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Is Erosion of Tariff Preferences a Serious Concern?

Antoine Bouët, Lionel Fontagné, Sébastien Jean

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IS EROSION OF TARIFF PREFERENCES A SERIOUS CONCERN?

SUMMARY

This working paper aims to clarify the specific issues raised by trade preferences, in particular non-reciprocal ones, as they pertain to the Doha round. How important are trade preferences for developing countries, and for which developing countries are such preferences of special importance? What are the issues raised from the perspective of multilateral liberalization for preference-receiving countries? In particular, is the erosion of preferences a legitimate concern? for which countries? and what are the possible policy implications?

The "mechanics" of the erosion of preferences are simple. Following multilateral trade negotiation at the GATT/WTO, cuts are applied to bound import duties, not directly to applied tariffs. A most-favored-nation (MFN) applied duty is reduced only if the liberalized bound duty for this product is lower than the initial applied duty, and then only to the extent of that difference. In turn, preferential rates (which are applied duties that had been set lower than the MFN rate) typically are cut by proportionately less than the MFN applied rates. This means preferential margins are eroded when tariffs are cut, other things equal. Also important is the fact that preferential tariff rate quotas (TRQs) are fairly common among agricultural products. Many of them give rise to substantial rents for some developing countries, and those rents are reduced following a cut in the out-of-quota tariff rate (OQTR) as a result of a MTN.

In agriculture, the average duty faced on exports range from 0.6 percent (Equatorial Guinea) to 87 percent (Guyana). For OECD countries, the average duty faced is regularly below 20 percent (except for Australia and New Zealand), whereas products originating from numerous small developing countries are highly taxed (Guyana, Barbados, Belize, Botswana, Gabon, Mauritius, ...). These huge differences are the result of the combination of two different effects: the first is the result of the composition of exports varying across countries due to different product specialisations and due to various geographic destinations; the second effect captures the fact that each country is benefiting from an average preferential margin, thanks to the trade regimes it has been conceded. Compared to the world average preferential margin (the worldwide average difference between MFN and applied preferential duties), a country might benefit from a higher or lower average preferential margin. We call this difference with respect to the world average the "true" preferential margin.

Although the "true" average preferential margin does not reach extreme values comparable to the composition effect, its value in agriculture is as high as almost 25 percentage points for Lesotho and Aruba, and it is higher than 6 points for Gambia, Saint Vincent, Uruguay, Yugoslavia, Saint Lucia, Guyana, Suriname, Turkmenistan, Virgin Islands, and Mali. As a whole, the true average preferential margin in agriculture is higher than 1 point for 47 developing countries, and higher than 2 points for 33 countries, according to our

calculations. Countries with high true preferential margin are in the majority sub-Saharan and Caribbean countries.

True preferential margins are less varied in non-agricultural products, with a maximum of 8.6 points for the Seychelles, but they are significant for large number of countries: 103 countries exhibit a true average preferential higher than 1%, 57 a true margin higher than 2%. Actually the countries exhibiting the largest true preferential margin are those which benefit from important preferential arrangements *and* are specialized in exporting textiles and apparel.

Trade preferences are not only granted through lower tariff duties. In many instances (and in particular for the most sensitive products), they are granted through preferential TRQs. In such cases, the benefit of a reduced (frequently to zero) tariff duty within a quota is limited either to a given country or to a set of preference-receiving countries. As soon as they are filled, such preferential TRQs give raise to rents, since the quantitative limitation of sells at the inside quota tariff rate is binding. This rent is not necessarily wholly captured by the exporter. Still, exporters generally earn a substantial part of these rents, and this benefit often represents an important share of the benefit preference-receiving countries are able to reap from their preferential access.

Assessed rents are as high as 8.3% of GDP in Guyana, 3.3% in Fiji Islands, 2.9% in Mauritius and 2.4% in Belize, thus representing for these countries a sizeable stake. Four more countries (Ecuador, Panama, Costa Rica, St Kitts & Nevis) were earning in 2001 rents amounting to more than 1% of GDP, and another six countries were earning rents higher than 0.5% of GDP. Countries earning substantial rents as a percent of GDP are mainly sub-Saharan and Caribbean countries, but Central-American countries are also strongly represented.

We simulate the impacts on preference margins of a tiered tariff-cutting formula directly inspired by the Harbinson proposal (scenario 1), and of the same formula with lower commitments applied to 2 percent “Sensitive Products” (scenario 2). In most cases, the impact of scenario 1 on true preferential margin is spectacular in agriculture: among the 12 countries with an initial preference margin higher than 6 points, only four end up with a margin higher than 3 points after the tariff-cutting formula is applied. The results are varied across countries, but in most cases, the preferential margin is largely swept out in this scenario. Scenario 2 leads to very different results in some cases, with preference margins essentially preserved (see e.g. Aruba, Saint Vincent or Saint Lucia). In other cases, the results are broadly comparable. This shows that products identified as sensitive are the main source of the preference margin for a number of countries, but not for all. This is because sensitive products are frequently excluded for preferential agreements, and because preferences for such products are frequently tied to quantitative limitations.

We then simulate the impact of these liberalization scenarios with and without preferences (i.e., neglecting their existence in the latter case). The comparison of the results shows that preferences matter significantly. The simulated increase in world agricultural exports associated with the Harbinson proposal is 14 percent when preferences are taken into

account, but 21 percent when neglecting preferences. The difference in the world welfare effect is not quite as large but still sizable. So studies that neglect the difference between preferential tariffs and MFN ones are thus overstating the potential trade and welfare impacts of agricultural liberalization: according to scenario 1, the real trade impact of such liberalization is only two-thirds of what would be expected by ignoring preferences, and the welfare impact less than four-fifths.

Taking into account underutilisation of preferences would only change marginally the broad picture drawn above about the erosion of preferences in agricultural products, given that several recent work suggest that trade preferences tend to be well utilized in agricultural products.

In sum, it is clear that the threat of preference erosion following the Doha round is real, insofar as trade preferences are now playing a key role in the world trading system, and in particular in the pro-poor policies undertaken by rich countries. The conventional response to these concerns is that the erosion of preferences is a problem of limited magnitude, focused on a handful of products and on a limited number of countries. Our analysis is consistent with this view, but it suggests that the magnitude of forthcoming difficulties for poor countries has perhaps been understated. Preferences can have perverse consequences, they suffer from several drawbacks, and they can be underutilized. Still, preferential schemes such as EU-ACP's Cotonou agreement or US-Caribbean's CBI program are of particular importance for benefiting countries. That is, the erosion of preferences is most of all a problem for a limited number of African and Caribbean countries, whose export specialization is largely a function of preferences. Sugar, bananas, textiles and clothing, and meat products play a central role. In addition, poor countries generally have a very low adjustment capacity due to the combination of an often-deficient capital market, of the existence of many obstacles to labor mobility, of the absence of safety nets and of training capacities, etc. The adjustment costs for poor countries faced with eroded preferences is thus likely to be fairly high.

ABSTRACT

This working paper aims to clarify the specific issues raised by trade preferences, in particular non-reciprocal ones, as they pertain to the Doha round. We evaluate the extent of tariff preferences through both a measure of the "true" preferential margin and an assessment of tariff-rate quota rents. We find that the threat of preference erosion following the Doha round is real, insofar as trade preferences are now playing a key role in the world trading system, and in particular in the pro-poor policies undertaken by rich countries. Although the problem is focused on a handful of products and on a limited number of countries, our analysis suggests that the magnitude of forthcoming difficulties for poor countries could be significant in many cases.

Classification JEL: F12, F13, D58, Q17, O19.

Keywords: Preferential trade arrangements (PTAs); erosion; Doha Development Agenda; Computable General Equilibrium (CGE) model.

FAUT-IL S'INQUIETER DE L'ÉROSION DES PRÉFÉRENCES COMMERCIALES ?

RÉSUMÉ

Ce document de travail étudie les enjeux soulevés spécifiquement par les préférences commerciales, en particulier par les schémas non-réciproques, dans le cadre de la négociation du cycle de Doha. Quelle est l'étendue des préférences commerciales pour les pays en voie de développement ? Pour quels pays ces préférences sont-elles spécifiquement importantes ? Quelles sont les questions soulevées par la perspective d'une libéralisation multilatérale pour les pays recevant les préférences ? En particulier, l'érosion des préférences est-elle un enjeu réel ? Pour quels pays ? Et quelles sont les implications politiques de ce débat ?

La "mécanique" de l'érosion est simple. A la suite d'une négociation commerciale multilatérale sous l'égide de l'OMC, des coupes sont appliquées aux droits consolidés à l'importation, et non pas aux droits préférentiels. Le droit appliqué sous la clause de la Nation la Plus Favorisée (droit NPF) est réduit seulement si le droit consolidé diminué est inférieur au droit appliqué initial. Ensuite, les droits préférentiels (qui sont des droits appliqués établis à des niveaux inférieurs aux droits NPF appliqués) sont réduits lorsqu'ils sont définis par un certain pourcentage du droit NPF ou lorsque les droits NPF leurs deviennent inférieurs au terme de la libéralisation. Mais cette diminution est proportionnellement moindre. Les marges préférentielles sont de ce fait érodées. Un autre enjeu réside dans les contingents tarifaires accordés selon des schémas préférentiels ; ils sont nombreux dans le secteur agricole. Beaucoup de ces contingents ont donné lieu à des rentes substantielles pour certains pays en développement, et ces rentes vont être réduites à la suite d'une réduction des tarifs à l'extérieur du contingent, négociée par la libéralisation multilatérale.

Dans l'agriculture le droit moyen supporté sur les exportations varie de 0,6 % pour la Guinée Equatoriale à 87 % pour la Guyane. Pour les pays de l'OCDE ces droits moyens sont fréquemment en dessous de 20 % (sauf pour l'Australie et la Nouvelle-Zélande) alors que les produits originaires de nombreux petits pays en développement sont fortement taxés (Guyane, Barbade, Belize, Botswana, Gabon, Maurice, ...). Ces écarts sont le reflet de deux effets : le premier provient de la composition des exportations, qui varie fortement d'un pays à l'autre du fait de spécialisations commerciales variées et de destinations géographiques différentes. Le second résulte de la marge préférentielle obtenue grâce aux régimes préférentiels que chaque pays a pu négocier. En comparaison de la marge préférentielle mondiale moyenne (différence moyenne mondiale entre le taux NPF et le taux préférentiel appliqué), un pays peut bénéficier d'une plus grande ou d'une plus petite marge préférentielle moyenne. Nous appelons cette différence par rapport à la moyenne mondiale la marge préférentielle « réelle ».

Bien que cette marge préférentielle « réelle » ait une variabilité entre pays moins prononcée que l'effet de composition, sa valeur dans l'agriculture va jusqu'à 25 points de pourcentage

pour le Lesotho et Aruba, et est supérieure à 6 points pour la Gambie, Saint-Vincent, l'Uruguay, la Yougoslavie, Sainte-Lucie, la Guyane, le Surinam, le Turkménistan, les îles Vierges et le Mali. Globalement, la marge préférentielle « réelle » dans l'agriculture est supérieure à un point dans 47 pays en développement et à deux points dans 33, selon nos estimations. Les pays ayant les plus grandes marges préférentielles « réelles » sont dans les Caraïbes et l'Afrique sub-saharienne.

Les marges préférentielles « réelles » sont plus uniformes pour les produits non-agricoles, avec un maximum de 8,6 points pour les Seychelles, mais elles sont significatives pour un nombre important de pays : 103 pays ont une marge préférentielle « réelle » supérieure à 1 %, 57 à 2 %. Ce sont des pays ayant bénéficié de schémas préférentiels importants et spécialisés dans le secteur du textile-habillement.

Les préférences commerciales ne sont pas seulement accordées par des droits à l'importation réduits. Dans beaucoup de cas (et en particulier pour les produits dits « sensibles »), elles sont accordées à travers des contingents tarifaires préférentiels. Dans de telles situations, le bénéfice d'un droit réduit (appelé droit à l'intérieur du quota et souvent nul) est donné soit à un pays soit à l'ensemble des pays recevant les préférences pour des flux commerciaux à l'intérieur d'un quota. Pour autant que ces contingents soient remplis, ils donnent lieu à des rentes, puisque la limitation quantitative est contraignante. Cette rente n'est pas nécessairement totalement capturée par les exportateurs. Néanmoins, ils en gagnent généralement une part substantielle et cette rente représente souvent une part très importante des bénéfices retirés des schémas préférentiels.

Selon nos évaluations, ces rentes représentaient en 2001 jusqu'à 8,3 % du PIB en Guyane, 3,3 % aux Fiji, 2,9 % à l'île Maurice et 2,4 % à Belize. Il s'agit donc pour ces pays d'un enjeu considérable. Pour quatre autres pays (Equateur, Panama, Costa Rica, St Kitts & Nevis) ces rentes représentent plus de 1 % du PIB, et pour six autres plus de 0,5%. Les pays concernés sont principalement des Caraïbes et d'Afrique sub-saharienne.

Nous simulons ensuite l'impact sur les marges préférentielles d'une formule tarifaire à étages, inspirée de la proposition Harbinson (scénario 1), et de la même formule avec des engagements de réduction tarifaire plus faibles pour 2% des lignes dans le cadre d'une clause dérogatoire pour les « produits sensibles » (scénario 2). Dans la plupart des cas l'impact du scénario 1 sur les marges préférentielles est spectaculaire dans l'agriculture : parmi les 12 pays ayant une marge initiale supérieure à 6 points, seulement 4 conservent une marge supérieure à 3 points. Les résultats sont différenciés selon les pays mais dans la plupart des cas la marge préférentielle est très largement entamée par ce scénario. Le scénario 2 conduit à des résultats très différents, avec dans certains cas des marges préférentielles conservées (Aruba, Saint Vincent ou Sainte-Lucie). Dans d'autres cas, les résultats sont largement comparables. Cela montre que les produits identifiés comme sensibles sont la principale source de la marge préférentielle pour certains pays, mais pas pour tous. Les produits sensibles sont en effet souvent exclus des accords préférentiels et lorsque des concessions existent sur ces produits, elles sont fréquemment contingentes à des limites quantitatives.

L'impact de ces scénarios de libéralisation est également simulé sans tenir compte des accords préférentiels existant initialement. La comparaison avec les simulations initiales, tenant compte de ces accords, permet de mettre en lumière les enjeux inhérents aux préférences. L'accroissement simulé des exportations mondiales agricoles associé à la proposition Harbinson est de 14 % quand les préférences sont prises en compte, de 21 % quand elles ne le sont pas. La différence en termes de bien-être mondial est moins forte, mais néanmoins significative. Ainsi les études qui négligent la différence entre droits appliqués préférentiels et NPF surestiment sensiblement les impacts en termes de commerce et de bien-être liés à la libéralisation agricole.

Prendre en compte la sous-utilisation des préférences ne changerait que marginalement les résultats d'ensemble concernant l'érosion des préférences sur les produits agricoles, car des études récentes montrent que les préférences commerciales sont plutôt bien utilisées dans ce secteur.

En somme, il apparaît que l'érosion des préférences commerciales liée à la négociation du cycle de Doha est un enjeu réel car les préférences commerciales jouent aujourd'hui un rôle important dans le système commercial mondial, et en particulier pour les politiques mises en place par les pays riches au profit des pays pauvres. La réponse traditionnelle est que l'érosion des préférences est un problème d'une ampleur limitée, liée à quelques produits et un petit nombre de pays. Notre analyse confirme ce point de vue mais suggère que certains pays pauvres pourraient dans un proche avenir connaître de nouvelles difficultés, substantielles, et que ces cas ont peut-être été sous-estimés. Les régimes préférentiels peuvent avoir des effets pervers, ils ont des défauts et ils peuvent être sous-utilisés. Néanmoins, des régimes tels que les accords de Cotonou concédés par l'Union européenne, ou le *Caribbean Basin Initiative* des Etats-Unis, sont d'une importance particulière pour les pays bénéficiaires. Autrement dit, l'érosion des préférences est surtout un problème pour un nombre limité de pays des Caraïbes et de l'Afrique sub-saharienne, pays dont la spécialisation des exportations est largement fonction de ces préférences. Le sucre, les bananes, le textile et l'habillement, la viande et les produits dérivés y jouent un rôle central. En outre les pays pauvres ont souvent une capacité d'ajustement très faible due à la combinaison de marchés des capitaux déficients, d'obstacles importants à la mobilité du travail et de l'absence de filets de sécurité. Les coûts d'ajustement pour les pays pauvres confrontés à l'érosion des préférences pourraient ainsi être élevés.

RÉSUMÉ COURT

Ce document de travail étudie les enjeux soulevés spécifiquement par les préférences commerciales, en particulier par les schémas non-réciproques, dans le cadre de la négociation du cycle de Doha. Nous évaluons l'étendue des préférences tarifaires à la fois par la mesure d'une marge préférentielle « réelle » et par une évaluation des rentes de contingents tarifaires. La principale conclusion est que l'érosion des préférences liée à une libéralisation multilatérale du Doha Round est un enjeu réel dans la mesure où ces schémas préférentiels jouent aujourd'hui un rôle clé dans le système commercial international, et en

particulier dans les politiques mises en place par les pays riches en faveur des pays les moins avancés. Bien que le problème soit concentré sur quelques produits et un nombre limité de pays, notre analyse suggère que l'ampleur des difficultés à venir pour les pays pauvres pourraient être significatives dans de nombreux cas.

Classement JEL : F12, F13, D58, Q17, O19.

Mots-clés : accords commerciaux préférentiels ; programme de Doha pour le développement ; érosion; modèle d'équilibre général calculable (MEGC).

IS EROSION OF TARIFF PREFERENCES A SERIOUS CONCERN?

*Antoine Bouët, Lionel Fontagné, Sébastien Jean*¹

Preferential trade arrangements (PTAs) have become a key feature of the world trading system, with their number rising dramatically since the early 1990s. More than 200 have been notified to the WTO (World Trade Organization). Their objectives have also widened in scope. In particular, trade preferences are being used increasingly as a substitute for more ambitious development policies, especially since the Singapore WTO Ministerial Conference in 1996. Granting developing countries nonreciprocal preferential access to markets is not new. However, the long-standing importance to developing countries of schemes such as European Union's Cotonou Agreement (formerly Lomé Convention) or the United States' Caribbean Basin Initiative (CBI), as well as the use of new schemes targeted on least developed countries (LDCs) or on Sub-Saharan Africa (SSA), have changed the nature of this issue. Preferences in general, and nonreciprocal preferences in particular, are among the important issues to be addressed during the Doha Round. A major concern of the G-90 member countries, in particular those in SSA, is that multilateral trade liberalization will erode these preferences.² This concern contributed to its inclusion as an issue in the July 2004 Framework Agreement (WTO 2004).

This working paper aims to clarify the specific issues raised by trade preferences, in particular nonreciprocal ones, as they pertain to the Doha Round. How important are trade preferences for developing countries, and for which developing countries are such preferences of special importance? What issues arise from the perspective of multilateral liberalization for preference-receiving countries? In particular, is the erosion of preferences a legitimate concern? If so, for which countries? And what are the possible policy implications?

The importance of preferences for numerous developing countries is well recognized and has been widely documented and discussed. Preferences have not interfered much with multilateral trade liberalization in the past, however, for at least two reasons. First, the impact of preferences was most substantial in agriculture and textiles and clothing, sectors where previous trade rounds failed to expand market access, at least until the recent phaseout of the Multifibre Arrangement (MFA). Second, until recently, the quantitative

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² The G-90 is an umbrella body of the African Group, which is composed of the least developed countries, and the African, Caribbean, and Pacific (ACP) Group. It is the largest grouping of members in the WTO.

economic analysis of multilateral liberalization failed to deal satisfactorily with trade preferences. No comprehensive global database describing the levels of protection adequately took into account preferences until 2004. Since the Uruguay Round, most worldwide empirical studies of multilateral liberalization have been based on computable general equilibrium (CGE) models that drew on Purdue University's Global Trade Analysis Project (GTAP) database. But until GTAP Version 6, released in late 2004, this database did not take into account PTAs, except five among the most important reciprocal agreements: the European Union, EU–European Free Trade Association (EU-EFTA), North American Free Trade Agreement (NAFTA), Australia–New Zealand Closer Economic Relations Agreement (ANZCERTA), and SACU (South African Customs Union). Until now virtually all global quantitative assessments of the impact of multilateral liberalization have been unable to address the issue of nonreciprocal trade preferences.

That lacuna has now been filled by the MAcMap database, jointly developed by the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) in Paris and the International Trade Commission (ITC, a joint agency of WTO and the UN Conference on Trade and Development, or UNCTAD, in Geneva). That database now offers a consistent and near-complete set of ad valorem protection rates across the world for 2001, taking account of all preferential agreements enforced at that date (Bouët et al. 2004b).

In this working paper we take advantage of this new protection database, as well as of a series of studies recently carried out by CEPII (Bouët et al. 2004a; Bhir, Jean, and Laborde 2004; Candau, Fontagné, and Jean 2004), to determine whether the erosion of trade preferences is a serious concern. The scenarios considered are a subset of those described in Jean et al. (2005), but the information is used directly at the HS6 level of product disaggregation.

The “mechanics” of the erosion of preferences are simple. Following multilateral trade negotiations, cuts are applied to bound import duties, not directly to applied tariffs. A most-favored-nation (MFN) applied duty is reduced only if the liberalized bound duty for this product is lower than the initial applied duty, and then only to the extent of that difference. In turn, preferential rates (which are applied duties that had been set lower than the MFN rate) typically are cut by less than the MFN applied rates because they are not affected until the bound rate comes below the preferential rate. This means preferential margins are eroded when tariffs are cut, other things equal. Also important is the fact that preferential tariff rate quotas (TRQs) are fairly common among agricultural products. Many of them give rise to substantial rents for some developing countries, and those rents are reduced if multilateral trade negotiations result in cuts in the out-of-quota tariff rate.

This working paper begins by reviewing the historical context of preferences and by exploring their effect on market access for developing-country exporters. It then assesses how multilateral liberalization following the Doha Round could erode preferences. This assessment clarifies the mechanics of preference erosion and evaluates the corresponding implications for preference margins. CGE simulations are then conducted to gauge the impact of preference erosion on trade, output, and welfare. Policy implications are discussed in the final section.

1. AN OVERVIEW OF PREFERENCES

The current situation is the result of a gradual piling up of numerous individual preference schemes. The situation is particularly complicated for farm products, not only because of the nature of the instruments used (specific tariffs and TRQs) but also because these instruments are frequently managed in a nontransparent manner.

1.1. The Starting Point

WTO members are generally constrained to offer all other members nondiscriminatory access to their markets. A core rule of the multilateral trade system holds that a member should not discriminate between its trading partners or between its domestic products and imports. This rule is manifested in the MFN clause, which requires MFN tariffs to be applied equally to all WTO members. Accordingly, Article I (paragraph 1) of GATT (WTO's predecessor, the General Agreement on Tariffs and Trade) states that "any advantage, favor, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties." Despite this very clear statement, substantial amounts of goods shipped around the world do not face an MFN tariff when entering the destination market.³ The reason for this is the existence of preferences, introduced in Paragraph 2 of that same Article I: "The provisions of paragraph 1 of this Article shall not require the elimination of any preferences."

Generally speaking, two kinds of preferential schemes operate: symmetric schemes, under which two countries mutually offer preferential access to their market; and asymmetric ones in which one country unilaterally concedes preferential access to a well-defined (but not necessarily stable) list of exporting countries. The former includes the treatment of regional agreements by the GATT, while the latter is associated with the Generalized System of Preferences (GSP) and its extensions. These include the EU's recent Everything But Arms (EBA) Initiative, which offers duty- and quota-free market access for LDCs; the United States' African Growth and Opportunity Act (AGOA); and development-targeted agreements introduced earlier (such as Cotonou and the CBI).

Article XXIV of the GATT, which allows the formation of customs unions and free trade areas, has also translated into a myriad of preferential agreements.⁴ Many of these trade agreements are regional; examples are the Common Market in the late 1950s, NAFTA, and Mercosur.⁵ But plenty of bilateral agreements involve noncontiguous countries (United

³ According to World Bank (2004), regional trade agreements cover more than 20 percent of world trade when imports subject to zero MFN tariffs are excluded.

⁴ Article XXIV states, "the provisions of this Agreement shall not prevent, as between the territories of contracting parties, the formation of a customs union or of a free-trade area".

⁵ Mercosur includes Argentina, Brazil, Paraguay, and Uruguay.

States–Morocco or Mexico-Israel, for instance). According to notifications to the WTO, the number of such agreements in force by the end of 2005 might approach 300. Many of the 148 WTO members participate in various trade agreements. Accordingly, their tariff schedules involve many different levels of treatment, often defined at the product level, and frequently embodying numerous exceptions to the MFN principle. The official and optimistic view that regionalism is a building block toward multilateral trade liberalization leaves unexplained the desire by WTO members to use these efforts to escape from complying with the nondiscrimination clause in Article 1 of the GATT.

For nonreciprocal trade agreements, the picture is even more complicated. The Millennium Development Goals aim, among other things, at developing a global partnership for development through more aid, better market access, and debt sustainability. This target is an extension of the decision taken in 1968 under the auspices of UNCTAD to grant developing countries nonreciprocal preferential access to developed-country markets under the GSP scheme.⁶ Under GSP, rich countries offer nonreciprocal preferential access to products originating in a list of developing countries, with preference-giving countries unilaterally choosing countries and products to be included in their GSP schemes. The lists are revised on a regular basis, leading to “entries” and “exits.” In addition, the preferences conceded can include products subject to quotas or considered politically “sensitive.”

Not surprisingly, preferences generally aim at preserving the vested interests of domestic producers. For instance, until 1994, the EU’s GSP scheme applied quantitative limits on GSP imports.⁷ This system has been replaced by “tariff modulation” in which reduced rates of duty are classified into four categories: very sensitive products (preferential margin equal to 15 percent of the MFN tariff), sensitive products (30 percent), semisensitive (65 percent), nonsensitive products (duty free). There are also special incentive schemes, offering additional tariff preferences for specific development purposes (such as the protection of labor rights or efforts to combat drug production and trafficking).

The general goal of such asymmetric, or nonreciprocal, preferences is to make it possible for countries with limited export potential to more easily reap the benefits of globalization. The multilateral trading system also provides “special and differential treatment” (SDT) to developing countries according to the so-called “enabling clause.”⁸ Besides longer

⁶ Resolution 21(ii), taken at the UNCTAD II conference in New Delhi in 1968, states that “the objectives of the generalised, non-reciprocal, non-discriminatory system of preferences in favour of the developing countries, including special measures in favour of the least advanced among the developing countries, should be: to increase their export earnings; to promote their industrialisation; and to accelerate their rates of economic growth.” The resolution was a follow-up to a proposal made in 1964 by Raúl Prebisch, the first secretary-general of UNCTAD.

⁷ See UNCTAD (2003) for an overview.

⁸ This enabling clause is the translation into GATT law of the GSP scheme, formally undertaken in 1979; it states that “notwithstanding the provisions of Article I of the General Agreement, contracting parties may accord differential and more favourable treatment to developing countries, without according such treatment to other contracting parties.” For more on SDT as it relates to Doha, see Josling (2005).

implementation periods or smoother commitments, SDT offers asymmetric market access. A recent extension of such agreements involves specific concessions granted to LDCs by the EU, Japan, Norway, and the United States. The European initiative is the previously mentioned Everything But Arms deal, which offers duty-free and quota-free access to all products originating in LDCs except for weapons and three agricultural products for which liberalization has been delayed (banana, rice, and sugar).

1.2. The EU and U.S Preferential Schemes at a Glance

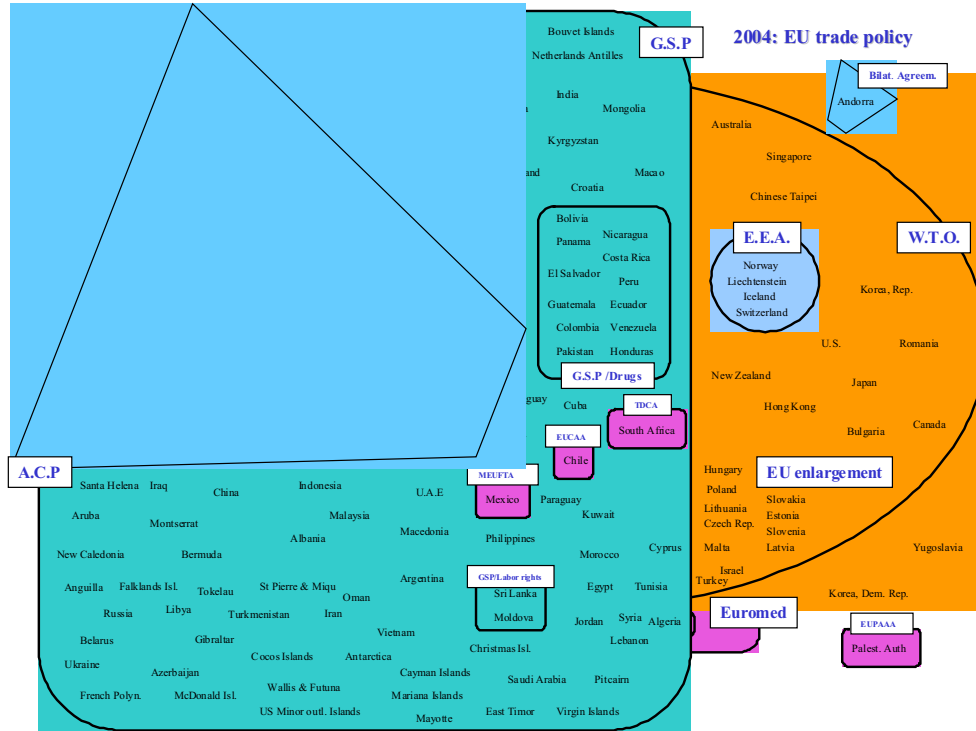
Figure 1 illustrates the intricacy of the European Union's trade policy in 2004.⁹ The EU has negotiated several regional (European Free Trade Association/European Economic Area) and bilateral (including with Chile, Mexico and Turkey) free trade agreements. It has also entered into a trading framework with a number of Mediterranean countries, known as the Euromed Initiative. The structure of European preferences has reached great complexity. Since 1995 the European GSP has been divided into five regimes: the standard GSP, the GSP granted to countries fighting against drug production and trafficking, the one granted to countries enforcing labor rights, the scheme for environmental protection (which has not been granted so far), and the EBA Initiative for LDCs.

A preferential regime has long been established with developing countries of Africa, the Caribbean, and the Pacific (ACP), with which the EU has historical links. This scheme, which is not WTO-compatible but has survived under a GATT waiver, expires on January 1, 2008, and must be replaced if preferential treatment is to continue. The Cotonou Agreement, signed in 2000, renewed the nonreciprocal ACP preferential arrangements formerly offered under the Lomé Convention, but it also foreshadowed the negotiation of Economic Partnerships Agreements (EPAs) with six groups of countries, later defined as countries from Central Africa, Eastern and Southern Africa, the Southern African Development Community (SADC), the Pacific, the Caribbean Islands, and Western Africa. The EPAs are currently scheduled to come into force by the end of 2007, but that may change if the GATT waiver is extended.

These myriad trade preference regimes mean that EU trade policy is highly fragmented. Today for Europe as an importing zone, the WTO multilateral regime applies to only 11 countries among the 208 potential exporting countries. Under the GSP scheme as it was originally negotiated in 1971, tariff preferences had to be nondiscriminatory with deeper preferences applying only to the LDCs. Figure 1 reveals how much the current scheme has departed from that initial principle. In part the multiple trade preferences reflect the fact that trade policy has been the European Community's only foreign policy instrument.

⁹ The complexity also concerns exporting countries: for example, products shipped by 28 countries, including Angola, Burundi, Chad, Malawi, Sierra Leone, and Solomon Islands, might be taxed under any of four alternative tariff regimes and administrative rules. This creates sizeable information costs for small exporters.

Figure 1 European Union Trade Policy, 2004



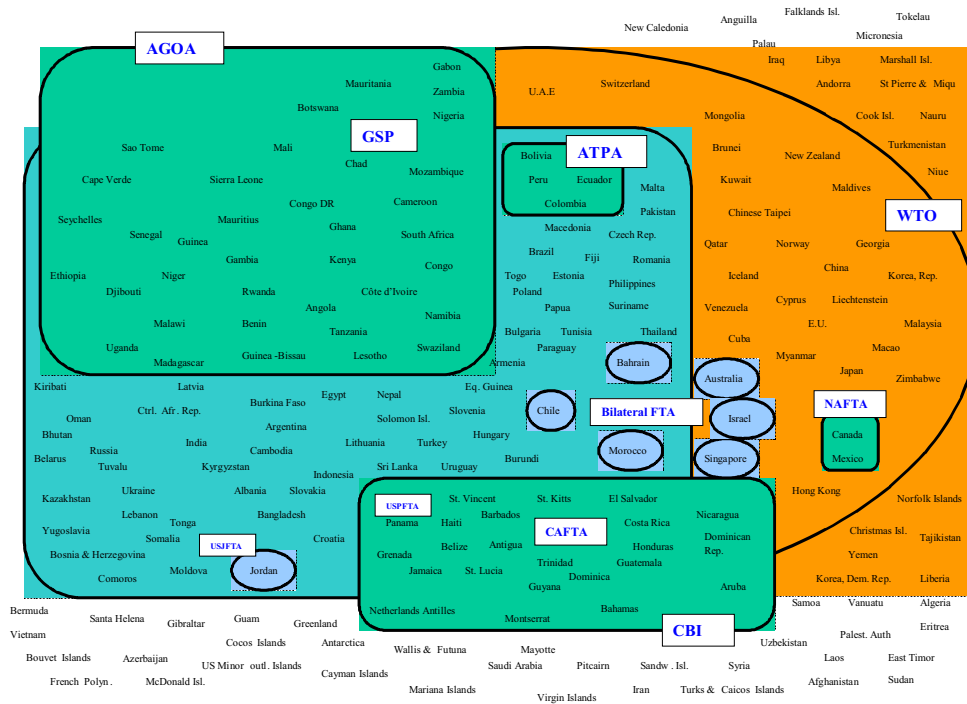
Note: ACP = African, Caribbean and Pacific Group of States; EEA = European Economic Area; EUCAA = European Union-Chile Association Agreement; EUPAAA = European Union-Palestinian Authority Association Agreement; Euromed = <<to come>>; GSP = Generalized System of Preferences; LDC = least developed countries; MEUFTA = Mexico-European Union Free Trade Agreement; TDCA = Trade Development Cooperation Agreement; WTO = World Trade Organization.

a. Tariff preferences temporarily withdrawn.

Source: MAcMap-HS6.

U.S. trade policy is also fragmented, although not as much as the EU's; under U.S. trade policy, the WTO regime applies to 25 partners (figure 2). Recently the United States has been pursuing a bilateral path, negotiating free trade agreements with single trade partners including Australia, Bahrain, Jordan, Morocco, Panama, and Singapore. Trade preferences granted to developing countries are also less fragmented than the EU's, with just four preferential regimes being defined (the GSP, CBI, Andean Trade Pact Agreement, and AGOA). Another noteworthy difference is that, unlike the EU, the United States has designated a set of sensitive products that are excluded from all preferential schemes (although the United States' GSP scheme generally offers duty free access to all products that benefit, in contrast with only partial reductions in tariffs from MFN levels applied by the EU).

Figure 2 - U.S. Trade Policy, 2004



Note: AGOA = African Growth and Opportunity Act; ATPA = Andean Trade Preference Act; CAFTA = Central American Free Trade Agreement; NAFTA = North American Free Trade Agreement; CBI = Caribbean Basin Initiative; GSP = Generalized System of Preferences; USJFTA = United States-Jordan Free Trade Agreement; USPFTA = United States-Panama Free Trade Agreement; WTO = World Trade Organization.

Source: MACMap-HS6.

1.3. Implications of Preferences on Market Access

What are the implications of these intricate preference schemes for the exports of both developed and developing countries? The MACMap HS6 database allows for an aggregation of applied duties across all products and all reporters (importers), for each partner (exporter), to obtain the average duty faced by each country on its exports to the rest of the world. The first and fifth columns in Table 1 report this average for agricultural and industrial products, respectively, using the MACMap's reference-group based weighting scheme (see Bouët et al. 2004b).

Table 1 - Decomposition of the Average Duty Faced by Each Exporting Country, 2001- percent, ad valorem equivalent duty

	Agriculture					Industry			
	Applied duty	Apparent margin	Composition effect	True margin		Applied duty	Apparent margin	Composition effect	True margin
Lesotho	18.4	0.8	-24.1	24.9	Seychelles	3.8	0.7	-7.2	8.6
Aruba	26.7	-7.6	-32.2	24.6	Lesotho	5.4	-0.8	-7	6.9
Gambia, The	16.6	2.6	-13.3	15.9	Haiti	5.3	-0.7	-6.5	6.5
St. Vincent	22.3	-3.2	-13.4	10.2	Madagascar	4.1	0.5	-5	6.2
Uruguay	25.4	-6.3	-16	9.7	Bangladesh	5.3	-0.7	-6.2	6.2
Yugoslavia, former	15.9	3.3	-5.2	8.5	Cambodia	6.0	-1.5	-6.7	6.0
St. Lucia	18.6	0.6	-7.5	8.0	Mauritius	7.3	-2.7	-7.3	5.3
Guyana	87.1	-67.9	-75.6	7.6	Maldives	9.2	-4.6	-9.2	5.3
Suriname	38.8	-19.6	-27.3	7.6	Nicaragua	5.7	-1.2	-5.4	4.9
Turkmenistan	3.3	15.8	8.4	7.5	Honduras	5.9	-1.4	-5.5	4.8
Virgin Islands	12.0	7.1	0.4	6.8	Fiji	4.8	-0.2	-4.3	4.8
Mali	2.9	16.3	9.9	6.4	Palau	5.1	-0.5	-4.6	4.7
Burkina Faso	9.2	9.9	4.0	5.9	Djibouti	12.0	-7.4	-11.3	4.7
Benin	8.2	10.9	5.6	5.3	Nepal	10.1	-5.5	-9.3	4.5
Dominica	17.1	2.1	-3	5.1	Greenland	4.1	0.5	-3.1	4.3
Malawi	21.6	-2.5	-7.3	4.9	Dominican Republic	4.3	0.3	-3.2	4.2
Kiribati	10.3	8.9	4.0	4.8	El Salvador	9.6	-5.0	-8.3	4.0
Kazakhstan	21.4	-2.3	-6.3	4.0	St. Pierre and Miquelon	2.8	1.8	-1.4	3.9
Vanuatu	4.1	15.1	11.2	3.9	Tonga	3.3	1.3	-1.8	3.8
Argentina	18.7	0.5	-3.4	3.8	Belize	3.9	0.7	-2.2	3.7
Belize	42.8	-23.6	-27.4	3.8	Guatemala	9.6	-5	-7.8	3.6
Sudan	10.1	9.0	5.7	3.3	Pakistan	6.2	-1.6	-4.3	3.4
Iraq	30.5	-11.4	-14.4	3.0	Tunisia	4.8	-0.2	-2.9	3.4
Saudi Arabia	29.0	-9.8	-12.7	2.9	Morocco	4.7	-0.2	-2.7	3.3
Togo	8.6	10.5	7.8	2.7	Cape Verde	3.6	1.0	-1.5	3.2
Andorra	12.1	7.1	4.6	2.4	Turkey	6.5	-1.9	-4.3	3.1
Turks and Caicos	17.5	1.7	-0.7	2.3	Falkland Islands	2.8	1.8	-0.6	3.1
Croatia	22.0	-2.9	-5.0	2.0	Turks and Caicos	3.9	0.7	-1.6	3.0
Dominican Rep.	21.2	-2	-4.0	2.0	Malawi	15.3	-10.7	-13.0	3.0
Eritrea	8.8	10.3	8.5	1.9	Sierra Leone	2.9	1.7	-0.5	2.9
Zimbabwe	23.5	-4.4	-6.2	1.8	Mozambique	2.4	2.2	0.0	2.9
Botswana	35.9	-16.8	-18.5	1.7	Albania	4.9	-0.3	-2.4	2.8
Bolivia	13.7	5.4	3.9	1.5	Uganda	6.1	-1.5	-3.5	2.7
Egypt, Arab Rep. of	14.0	5.2	3.9	1.3	Senegal	10.4	-5.8	-7.7	2.7
Jamaica	33.2	-14.1	-15.3	1.2	Micronesia	9.6	-5.0	-6.9	2.6

Note: Countries are ranked by decreasing true preference margin, and the table is limited to the first 35 countries.

Source: Authors' calculations, based on MAcMap-HS6 version 1.

In agriculture, the average duty faced on exports ranges from 0.6 percent (Equatorial Guinea) to 87 percent (Guyana). For member countries of the Organisation for Economic Co-operation and Development (OECD), the average duty faced is regularly below 20 percent (except for Australia and New Zealand), whereas products originating from numerous small developing countries (such as Barbados, Belize, Botswana, Gabon, Guyana, and Mauritius) are highly taxed. These huge differences result from a combination of two different effects: a composition effect and a true preferential margin. The composition effect refers to variation in exports caused by product specialization and the geographic destination of exports.¹⁰ The true preferential margin captures the fact that each country is benefiting from an average preferential margin, thanks to the trade regimes it has been conceded. Compared with the world average preferential margin (the worldwide average difference between MFN and applied duties), a country might benefit from a higher or lower average preferential margin. We call this variation from the world average the “true” preferential margin.

To understand the implications of these different components, we derive the following equation. Let $t_{s,r}^h$ be the applied ad valorem equivalent (AVE) duty imposed by country s on product h exported by country r , let $w_{s,r}^h$ be the weight of this flow, let $MFN_{s,r}^h$ be the MFN AVE duty imposed by country s on product h .¹¹

For a given country i , let us define the apparent margin, AM_i , as:

$$AM_i = \frac{\sum_r \sum_s \sum_h w_{s,r}^h t_{s,r}^h}{\sum_r \sum_s \sum_h w_{s,r}^h} - \frac{\sum_s \sum_h w_{s,i}^h t_{s,i}^h}{\sum_s \sum_h w_{s,i}^h} \quad (1)$$

The first term on the right-hand side of equation 1 is the applied duty faced by the world, the second one is the applied duty faced by country i . From equation 1, we derive:

¹⁰ The unit value used in computing the ad valorem equivalent of specific tariffs also varies across reference groups.

¹¹ The MFN AVE duty is defined as a three-dimensional variable (reporter, product, and partner) due to the calculation of the ad valorem equivalent based on a bilateral unit value.

$$\begin{aligned}
AM_i = & \left[\frac{\sum_r \sum_s \sum_h w_{s,r}^h t_{s,r}^h}{\sum_r \sum_s \sum_h w_{s,r}^h} - \frac{\sum_r \sum_s \sum_h w_{s,r}^h MFN_{s,r}^h}{\sum_r \sum_s \sum_h w_{s,r}^h} \right] \\
& + \left[\frac{\sum_r \sum_s \sum_h w_{s,r}^h MFN_{s,r}^h}{\sum_r \sum_s \sum_h w_{s,r}^h} - \frac{\sum_s \sum_h w_{s,i}^h MFN_{s,r}^h}{\sum_s \sum_h w_{s,i}^h} \right] \\
& + \left[\frac{\sum_s \sum_h w_{s,i}^h MFN_{s,r}^h}{\sum_s \sum_h w_{s,i}^h} - \frac{\sum_s \sum_h w_{s,i}^h t_{s,i}^h}{\sum_s \sum_h w_{s,i}^h} \right]
\end{aligned} \tag{2}$$

The apparent preferential margin obtained by country i on its exports is thus defined by the sum of three components. The first term is the worldwide difference between the average applied duty and the MFN duty. It is the opposite of the world average preferential margin. The second term is the difference between the MFN duty faced by the world and the one faced by country i . It measures a composition effect of country i 's exports. The third term is the difference between the average MFN duty and the average applied duty faced by country i ; it is country i 's preferential margin. What we call the true preference margin is the sum of the first and the third terms, that is, the difference between the country's and the world's average preferential margin, defined as the weighted average across products of the difference between the MFN and the applied rate.

Based on equations 1 and 2, the average applied duty faced by country i on its exports can thus be defined as the applied duty faced by the world, minus the composition effect (the second difference term in equation 2), minus the true preferential margin effect. A positive composition effect means that country i is specialized in products (or in geographical destinations) that are less protected all around the world. A positive true preferential margin means that, on average across its export markets, country i reaps a larger preference on its exports compared with the world average. The corresponding decomposition is reported in Table 1. For the sake of clarity, since world average levels are taken as references in these calculations, they are reported in Table 2:

Table 2 - Average World Applied and MFN Tariff Protection Rates, 2001- percent

Sector	Applied duty faced	MFN duty faced	MFN-applied margin
Agriculture	19.1	26.8	7.6
Industry	4.6	5.3	0.7

Source: Authors' calculations, based on MAcMap-HS6 version 1.

Table 1 should be read as follows. The first row shows that Lesotho's agricultural exports face an average applied AVE tariff duty of 18.4 percent, 0.8 percentage points less than the world average. But this tiny apparent preference margin results from the combination of strongly negative composition effect (-24.1 percentage points), revealing specialization in highly taxed products, and of strongly positive true average preferential margin (24.9 percentage points), because of the preferential agreements from which Lesotho benefits.

In agriculture, the composition effect appears to vary strongly across countries. It is strongly negative for several countries (Guyana, -76 percent; Mauritius, -36 percent, St Kitts and Nevis, -35 percent; Barbados, -25 percent; Belize, -27 percent), as a result of their specialization in products still highly protected in most large markets.¹² These large, negative composition effects are likely to be primarily endogenous: although preferential agreements frequently exclude highly sensitive products, preferential margins, by construction, can only be large in highly protected products. As a matter of fact, preference-receiving countries thus face incentives to specialize in highly protected products, since that is where their preferential margin is higher. This is not a systematic rule, however; some developing countries tend to specialize in largely liberalized products, as reflected in a positive composition effect (Equatorial Guinea, 26 percent; Chad, 20 percent). Orders of magnitude are far lower in nonagricultural products, but it is even more striking that most countries with significant true preferential margins exhibit large, negative composition effects.

Although the true average preferential margin does not reach the extreme values seen in the composition effects, it does reach almost 25 percentage points for Lesotho and Aruba, and it is above 6 points for 10 countries. Overall, the true average preferential margin in agriculture is above 1 point for 47 developing countries, and above 2 points for 33 countries, according to our calculations. Countries with high true preferential margins are primarily Sub-Saharan and Caribbean countries. True preferential margins are less varied in nonagricultural products, with a maximum of 8.6 points for the Seychelles, but they are significant for large numbers of countries: 103 countries exhibit a true average preferential margin above 1 percentage point; 57 a true margin higher than 2 percentage points. The countries exhibiting the largest true preferential margins are those that benefit from important preferential arrangements and that are specialized in exporting textiles and apparel—although, as already noted, this specialization is likely to be at least partly endogenous. This important role of textiles and apparel explains why several South Asian countries are among those exhibiting the highest margin in industrial products.

Many developing countries export only a few, highly specialized products, and that lack of diversification is often interpreted as an economic weakness. During the Doha Round, LDCs voiced their concern that countries with highly concentrated exports would be especially vulnerable to preference erosion. A few products appear to be the source of this concern: banana, sugar, meat, vegetables and fruits, and textiles and apparel. Table 3

¹² Some of the examples cited here are not reported in the table, since it includes only countries with the highest true preferential margin, in order to save space.

reports the true average preferential margin for each of these products for those developing countries belonging to WTO that display the highest preferential margins in agriculture. Importantly, this average is calculated (as above) using trade flows from the exporter to the reference group of the importer, thus minimizing the extent of the endogeneity bias (linked to the influence of applied tariffs on the level of bilateral exports), which is likely to be sizable for such highly protected products.¹³ The table shows that preferential margins are also highly concentrated, as Alexandraki and Lanke (2004), among others, have already emphasized. For most countries exhibiting a significant true preferential margin, one single (group of) products turns out to be the source of this preferential margin: meat products for Lesotho, Uruguay, and Vanuatu; sugar for Aruba, Croatia, Suriname, and the former Yugoslavia; bananas for several Caribbean countries. With exports concentrated on a small number of products, on which their preferential margin is especially high, these countries are likely to be very vulnerable to the erosion of preferences.

2. ASSESSING THE INTERACTION OF PREFERENCES AND MULTILATERAL LIBERALIZATION

Multilateral liberalization, as it is conducted under the aegis of the WTO, can lead to an erosion of preferences. Tariff formulas are applied to cut bound tariffs, which are greater than or equal to MFN applied tariffs, which are greater than or equal to preferential tariffs. The preferential tariffs are set either as a fixed proportion of the MFN applied duty (the most frequent case) or as a lower duty independent of the MFN rate. When bound duties are reduced, several implications for developing countries benefiting from trade preferences may arise:

- The MFN applied duty may not be changed, in which case market access and preferential margins are not affected;
- The MFN tariff may be reduced, so if the preferential tariff is a fixed proportion of the MFN duty, then market access is improved for developing countries, but their preferential margin is reduced, leading to more competition from MFN duty-paying countries; or
- The preferential tariff is independent of the MFN duty (it might be zero), in which case market access is not improved for preference-receiving developing countries and their preferential margin is eroded.

¹³ When aggregating tariffs across products, exporters, and importers, MAcMap-HS6 uses a weighting scheme based on trade flows between the exporter and the reference group to which the importer belongs. Reference groups gather similar countries and are determined by use of a clustering analysis. This method tends to limit the extent of the well-known endogeneity bias arising when bilateral trade flows are used as weighting schemes. For a more detailed explanation, see Bouët et al. 2004b.

Table 3 - Average True Preferential Margin by Country, by Sector and Commodity
percent

<i>Country</i>	<i>By sector</i>		<i>By commodity</i>					
	<i>Agriculture</i>	<i>Industry</i>	<i>Sugar</i>	<i>Meat</i>	<i>Banana</i>	<i>Vegetables, fruit</i>	<i>Textiles, apparel</i>	<i>Other</i>
Lesotho	24.9	6.9	-6.0	47.4	-7.2	8.2	5.2	4.6
Aruba	24.6	1.1	52.9	-7.4	-7.2	-5.0	-1.4	1.2
Gambia, The	15.9	2.5	-11.6	-8.6	-7.2	-0.5	0.0	14.5
St. Vincent	10.2	1.5	-11.6	-9.2	13.6	-2.9	-1.6	2.6
Uruguay	9.7	2.3	-5.2	13.6	-2.5	0.3	0.8	6.1
Yugoslavia, former	8.5	1.3	78.5	-8.1	-7.1	-1.0	1.6	1.2
St. Lucia	8.0	2.2	-11.6	-1.7	13.8	6.0	3.6	0.2
Guyana	7.6	1.5	-3.1	-8.5	9.5	1.2	4.2	4.1
Suriname	7.6	2.0	16.0	-8.6	11.6	2.4	1.4	1.5
Turkmenistan	7.5	0.1	-11.4	-9.2	-7.2	-4.5	-1.5	0.1
Virgin Islands	6.8	0.4	15.7	-8.5	14.9	-1.7	0.1	-0.3
Mali	6.4	0.7	-5.3	-6.4	-7.2	1.2	0.4	9.8
Burkina Faso	5.9	0.9	12.4	-8.0	-5.4	1.3	-0.4	9.5
Benin	5.3	1.1	-8.3	8.3	-7.2	-3.6	-0.8	11.4
Dominica	5.1	0.8	-11.6	-2.0	11.8	-2.8	2.6	-0.1
Malawi	4.9	3.0	-5.1	-8.4	-7.2	11.1	1.4	11.6
Kiribati	4.8	1.7	-11.6	-9.2	-7.2	-4.6	2.2	0.7
Kazakhstan	4.0	0.2	11.3	-8.9	-6.5	-2.9	0.1	-0.0
Vanuatu	3.9	0.9	-11.6	53.1	-7.2	31.2	2.8	0.3
Argentina	3.8	0.6	-5.9	2.8	-6.4	-0.6	-1.2	4.5
Belize	3.8	3.7	-2.9	-7.6	13.9	-0.4	3.9	4.1
Sudan	3.3	0.6	-4.3	-7.8	-6.4	-2.2	-0.6	1.1
Iraq	3.0	-0.0	-0.8	-0.6	-4.9	-2.4	-0.1	-1.0
Saudi Arabia	2.9	0.1	0.5	-0.5	-7.2	-0.2	-1.0	-0.9
Togo	2.7	0.9	-9.5	-2.8	-7.2	2.8	6.2	3.0
Andorra	2.4	1.4	51.6	9.7	-7.2	3.0	1.8	0.3
Turks and Caicos	2.3	3.0	-11.6	-9.2	-7.2	-4.6	2.1	2.9
Croatia	2.0	1.8	61.3	-5.5	14.9	0.5	2.9	0.6
Dominican Republic	2.0	4.2	-4.6	-8.7	14.1	2.0	3.9	2.0
Eritrea	1.9	1.5	-11.6	9.5	-7.2	4.1	-0.2	1.2
Zimbabwe	1.8	1.8	-1.1	-3.4	1.0	0.7	1.7	4.7
Botswana	1.7	0.9	-7.1	2.0	-7.2	-2.6	1.8	-0.5
Bolivia	1.5	0.9	8.6	-8.6	-0.2	-2.7	1.8	2.3
Egypt, Arab Rep. of	1.3	2.2	-9.7	-7.2	-4.6	0.7	2.6	1.7
Jamaica	1.2	2.5	-3.4	-5.0	14.5	2.4	3.8	1.8

Note: Countries are ranked by decreasing order of initial true preference margin in agriculture. The commodity figures are computed in the same way as indicated above for true preference margins by large sector: average preferential margin for the country (that is, the average across markets and products concerned of MFN duty minus the applied duty faced by the country), minus world average preferential margin for the products concerned.

Source: Authors' calculations, based on MAcMap-HS6 version 1.

The magnitude of the erosion may depend on the tariff-cutting formula adopted. Following the approach taken by Jean, Laborde, and Martin (2005), we simulate the impacts on preference margins of two liberalizing scenario. Scenario 1 is a tiered tariff-cutting formula in agriculture and a 50 percent cut in industrial tariffs.¹⁴ Scenario 2 adds a sensitive products clause, which allows 2 percent of tariff lines to be reduced by only 15 percent.

In most cases, the impact of scenario 1 on the true preferential margin is spectacular in agriculture: among the 12 countries with an initial preference margin higher than 6 points, only 4 end up with a margin higher than 3 points after the tariff-cutting formula is applied (Table 4). The results are varied across countries, but in most cases, the preferential margin is largely swept out in this scenario. Scenario 2 leads to very different results in some cases, with preference margins essentially preserved (see, for example, Aruba, St. Vincent and the Grenadines, or St. Lucia). In other cases, the results are broadly comparable to those under scenario 1. This suggests that products identified as sensitive are the main source of the preference margin for a number of countries, but not for all. That is because sensitive products are frequently excluded from preferential agreements and because preferences for such products are frequently tied to quantitative limitations.

2.1. RQ Rents and their Erosion

Lower tariff duties are not the only type of trade preferences. In many instances (particularly for the most sensitive products), they are granted through preferential tariff rate quotas. In such cases, the benefit of a reduced (frequently to zero) tariff within a quota is limited either to a given country or to a set of preference-receiving countries. As soon as such preferential TRQs are filled, they give rise to rents, since the quantitative limitation on sales at the in-quota tariff is binding. These rents are not necessarily wholly captured by the exporter (see de Gorter and Kliauga 2005 for a detailed discussion). Still, exporters generally earn a substantial part of these rents, and this benefit often represents an important share of the benefit countries are able to reap from their preferential access.

Table 5, based on Bouët et al. (2004b), displays the magnitude of these rents, for those developing countries for which they represented more than 0.15 percent of gross domestic product (GDP) in 2001. The methodology used to assess TRQ rents can be summarized as follows (for details, see Bouët et al. 2004b). The rent is assumed to be zero when the fill rate of the TRQ (restricted to the partners the quota is allocated to, if applicable) is below 90 percent.¹⁵ The calculation is based on the shadow tariff, defined as the ad valorem tariff that would lead to the same level of imports as is observed under the tariff rate quota. This shadow tariff is computed as a simple arithmetic average of the in-quota and the out-of-quota tariff rates when the fill rate lies between 90 and 99 percent, based on the assumption

¹⁴ The tiered formula is directly inspired by the Harbinson proposal, but it is corrected to avoid discontinuities (see Jean, Laborde, and Martin 2005).

¹⁵ Note, however, that this is a crude approximation. In many cases, the quota is not filled because of limitations imposed by the administrative regime, not by the level of the in-quota tariff rate (see de Gorter and Kliauga 2005). Because of data limitations, we do not take this into account.

that the quota is binding, but that the out-of-quota tariff rate is prohibitive. As soon as the fill rate is higher than 99 percent, the shadow tariff is assumed to be equal to the out-of-quota tariff rate.

Table 4 - Simulation of the Impact of a Proportional Cut in Bound Duties under Scenarios 1 and 2

Country	Initial true margin		Scenario 1		Scenario 2	
	Farm	Nonfarm	Farm	Nonfarm	Farm	Nonfarm
Lesotho	24.9	6.9	3.2	5.3	7.7	6.3
Aruba	24.6	1.1	-3.3	-0.5	21.2	0.5
Gambia, The	15.9	2.5	2.1	1.0	2.1	2.0
St. Vincent	10.2	1.5	1.8	-0.1	8.1	0.9
Uruguay	9.7	2.3	2.6	0.7	6.4	1.7
Yugoslavia, former	8.5	1.3	-3.3	-1.2	2.0	-0.2
St. Lucia	8.0	2.2	-1.1	0.6	6.8	1.6
Guyana	7.6	1.5	-0.7	-0.1	1.3	1.0
Suriname	7.6	2.0	3.9	0.5	13.3	1.6
Turkmenistan	7.5	0.1	3.1	-3.2	2.5	-2.1
Virgin Islands	6.8	0.4	1.5	-1.8	3.1	-0.8
Mali	6.4	0.7	3.1	-0.9	2.4	0.1
Burkina Faso	5.9	0.9	2.6	-0.8	1.9	0.3
Benin	5.3	1.1	2.6	-0.5	2.0	0.5
Dominica	5.1	0.8	-0.9	-0.8	5.1	0.2
Malawi	4.9	3.0	3.6	1.3	2.6	2.4
Kiribati	4.8	1.6	0.5	-0.8	1.0	0.2
Kazakhstan	4.0	0.2	-3.3	-1.5	-1.1	-0.5
Vanuatu	3.9	0.9	0.6	-1.1	3.8	0.0
Argentina	3.8	0.6	1.7	-1.1	1.4	0.0
Belize	3.8	3.7	0.3	2.3	2.6	3.3
Sudan	3.3	0.6	-2.7	-1.4	-2.1	-0.3
Iraq	3.0	-0.1	-6.1	-1.7	-3.2	-0.7
Saudi Arabia	2.9	0.1	-12.8	-1.6	-12.5	-0.6
Togo	2.7	0.9	2.0	-0.7	1.3	0.3
Andorra	2.4	1.4	-0.6	-0.1	3.5	0.9
Turks and Caicos	2.3	3.0	-6.1	1.4	5.0	2.5
Croatia	2.0	1.8	1.5	0.1	3.2	1.1
Dominican Republic	2.0	4.2	1.5	2.6	2.1	3.7
Eritrea	1.9	1.5	-3.1	-0.1	0.5	0.9
Zimbabwe	1.8	1.8	2.2	0.2	1.6	1.2
Botswana	1.7	0.9	1.0	-0.7	2.1	0.3
Bolivia	1.5	0.9	-0.5	-0.7	-1.2	0.3
Egypt, Arab Rep. of	1.3	2.2	1.2	0.6	0.5	1.6
Jamaica	1.2	2.5	0.1	1.0	0.6	2.0

Note: Countries are ranked by decreasing true preference margin. Only countries with a true preference margin higher than 1 percent are shown in agriculture (1.5 percent for industry). See text for explanation of scenarios.

Source: Authors' calculations based on MAcMap-HS6 version 1.

**Table 5 - TRQ Rents Received by Developing Country, in 2001
and after Scenarios 1 and 2**

Country	2001 (US\$ millions)	TRQ rents received (as % of GDP)		
		2001	Scenario 1	Scenario 2
Guyana	59.8	8.28	3.28	7.89
Fiji	51.4	3.26	1.27	3.09
Mauritius	125.8	2.89	1.37	2.68
Belize	20.5	2.40	1.09	2.32
Ecuador	267.3	1.60	0.72	1.55
Panama	143.1	1.44	0.67	1.40
Costa Rica	228.2	1.37	0.63	1.33
St. Kitts and Nevis	4.1	1.26	0.59	1.16
Malawi	17.3	0.99	0.62	0.92
Jamaica	51.3	0.68	0.29	0.65
St. Vincent	2.3	0.67	0.48	0.67
Swaziland	6.0	0.52	0.21	0.49
Barbados	13.5	0.52	0.19	0.49
Honduras	31.7	0.50	0.26	0.48
Dominica	1.3	0.47	0.34	0.47
St. Lucia	3.3	0.46	0.33	0.46
Nicaragua	8.3	0.33	0.21	0.32
Zimbabwe	30.6	0.33	0.22	0.32
Suriname	2.3	0.26	0.21	0.26
Colombia	199.0	0.25	0.12	0.24
Côte d'Ivoire	23.3	0.25	0.16	0.24
Zambia	7.6	0.24	0.18	0.23
Dominican Republic	50.4	0.22	0.17	0.22
Cameroon	17.4	0.20	0.15	0.20
Trinidad and Tobago	14.5	0.18	0.09	0.16
Guatemala	30.0	0.15	0.08	0.14

Note: Developing countries only, ranked by decreasing order of rents received in 2001 as a percentage of gross domestic product (GDP), and limited to countries for which this value is higher than 0.15 percent. See text for explanation of scenarios.

Source: Authors' calculations, based on MAcMap-HS6 version 1.

For each HS-6 product concerned, the quota rent is then computed as follows:

$$rent = \text{Min} \left(uv \times q \times \frac{SR - IQTR}{1 + IQTR}, tradev \times \frac{SR - IQTR}{1 + SR} \right)$$

where uv refers to the unit value, q to the quota allocated to the line, $tradev$ to the trade value, SR to the shadow tariff rate, and $IQTR$ to the in-quota tariff rate.

Assessed rents are as high as 8.3 percent of GDP in Guyana, 3.3 percent in Fiji, 2.9 percent in Mauritius, and 2.4 percent in Belize, suggesting that quota rents are important for these countries. Several other countries were earning rents in 2001 amounting to more than 1 percent of GDP, and another six countries were earning rents higher than 0.5 percent of GDP. Countries earning substantial rents as a share of GDP are mainly Sub-Saharan and Caribbean countries, but Central American countries are also strongly represented in Table 5.

To assess how multilateral liberalization is likely to change the magnitude of these rents, the same calculations were carried out for scenarios 1 and 2, described earlier. For this exercise, we assumed that in-quota tariff rates and fill rates remained unchanged. This is a crude proxy, but because it is unclear how in-quota tariff rates will be liberalized, it is difficult to evaluate how liberalization will change fill rates.¹⁶ These calculations suggest that applying scenario 1 would strongly erode the value of TRQ rents; in most cases the rents are more than halved. Such a reduction would represent a sizable shock, even at a macroeconomic level, especially for those countries with the highest rents. Although it is questionable whether TRQ rents are effectively used in many cases, such a sudden fall would certainly involve significant adjustment cost for the economies concerned. Scenario 2 presents a striking contrast: as soon as sensitive products are granted flexible treatment, multilateral liberalization does not entail such strong drops in TRQ rents. This result illustrates the well-known fact that TRQs generally apply to highly sensitive products. Exempting such products from substantial liberalization would thus largely maintain these rents.

2.2. Assumptions of CGE Simulations

The purpose of this section is to see how taking preferences into account modifies our conclusions regarding the expected benefits of trade liberalization, and how countries are affected differently as a result of the inclusion of preferences and their erosion. We draw on Bouët et al. (2004a) and make use of the same model, which is an adapted version of the MIRAGE CGE model, to include more explicit modeling of agricultural policies. A number of liberalization scenarios, which correspond to plausible outcomes of the negotiations on market access in agriculture, are considered by simulating their consequences with and without preferences taken into account. Liberalization is limited to the agricultural sector in

¹⁶ A priori, however, should in-quota tariff rates remain unchanged, multilateral liberalization should decrease fill rates of TRQs, since competition from out-of-quota exports would be tougher.

this exercise. Accordingly, tariffs on nonagricultural merchandise are not liberalized, nor is trade in services. Distortions such as export subsidies or domestic support also are not reduced. TRQs are explicitly modeled (and we assume that their rents accrue entirely to the exporters). The assessed impact of eroded preferences thus takes into account both the decrease in the tariff preference margin and the fall in TRQ rents.

Our baseline incorporates the most recent developments in the agricultural sector: the implementation of the EU's 2000 Agenda, the recent (partial) decoupling introduced into European policy, and the 2002 U.S. farm bill. The 2001 protection data were also amended to take into account the addition of 10 members to the EU (by freeing trade between the old and new members and replacing the new members' external tariff structure with the existing EU structure) and the accession of China to the WTO.

To assess the specific impact of preferences on multilateral liberalization, scenarios 1 and 2 are each modeled twice: with preferences, and without preferences, meaning that preferential agreements are ignored when measuring initial protection in the model (except for a handful of large free trade agreements between developed countries), such that applied rates are assumed to be equal to MFN rates. This alternative dataset is introduced as a change in the initial dataset, not as a shock.¹⁷ The liberalization is modeled with the MIRAGE-AG model (see Bhir et al. 2002 for the base model and Bouët et al. 2004a for the model devoted to the analysis of agricultural liberalization). The regional and sectoral breakdowns are reported in Table 6.

2.3. Results of CGE Simulations

Do preferences matter? The simulation results in Table 7, where overall results at the world level are considered for our two scenarios, show that the answer is definitively yes. The simulated increase in world agricultural exports associated with the tiered formula (scenario 1) is 14 percent when preferences are taken into account, but 21 percent when neglecting preferences. The difference in the effect on world welfare is not quite as large but still sizable.

Not surprisingly (given the results reported in Jean, Laborde, and Martin 2005), exempting sensitive products from tariff cuts (scenario 2) has a much more limited impact on world agricultural exports and welfare. But the impact of including preferences is even higher in scenario 2 than in scenario 1: if preferences were neglected, the estimated increase in exports would be twice as large and the impact on welfare three times as large.

¹⁷ The algorithm used to make this change is intended to distort the initial dataset as little as possible; in particular, we leave unchanged the international trade flows. The welfare results would not differ widely if we had used an initial shock.

Table 6 - Sectoral and Geographical Breakdown in the Simulation Exercise

Sector	Counterparts in GTAP	Geographical Breakdown
Rice	Paddy rice, processed rice	1. ANZCERTA : Australia, New Zealand
Wheat	Wheat	2. Bangladesh
Cereals	Cereal grains nec	3. BraArg: Brazil, Argentina
VegFruits	Vegetables, fruit, nuts	4. CairnsAsia: Indonesia, Malaysia, Philippines, Thailand
Oilseeds	Oil seeds	5. Canada
Sugar	Sugar cane, sugar beet, sugar	6. CentrAmCar: Central America, Rest of FTAA, rest of Caribbean
Fibers	Plant-based fibers	7. China
OthAgr	Crops nec, animal products nec; wool, silk-worm cocoons	8. DdAsia: Rest of developed Asia—Hong Kong (China), Singapore, Taiwan (China)
Meat	Cattle, sheep, goat, horses; meat: cattle, sheep, goat, horse; meat products nec	9. EU25: European Union—25 countries
Milk	Raw milk, dairy products	10. EFTA: Iceland, Norway, Switzerland
Fats	Vegetable oils and fats	11. India
Food	Food products nec, beverages and tobacco products	12. Japan
Clothing	Wearing apparel, leather products	13. Korea, Rep. of
AgInputs	Chemical, rubber, plastic products; machinery and equipment nec	14. MorTun: Morocco, Tunisia
Other	Forestry; fishing; coal; oil; gas; minerals nec; textiles; wood products; paper products, publishing; petroleum, coal products; mineral products nec; ferrous metals; metals nec; metal products; motor vehicles and parts; transport equipment nec; electronic equipment; manufactures nec	15. OthLatAm: Other Latin America (Chile, Colombia, Mexico, Peru, Uruguay, R.B. Venezuela, rest of Andean Pact, rest of South America)
TrT	Trade; transport nec; sea transport; air transport	16. Row: Rest of the world (Albania, Bulgaria, Croatia, Romania, Russian Federation, Sri Lanka, Vietnam, rest of former Soviet Union, rest of East Asia, rest of Oceania, rest of Southeast Asia, rest of South Asia, rest of Middle East, rest of North Africa, rest of North America)
OthSer	Electricity; gas manufacture, distribution; water; construction; communication; financial services nec; insurance; business services nec; recreation and other services; public administration/defense/health/education; dwellings	17. SADCxSA: South African Development Community except South Africa
		18. SouthAf: South Africa
		19. SSAXSADC: Sub-Saharan Africa except SADC
		20. Turkey
		21. US: United States

Note: nec = not elsewhere classified.

Source: Authors.

Table 7 - Simulated Impact of Two Alternative Agricultural Tariff Cut Scenarios on World Trade and Welfare - percent change

Scenario	Including preferences (a)	Excluding preferences (b)	Ratio (a) / (b)
Scenario 1			
World trade	0.80	1.22	1.5
World agricultural exports	13.59	21.08	1.6
World welfare	0.14	0.18	1.3
Scenario 2			
World trade	0.25	0.49	2.0
World agricultural exports	4.21	8.72	2.1
World welfare	0.02	0.06	3.0
Ratio (2)/ (1)			
World trade	0.3	0.4	
World agricultural exports	0.3	0.4	
World welfare	0.1	0.3	

Note: See text for explanation of scenarios.

Source: Authors' MIRAGE-Agr model simulation results.

Overvaluation of the impact of trade liberalization when preferences are not taken into account translates into larger estimated impacts of liberalization on world prices. Since we are here mostly interested in developing countries, we show only the expected changes in international prices faced by these countries. They are much lower than those generally reported using models that do not account for preferences, averaging no more than 2 percent in scenario 1 and even less in scenario 2 (Table 8). The impact under scenario 1 is most pronounced for sugar, meat, oilseeds, and cereals. When sensitive products are excluded from the tariff cuts (scenario 2), the effect is greatest on wheat, while rice is one of the less-affected products.

Results also vary across regions. For the first, more ambitious, trade liberalization scenario, Table 9 shows that Argentina, Brazil, CairnsAsia, SADC (Southern African Development Community), and South Africa would enjoy significant welfare gains and positive changes in the returns to land. (In contrast, the factor price change is negative in Canada, European Free Trade Agreement (EFTA), the EU, Japan, and the Republic of Korea.) Including preferences in the exercise reduces the positive impacts of agricultural trade liberalization for most regions, but especially for CairnsAsia and SADC.

Sub-Saharan African (SSA) countries excluding SADC, however, sustain losses when preferences are taken into account, but not when they are assumed not to exist. Table 10 provides more detailed results for SSA countries excluding SADC. In scenario 1, their export volume increases by 0.5 percent when preferences are not taken into account, but decreases by 3.9 percent when preferences are included. Agricultural imports are boosted in both scenarios, however, leading to an overall reduction in agrofood production in these countries. The magnitude of these effects is large enough to lead to a depreciation of the real exchange rate and a decline in unskilled wages when preferences are included. The

returns to land are depressed too, but less in scenario 1 than in scenario 2. Overall welfare changes very little in both scenarios but is slightly positive if preferences are ignored and slightly negative when they are taken into account.

Table 8 - Simulated Impact of Two Alternative Agricultural Tariff Cut Scenarios on International Prices of Developing Country Exports - *percent change*

Export	Scenario 1		Scenario 2	
	Including preferences	Excluding preferences	Including preferences	Excluding preferences
Cereals	1.1	1.85	0.31	0.75
Fats	0.77	1.14	0.21	0.44
Fibers	0.38	0.79	0.08	0.29
Food	0.54	0.9	0.13	0.36
Meat	1.39	2.07	0.33	0.61
Milk	0.63	1.18	0.19	0.68
Oilseeds	1.31	2	0.32	0.56
OthAgr	0.67	1.34	0.2	0.52
Other	0.42	0.67	0.1	0.28
Rice	0.99	1.33	0.19	0.51
Sugar	1.5	2.12	0.36	0.72
VegFruits	0.89	1.46	0.19	0.57
Wheat	0.79	1.27	0.51	1.99
Clothing	0.41	0.68	0.09	0.3
AgrInputs	0.43	0.69	0.11	0.29
OthSer	0.48	0.76	0.12	0.31
TrT	0.45	0.73	0.11	0.32

Note: See text for explanation of scenarios.

Source: Authors' MIRAGE-Agr model simulation results.

Table 9 - Simulated Impact of Scenario 1 on Welfare, Terms of Trade, and Returns to Land, by Region - percent change

Region	Welfare		Terms of trade		Returns to land	
	Including preferences	Excluding preferences	Including preferences	Excluding preferences	Including preferences	Excluding preferences
ANZCERTA	0.06	0.23	1.04	2.28	9.25	8.83
Bangladesh	-0.04	-0.05	-0.02	0.01	0.04	0.04
BraArg	0.10	0.16	1.22	1.75	0.20	0.32
CairnsAsia	0.29	0.48	0.18	0.28	0.67	1.01
Canada	0.19	0.74	-0.07	-0.22	-0.23	-1.75
CentrAmCar	-0.09	-0.05	0.39	0.65	1.13	1.30
China	0.06	0.09	0.12	0.24	0.03	0.47
DdAsia	-0.01	0.01	-0.03	-0.02	-1.06	2.45
EFTA	0.50	2.07	-0.06	-0.23	-2.30	-3.37
EU25	0.16	0.21	-0.20	-0.33	-0.65	-0.92
India	0.09	0.10	0.34	0.39	1.49	1.26
Japan	1.08	1.37	-0.34	-0.50	-13.67	-19.19
Korea, Rep. of	1.95	2.13	-0.22	-0.31	-5.64	-4.23
MorTun	1.20	1.59	-0.14	0.04	-0.13	-1.28
OthLatAm	0.04	0.08	0.14	0.33	-0.12	0.07
RoW	0.09	0.11	0.09	0.18	-0.67	-0.71
SADCxSA	0.13	0.42	0.86	1.67	1.49	1.71
SouthAf	0.12	0.20	0.15	0.34	1.00	5.50
SSAxSADC	-0.02	0.00	-0.03	0.17	-0.16	-0.37
Turkey	0.10	0.15	0.15	0.40	-0.13	0.37
United States	-0.02	-0.02	0.05	-0.02	2.22	1.86

Note: See text for explanation of scenario 1. See Table 6 for geographical breakdown.

Source: Authors' MIRAGE-Agr model simulation results.

**Table 10 - Detailed Impact of Two Tariff-cutting Scenarios
on Selected Sub-Saharan Countries - percent change**

Indicator affected	Scenario 1		Scenario 2	
	Including preferences	Excluding preferences	Including preferences	Excluding preferences
Agricultural exports (volume)	-3.90	0.58	-1.36	0.16
Agricultural imports (volume)	2.01	3.17	0.26	0.53
Agricultural real wages	-0.35	0.19	-0.09	0.06
Agro-food production	-0.57	-0.29	-0.16	0.00
Agro-food production price	0.05	0.57	0.01	0.24
Exports (volume)	0.08	0.61	-0.02	0.16
GDP (volume)	0.01	0.01	0.00	0.00
Imports (volume)	-0.05	0.29	-0.04	0.06
Nonagricultural unskilled real wages	-0.04	0.09	-0.02	0.04
Real effective exchange rate	-0.03	0.21	-0.01	0.09
Real return to capital	0.14	0.09	0.03	0.05
Real return to land	-0.16	-0.37	-0.07	-0.15
Real return to natural resources	0.64	0.34	0.16	0.10
Skilled real wages	0.05	-0.01	0.00	0.03
Terms of trade	-0.03	0.17	-0.02	0.07
Unskilled real wages	-0.24	0.15	-0.07	0.05
Welfare	-0.02	0.00	-0.01	0.01

Note: See text for explanation of scenarios.

Source: Authors' MIRAGE-Agr model simulation results.

2.4. Utilization of Preferences

So far, we have taken for granted that exporters fully used statutory trade preferences without restriction or any cost. In reality, however, that may not be the case, since benefiting from a preferential scheme requires complying with several requirements: purely administrative issues, technical requirements that may be attached to the benefit of the scheme, other specific conditions, and most of all rules of origin (ROOs). A priori, there is no reason to contest the legitimacy of these conditions attached to the benefit of preferential schemes.

ROOs are of special importance. They are justified by the need to avoid trade deflection, that is, reexports through the preference-receiving country of goods essentially produced in a third country. ROOs prevent misuses of preference schemes, arguably reinforcing the benefit of the scheme for the preference-receiving country to the extent that they create an incentive for third countries to invest in the preference-receiving country in order to benefit from preferential market access. There can be a direct cost associated with meeting the ROOs, however. Required administrative paperwork is potentially cumbersome and costly if it requires operating a parallel accounting system differing in definition, scope, and

concept from the system imposed by domestic legal requirements.¹⁸ 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 (Krishna and Krueger 1995; Falvey and Reed 1998, 2002). It has also been argued that ROOs are sometimes used as export subsidies, insofar as restrictive rules can create an incentive for the preference-receiving country to buy its inputs from the preference-granting country (Cadot, Estevadeordal, and Suwa-Eisenmann 2004).

In practice, the magnitude of these costs is difficult to assess. Based on indirect evidence, several studies estimate the administrative compliance costs of preferential schemes to be between 1 and 5 percent of the value of exports (Herin 1986; Anson et al. 2004), depending on the precise nature of the requirements and on the technical capacity of exporters to comply with them. Nonadministrative 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 possibilities for splitting the value-added chain for the product among countries and on whether the agreement includes low-cost input suppliers. In addition, several different types of ROOs are used (Estevadeordal and Suominen 2003), the restrictiveness of which differs widely. Based on the detailed work undertaken by Estevadeordal (2000), several studies have focused on the North American Free Trade Agreement and have found that ROOs hamper Mexican exports to the United States, particularly 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 free trade agreements between the EU and Central European partners, Brenton and Manchin (2003) conclude that the rules associated with the agreements preclude exporters from reaping any substantial benefit, as evidenced by the very low use of these agreements.¹⁹

Nonreciprocal preferences face the same kind of issues, but not necessarily the same results because of differences in rules applied, in product specialization, and in income levels of the exporters. Reporting that the EBA initiative was very underused 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. Subramanian, Mattoo, and Roy (2002) make a similar point about AGOA, showing that rules of origin, in particular, strongly undermine the “generosity” of this agreement. These findings of a poor utilization rate, not only for both EBA and AGOA but also for the GSP scheme, have been confirmed and qualified by Inama (2003).

¹⁸ See, for example, UNCTAD (2003, 54) and Inama (2003).

¹⁹ They found that only 35 percent of Central and Eastern European countries’ exports enter the EU using the lowest tariff for which they would be eligible.

However, studying the utilization of various preferential schemes individually may be misleading. Candau, Fontagné and Jean (2004) and OECD (2004) emphasize the problem of “competing preferences”: when a country is eligible for several preferential schemes (and this is the case with numerous developing countries, with preferential access to the EU or the U.S. market), underuse of a given scheme can merely mean that another scheme is judged more interesting by the exporter. In this case, underutilization 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. Typically, the very low utilization rate of EBA among ACP LDCs (3 percent on average for all products in 2001, according to Candau, Fontagné, and Jean 2004) simply means that exporters prefer to use the preferential access offered through the Cotonou Agreement, which has existed for a long time and has less-restrictive rules.²⁰

When due account is taken of these overlapping preference schemes, preferences appear to have been well utilized in agricultural products, at around 90 percent. Wainio and Gibson’s (2004) analysis of U.S. nonreciprocal preferential regimes for agricultural products confirms this finding. In summarizing four case studies carried out in Botswana, Kenya, Lesotho, and Mauritius, Stevens and Kennan (2004) also report that very few exports from these countries to the EU (1–6 percent) do not benefit from any preference (or from zero MFN duty). As they conclude, it is “inherently implausible that for the countries and products studied, preferences have not been well utilized,” given the magnitude of preferential margins, and the place they take in the long-standing export structure of these countries. In addition, Stevens and Kennan report that their detailed analysis does not show product coverage significantly limiting the benefit of the Cotonou Agreement (except for quantitative limitations linked to preferential tariff quotas). Indeed, no significant exports are made to the EU, nor to markets in Canada, Japan, or the United States, for products for which preferences were not available (Stevens and Kennan 2004, 8).

The average figures given by Candau, Fontagné, and Jean (2004) summarize the resulting effects on market access barriers: for raw agricultural products in 2001, the lowest duty available to Sub-Saharan countries (assuming perfect utilization of preferences) was zero for LDCs and 0.4 percent for non-LDCs and the average duty actually faced was 0.8 percent in both cases; for food products, the lowest duty available averaged 4.9 percent for LDCs and 12.6 percent for non-LDCs, while the average duty faced was respectively 5.4 percent for LDCs and 13.8 percent for non-LDCs.²¹

²⁰ The EBA initiative is embedded in the GSP scheme, the rules of origin of which are far more stringent than under the Cotonou Agreement. In particular, no diagonal cumulation is allowed among beneficiaries of the GSP schemes, except under a few regional agreements, while such cumulation is possible across Cotonou Agreement’s beneficiaries.

²¹ The statistics refer only to the import regime requested by the importer; it does not make clear how customs officers treat these requests. Differentiating raw agricultural products and food products makes sense as rules of origin are supposed to have different impact on preference utilization according to the level of product transformation (UNCTAD, 2003).

Introducing preferences more explicitly in the CGE simulations allows a quantitative assessment of the impact concerning the erosion of preferences. Although existing data do not raise any particular technical problem, we feel that they fall short of paving the way for a complete and detailed analysis, mainly because of incomplete geographical coverage. More important, the results show that taking underutilization of preferences into account changes only marginally the broader effect caused by the erosion of preferences in agricultural products.

Nevertheless, it is worth emphasizing that this conclusion is not true outside agriculture. Here the main concern is textiles and clothing, both because a deep international division of labor takes place in this industry and because it is the main industrial sector for which poor countries have a significant export potential. It is also an industry where lobbies have played a significant role in recent decades. As a result, the arguments about the use of ROOs as protective instruments are fully applicable. The use of preferences in textiles and clothing is as low as 35 percent under AGOA (Inama 2003), and Brenton (2003) and Inama (2003) point to the low utilization rate of the EU's EBA preferences in textiles and clothing, even by non-ACP countries. (In particular, Bangladesh uses this scheme for only about half its exports in the sector, and Cambodia hardly makes any use of it). Candau, Fontagné, and Jean (2004) confirm this finding but also show that the problem of underusage of preferences in textiles and clothing is limited to the GSP scheme and does not, for instance, extend to the Cotonou Agreement, although this agreement fully covers the sector. Still, the problem is important, especially for the EBA Initiative, where preferential margins are rather large. According to calculations by Candau, Fontagné, and Jean (2004), the average duty rate faced by non-ACP LDCs exporters in textiles and clothing is 5.2 percent, even though they are eligible for duty free access. As far as textiles and clothing are concerned, underuse of preferential schemes is thus widespread. All authors agree in pointing out the prominent role of stringent ROOs as the overwhelming cause for this underusage, thus suggesting that even exports benefiting from preferential access might suffer from the additional costs imposed by these rules. ROOs thus seem to seriously undermine the benefit that poor countries can reap from most nonreciprocal preferential agreements.

3. CONCLUSIONS AND POLICY IMPLICATIONS

It is clear that the threat of preference erosion following the Doha Round is real, insofar as trade preferences are now playing a key role in the world trading system, and in particular in the pro-poor policies undertaken by rich countries. But it is equally clear that these concerns are likely to be used by vested interests to lobby against multilateral liberalization as they try to take advantage of the convergence of interests between poor countries' producers benefiting from rents created by preferential access to rich markets and rich countries' protected producers.

The conventional response to these concerns is to assume that the erosion of preferences is a problem of limited magnitude, focused on a handful of products and on a limited number of countries (Subramanian 2003; Alexandraki and Lankes 2004). Our analysis is consistent with this view, but it suggests that the magnitude of forthcoming difficulties for poor

countries has perhaps been understated. Preferences can have perverse consequences, they suffer from several drawbacks, and they can be underutilized. Still, preferential schemes such as the Cotonou Agreement or the CBI are of particular importance for benefiting countries. In other words, the erosion of preferences is most of all a problem for a limited number of African and Caribbean countries, whose export specialization is largely a function of preferences. Sugar, bananas, textiles and clothing, and meat products play a central role. In addition, poor countries generally have a very low adjustment capacity because of a combination of deficient capital markets, obstacles to labor mobility, the absence of safety nets, and the lack of training capacities. The adjustment costs for poor countries faced with eroded preferences may therefore be fairly high.

Thus we believe the erosion of preferences to be a serious concern for poor countries (although further research is needed to determine to what extent the benefits of preferences within those countries accrue to poor households). What are the possible policy responses to this issue? The alternative should not be the status quo, not least because EU-ACP nonreciprocal preferences have been ruled incompatible with WTO rules and a WTO waiver protecting them is scheduled to expire in 2008. At that time, this nonreciprocal scheme could be replaced by reciprocal Economic Partnership Agreements (EPAs), negotiated between the EU and regional groupings of ACP countries, as planned in the Cotonou Agreement. The perspective of eroded preferences must therefore be gauged against this background, although the precise shape of EPAs is difficult to foresee.²²

The possibility of granting preference-dependent countries an adjustment package has been repeatedly mentioned, including during the Cancún Ministerial Conference. The basis for such an approach was set up with the launch in April 2004 of the International Monetary Fund's Trade Integration Mechanism, designed to "assist member countries to meet balance of payments shortfalls that might result from multilateral trade liberalization."²³ This new instrument is explicitly motivated by adjustments required as a result of "measures implemented by other countries that lead to more open market access for goods and services," which clearly includes preference erosion.²⁴ It creates a new framework within which future adjustment packages could be managed, and it could be helpful to the extent that adjustment costs are likely to be substantial in several poor countries. It remains doubtful, however, whether such a temporary adjustment facility is a suitable answer to the permanent shock resulting from the erosion of preferences. If preferences have been of some interest to recipient countries—and, notwithstanding their drawbacks, we believe they have—then an adjustment package would not be a satisfactory answer. The record of technical assistance so far has not proven to be very convincing, so other possibilities

²² In principle, countries signing an EPA with the EU should benefit from the same access as they do under the EBA Initiative, although the detailed conditions remain to be defined. EPAs may not be fully reciprocal, however, and market access offered by signing countries to EU's exporters has not been clearly defined so far.

²³ See <http://www.imf.org/external/np/exr/facts/tim.htm>.

²⁴ The Trade Integration Mechanism explicitly "does not cover the implications of 'own liberalization' measures" (www.imf.org).

should be considered to make trade liberalization “work for the poor.” In the current case, that means making sure that vulnerable countries gain elsewhere from the Doha Round. Improving market access conditions for poor countries can contribute, particularly by allowing the poorest countries duty free, quota free access to rich countries’ markets. Easing restrictive ROOs in textile and clothing can also be of interest in this perspective, as can giving preferential schemes more predictability and stability across time.²⁵ The benefits poor countries could reap from such measures are not clear, however. Targeted offensive initiatives are thus also of interest. These could include the cotton initiative discussed in Sumner (2005), or a more proactive stance on Mode IV trade in services (trade where the service provider moves to the consuming region) (Winters et al., 2003). The difficulties of standards and technical barriers to trade and of standards, particularly those linked to the Sanitary and Phytosanitary Agreement, also need to be acknowledged for poor countries try to access rich-country markets. Here, a balance is very difficult to strike between legitimate collective choices and preserved opportunities for poor countries to integrate into world markets.

Perhaps consideration needs to be given to a new proposal, mentioned in Anderson, Martin and van der Mensbrugghe (2005), to reward developing-country commitments to greater trade reform with an expansion of trade-facilitating aid, to be provided by a major expansion of the current Integrated Framework, which is operated by a consortium of international agencies for least developed countries (Hoekman 2005). This approach may well provide an attractive path for developing countries seeking to trade their way out of poverty, as well as a potentially more efficient way for developed countries to assist people in low-income countries than the current systems of tariff preferences (provided of course that governments spend that additional aid on initiatives that benefit the poor).

²⁵ The GSP schemes and AGOA, in particular, do not offer long-term stability.

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