l'initiative "Tous sauf les armes" (TSA), parce qu'ils préfèrent exporter en utilisant le régime de Cotonou, qui est extrêmement favorable aussi bien en termes de taux que de contraintes associées, et auquel ils sont habitués. Pour les pays d'Afrique subsaharienne pris dans leur ensemble, l'utilisation du régime de Cotonou atteint 94 %.

L'utilisation des autres régimes préférentiels est plus faible, mais reste élevée dans la plupart des cas. Une sous utilisation significative (taux d'utilisation inférieur à 75 %) apparaît dans trois cas : pour les PMA non africains dans le textile et l'habillement (46 %), et pour les non-PMA ne bénéficiant que du Système Généralisé de Préférences (SPG) dans les secteurs du textile habillement (65 %) et dans les autres produits manufacturés (70 %). Il est difficile d'en tirer des conclusions concernant l'initiative TSA, dans la mesure où l'année 2001 est l'année de sa mise en place, et où les chiffres pour 2002 dénotent une (légère) augmentation de son utilisation. En ce qui concerne le SPG, ce taux d'utilisation est faible, vraisemblablement du fait des règles d'origine propres à ce régime. En accord avec cette constatation, nous montrons que les cas mentionnés ci-dessus sont les seuls pour lesquels des marges conséquentes (supérieures à 6 points) restent largement sous-utilisées.

Une moyenne pondérée par les importations donne un droit appliqué NPF moyen de 3,6 %, et un droit préférentiel moyen de 2,0 % en supposant une utilisation totale. La sous-utilisation affecte peu le bénéfice de ces préférences, le droit moyen étant de 2,3 % lorsque nous la prenons en compte.

Nous calculons aussi la valeur de ces préférences. En supposant une utilisation parfaite, les préférences offertes par l'UE en 2001 peuvent être évaluées sous des hypothèses simples à 182 millions d'euros pour les PMA africains, à 521 millions d'euros pour les non-PMA d'Afrique subsaharienne, et à 510 millions d'euros pour les autres PMA. Pour tous les groupes de pays, exceptés ceux éligibles au SPG, ces chiffres représentent une proportion significative de la valeur de leurs exportations taxables vers l'UE, jusqu'à environ 10 % pour les pays d'Afrique subsaharienne et les PMA. La prise en compte de la sous-utilisation change peu ce résultat, exception faite des PMA non africains, dont la valeur des préférences est divisée par deux.

Classement JEL : F13, N77.

Mots-clés : Accords de commerce préférentiels ; taux d'utilisation ; valeur des préférences ; Union européenne ; Afrique subsaharienne.

**WHAT ARE EU TRADE PREFERENCES WORTH FOR SUB-SAHARAN AFRICA
AND OTHER DEVELOPING COUNTRIES?**

*Fabien Candau & Sébastien Jean*¹

As then-EU Trade Commissioner Pascal Lamy (2002, p. 1403) puts it, “in the days before we had a Common Foreign and Security Policy, [...] the principal instrument of EU foreign policy was trade preferences”. This has led to a situation where “the EC maintains preferential trade arrangements with virtually all countries” (Sapir, 1998, 717), the only exception being North Korea and a handful of non-European developed countries. In a context where the EU is by far the first market for developing countries’ agricultural exports in general, and is of overwhelming importance for most former colonies, EU’s trade preferences are thus potentially an important stake for development. This is undoubtedly what the Ministers of Trade of the Member States of the African Union had in mind when they recognised, in the Grand-Baie Declaration (June 20th, 2003), “the vital importance of long standing preferences for African countries”, and subsequently expressed in three occasions their concerns about the erosion of preferences.

As a matter of fact, preferential trade arrangements (PTAs), either reciprocal or not, play a central role in shaping trade opportunities for numerous developing countries, notably for the poorest ones. This is especially the case for sub-Saharan African countries, due to the non-reciprocal preferences they are granted, in particular through the Cotonou Partnership Agreement (CPA). The perspective of multilateral liberalisation thus raises serious concerns about the erosion of these preferences and its possible consequences (Bouët et al., 2005)

This work studies how effective EU’s² preferential agreements are in granting developing countries improved market access. How far are preferences indeed utilised by exporters, when entering the EU’s market? What is their value for receiving countries? The EU case raises several methodological issues, due to the complexity of European trade policy, with numerous, frequently overlapping preferential arrangements. Our analysis focuses on non-reciprocal preferences granted to developing countries, and more especially on sub-Saharan

¹ Fabien Candau is a PhD Student with the CATT, University of Pau. Sébastien Jean was Senior Economist with CEPII when this study was being carried out. This study has benefited from partial financial support by the World Bank. It also received partial financial support under the “Agricultural Trade Agreements (TRADEAG)” project, funded by the European Commission (Specific Targeted Research Project, Contract No. 513666). We thankfully acknowledge Lionel Fontagné’s contribution to an earlier stage of this work. We are grateful to the European Commission services for giving us access to the customs data. We especially thank Reinhard Binder, Xavier Pichot, David Laborde, Jacques Gallezot for their help and comments, Stefano Inama and Louise Curran for useful suggestions, and Will Martin for guidance. Corresponding author: Sébastien Jean (laure.boivin @ cepii.fr).

² Formally, trade policy is conducted by the European Community. For ease of exposition, we will only refer in what follows to the European Union (EU).

African countries.³ Still, the empirical work will cover all agreements and all partners, both to give a complete picture, and because of the difficulty to analyse some schemes separately from others.

Analysts are used to assessing the consequences of these trade preferences on the basis of statutory protection, i.e. of the preferential access exporters are eligible to. This is certainly more realistic than not taking account at all of preferences, but it does not necessarily reflect the protection level faced in practice. Indeed, benefiting from a preferential scheme requires complying with several requirements, technical, administrative, or intended to prove the origin of the product. Given the cost and sometimes the complexity of these constraints, the benefit of preferential agreements cannot be considered as automatic, costless nor unconditional. On the contrary, recent studies suggest that EU preferences are systematically under-utilised by exporters (Brenton and Manchin, 2001; Brenton, 2003) with an especially thin utilisation of the EBA initiative. This finding is not uncontroversial, however. Inama (2003) shows that utilisation of LDC-ACP preferences has been "above 70 per cent on average for the whole period 1998-2002", and emphasises that utilisation depends on a number of factors, such as the extent of the preference, supply capacity and rules of origin implications. Gallezot (2003) finds that a large proportion of EU's agricultural imports use a preferential rate.

These results might seem contradictory at first glance. However, they do not deal exactly with the same problem. For instance, Brenton (2003) focuses on the utilisation of the EBA initiative (in addition, during the year when it was enforced, 2001), while Gallezot takes a broader measure, by studying the utilisation of any of the preferential agreements the exporter is eligible to. Indeed, EU's trade policy is fairly complex, and numerous trade partners benefit from various preferential agreements, as it is the case for sub-Saharan Africa LDCs with the EBA initiative and the Cotonou agreement. The analysis of the utilisation of preference must therefore be adapted to this specific context, where in addition the administrative requirements and the rules of origin vary from one agreement to the other, included for a given partner. The utilisation of a given preferential scheme cannot be properly studied without taking into account whether an alternative preferential scheme is offered or not to the exporter. This is an important premise of our analysis, which will take a broad view of all preferential agreements offered by the EU, whether reciprocal or not.

We also argue that the level of the preferential margin (i.e., the difference between the preferential and the MFN applied duty) should be accounted for. The economic significance of a given scheme (and of its possible under-utilisation) is obviously higher, the higher the preferential margin. This is why we also make use of detailed data about EU's statutory protection, in association with customs declarations.

³ From a pure trade policy point of view, it is customary to consider sub-Saharan African countries together with Caribbean and Pacific countries, due to the importance of EU-ACP preferential agreements. Still, these country groups are far from homogenous in other respects. In particular, Sub-Saharan African countries' external trade exhibit a higher dependency with regards to the EU, while the US make up for a large part Caribbean countries' exports, as Australia and New-Zealand do for Pacific ACP countries.

While all partners are covered, our analysis devotes special attention to sub-Saharan African countries, for which the trade relationship with the EU is of particular relevance, and for which most concerns have been voiced about the erosion of preferences possibly resulting from future multilateral liberalisation. Our study makes use of 2001 data. Not using more recent data is frustrating, but this is the most recent year for which complete statutory and customs data is available to us at the tariff line level. More recent evidence suggests in addition that the situation did not dramatically change during the recent years.

1. EUROPEAN TRADE POLICY: THE SCOPE AND DEPTH OF PREFERENTIAL AGREEMENTS

The EU is by far the first contributor to the profusion of trade agreements worldwide, with more than 50 RTAs notified to the WTO up to 2003. As illustrated by Figure 1, even a simplified overview of the EU's trade policy remains quite intricate. The political economy roots of this profusion of agreements belong to the heterogeneity of the EU, to the specific role played by its trade policy –for long the only Community competence in terms of foreign policy–, and by the strong demand from trading partners, as well described in Sapir (1998, see also Lamy 2002, and Panagariya 2002).

Besides partners diversity, two kinds of schemes must be distinguished from the outset: free-trade agreements (FTAs) are bilaterally agreed, reciprocal commitments between the parties; non-reciprocal schemes are unilaterally granted by the EU to developing countries. While the former are intended to be a tool of regional economic integration (with legal basis in the multilateral arena under GATT's Article XXIV), the latter grant developing countries with more favourable treatment (as authorised either under the Enabling Clause, or through specific WTO waivers). The non-contractual nature of several non-reciprocal schemes (the GSP, in particular) also involves uncertainty as to their future (except for the EBA initiative, see below), since they can be unilaterally changed.

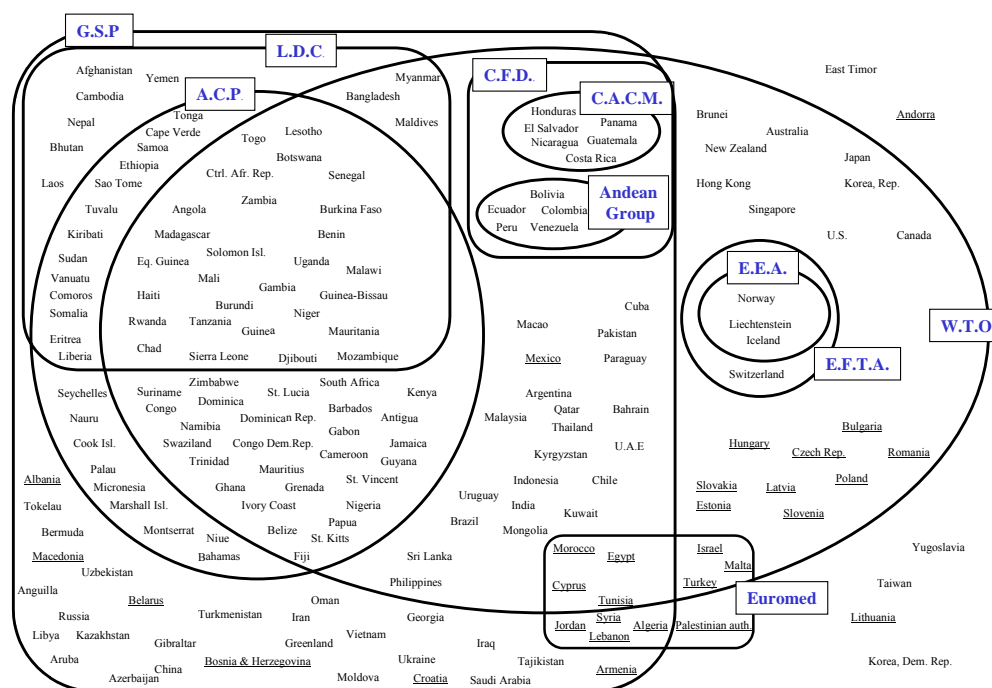
These numerous agreements can be classified in a few categories. A first set includes close neighbourhood, reciprocal agreements within Europe, with in particular the EU-EFTA agreement, bilateral free-trade agreement with Central and Eastern European Countries (CEECs), and a few additional bilateral agreements.

The other agreements concern developing countries. The most inclusive is the GSP, which grants a non-reciprocal, preferential access for a large scope of products, although with a limited preferential margin for so-called sensitive products. The GSP is also characterised by its temporary nature, with periodical revisions. Graduation measures (i.e. exclusion of some or all products from the scheme) are taken when "beneficiary countries may have reached, in certain sectors, a level of competitiveness which ensures further growth even without preferential access to the EU market" (European Commission). The GSP is associated with relatively stringent rules of origin. No diagonal cumulation⁴ is allowed

⁴ Diagonal cumulation means that intermediate inputs from other countries benefiting from the schemes can be taken into account as local in order to fulfil the conditions required to confer origin to the exported product.

among beneficiaries of the GSP scheme, except under a handful of regional agreements (among which ASEAN and SAARC). A special and more beneficial regime has in the past been granted to countries fighting drugs (in 2001, only Central American and Andean Pact countries were concerned).⁵ The latest GSP revised this approach and provides very generous preferences to countries which demonstrate a commitment to sustainable development through ratification of key international treaties and conventions.

Figure 1: EU's trade policy in 2001



Source: authors' revision, based on Bouët et al., 2002.

Note: An underlined country's name signals a bilateral agreement with the EU. This figure is a simplified representation of EU's trade agreements in 2001. It does not pretend to be exhaustive, and it does not show the variation across country of the product coverage of agreements.

In addition, starting from March 2001, the EBA initiative grants duty-free, quota-free access to LDCs for all products but arms, and with a differed enforcement for sugar, rice and bananas. Although embedded in the GSP scheme and thus associated to the same general rules, EBA has the specificity of being a permanent scheme, without limitation of duration.

⁵ Pakistan has subsequently benefited from this regime. Note in addition that two additional incentive clauses, linked to fundamental social rights and environment protection, were unused in 2001.

The last set of agreements includes a number of bilateral and regional agreements (like those with Mediterranean countries, South Africa and Chile), offering further preferences with respect to the GSP. The Cotonou Partnership Agreement between the EU and ACP countries, following upon former Lomé conventions, is especially noteworthy: this non-reciprocal agreement grants duty-free access to the EU to most ACP products (as well as important preferential tariff quotas), and is of particular relevance to benefiting countries.⁶ The RoOs associated to this agreement are more favourable than those of the GSP, and include diagonal cumulation between eligible countries.

Compared to other Quad markets, the preferential margin offered to developing countries appears relatively high in the EU (Table 1). This especially clear for LDCs, for which the AVE protection faced appears to be close to zero, as a result of the EBA initiative. For non-LDC developing countries, the average preferential margin in the EU market is thin (0.7 percentage points), but still superior than in other Quad markets. In manufacturing, protection is low in any case, but it is virtually zero for developing countries, outside textile-clothing. In textile and clothing, non-LDC developing countries do not benefit from any significant preferential margin. In agriculture, the margin is almost 4 points for non-LDCs, and as much as 15.7 percentage points for LDCs. Note however that the average preferential margin offered to developing countries (either LDC or not) for agricultural products is higher in Canada and in Japan, while it is almost zero in the US for LDCs.⁷

Table 1: Protection faced in Quad markets in 2001, by partner and sector

Panel A. Average AVE protection by sector and by partner (%)

Importer:	By sector			By partner			Total
	Agric.	Manuf.	Textile	Rich	DCs	LDCs	
Canada	14.4	1.6	12.6	3.7	3.1	6.3	3.5
European Union (15)	16.2	1.8	6.4	3.6	2.9	0.8	3.2
Japan	28.7	0.6	9.9	3.9	3.4	1.9	3.7
United States	5.2	1.4	10.4	2.4	2.6	5.9	2.4

Panel B. Average AVE protection by sector, for each partner (%)

Partner:	Developed Countries			Non-LDC developing coun.			LDCs		
	Agric.	Manuf.	Textile	Agric.	Manuf.	Textile	Agric.	Manuf.	Textile
Canada	18.1	2.0	11.5	5.8	0.7	13.4	0.4	0.0	16.2
European Union (15)	18.5	2.5	6.6	14.7	0.8	6.5	2.8	0.0	1.0
Japan	33.0	0.7	10.2	18.1	0.4	10.1	11.6	0.2	0.1
United States	5.8	1.6	9.7	3.7	0.8	10.9	5.2	0.1	13.0

Source: Bouët et al. (2004b), based on MAcMap.

Note: "Agric." refers to agriculture and agrofood. "Textile" refers to textile, clothing, leather and leather products.

⁶ The WTO waiver for this agreement is due to expire by the end of 2007, and reciprocal Economic Partnership Agreements by group of countries are being negotiated to replace it. Although we do not deal directly with this perspective here, this should of course be an essential element of any prospective outlook.

⁷ How far this is due to the partial enforcement of AGOA in 2001 remains an open question.

In setting the stage, it is also worth emphasising the outstanding importance of the European market for developing countries. The case of agricultural products is especially relevant, given both the high level of trade barriers in this sector, and the overwhelming importance of these products in developing countries exports. As illustrated by Table 2, the EU-25 imports of agricultural products from developing countries were significantly higher, in 2001, than the sum of US and Japanese imports. Among providers, developing countries (and especially so LDCs) also accounted for a far larger share of agricultural imports in the EU than they did in the US or in Japan. These figures emphasise the potential importance of EU's trade preferences to developing countries. It is therefore worth assessing what their use is in practice.

Table 2: Agricultural imports in the Triad countries in 2001, by groups of exporters

	EU25		US		Japan	
	Value (M \$)	Share (%)	Value (M \$)	Share (%)	Value (M \$)	Share (%)
Developed	15,918	30.5	24,532	56.5	20,982	69.3
Developing except G-90	27,708	53.1	17,409	40.1	8,750	28.9
G-90	8,566	16.4	1,444	3.3	542	1.8
Total	52,192		43,384		30,273	

Source: Calculations based on CEPII's BACI database.

Note: the G-90 (Group of 90) is composed of all LDCs and of all members of the African Union (which itself includes virtually all African countries).

2. THE USE OF EU'S PREFERENCES: PRIMA FACIE EVIDENCE

Since conditions are attached to the benefit of trade preferences, their value is not only a question of statutory advantages, but also of benefits reaped in practice. In this section, we reconsider the evidence about the utilisation of EU's preferential schemes, based on detailed customs declarations. Given the existence of competing preferences for several partners, this is done for the most beneficial scheme available to each exporter, but also by considering whether at least one preferential scheme is used.

2.1. Related literature

Benefiting from a preferential scheme requires complying with several requirements: purely administrative issues, technical requirements, other specific conditions, and most of all rules of origin (RoOs). RoOs specify criteria required for commodities to be considered as originating in the country, and therefore to be eligible to preferential treatment when applicable. Local content requirements (usually expressed as a minimum share of local value added) and sufficient transformation (as witnessed for instance by a change in classification heading) are the most common criteria used in practice. RoOs are justified by the need to avoid trade deflection, i.e. re-exports through the preference-receiving country of goods essentially produced in a third country. RoOs avoid misuses of preference

schemes, arguably reinforcing the benefit of the scheme for the preference-receiving country to the extent that they create an incentive to invest in the preference-receiving country in order to benefit from preferential market access.

However, there is a direct cost associated with meeting RoOs. Required administrative paperwork is potentially cumbersome, and costly if it requires operating a parallel accounting system differing in definition, scope and concepts from the system imposed by domestic legal requirements.⁸ RoOs also constrain the sourcing of intermediate inputs. These costs have been the subject of close scrutiny, because of the widespread suspicion that requirements associated with preferential agreements, and especially RoOs, are used as protective measures that undermine the benefit of preferential access (Krueger 1993, Krishna and Krueger, 1995, Falvey and Reed, 1998). Falvey and Reed (2002) show that RoOs allow the importing country's terms of trade to be improved in both final and intermediate goods, and can be a complementary tool to the optimal tariff. It has also been argued that RoOs are used in some instances as export subsidies, insofar as restrictive rules can create an incentive for the preference-receiving country to source its inputs in the preference-granting country (Cadot et al. 2004). The effect of RoOs depends however on their nature, on the time period of the analysis (short run versus long run) and on market structure (see Krishna and Krueger, propositions 1 and 2).⁹ Moreover, the impact is not necessarily a monotonic function of the rule's restrictiveness.

The magnitude of these costs is difficult to assess. Based on indirect evidence, several studies provide estimates of the administrative compliance costs of preferential schemes to be between 1 and 5 percent of the value of exports (see Herin, 1986; Anson et al., 2003), depending on the precise nature of the requirements and on the technical capacity of exporters to comply with them. Non-administrative costs, linked in particular to the constraint on sourcing imposed by RoOs, vary even more across products and countries. They depend in particular on the existing possibilities to split the value-added chain for the product, and on the status of competitive input providers with regard to the agreements. In addition, different types of RoOs are used (see e.g. Estevadeordal and Suominen, 2003), the restrictiveness of which differs widely. Based on the detailed work undertaken by Estevadeordal (2000), several studies have focused on NAFTA and found that RoOs hamper Mexican exports to the US, in particular in the automotive and textile-clothing sector (Cadot et al. 2002, Anson et al. 2004). Their cost varies with the nature of the rule, but the whole cost seems to be close to the preferential margin itself, suggesting that the value of the agreement would be very low for Mexican exporters. Studying FTAs between the EU and CEECs, Brenton and Manchin (2003) also conclude that the rules associated

⁸ See for example UNCTAD (2003b, p. 54) and Inama (2003).

⁹ Ju and Krishna (2002, 2005) demonstrate that if the exporting intermediate sector is more protected than the final sector, then the effect of RoOs in the two sectors goes in opposite direction i.e. intermediates price (and final good imports) follow a bell-curve with the increase in the RoO's restrictiveness, while final good price (and intermediate imports) follows a U-curve. The top and down of these curves are reached when firms prefer to disregard RoOs, import inputs and pay the MFN.

with the agreement preclude exporters from reaping any substantial benefit, as evidenced by the very poor utilisation of these agreements.¹⁰

Non-reciprocal preferences face the same kind of issues, but the above-mentioned results need not apply in this case because of the differences in rules applied, in product specialisation, and in income levels of the exporters. Recent studies suggest that preferences are systematically under-utilised by exporters. Brenton and Manchin (2003) found that only 35% of CEECs' exports enter the EU using the lowest tariff for which they would be eligible. Reporting that the EBA initiative was very poorly utilised by LDC exporters to the EU in 2001, Brenton (2003) casts doubts on the actual benefit of this preferential scheme, and points to the stringency of rules of origin as the main culprit. Mattoo et al. (2003) make a similar point as far as AGOA is concerned, showing that rules of origin, in particular, strongly undermine the "generosity" of this scheme. Using a general equilibrium model, they argue that the benefit of AGOA would have been five times greater without RoOs (\$540 millions instead of 140 millions).

Gallezot (2003), in contrast, found that a large proportion of the EU's agricultural imports use a preferential rate. Inama (2003), found that 62% of imports of Quad countries from all beneficiaries of GSP schemes were actually covered by preferences in 2002. But only 39% of the eligible imports were effectively shipped under such schemes. Turning to LDCs only, 64% of imports were covered but no more than 43% of eligible imports were effectively requesting to benefit from these schemes. Regarding the EU, the utilisation rate was 40% for LDCs, to be compared with 30% for Japan, in 2001. Under the AGOA scheme, the utilisation rate was 67% for mineral products, which account for 90% of total imports receiving in the US, with a very tiny preference margin; for textile and clothing, however, the utilisation rate was only 36% (for a more specific assessment of US preferences, see Dean and Wainio, 2005).

Studying separately the utilisation of various preferential schemes may be misleading. When a country is eligible to several preferential schemes (and this is the case with numerous developing countries, as far as access to the EU or the US market is concerned), an under-utilisation of a given scheme can merely mean that another scheme is judged more interesting by the exporter. In this case, under-utilisation may not be a problem, since the exporter still enjoys the benefit of preferential market, although the preference margin available under the chosen scheme may be lower than under the one with more restrictive rules. The very low utilisation rate of EBA among ACP LDCs countries might well mean that exporters prefer to use the preferential access offered through the Cotonou agreement, which they have already been using for a long time and has less restrictive rules of origin (Inama, 2003). In a study concomitant to this one, Gallezot and Bureau (OECD, 2005) show that when due account is taken of these competing preference schemes, EU and US non-reciprocal trade preferences are found to be well utilised in agricultural products, at around 90 percent. They also show that the existence of an alternative preferential regime

¹⁰ They found that only 35 percent of CEECs' exports enter the EU using the lowest tariff for which they would be eligible.

lowers considerably the utilisation of a given preferential scheme, and that this explains the poor utilisation of the EBA initiative by sub-Saharan African countries. This is paralleled by Wainio and Gibson's (2003) analysis of US non-reciprocal preferential regimes for agricultural products, also found to be utilised by more than 90% of eligible imports.

In summarising four case studies carried out on Botswana, Kenya, Lesotho and Mauritius, Stevens and Kennan (2004) reports that very few exports (1 to 6 percent) from these countries to the EU do not benefit from any preference (or from zero MFN duty). As they put it, it is "inherently implausible that for the countries and product studied preferences have not been well utilised", given the magnitude of preferential margins, and the place they take in the long-standing structure of these countries exports. In addition, Stevens and Kennan report that a detailed analysis does not point to product coverage significantly limiting the benefit of the Cotonou agreement (except due to quantitative limitations linked to preferential tariff quotas). Indeed, no significant exports are made to the EU, nor to other Quad markets, for products for which preferences were not available (Stevens and Kennan 2004, p. 8).

2.2. The data

The main source available to study the utilisation of preferences in EU's market is the Single Administration Declarations (SAD), collected by national customs, and put together by Eurostat.¹¹ This database makes it possible to know, for each tariff line, the value and volume of imports by requested preference regime. Seasonal tariffs are treated using several lines (one for each period of time), additional information is available about the use of a quota, and about tariff suspensions.¹² The analysis is carried out here based on summer 2003's release.

It should be emphasised at the outset that the preference regime notified in the data is the regime *requested* by the exporter, not the regime finally used. In other words, no information is available about the treatment carried out by custom officers, and the answer they have given to this request. This explains why a significant proportion of the declarations is inconsistent: this occurs for instance when an exporter requests a regime he is not eligible to. While nothing prevents him from making such a request, custom officers should deny him benefiting from this regime. Obvious inconsistencies need to be corrected during the statistical treatment.

¹¹ The EU notifications concerning the use of their GSP scheme also allows GSP imports to be disentangled from other preferential imports.

¹² Compared to previous releases, the quality of the database has been strongly improved in this version, both in terms of consistency for countries covered, and through the inclusion of the Netherlands, which were previously missing. The number of inconsistencies in the database is approximately halved in this release, compared to previous ones.

In order to judge the consistency of custom declarations, detailed information is required about the regime the exporters are eligible to. This includes the countries covered by each agreement, but also the product coverage of each agreement, given that this product coverage varies in some instances from one partner to the other, due to product exclusions. An important example is graduation measures under the GSP, for which countries and sectors concerned are determined each year.

In the dataset used, the frequency of inconsistent declarations is about 15%. We chose to exclude these declarations from the calculations of utilisation rates of preferences (and of AVE requested duty, see below). However, the corresponding flows are taken into account in the measurement of trade value, and in the trade-based weighting procedures. Still, working on requested instead of effectively used regime remains a limitation, and should be borne in mind when interpreting the results.

2.3. The coverage and utilisation rates of EU preferences

The above-described data allows the coverage and utilisation of EU trade preferences to be characterised. This is usually made by calculating first the coverage ratio, i.e. the ratio of imports eligible to the preference regime to dutiable imports, for the (group of) partner and the (group of) sector considered. The utilisation rate of a given preferential regime is calculated as the share of imports eligible to this regime, that indeed (request to) use it. Inama (2003) also calculates the utility ratio of a preference regime, referring to the share of dutiable imports that do use a given preference regime.¹³

This simple arithmetic might be misleading when various preference regimes are available to the exporter. From the comparison of the results obtained respectively by Brenton (2003) and Gallezot (2003), in particular, it follows that while EBA is very poorly utilised in sub-Saharan Africa, the Cotonou agreement is strongly used. This suggests that many LDC African countries continue to use the Cotonou regime, even though EBA would grant them higher preferential margin for some products, notably because 20 years of use made them familiar with the formalities requested under the Cotonou agreement, in particular the "Form EUR I" certificate of origin (Inama, 2003). In this case, it is useful to understand why this is the case, but it is also necessary to take stock of the fact that these countries still benefit from a preferential regime.

A preferential regime never covers all products, and product coverage varies widely across agreements. However, for products covered, a preferential agreement provides an additional preference margin, with respect to GSP. The only exception is for LDCs: they are eligible to the EBA initiative as a special clause of the GSP scheme, and EBA is the best regime available to them in terms of statutory tariff duties, even when they benefit in addition from another preferential agreement, as is the case with ACP LDCs. The latter case is intricate since EBA is nevertheless associated with tighter RoOs, so that the "best" preferential

¹³ The utility ratio is thus the product of the coverage ratio by the utilisation ratio.

regime in terms of tariff duty is not necessarily the best one in terms of associated constraints.

In analytical terms, this implies that measuring the utilisation rate of a preference regime that is not the most favourable in terms of tariff duties does not make sense: this regime ought not be largely utilised if a better one exists. For sub-Saharan African LDCs, for instance, the utilisation rate of the Cotonou regime is theoretically inappropriate,¹⁴ as is the utilisation of the GSP for a non-LDC that also benefits from a preferential agreement, as for instance Morocco or Tunisia.

Taking into account this hierarchy between preferential schemes, we calculate two kinds of utilisation and coverage rates, for each type of partners: the rates corresponding to the most favourable preference regime (GSP in the case of LDCs, other preferential agreements for non-LDCs also eligible to the GSP); and the rates of coverage and utilisation of "*at least one*" preference regime, with the corresponding straightforward definitions. By definition, the coverage rate is superior for at least one preference than for any single preference regime, but this is not necessarily the case for the utilisation rate. The utilisation and coverage rates are computed by grouping partners together according to the preference regime they are eligible to, treating separately LDCs and sub-Saharan African (SSA) countries.¹⁵

Overall, 48.9% of 2001 EU's imports were dutiable, i.e. concerned products for which the MFN duty is not zero (Table 3). Among these dutiable imports, 56.5% were eligible to a preferential regime, and the benefit of a preferential regime was requested for 81.3% of eligible imports. As already emphasised by Sapir (1998), in spite of the complex web of preferences maintained by the EU, imports actually entering under a preferential duty are thus a small minority ($48.9\% \times 56.5\% \times 81.3\% = 22.5\%$).

These rates vary substantially across groups of partners. The share of dutiable imports is as low as around 25% for sub-Saharan African countries, specialised in raw agricultural exports, while it overreaches 95% for non-African LDCs, specialised in textile and clothing. The coverage of the GSP itself also varies substantially, from 53% for those non-LDCs countries not benefiting from any additional agreement (mainly Latin American and East Asian countries) up to 99.3% for non-African LDCs. This is due to the specific regime granted to LDCs under the EBA initiative, but also to product specialisation and to graduation, which concerns most of all intermediate countries (see OECD, 2005, for a detailed analysis). Preferential agreements other than GSP have a strong coverage rate, and

¹⁴ This statement might seem contradictory with the practice, given the high utilisation of the Cotonou agreement. Still, it would be logical, in theory to use EBA instead of Cotonou on products where the former offers additional preferences. In such a case, not using the Cotonou preference should not be interpreted as "under-utilisation" of this preference scheme.

¹⁵ As outlined above, it would have been more consistent, from a pure trade policy standpoint, to treat jointly all ACP countries. Because we want to focus on SSA countries, however, we consider them separately. Due to their small size, we did not find it necessary to create an additional, separate group for Caribbean and Pacific countries, which are therefore included in the "GSP_PRE" group.

this is particularly the case of the Cotonou Agreement (up to 99.6% for non-LDC sub-Saharan African countries).

Table 3: Average coverage and utilisation rates of preferences in the EU, by group of partners, 2001 (%)

Partner	Total imports (M euros)	Dutiable imports (M euros)	Share of dutiable imports (%)	Coverage rate (%)			Utilisation rate (%)		
				GSP	Pref	At least one	GSP	Pref	At least one
SSA_LDC	8,313	2,046	24.6	95.4	98.7	99.7	1.3	-	92.2
SSA_nonLDC	15,583	3,959	25.4	62.5	99.6	99.7	-	92.9	94.2
Other_LDC	4,397	4,203	95.6	99.3	0.1	99.4	49.1	-	49.2
GSP_PRE	60,739	24,532	40.4	82.2	82.8	89.0	-	72.7	86.4
GSP_nonPRE	215,459	97,598	45.3	53.1	0.0	53.1	70.3	-	70.3
nonGSP_PRE	238,841	147,726	61.9	0.0	90.7	90.7	-	85.3	85.3
nonGSP_nonPRE	244,657	105,463	43.1	0.0	0.0	0.0	-	-	-
All partners	787,988	385,527	48.9	20.4	41.6	56.5	54.2	83.9	81.3

Source: Authors' calculations based on Custom declarations and TARIC.

Note: "SSA_LDC" includes sub-Saharan African countries classified as LDCs; "SSA_nonLDC" refers to other sub-Saharan African countries; "Other_LDC" includes all LDCs outside sub-Saharan Africa; "GSP_PRE" include countries benefiting from both the GSP and a preferential agreement, except those included in the categories above (i.e. sub-Saharan African countries and LDCs); "nonGSP_PRE" refers to countries benefiting from a preferential agreement, but not from the GSP; "nonGSP_nonPRE" includes countries not eligible to any preferential regime.

The utilisation rate of the preferential agreement taken alone is rather low (73%) for GSP countries also eligible to a preferential agreement, but taking into account both schemes leads to a markedly higher utilisation rate (86%). Although it cannot be excluded that in some cases, the regime used is not the most interesting one, this does not reveal any substantial problem of under-utilisation. The rather low utilisation (70%) of the GSP regime for non-LDCs only available to this regime ("GSP_nonPRE") is more problematic, since this means that almost one third of eligible imports enters under the MFN regime. This casts doubts about the adequacy of constraints associated to EU's GSP scheme. By contrast, the utilisation of the Cotonou scheme by sub-Saharan African countries is very high (94%).

For African countries, the EBA initiative remained virtually unused. As mentioned above, this is likely to be due to the alternative offered to these countries to benefit from the Cotonou regime, which is already extremely favourable both in terms of rates and of associated constraints, and which exporters are accustomed to. When all preferential agreements offered to sub-Saharan African LDCs are considered together, the utilisation of "at least one" preferential regime turns out to be high, well above 90%.

Even for non-African LDCs, for which no alternative preferential agreement exists (except for a few Caribbean and Pacific states, relatively small), utilisation does not reach 50%. EBA thus stands out as exhibiting a especially low utilisation rate. However, it is difficult to judge the meaning of this figure, given that EBA was only enforced in March 2001. Not only was the scheme in force over part of the year only, but it is also logical that getting accustomed to the specific requirements associated to a scheme takes time. This is all the more true in poor countries, where information dissemination is far from perfect.

Although our analysis focuses on 2001, we could investigate the utilisation of the EBA initiative in 2002. For sub-Saharan African LDCs, it increased from 1.3% to 2.8%, still a very small figure, due to the above-mentioned “preference” of exporter to use the CPA. For other LDCs, the utilisation rate rose from 49.1% to 54.8%. While slow, this increase suggests that exporters are adapting, and could draw more and more benefit from this scheme. More time is needed to draw any firm conclusion, but it confirms that working on the year of enforcement leads to under-stating the potential use of the EBA initiative.

The analysis of the coverage and utilisation of preferences by group of products shed more light on underlying issues (Table 4). For other LDCs, under-utilisation is actually limited to textile and clothing products, but these account for the bulk of their exports. It is striking however that the utilisation is twice as high in other sectors as in this one. Given the well-known importance of rules origin in textile and clothing exports (see e.g. Inama, 2003), this is a suggestive result.

For non-LDCs only eligible to the GSP, the under-utilisation of preferences is more important in the textile-clothing sector (65%), but it is also significant in other manufacturing products (70%). The later is a sector where tariff duties are lower, but it includes a far wider range of products, hence the relevance of this result. This lower-than-average utilisation of preferences in the “other manufacturing” sector suggests that rules of origin are not only a problem in the textile and clothing sector. They may also be limiting significantly, although to a lesser extent, the benefit drawn from preferences in other manufacturing sectors, where the international division of labour is a common practice.

Table 4a: EU imports covered by a preferential agreement, by group of partners and group of products, 2001 (M€)

Partner	Raw agric.	Food prod.	Oth. primary	Text-clothing	Oth. manuf	All products
SSA_LDC	399	842	17	252	528	2,039
SSA_nonLDC	1,075	1,445	75	701	651	3,946
Other_LDC	11	235	3	3,884	45	4,178
GSP_PRE	1,856	2,269	999	7,139	9,571	21,835
GSP_nonPRE	759	2,890	123	13,374	34,641	51,787
nonGSP_PRE	1,505	4,334	891	22,118	105,146	133,994
All partners	5,605	12,016	2,107	47,468	150,582	217,778

Source: Authors' calculations based on Custom declarations.

Table 4b: Utilisation rate of preferences, by group of partners and group of products, 2001 (%)

Partner	Raw agric.	Food prod.	Oth. primary	Text- clothing	Oth. manuf	All products
SSA_LDC	94.2	91.8	98.6	95.4	89.6	92.2
SSA_nonLDC	95.1	97.0	88.7	92.5	88.9	94.2
Other_LDC	93.0	90.2	94.5	46.1	89.3	49.2
GSP_PRE	84.8	93.6	96.2	94.1	78.3	86.4
GSP_nonPRE	77.3	88.6	76.5	65.3	70.5	70.3
nonGSP_PRE	77.1	86.7	92.1	89.7	84.3	85.3
All partners	84.3	90.1	93.1	80.0	80.8	81.3

Source: Authors' calculations based on Custom declarations.

3. PREFERENCE MARGINS, UTILISATION AND VALUE OF PREFERENCES

The economic significance of the under-utilisation of preferences is difficult to gauge without additional information about the corresponding level of protection under alternative import regimes at stake. This is studied here through different approaches, thus paving the way for an assessment of the value of these preferences.

3.1. Utilisation by level of preference margin

It should not come as a surprise that exporters do not find it profitable to comply with administrative requirements when the preference margin it would provide them is tiny. In contrast, a low utilisation of a preference regime granting a large preferential margin is a clear sign that significant obstacles prevail, which prevent exporters from taking advantage of the preference.

In order to take this dimension of the utilisation of preference into account, it is necessary to match statutory protection with custom duties. Indeed, custom declarations do not provide any information about the level of duties, but only about the preference regime used. This information is thus taken from the official information about the EU's statutory protection, as given in the TARIC. The data used is broken down at the EU's tariff line level, *i.e.* at the 10-digit level TARIC classification (plus two additional codes). Computing the preference margin requires calculating ad-valorem equivalents of specific tariffs. This is done here using the unit value of imports by partner, at the tariff line level.¹⁶

These AVE duties allow, for each product and each preferential regime, the AVE preferential margin to be computed. In Table 5, the utilisation rate of preferences is related to the preferential margin, calculated for the most favourable regime. It also displays the corresponding share in dutiable exports of each partner, which illustrates the particular

¹⁶ Note however that these unit values suffer from two drawbacks: they lack robustness, and they are likely to present endogeneity (in particular when preference creates a rent, materialising in an above-world average price, see e.g. Olarraega and Ozden, 2005).

importance of trade preferences for LDCs and sub-Saharan African countries: more than 95% of dutiable exports of these partners towards the EU are made in product where their preferential margin is higher than 3 percentage points. For non-African LDCs, almost 96% of their exports correspond to products where their preferential margin is higher than 9 points (overwhelmingly, textile and apparel products).

Table 5: Coverage and utilisation rates of preferences in the EU, by group of partners and by magnitude of preferential margin, 2001 (%)

Level of pref. margin	Share in dutiable imports					Utilisation rate			
	0]0;3]]3;6]]6;9]	>9]0;3]]3;6]]6;9]	>9
Group of partners									
SSA_LDC	0.3	2.8	35.9	15.5	45.4	54	93	92	94
SSA_nonLDC	0.3	4.2	21.0	13.6	61.0	71	95	96	95
Other_LDC	0.6	0.0	0.8	2.9	95.7	29	89	58	49
GSP_PRE	11.0	22.1	18.4	18.1	30.3	81	81	91	91
GSP_nonPRE	46.9	25.8	22.1	4.5	0.7	68	69	88	79
nonGSP_PRE	9.3	35.9	20.7	12.9	21.3	82	86	91	87
All preferences	22.2	29.9	20.8	10.3	16.8	78	79	91	85

Source: Authors' calculations based on Custom declarations and TARIC.

Note: The preference margin is calculated as the difference between the AVE MFN rate and the best preferential rate available. The calculation is made at the tariff line level. The AVE of specific tariffs are computed based on worldwide weighted median unit values.

The utilisation rate of preferences may be linked to the magnitude of the preferential margin in two kinds of situation. Firstly, the existence of a significant compliance cost for a given preferential regime should lead exporters not to request for the benefit of this regime, as long as the preferential margin is lower than the compliance cost. Such situation should be reflected in a poor utilisation for low preferential margins, since compliance costs are generally assumed to be limited to a few percentage points of total cost. Secondly, preferential access may be associated with restrictive RoOs. When these rules are indeed a binding constraint for exporters, they should lead to an incomplete utilisation of preferences. And there is no reason to assume a priori that this under-utilisation should be restricted to low preferential margins: if the local content requirement and the rules of cumulation associated with a regime prevent exporters from sourcing their intermediate inputs from the best providers, this might well entail substantial extra-cost, thus possibly leading to under-utilisation of significant preference margins.

A low utilisation of preferences when the margin is inferior to 3 points is indeed recorded for LDCs, but this is not very significant given the weak amounts concerned. More significant is probably the relatively weak utilisation of the GSP for non-LDCs only available to that scheme when the preferential margin is inferior to 6 points. This is

consistent with administrative requirements and/or rules of origin being constraining in this case.

When the preferential margin is superior to 6 points, however, EU's trade preferences are well utilised, with two exceptions: non-African LDCs, for which the utilisation is as low as 49% for products where their preferential margin is higher than 9 points; and non-LDCs only eligible to the GSP, with a utilisation rate of 79% for products where the margin is higher than 9 points. The first case is difficult to interpret given the enforcement of EBA during the year studied. The latter, however, suggests that stringent rules of origin might entail significant cost for one fifth of eligible imports.

3.2. Utilisation of preferences and "actual" average protection

The link between the level of preference margin and their degree of under-utilisation can also be summarised through the computation of average AVE duties. Every exporter has at least access to the MFN regime, without any additional requirement. This can be thought of as an upper bound for the level of protection faced. If he complies with administrative requirements, he can at best use the most favourable preferential regime he is eligible to. Hereafter, this is referred to as the best preferential regime, and it corresponds to the lower bound for protection faced for the product. When the utilisation of preferences is imperfect for a given product, part of exports enter the market using the MFN regime, part of them make use of the best preferential regime, and part of them possibly use another available preferential regime. It is then possible to compute the average AVE duty actually faced by the exporter, i.e. the ratio of tariff receipts to the value of imports. This is hereafter referred to as the average "requested duty".

Table 6 shows this average requested duty, in comparison to the MFN and the best duty, by group of partners and group of products. When aggregating across products and partners, a straightforward calculation takes the import-weighted average. This is a standard way to proceed, and it preserves the definition of the average requested duty as the ratio of tariff receipts to the value of imports. Its obvious drawback, however, is that imports are strongly endogenous to protection: the higher the protection level, the lesser the import value, *ceteris paribus*. In the presence of trade preferences, products where the preference margin is large (and relatively costless to use) are also likely to be overrepresented. This may bias upward the assessment of the average preferential margin, and of the average utilisation rate.

This is why we also report another average, computed using exports to all markets except the EU. This weighting scheme intends to reflect the structure of export specialisation of each country, and its weight as an exporter. Besides, this alternative weighting scheme can be applied to compute an average across all products for all partners, including for those products not imported by the EU from the partner. Note however that, for those "zero-import" products, the requested duty as defined above cannot be defined (since its definition is based upon the regime claimed while importing). We thus report separately the average across "zero-import products", i.e. across those product-partner pairs for which no import flow is recorded in the EU.

Table 6: AVE of MFN, requested and best preferential rates in the EU, by group of partners and group of products, 2001 (%)

<i>Group of partners</i> Products	Share in partner's exports to the EU	Share in partner's extra-EU exports		Import-weighted average duty				Extra-EU export-weighted average duty					
		All products	Zero-import products	MFN	Req	Best	Utilisation	Zero-import products		Non-zero import products			
								MFN	Best	MFN	Req	Best	Utilisation
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
<i>SSA_LDC</i>													
Raw agric.	13.2	12.3	5.4	2.9	0.2	0.0	94.4	5.1	0.0	2.6	0.4	0.0	86.2
Food prod.	10.7	5.2	3.3	11.0	1.3	0.5	92.5	23.3	7.3	13.2	3.9	3.6	96.8
Oth. primary	55.0	67.9	32.4	0.0	0.0	0.0	99.2	0.0	0.0	0.0	0.0	0.0	93.5
Text-wear'g	3.1	3.9	2.2	10.3	0.5	0.0	95.4	10.6	0.0	11.6	1.3	0.0	89.0
Oth. manuf	18.0	10.6	6.6	2.0	0.2	0.0	91.8	2.6	0.0	1.6	0.3	0.0	78.5
All products	100.0	100.0	49.9	2.2	0.2	0.1	93.2	2.9	0.5	1.4	0.3	0.1	89.5
<i>SSA_nonLDC</i>													
Raw agric.	18.9	8.5	2.4	11.3	5.3	4.9	93.6	4.7	0.9	2.4	0.5	0.2	86.5
Food prod.	9.7	5.1	3.0	20.4	6.7	6.2	96.8	47.9	39.0	16.6	8.0	6.3	84.1
Oth. primary	55.5	70.2	14.8	0.1	0.0	0.0	97.6	0.1	0.0	0.0	0.0	0.0	85.0
Text-wear'g	4.5	4.0	2.2	11.4	1.0	0.0	91.4	11.1	0.0	11.3	2.0	0.0	82.4
Oth. manuf	11.3	12.2	7.4	1.9	0.2	0.0	91.5	3.3	0.0	2.5	0.4	0.0	83.9
All products	100.0	100.0	29.9	4.9	1.7	1.5	94.5	6.9	4.0	1.2	0.4	0.2	84.0
<i>Other_LDC</i>													
Raw agric.	1.3	5.0	2.6	3.4	1.1	0.0	66.6	7.0	2.1	1.8	1.5	1.3	62.9
Food prod.	5.5	6.0	3.8	13.1	1.9	0.8	90.8	16.1	1.0	12.6	6.6	1.4	54.0
Oth. primary	0.8	33.6	19.3	1.8	0.1	0.0	96.2	0.3	0.0	0.1	0.0	0.0	81.7
Text-wear'g	89.4	48.2	14.7	12.0	6.5	0.0	46.0	10.4	0.3	11.2	7.8	0.1	30.9
Oth. manuf	3.0	7.2	4.9	4.2	0.6	0.4	93.8	2.7	0.9	2.1	1.0	0.7	79.1
All products	100.0	100.0	45.3	11.7	6.0	0.1	49.2	5.5	0.4	7.6	5.2	0.2	33.0

Table 6 (continued): AVE of MFN, requested and best preferential rates in the EU, by group of partners and group of products, 2001 (%)

<i>Group of partners</i> Products	Share in partner's exports to the EU	Share in partner's extra-EU exports		Import-weighted average duty				Extra-EU export-weighted average duty					
		All products	Zero-import products	MFN	Req	Best	Utilisation	Zero-import products		Non-zero import products			
								MFN	Best	MFN	Req	Best	Utilisation
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
<i>GSP_PRE</i>													
Raw agric.	9.0	3.6	1.3	38.2	35.1	34.1	76.2	16.0	13.6	18.7	17.3	14.8	34.1
Food prod.	5.2	5.4	2.8	9.3	4.0	2.4	76.9	28.4	22.3	15.0	11.3	8.2	54.4
Oth. primary	41.8	19.9	9.6	0.1	0.0	0.0	95.0	0.2	0.0	0.0	0.0	0.0	76.4
Text-wear'g	11.8	9.3	3.8	10.8	0.9	0.1	92.6	10.4	1.2	11.0	8.8	1.3	22.8
Oth. manuf	32.2	61.8	24.6	2.5	0.8	0.3	75.6	4.0	0.9	4.3	3.3	0.9	29.8
All products	100.0	100.0	42.2	6.0	3.8	3.3	84.0	5.7	2.5	5.2	4.1	1.6	30.4
<i>GSP_nonPRE</i>													
Raw agric.	4.0	2.4	0.9	5.9	5.6	5.4	61.6	10.4	9.6	6.0	5.5	5.1	59.2
Food prod.	5.8	7.0	3.1	11.3	10.0	9.8	90.9	23.2	20.8	18.9	17.3	16.6	67.3
Oth. primary	26.9	26.1	12.7	0.0	0.0	0.0	85.1	0.1	0.1	0.1	0.1	0.1	50.7
Text-wear'g	15.2	11.6	1.7	9.9	9.2	8.8	67.1	9.1	7.9	10.0	9.6	9.3	56.9
Oth. manuf	48.1	53.0	16.0	2.6	1.7	1.4	71.9	2.3	1.3	2.8	2.1	1.6	56.3
All products	100.0	100.0	34.4	3.6	3.0	2.8	72.7	4.0	3.1	4.3	3.8	3.4	58.0
<i>nonGSP_PRE</i>													
Raw agric.	1.0	1.1	0.5	7.3	4.6	4.0	79.8	13.4	10.8	9.5	7.3	6.3	69.3
Food prod.	2.6	5.1	2.5	13.2	5.2	3.8	84.5	34.1	15.7	29.8	26.7	23.6	50.5
Oth. primary	12.2	3.5	0.6	0.2	0.1	0.1	93.1	1.3	1.0	0.2	0.1	0.1	87.9
Text-wear'g	10.9	10.3	2.2	10.0	2.4	1.5	89.2	7.8	4.7	9.2	6.5	6.1	87.4
Oth. manuf	73.4	79.9	19.3	3.2	0.9	0.5	86.0	2.4	1.0	2.4	1.5	1.2	76.3
All products	100.0	100.0	25.1	3.9	1.1	0.7	86.7	6.2	3.0	4.0	2.9	2.5	75.0

Table 6 (continued): AVE of MFN, requested and best preferential rates in the EU, by group of partners and group of products, 2001 (%)

<i>Group of partners</i> Products	Share in partner's exports to the EU	Share in partner's extra-EU exports		Import-weighted average duty				Extra-EU export-weighted average duty					
		All products	Zero-import products	MFN	Req	Best	Utilisation	Zero-import products		Non-zero import products			
								MFN	Best	MFN	Req	Best	Utilisation
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	
<i>NonGSP_nonPRE</i>													
Raw agric.	1.9	2.1	0.8	2.8	2.8	2.8	-	18.1	18.1	6.3	6.3	6.3	-
Food prod.	2.5	5.2	2.3	17.6	17.6	17.6	-	32.8	32.8	28.1	28.1	28.1	-
Oth. primary	3.5	4.0	1.7	0.2	0.2	0.2	-	0.6	0.6	0.5	0.5	0.5	-
Text-wear'g	2.0	3.4	0.7	7.1	7.1	7.1	-	6.7	6.7	8.1	8.1	8.1	-
Oth. manuf	90.1	85.2	17.4	2.1	2.1	2.1	-	2.7	2.7	3.3	3.3	3.3	-
All products	100.0	100.0	22.9	2.5	2.5	2.5	-	6.3	6.3	4.4	4.4	4.4	-
<i>All partners</i>													
Raw agric.	3.2	2.4	0.9	12.9	11.1	10.7	82.4	14.3	13.2	8.2	7.6	7.0	49.4
Food prod.	3.9	5.8	2.7	13.2	9.5	8.9	86.9	28.8	25.1	23.3	22.0	21.1	60.2
Oth. primary	17.0	13.8	6.3	0.1	0.0	0.0	93.8	0.2	0.2	0.1	0.1	0.1	65.5
Text-wear'g	9.6	7.6	1.6	10.0	5.7	4.8	82.7	8.9	5.0	9.6	8.7	7.6	44.2
Oth. manuf	66.3	70.4	17.7	2.6	1.5	1.3	82.7	2.8	1.8	3.1	2.8	2.5	49.8
All products	100.0	100.0	29.2	3.6	2.3	2.0	83.2	5.3	4.1	4.4	4.0	3.6	49.9

Source: Authors' calculations based on Custom declarations and TARIC.

Note: The preference margin is calculated as the difference between the AVE MFN rate and the best preferential rate available. Calculations are made at the tariff line level. Columns (g) and (m) give the utilisation rate of the preferential margin, computed as follows: (g) = ((d)-(e)) / ((d)-(f)) and, similarly, (m) = ((j)-(k)) / ((j)-(l)).

When relying on import-weighted averages, these calculations show that the average requested duty faced by EU's imports is 2.3%, close to the best preferential duty of 2.0%, and substantially lower than the MFN average duty (3.6%). This corresponds to an average utilisation of the preferential margin of 83%, very close to the above-calculated utilisation rate of preferences. Non-African LDCs exhibit the lowest utilisation of the preferential margin (49.2%). They face an average requested duty of 6.0%, while the best preferential duty they are eligible to is as low as 0.1%: they do enjoy an average 5.7 percentage points preferential margin in their exports to the EU, but this is way below the 11.6 point preference margin they would be eligible to. The preferential margin is also significantly under-utilised by non-LDCs only eligible to the GSP, but the margin at stake is rather low in this case (0.8 percentage points).

Calculations based on world-wide exports outside the EU deliver a different picture. Firstly, the assessed preferential margin is lower: 0.8 percentage points for all partners, as compared to 1.6 points using import-weighted averages. While moderating the assessed extent of tariff preferences, this suggests at the same time that trade preferences are successful in enhancing exports, since products granted a relatively high preference margin account for a higher share of partners' exports to the EU than to the rest of the world. In particular, EU preferences appear to effectively enhance sub-Saharan African countries' agricultural exports. Their large preferential margin in this sector is fairly well utilised (by 84% up to 97%), and it is reflected in these products occupying a strongly larger share in exports to the EU than to other markets. Broadly speaking, the good utilisation of EU preferences by sub-Saharan Africa is confirmed.

Using a weighting scheme based on world-wide exports outside the UE also results in utilisation rate of preferential margin appearing far lower, slightly below 50%. The difference is especially striking for developing countries eligible both to the GSP and to another preferential scheme (30% of utilisation). Noteworthy, the "other manufacturing" sector plays a significant role in the latter case, and the low utilisation of preferences in this sector is associated with a significantly lower share in export to the EU than in exports to the rest of the world.

Non-African LDCs record an average utilisation of the preferential margin down to 33% in this alternative calculation. Again, textiles and clothing play an overwhelming role in this case. However, the share of textile and clothing is strongly higher in exports toward the EU than toward the rest of the world. In spite of imperfect utilisation of preferences, non-African LDC textile-clothing exporters might thus enjoy easier access to the EU market than to other large markets (the US and Canada in particular, see Table 1), and this is certainly due at least in part to the preferential access offered by the EU.

Using world-wide exports outside the EU as weighting scheme also paves the way for incorporating in the analysis products not exported to the EU. It can then be assessed whether protection and constraints associated with preferential schemes might impede access to the European market for some products. On the whole, the average MFN duty for zero-import products is slightly above the average for other products (5.3%, as compared to 4.4%), but the difference is not striking, and it is even less in terms of average best duty

available (4.1%, compared to 3.6%). However, the specificity of zero-import products is noteworthy in raw agricultural and food products, where the higher MFN protection is not compensated by preference margins. In the case of food products, their share in exports to the EU (3.9%) is also significantly lower than in exports to other markets (5.8%).

3.3. The value of EU preferences

Assessing the effective benefit receiving countries might draw from trade preferences (or the loss the might suffer as a result of their removal) lies beyond the scope of this paper (see Alexandraki and Lankes, 2004, or Bouët et al., 2005 for recent assessments). However, following Alexandraki and Lankes (2004) and Dean and Wainio (2005), a simple calculation can be carried out. Under simplifying assumptions (perfect substitutability across origins and constant world prices, in particular), the value of the rent arising from preferential tariff duties can indeed be computed as follows, for any partner j :

$$(1) \quad V_j = \sum_i (t_i^{MFN} - t_{ij}^{PRE}) dutiable_{ij} util_{ij}^{PRE}$$

Where i is the tariff line, t_i^{MFN} and t_{ij}^{PRE} refer respectively to the MFN and the preferential applied tariff duty. “ $dutiable_{ij}$ ” refers to EU’s dutiable imports of product i from partner j , “ $util$ ” is the corresponding utilisation rate.

This is a crude approximation in many respects, but it allows the magnitude of preferences to be compared across countries. Note however that these calculations do not account for EU’s preferential tariff rent quotas, which are an important source of rents, in particular for sugar, banana and beef, because of CPA’s “product protocols” (see Bureau and Tangerman, 1999 for a detailed analysis of EU’s TRQs, and Bouët et al., 2005, Table 6.5, for an assessment of the importance of TRQ rents for developing countries).

The calculation is first carried out assuming full utilisation of tariff preferences,¹⁷ then taking into account incomplete utilisation. As an alternative to this calculation, the value of preferences is also computed as a share of the country’s dutiable exports to the EU, thus showing to what extent its trade relationships with the EU rely on preferential access; it is also computed as a share of total exports of goods, in order to better reflect the economy’s dependence with regard to preferences.

Assuming full utilisation, tariff preferences granted by the EU amount to 182 M euros for African LDCs, to 521 M euros for non-LDCs in SSA, and to approximately the same level 510 M euros for other LDCs) (Table 7). For all country groups except GSP-only countries, this represents a significant proportion of the value of dutiable exports to the EU, as much as around 10% for sub-Saharan African countries and LDCs. Under-utilisation does not change this picture substantially, except for non-African LDCs, where the value of preferences is halved.

¹⁷ The utilisation rate is then assumed to be uniformly equal to 100% in (1).

Table 7: The average value of EU's trade preferences by group of partners

Group of partners	Value in M euros		As a % of country's dutiable exports to the EU		As a % of country's total exports	
	Assuming full utilisation	Accounting for under-utilisation	Assuming full utilisation	Accounting for under-utilisation	Assuming full utilisation	Accounting for under-utilisation
SSA_LDC	182	168	8.9	8.2	0.7	0.6
SSA_nonLDC	521	491	13.2	12.4	0.9	0.9
Other_LDC	510	251	12.1	6.0	2.3	1.1
GSP_PRE	1,646	1,422	6.7	5.8	0.2	0.2
GSP_nonPRE	1,828	1,285	1.9	1.3	0.1	0.1
nonGSP_PRE	7,747	6,604	5.2	4.5	1.0	0.8

Source: Authors' calculations based on Custom declarations and TARIC.

The figures are far lower when expressed as a proportion of countries' world exports in goods. Still, the value of preferences, even accounting for under-utilisation, amounts to around one percent of world exports in average for sub-Saharan African countries and LDCs. Although moderate, this is not negligible for the EU market alone, given in addition that these exports include a significant proportion of non-dutiable products (energy and primary materials in particular).

At the country level, however, the value of EU preferences amounts in some cases to far higher values, in excess of 4% of their world exports in goods for 10 countries, all of them African or Caribbean, except Lao. Preferences account for more than 10% of Dominica and Seychelles world exports, and for almost half dutiable exports to the EU of Saint Lucia.¹⁸

Here again, under-utilisation does not change substantially the picture, except for South-Asian LDCs. The value of EU preferences for Bangladesh, for instance, falls from 12.1% to 6.4% of its dutiable exports to the EU (respectively, 3.4% and 1.9% of its world exports) because of under-utilisation.

¹⁸ Note that the value of preferences in absolute terms is higher for large developing countries (among non-European developing countries, the highest values are found by decreasing order for Turkey, China, Morocco, Tunisia, Bangladesh, India, Israel).

Table 8: The value of EU's tariff preferences for selected countries

Partner	Group the country belongs to	Value in M euros		As a % of country's dutiable exports to the EU		As a % of country's total exports	
		Assuming full utilisation	Accounting for under-utilisation	Assuming full utilisation	Accounting for under-utilisation	Assuming full utilisation	Accounting for under-utilisation
Seychelles	SSA_nonLDC	37.6	35.5	23.5	22.2	13.4	12.6
Dominica *	GSP_PRE	6.5	6.3	28.5	27.6	10.7	10.3
Saint Lucia *	GSP_PRE	12.3	12.2	46.8	46.2	10.0	9.9
Senegal	SSA_LDC	29.9	28.3	11.3	10.7	7.3	6.9
Tunisia	GSP_PRE	399.2	374.3	8.9	8.3	6.5	6.1
Morocco	GSP_PRE	454.3	432.7	10.0	9.6	5.2	5.0
Mozambique	SSA_LDC	33.4	32.5	7.0	6.8	5.0	4.8
Lao PDR	Other_LDC	16.5	10.3	12.3	7.6	7.7	4.8
Mauritius	SSA_nonLDC	90.3	82.8	12.3	11.2	4.5	4.2
Cameroon	SSA_nonLDC	86.3	82.6	25.9	24.8	4.2	4.0
Saint Vincent and the Gr. *	GSP_PRE	11.1	6.5	29.5	17.2	6.5	3.8
Belize*	GSP_PRE	16.4	15.8	38.5	37.0	3.9	3.7
Gambia	SSA_LDC	1.1	1.0	12.0	11.0	4.0	3.7
Namibia	SSA_nonLDC	38.3	37.2	10.8	10.5	3.7	3.5
Bosnia and Herzegovina	nonGSP_PRE	28.1	26.0	7.2	6.6	3.7	3.4
Eritrea	Other_LDC	0.2	0.1	13.8	11.9	3.9	3.4
Cape Verde	SSA_LDC	0.6	0.6	7.1	6.6	3.4	3.2
Kenya	SSA_nonLDC	54.6	50.3	11.2	10.3	3.4	3.2
Romania	nonGSP_PRE	470.9	429.7	7.7	7.0	3.5	3.2
Madagascar	SSA_LDC	45.2	39.4	11.2	9.8	3.4	3.0

Source: Authors' calculations based on Custom declarations and TARIC.

Note: Countries are ranked by decreasing order of value of preferences accounting for incomplete utilisation, expressed as a share of the country's world exports (last column). To save space, only those developing countries for which this value exceeds 3% of their world exports are shown. An asterisk denotes a non-African country eligible to the Cotonou agreement (here, Caribbean countries).

4. CONCLUSION

The EU plays a singular role with regards to developing countries exports, both because of the size of its market, and because of its numerous reciprocal and non-reciprocal preferential agreements. Our assessment confirms that EU tariff preferences are an important stake for a number of developing countries, in particular in sub-Saharan Africa. While even the average figures are significant, the dependence to EU preferences is most of all important for a limited number of African and Caribbean countries. On average, the utilisation of these tariff preferences turns out to be strong.

The only case where under-utilisation appears as a significant loss to receiving countries is the EBA initiative for South-Asian LDCs. The novelty of the EBA scheme is part of the explanation, as witnessed by the slight but significant increase recorded between 2001 and 2002. However, the constraints imposed by rules of origin on textile and clothing exports (the foremost export specialisation of South-Asian LDCs) appear as the main reason for under-utilisation. Relaxing these rules could be an efficient way to increase substantially the benefit receiving countries are likely to draw from the scheme, at least as far as the textile-clothing sector is concerned, and perhaps also for other manufacturing goods.

For sub-Saharan African countries, the contractual non-reciprocal preference granted through the Cotonou Partnership Agreement is of overwhelming importance. This emphasises the need to find an acceptable transition out of this regime, the WTO-waiver of which is due to expire on January 1, 2008. Economic Partnership Agreements are already being negotiated with the EU, and it is foreseeable that they will entail very long transition periods and less-than-full reciprocity. For sub-Saharan African LDCs, the EBA initiative might be of some help in this context. Given their specialisation in raw agricultural products, most of which are wholly obtained and thus not submitted to rules of origin, our results suggest that EBA could then be of higher value to them. For others, and the strongest dependence to EU preferences is actually found among non-LDC Caribbean and sub-Saharan African countries, finding a good way out of the Cotonou agreement is a crucial stake.

REFERENCES

- Alexandraki K. and H. P. Lankes (2004), “The Impact of Preference Erosion on Middle-Income Developing Countries”, IMF Working Paper 04/169, International Monetary Fund, Washington DC.
- Anson J., O. Cadot, A. Estevadeordal, J. de Melo, A. Suwa-Eisenmann and B. Tumurchudur (2004), Rules of Origin in North-South Preferential Trading Arrangements with an Application to NAFTA, *mimeo*.
- Bouët A., J-C Bureau, Y. Decreux and S. Jean (2004a), ‘Multilateral Agricultural Trade Liberalization: The Contrasting Fortunes of Developing Countries in the Doha Round’, *CEPII Working Paper 2004-18*, Centre d’Etudes Prospectives et d’Informations Internationales, Paris.
- Bouët A., Y. Decreux., L. Fontagné, S. Jean and D. Laborde (2004b), ‘A Consistent, ad valorem Equivalent Measure of Applied Protection Across the World: The MAcMap-HS6 Database’, *CEPII Working Paper 2004-22*, Centre d’Etudes Prospectives et d’Informations Internationales, Paris.
- Bouët A., Jean S. and L. Fontagné (2005), “Is erosion of preferences a serious concern?”, in *Agricultural Trade Reform and the Doha Development Agenda*, edited by K. Anderson and W. Martin, Washington, D.C.: The World Bank, forthcoming.
- 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 Paper No. 3018, Washington, D.C.: World Bank.
- Brenton P. and M. Manchin (2003), “Making EU Trade Agreements Work: The Role of Rules of Origin”, *The World Economy*.
- Cadot O., A. Estevadeordal and A. Suwa-Eisenmann (2004), “Rules of Origin as Export Subsidies”, *mimeo*, INRA, February.
- Cadot O., A. Estevadeordal, J. de Melo, A. Suwa-Eisenmann and B. Tumurchudur (2002), “Assessing the Effect of NAFTA’s Rules of Origin”, *mimeo*, University of Lausanne.
- Duttagupta R. and A. Panagariya (2001), “Free Trade Areas and Rules of Origin: Economics and Politics”, University of Maryland at College Park, *mimeo*
- Estevadeordal A. (2000), “Negotiating Preferential Market Access: The Case of the North American Free Trade Agreement”, *Journal of World Trade*, 34, 141-66.
- Estevadeordal, A. and K. Suominen (2003), “Measuring Rules of Origin in the World Trading System and Proposals for Multilateral Harmonization”, *mimeo* IDB, Washington, D.C.

- Estevadeordal A. and K. Suominen (2004), "Rules of Origin: A World Map and Trade Effects", *mimeo* IDB, Washington, D.C.
- Falvey R. and G. Reed (1998), "Economic Effects of Rules of Origin", *Weltwirtschaftliches Archiv*, 134(2), pp. 209-229.
- Falvey R. and G. Reed (2002), "Rules of Origin as Commercial Policy Instruments", *International Economic Review*, 43(2), pp. 393-407.
- Gallezot J. (2003), "Real access to the EU's agricultural market", *mimeo*, INRA, Paris.
- Herin J. (1986), "Rules of Origin and Differences Between Tariff Levels in EFTA and in the EC", *EFTA Occasional Paper* 13.
- Inama S. (2003), "Trade Preferences for LDCs: An Early Assessment of Benefits and Possible Improvements", UNCTAD, ITCD/TSB/2003.
- Ju J. and K. Krishna, (2005), "Firm behaviour and market access in a Free Trade Area with rules of origin", *Canadian Journal of Economics*, Canadian Economics Association, vol. 38(1), pp. 290-308.
- Ju J. and K. Krishna (2002), "Regulations, regime switches and non-monotonicity when non-compliance is an option: an application to content protection and preference", *Economics Letters*, Vol. 77(3), pp. 315-321.
- Krishna K. (2005), "Understanding Rules of Origins", NBER Working Paper 11150.
- Krishna K. and A. Kruger (1995), "Implementing Free Trade Areas: Rules of Origin and Hidden protection" in A. Deardorff, J Levinsohn and R. Stern (eds), *New directions in Trade Theory*. Ann Arbor, MI: University of Michigan Press.
- Lamy P. (2002), "Stepping Stones or Stumbling Blocks? The EU's Approach Towards the Problem of Multilateralism vs Regionalism in Trade Policy", *The World Economy*, Vol. 25, No. 10, pp. 1399-1413.
- Mattoo A., D. Roy and A. Subramanian (2003), "The Africa Growth and Opportunity Act and its Rules of Origin: Generosity Undermined?", Vol. 26, Issue 6, pp 829-851.
- OECD (2005), *Preferential Trading Arrangements in Agricultural and Food Markets. The case of the European Union and the United States*, prepared by J. Gallezot and J.C. Bureau for the OECD Secretariat, Organisation for Economic Co-operation and Development, Paris.
- Olarreaga M. and C. Ozden (2005), "Who Captures the Tariff Rent in the Presence of Preferential Market Access?", *The World Economy*, Vol. 28, No. 1, pp. 66-77.

Panagariya A. (2002), "EU Preferential Trade Arrangements and Developing Countries", *The World Economy*, Vol. 25, No. 10, pp. 1415-1432.

Sapir A. (1998), "The Political Economy of EC Regionalism", *European Economic Review* 42, 717-32.