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**Agricultural tariff rate quotas in the EU 1997-2002:  
Do developing countries enjoy quota rent?**

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# **Agricultural tariff rate quotas in the EU 1997-2002: Do developing countries enjoy quota rent?**

Cathie Laroche Dupraz and Alan Matthews<sup>1</sup>

## **Abstract**

Tariff rate quotas (TRQs) were introduced and legitimised as a market access instrument in the Uruguay Round Agreement on Agriculture (URAA). TRQs combine both restrictions on imports, as well as safeguarding current or preferential agricultural trade flows. When market access is restricted by a high tariff level beyond the quota, exporters that enjoy the low in-quota tariff may be able to gain a share of the quota rent. Do developing exporting countries benefit from EU TRQs? Are quota rents or the guaranteed market access the more important gain from the operation of these TRQs? What interests should developing countries defend in the debate on TRQs in the WTO Doha Round agricultural negotiations?

This paper analyses the implementation of 87 EU agricultural TRQs between 1997 and 2002 to examine their economic significance from the point of view of developing countries. Analysis of the database shows that TRQ trade can generate a high preference margin but that the potential rent is not so high. Moreover, this potential rent is concentrated on bananas and sugar, because TRQs are actually binding for those two commodities. More detailed analysis of those products indicates that only a few exporting countries are likely to enjoy this potential rent: Latin American countries for bananas and ACP countries for sugar. Whether developing country exporters benefit from this potential rent depends on their competitiveness relative to world market prices as well as on the market conditions which determine whether rent is collected by the exporting country or by the importer.

**Keywords:** Tariff rate quotas, quota rent, developing countries

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## 1. Introduction

Tariff rate quotas (TRQs) have been introduced and legitimised as a market access instrument in the Uruguay Round Agreement on Agriculture (URAA). The motivation behind this instrument was to guarantee minimum level of market access and to safeguard current levels of access in the face of the high MFN tariffs which resulted from tariffication. 1371 TRQs were notified by 37 countries to the WTO as a result of the Uruguay Round (G/AG/NG/5/7).

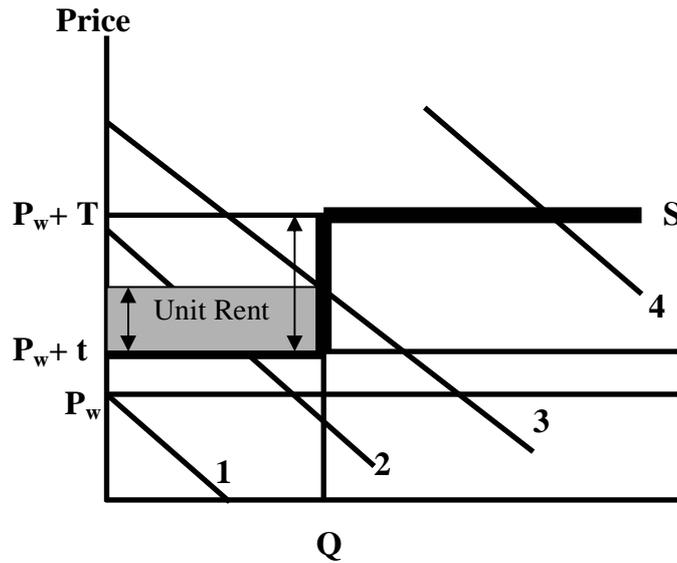
TRQs constitute a double tariff system: a low level tariff ( $t$ ) is applied to imports up to the quantitative limit established by the quota  $Q$ ; beyond the quota, a higher level tariff ( $T$ ) is applied to imports. Thus, TRQs combine both restriction of imports, and the safeguard of current or preferential agricultural trade flows. When market access is restricted by a high tariff level beyond the quota, exporters that enjoy the low in-quota tariff may be able to gain a share of the quota rent. Do developing exporting countries benefit from EU TRQs? Are quota rents or the guaranteed market access the more important gain from the operation of these TRQs? What interests should developing countries defend in the debate on TRQs in the WTO Doha Round agricultural negotiations?

This article analyses the implementation of 87 EU agricultural TRQs between 1997 and 2002 to examine their economic significance from the point of view of developing countries. Section 2 discusses some theoretical aspects of the economics of TRQs, in order to introduce the empirical work. Section 3 briefly presents the database built and used to analyse the implementation of the EU's agricultural TRQs during the period 1997-2002. The potential total rent that one can theoretically expect from TRQs is calculated, by product and export country groupings. Section 4 focuses on those product groups, bananas and sugar, which generate the highest potential rent, and discusses the extent to which developing country exporters benefit from these rents. Section 5 concludes.

## 2. Tariff rate quotas, import market access and quota rent

The standard analysis of TRQs assumes that the importing country is small with respect to the world market and takes account of only one source of imports, thus ignoring the possibility of the specific allocation of TRQs to particular exporters (see Figure 1). In this analysis, the unit quota rent corresponds to the difference between the in- and over-quota tariffs ( $T - t$ ), if the quota is entirely filled and there are out of quota imports (case 4). If there are no over-quota imports but the quota is entirely filled, then the unit quota rent depends on the import price (case 3). In this framework, there is no rent if the quota is not entirely filled (cases 1 and 2).

**Figure 1 - Standard TRQ diagram, from Skully (2001)**



Laroche Dupraz and Matthews (2005) extended this framework by analysing what happens when the restrictive assumptions behind the standard analysis are relaxed. In this more realistic analysis, the importing country is large, there may be several groups of suppliers characterised by different levels of exporting costs, and TRQs may or may not be specifically allocated to one or another group. They show that a variety of situations may occur, which give a better understanding of the creation of quota rent under TRQs. Figures 2 and 3 aim to gradually build up the graphical framework used to show the role of rents in this more complex analysis. Note that we assume in this analysis that the quota rent accrues to the exporting country. In practice, the division of the quota rent between the importer and exporter depends on a variety of factors, including the market structure and the manner of allocating the licences for in-quota imports.

**Figure 2 – Price formation in a tariff quota import market, no specific quota allocation**

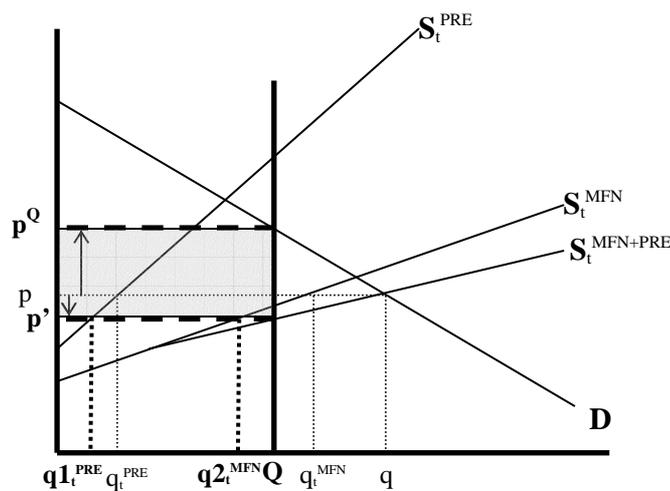
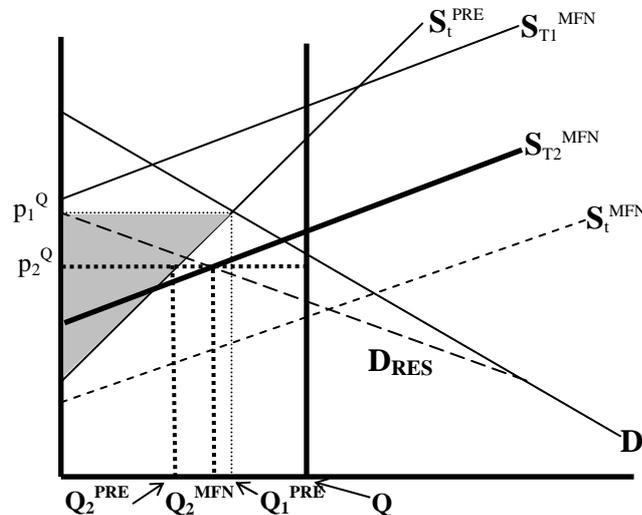


Figure 2 indicates that two groups of overseas suppliers are distinguished: import demand  $D$  faces the supply  $S_t^{MFN+PRE}$  which is the horizontal sum of  $S_t^{PRE}$  and  $S_t^{MFN}$ , the export supplies of preferred areas and other areas (subject to the most favoured country (MFN) regime),

respectively. One of them,  $S_t^{PRE}$ , is assumed relatively more high cost than the other. However, given the way the diagram is drawn, both groups supply the import market. Under a simple tariff  $t$ , total imports are  $q$ ; market shares are allocated between preferred suppliers, up to  $q_t^{PRE}$ , and MFN countries, at the level  $q_t^{MFN}$ . The world price is  $p$ .

We now introduce a global quota  $Q$ . Compared to the previous non quota situation, the world price is depressed from  $p$  to  $p'$ . If there is no specific allocation of the TRQ, both groups continue to supply the import country and the price obtained for in-quota sales is increased from  $p$  to  $p^Q$ . There is no over quota supply under the assumption that  $T$  is prohibitive for both suppliers at the import price  $p^Q$ . MFN and PRE countries do enjoy the quota rent up to their respective export quantities  $q_2^{MFN}$  and  $q_1^{PRE}$ , at the unit rent level  $(p^Q - p')$ , represented by the grey area.

**Figure 3 – Price formation in a tariff quota import market, specific quota allocation to preferred exporting countries, non binding quota**

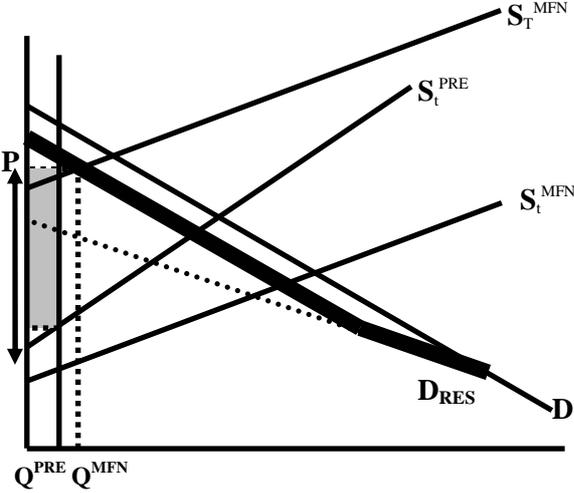


In order to guarantee a better access specifically to the preferred group, the importing country might want to open a bilateral quota. In the case of an allocated TRQ, import demand  $D$  first faces the preferred country export supply, and only the residual demand faces the MFN country export supply. Residual demand is denoted by  $D_{RES} = D - S_t^{PRE}$ . Figure 3 illustrates two alternative scenarios. In scenario (1), the over-quota tariff  $T1$  is prohibitive for MFN exporters and  $S_t^{PRE}$  is not competitive enough to fill the entire TRQ:  $Q_1^{PRE} < Q$ . Although the import price is  $p_1^Q$ , certainly higher than the world price, there is no rent for preferred exporters. They nevertheless enjoy a greater export surplus than they would without a specifically allocated TRQ, represented as the grey triangle. In scenario (2), the over-quota tariff  $T2$  is not prohibitive. MFN exporting countries are able to compete with preferred countries despite the over-quota tariff  $T > t$ . The import price  $p_2^Q$  is depressed compared to the situation without over-quota imports because  $Q_2^{PRE} < Q_1^{PRE}$ . There is no rent although there are over-quota imports. Compared to scenario (1), the export surplus of preferred countries is now smaller. This observation illustrated the risk of preference erosion for preferred suppliers in the case where the over-quota tariff  $T$  is reduced.

A third scenario is represented in Figure 4. It occurs if  $Q$  is binding for  $S_t^{PRE}$ . In this third case, preferred suppliers enjoy both export surplus and quota rent due to the specific allocation of TRQ. The residual demand curve addressed to MFN supply is drawn parallel to

total import demand when the quota is entirely filled. One can then measure the unit quota rent value for preferred suppliers if it exists. It clearly depends on the export costs of preferred exporting countries (grey rectangle) and is not exactly equal to  $(T - t)$  (black arrow).

**Figure 4 – Price formation in a tariff quota import market, specific quota allocation to preferred exporting countries, non binding quota**



Several other cases are possible depending whether the quota  $Q$  is binding or not, the MFN supply is competitive or not at tariff  $T$ , etc. But the analysis highlights the difference between quota rent enjoyed by competitive suppliers when a TRQ is binding, and preferential export surplus that can occur for preferred suppliers, with or without rent, when an allocated TRQ gives them a preferential market access to the importing country, protected from foreign competition. This analysis highlights the risk of overestimating the quota rent, if this is calculated as the unit difference between in- and over-quota tariffs  $(T - t)$ . The assessment of the economic welfare gains for exporters closely depends, first, on the price competitiveness of the exporter that enjoys the in-quota reduced tariff  $t$ . The higher price on the quota-constrained market takes the form either of a rent or of a simple export surplus gain. Second, it depends on the method of TRQ allocation. A specific bilateral allocation guarantees a welfare gain to the beneficiary, protected from international competition. These results have different implications for the negotiation positions of exporting countries in the WTO.

In the light of this enlarged framework, this article purposes an empirical investigation to look after EU implementation of agricultural TRQs upon the last years, and identify the cases where TRQs either generate rents or only assure at least an market access to less competitive countries, indeed a guaranteed export surplus due to specific allocation of TRQ.

**3. Implementation of EU agricultural TRQs, 1997-2002**

A database of EU TRQs had previously been constructed for the years 1997 to 1999 (Matthews and Laroche, 2001). This database is extended in this paper to include the available data from more recent years: 2000 to 2002. Data on the use of TRQs beyond 2002 have not yet been notified by the EU to the WTO. Of the 91 TRQs the EU notified on its WTO schedule, 87 were in force during the period analysed: 44 current access (CA), 38

minimum access (MA) and 6 non tariffed quotas.<sup>2</sup> 14 of the 44 CA TRQs are bilaterally allocated, while 18 MA TRQs include CEEC access. Although globally TRQs account for less than 10% of the total value of agricultural imports, several products, such as manioc, maize, sugar or bananas, are essentially imported into the EU through this particular instrument. Some exporting countries clearly depend on this instrument for their EU market access. CA and MA in-quota tariffs were significantly reduced between 1995 and 2000 due to URAA implementation. Note that there are TRQs not notified in the WTO schedule, such as those which are granted in the framework of EU preferential agreements with particular countries such as the African, Caribbean and Pacific (ACP) countries under the Lomé and Cotonou Agreements. Thus the quota for “ACP traditional quantities of bananas”, for example, which is similar to the EU TRQs allocated to ACP banana exporters, is not notified as such. Also, the EU has added new TRQs since then, including for example compensation to exporters hurt as a result of the latest EU enlargement. In this paper, we focus on the original 87 TRQs as these are the most important.

Each TRQ covers one or, more often, several products defined at the HS8 (Harmonized System 8 digit) tariff code level. For every notified TRQ, annual AMAD<sup>3</sup> and WTO notifications give in and out of quota tariffs, as well as fill rates. The Eurostat COMEXT external trade database gives, for each commodity defined at the HS8 level, the EU import level (volume and value) as well as the origin of imports. The constructed TRQ database provides information, for each HS8 commodity and for each origin of import, on (i) the in-quota import level, (ii) the quota fill rate, (iii) potential rent level. Because a TRQ often covers several HS8 commodities, and because also one HS8 commodity may appear in several separate TRQs, constructing the information on points (i) and (ii) of the database required the following assumptions:

- The distribution of HS8 commodity imports between several TRQs is assumed proportional to the relative size of each TRQ concerned,
- The global fill rate of a TRQ is assumed to apply to each HS8 commodity composing the TRQ,
- The distribution of import origins for each HS8 tariff line covered by a TRQ follows the global distribution of imports under that HS8 line (for example, in the case where there are over-quota imports and thus TRQ imports make up only a part of total imports under that tariff line), except if a specific allocation has been stated in the notification. In that case, the distribution of TRQ imports between origins respects first the specific allocations.

Concerning point (iii) of the database construction, i.e., the evaluation of quota rents, the previous graphical analysis highlighted the difference between what we would call the “preference margin” ( $PM = T - t$ ), which is the potential rent which would occur only if a TRQ is actually filled, and the effective rent, which depends on the relative competitiveness of export supplies on the import market. Figure 5 makes the point about each stage of rent evaluation. In our database, the potential preference margin ( $PPM = Q*(T-t)$ ), actual preference margin ( $APM = in-Q * (T-t)$ ) and potential rent ( $PR = APM$  if  $in-Q \geq 90 \% Q$ ) are

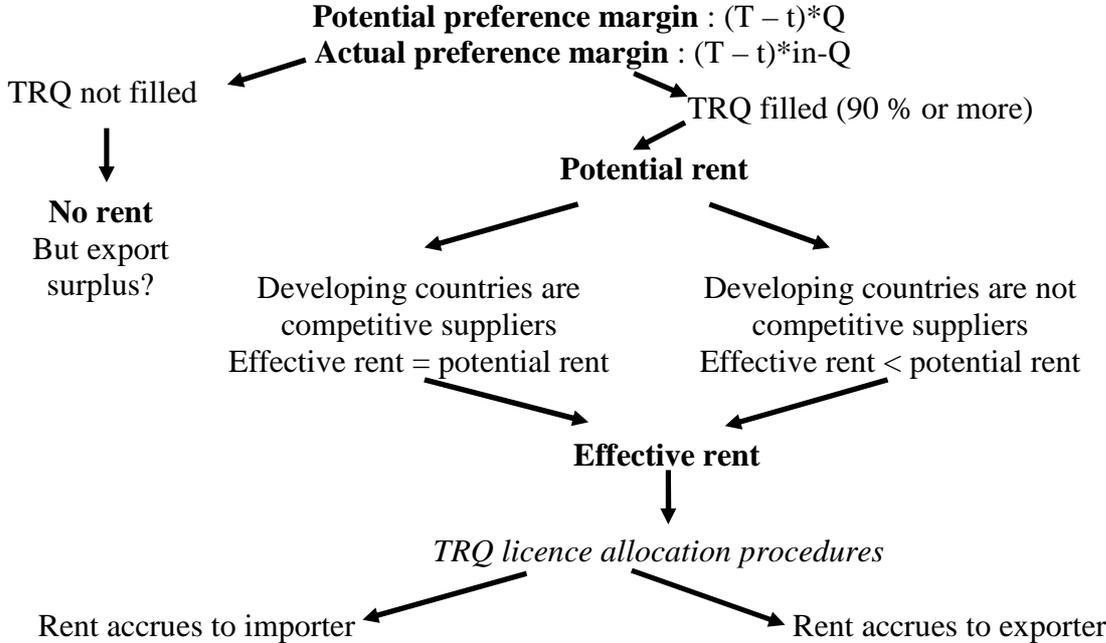
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<sup>2</sup> In this paper, all aggregated data from 1997 to 2002 do not take into account TRQ 87 (rum) because data upon this TRQ are only available for period 2000 to 2002.

<sup>3</sup> The Agricultural Market Access Database (AMAD) is a cooperative effort among Agriculture and Agri-Food Canada, EU Commission, DG Agriculture, OECD Directorate for Food, Agriculture and Fisheries, UNCTAD, TRAINS Database unit, UN FAO, Commodities and Trade Division, and USDA, Economic Research Service. to provide a common dataset on agricultural tariffs, TRQs and imports. See [www.amad.org](http://www.amad.org) for further details.

systematically calculated for each tariff line covered by a TRQ. The transformation into effective rent and its allocation between importers and exporters has not been attempted in this paper. We nevertheless begin such an evaluation in a number of case studies described in Section 4.

**Figure 5 - From the potential preference margin to the effective rent**



A further stage in building the database was to synthesise the data by regrouping HS8 results to HS4 and HS2 levels, and to aggregate exporting countries into groups (developing countries, ACP, LDCs, by regional areas...), in order to make the overall results easier to follow and to broad magnitudes of TRQ implementation effects. While results are available on an annual basis, the following tables report averages for the period 1997-2002.

Table 1 gives, for each commodity group, the relative importance of TRQ imports in total EU imports. One can observe that the share of TRQ imports in total imports is large especially for meat, dairy, sugar and fruits.

**Table 1: Relative importance of TRQ imports by commodity group in EU imports**

Average 1997-2002	total imports	of which : imports of HS8 products covered by TRQs	As per cent of total	Potential value of TRQ imports	As per cent of total imports	Actual value of TRQ imports	As per cent of total imports	ratio of actual to potential TRQ imports, i.e. fill rate
	(1) m€	(2) m€	(3) = (2) / (1) %	(4) m€	(5) = (4) / (1) %	(6) m€	(7) = (6) / (1) %	(8) = (6) / (4) %
Live animals and meat	3 069	2 198	72%	1 938	63%	1 508	49%	78%
Dairy	817	642	79%	1 212	148%	551	67%	46%
Fruit, vegetable and nuts	12 595	3 785	30%	2 340	19%	1 715	14%	73%
Tropical products	6 667	0	0%	0	0%	0	0%	na
Cereals and milling products	6 960	1 585	23%	476	7%	544	8%	114%
Oils and Oilseeds	16 022	0	0%	0	0%	0	0%	na
Sugar and sugar confectionery	2 503	883	35%	795	32%	1 150	46%	145%
Other processed foods & drink	27 847	783	3%	306	1%	195	1%	64%
<b>Total</b>	<b>76 481</b>	<b>9 876</b>	<b>13%</b>	<b>6 051</b>	<b>8%</b>	<b>5 664</b>	<b>7%</b>	<b>94%</b>

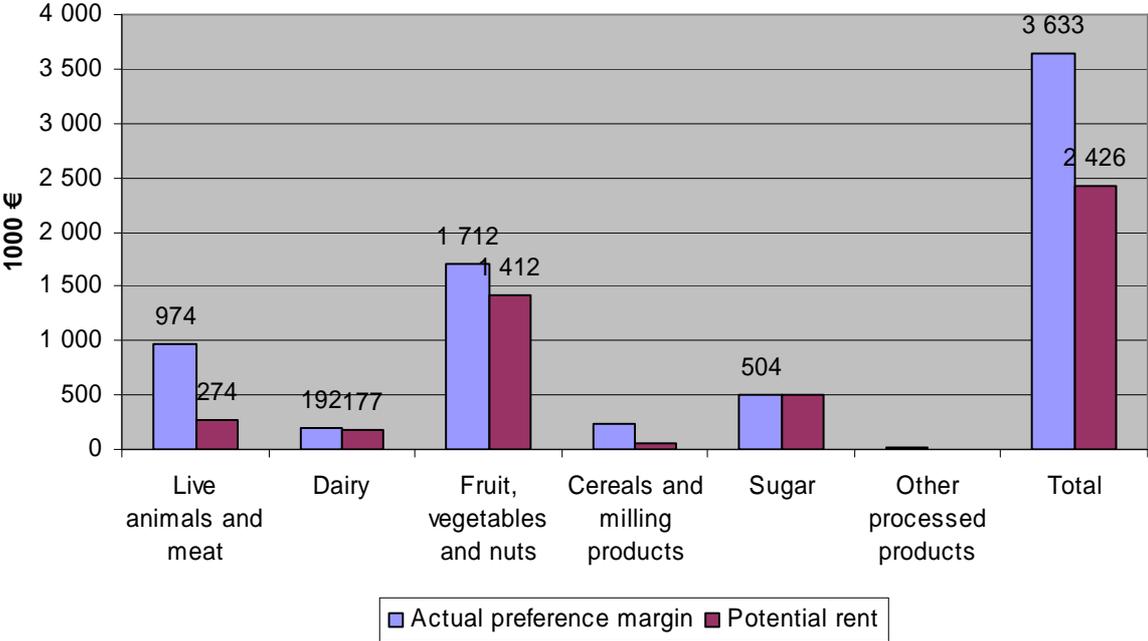
Table 2 shows, for each country group, the relative importance of TRQ imports in total EU imports. Note the significant share of TRQs in total sugar, meat and dairy imports from ACP countries and fruits and vegetable imports from Latin American and Asian countries.

**Table 2: Country group TRQ shares as a ratio of their total trade for each commodity group**

Average 1997 -2002	Live animals and meat	Dairy	Fruits, vegetables and nuts	Cereals and milling products	Sugar	Other processed foods	Total
Total	54%	56%	18%	4%	34%	0%	7%
Total LDC non ACP	1%	1%	0%	1%	61%	0%	2%
Total LDC ACP	9%	72%	0%	51%	75%	0%	4%
Total ACP non LDC	52%	33%	1%	7%	97%	0%	11%
Total non LDC Asia	5%	25%	46%	4%	2%	0%	7%
Total non LDC Latin America	62%	3%	39%	13%	32%	0%	8%
Total non LDC Maghreb , Middle Est	1%	60%	1%	1%	1%	0%	1%
Total developing countries	45%	15%	24%	11%	41%	0%	8%
Total developed or in transition countries	59%	63%	7%	2%	8%	1%	7%

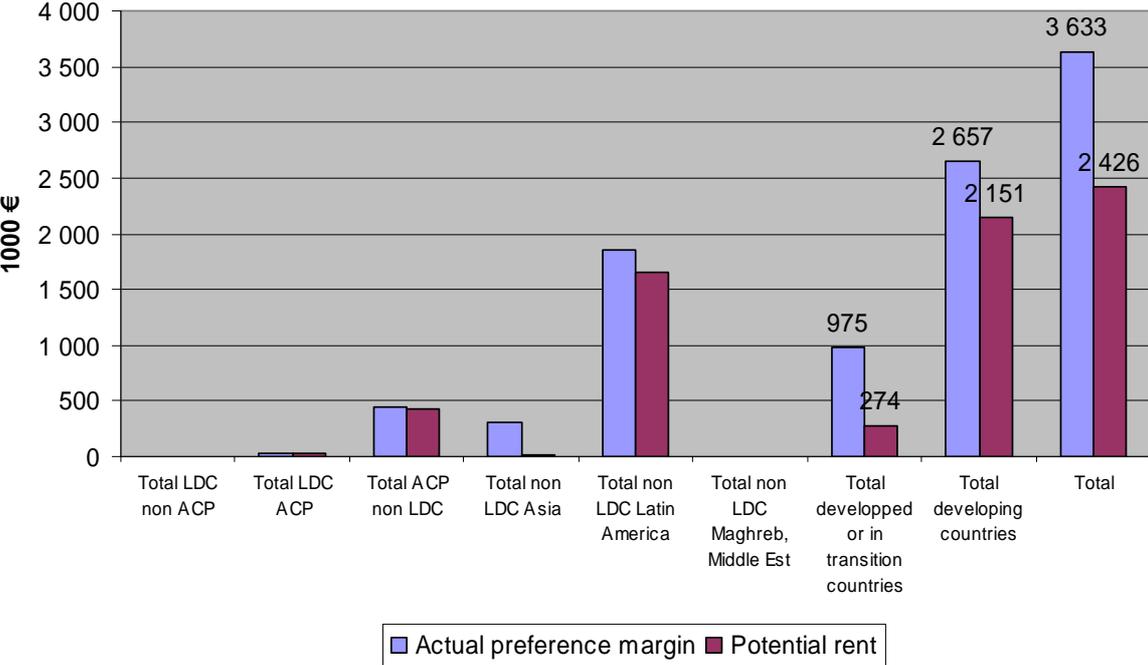
Figures 6 and 7 report the distribution of preference margin and potential rent respectively between commodities and exporting countries.

**Figure 6: Distribution of preference margin and potential rent between commodity groups, 1997-2002 average**



There is a large difference between the calculated potential preference margin (total PPM : 4.4 million euro), actual preference margin (total APM : 3.6 million euro) and the potential rent (total PR : 2.4 million euro). The potential rent is concentrated on a few commodities: essentially fruits and vegetables and sugar. Note that, for sugar, there is no significant difference between the potential rent and potential preference margin: sugar TRQs are in practice binding.

**Figure 7: Distribution of preference margin and potential rent between country groups, 1997-2002 average**



A first look at this figure indicates that virtually all of the potential rent created by TRQs accrues to developing countries (under the maintained working assumption that rent is collected by the exporting country). However the distribution of this potential rent across supplier countries is very uneven. Most potential rent accrues to Latin American and ACP countries. LDC's, while Asian and the Maghreb countries do not benefit to any significant extent from the rent created by TRQs.

The database results presented in this section give broad magnitudes of the effects of TRQs for exporting countries by country and commodity grouping. But they often hide particular commodity or exporting country situation. In Section 4 we focus on a few commodities which account for a high proportion of the potential rent, in order to elaborate, for those particular products, the consequences of TRQ implementation for developing exporting countries.

#### 4. The cases of Fruits and Vegetables and Sugar

Fruits and vegetables and sugar are the two commodity groups which account for most of the potential rent accruing from the EU's agricultural TRQs. Do these EU TRQs give effective rent to exporters?

##### 4.1. Fruits and vegetables

Disaggregating this commodity group to the more detailed HS4 level, Table 3 indicates that the main part of the fruits and vegetables preference margin comes from bananas (manioc may also be important, but the large difference between PPM and APM for code 0714 suggests that the fill rate is not sufficient to give rise to significant effective rent). In other words, although TRQs in the fruits and vegetable sector seemed, at first glance, to create an important source of rent for developing countries, in fact, only a small group of countries actually share this rent and then only for one product: bananas.

**Table 3: Distribution of TRQ preference margin between fruits and vegetables**

HS4 code	Description	Potential preference margin €m	Actual preference margin €m
0701	potatoes, fresh or chilled	0,1	0,1
0706	carrots, turnips, salad beetroot, salsify, celeriac, radishes and similar edible roots, fresh or chilled	0,0	0,0
0707	cucumbers and gherkins, fresh or chilled	0,5	0,4
0709	other vegetables, fresh or chilled (excl. Potatoes, tomatoes, alliaceous vegetables, edible brassicas, lettuce "lactuca sativa" and chicory...)	0,0	0,0
0711	vegetables provisionally preserved, e.g. by sulphur dioxide gas, in brine, in sulphur water or in other preservative solutions...	8,2	5,9
0712	dried vegetables, whole, cut, sliced, broken or in powder, but not further prepared	0,8	0,8
0714	manioc, arrowroot, salep, Jerusalem artichokes, sweet potatoes and similar roots and tubers with high starch or inulin contents...	649,8	289,3
0802	other nuts, fresh and dried, whether or not shelled or pelled (excl. Coconuts, brazil nuts and cashew nuts)	7,1	5,1
0803	<b>bananas, incl. Plantains, fresh or dried</b>	<b>1 405,8</b>	<b>1 405,8</b>
0805	citrus fruits, fresh or dried	7,6	4,6
0806	grapes, fresh or dried	0,3	0,3
0808	apples, pears and quinces, fresh	0,4	0,4
0809	apricots, cherries, peaches incl. Nectarines, plums and sloes, fresh	1,4	0,4

**Figure 8: Distribution between developing countries of potential rent accruing from fruits & vegetables and sugar TRQs, average 1997-2002**

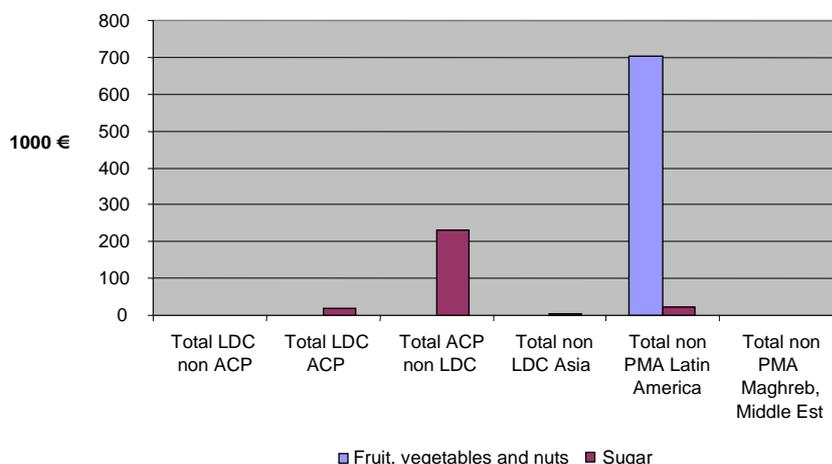
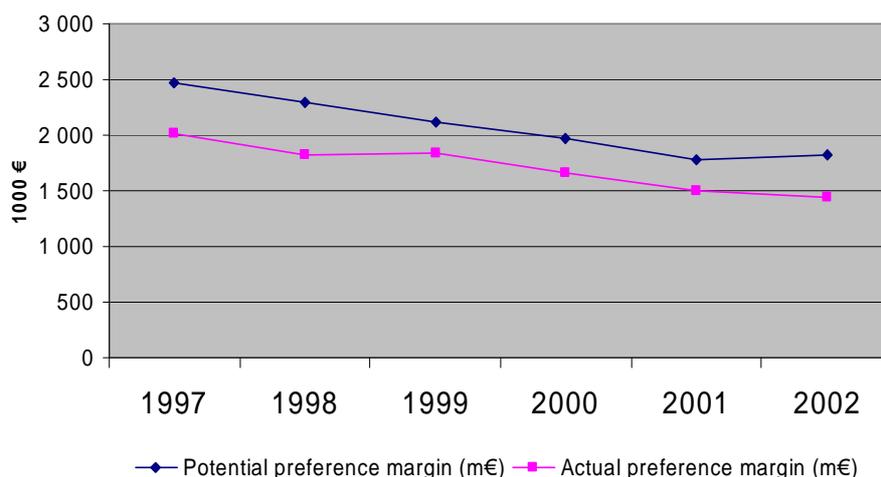


Figure 8 confirms, as observed earlier, that potential rent in the fruits and vegetables sector accrues to Latin American countries. That is consistent with the allocation rules of the bananas TRQ which is reserved for Latin American banana imports. This particular TRQ is very well known because it has been at the core of a long dispute in the WTO between EU and exporting firms of Latin American bananas, (WTO, 1997 a & b), which wanted to be sure that TRQ import licences would be allocated only to them. Various studies show that rent seeking was an important goal for banana exporting firms and countries, as attested by the active quota licences market between firms.

**Figure 9: Evolution 1997-2002 of the preference margin for Fruits and Vegetables**



The fruits and vegetables preference margin follows a negative trend over time due to the reduction in the out-of-quota tariff resulting from the implementation of the Uruguay Round Agricultural Agreement: potential rents accruing from TRQs decrease with time until 2000. For example, the banana TRQ tariff T decreased from 750 to 680 €/t, while the in-quota tariff t stayed at the 75 €/t level. A relative stabilisation may be observed in 2001 and 2002. Note that the gap between the potential and actual preference margin does not come from the

bananas TRQ which is systematically entirely filled, but from other fruits and vegetables (see Table 3). The unit quota rent in that case does not reach the value of the unit preference margin (T-t) because the out-of-quota tariff is prohibitive (no out-of-quota imports). However, the recurrent dispute at the WTO to redistribute the rent suggests that the rent level is high.

On 1 January 2006, the European Union introduced a new import regime for bananas, removing the TRQ and setting the MFN tariff equal to 176 €/t, while also applying a duty-free quota reserved for imports from ACP countries (which is comparable to the previous regime) and expanding the EBA initiative for bananas (Anania, 2006). In other word, the banana TRQ has been eliminated, and with it, the major source of agricultural TRQ potential rent for Latin American exporting countries.

#### 4.2. Sugar

Figure 8 shows that the sugar TRQs' potential rent essentially accrues to ACP countries. That is consistent with the allocation rules for these TRQs. Three TRQs are open in the sugar sector, as described in Table 4. TRQ37 (cane or beet sugar), which is the main TRQ on sugar sector, allocates 10 000 t to India, with the rest reserved for ACP countries. Note that other preferential arrangements also exist in the sugar sector which are not notified as TRQs under the WTO agreement, including the arrangement for Special Preferential Sugar which is meant to ensure that the Maximum Supply Needs of EU cane refineries can be met.

**Table 4 : TRQs notified in the EU sugar sector**

TRQ	Description	HS Code	Quantity (t)
TRQ37	Cane or beet sugar	1701	1 304 700
TRQ38	Raw cane sugar	17011110	85 463
		17011190	
		17011210	
		17011290	
		17019100	
		17019950	
TRQ39	Chemically pure fructose	17025000	4 504

This remunerative market access for ACP countries is granted as a result of bilateral trade agreements i.e., the sugar protocol of the Lomé Convention, continued by the Cotonou Agreement. This particular market access guarantees that the EU buys the specified amounts at a price related to the intervention price for EU sugar in return for an obligation to supply on the part of the ACP suppliers. But, do sugar TRQs give an effective rent to ACP countries?

**Figure 10: Evolution 1997-2002 of the preference margin for Sugar**

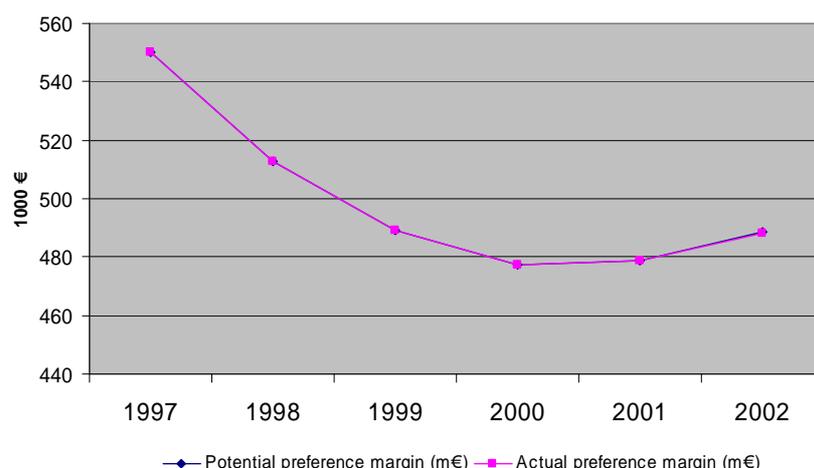


Figure 10 shows that, for sugar, the potential and actual preference margins are equal: the TRQs are entirely filled. As for fruits and vegetables, the sugar preference margin decreases from 1997 to 2000 because of out-of-quota tariff reduction. This trend is reversed in 2001 and 2002 where we observe a small increase in the preference margin. This is due to an increase in TRQ38 imports from Central European countries (Poland, Hungary, Czech Republic...) and especially of commodity 17019950 which has a higher unit preference margin compared to the other commodities of TRQ 38.

Because the sugar TRQ guarantees ACP countries a price related to the EU market price, which is significantly higher than the world market price, it might be assumed that the sugar TRQs create rents for ACP exporters, but it is also theoretically possible that ACP countries are just competitive enough to export sugar at the EU price, like  $S_t^{PRE}$  in the situation described in Figure 3. Available data about costs production let us think that there are actually very few ACP exporting countries competitive enough to enjoy quota rent : Belize, Zimbabwe are ACP low costs producers, Guyana is in an intermediate position, but production costs of other exporters like Jamaica or Barbados clearly overpass the UE entry price (see table 5).

**Table 5: Some available data about raw sugar production costs and prices, 1997-2002**

Areas		Raw sugar prices and production costs ( € / mt)
World data Average 1997-2002	World FOB price	190 to 250 according to used sources
	Low-cost producers (Australia, Brazil centre / south, Guatemala, Malawi, Zambia, Zimbabwe)	163
	Major exporters (Australia, Brazil, Colombia, Cuba, Guatemala, South Africa, Thailand)	202
	Brazil	205
Few ACP data Average 1997-1998	ACP EU in TRQ entry price	524
	Belize	305
	Guyana	422
	Jamaica	727
	Barbados	698
	Saint Kitts & Nevis	698
	Trinidad & Tobago	915

Sources: averages data taken from Nothover and Thomas (1999), Haley and Suarez (2004), EC DE Agri (2003), AGRI/63362/2004, author's database and calculations. Conversion \$ US / € using nominal annual average exchange rates, USDA 2008. Figures have to be considered with caution because they come from disparate sources, have initially been given in different units, and cover different annual series.

Since 2002, in line with the Cotonou Agreement, EU and ACP countries have begun to negotiate new Economic Partnership Agreements (EPA), in order to substitute a reciprocal and WTO-compatible trade agreement for a non-reciprocal one. The benefits of the sugar protocol are not directly threatened because the EPA negotiations require that the trade advantages for ACP countries must be protected in the new sugar regime. But the extension of the EBA initiative to the sugar sector after 2009 and the promised simplification of rules of origin may lead to the transformation of the TRQ into a simple differentiated tariff regime according to origin (MFN versus ACP or LDC countries), on the banana model. This would undoubtedly have adverse effects on some ACP sugar producers which would then face greater competition from other preferred developing countries, and particularly the least developed countries. The consequences for ACP countries will also depend on the EU market price under this new regime which will determine the future volume of exports and thus the size of any export surplus earned on those exports. Further reform of the EU sugar regime, leading to the elimination of production quotas, will require a further reduction in EU sugar prices, which will further reduce the gains which ACP now earn from the sugar TRQs.

## **5. Conclusion**

This paper presents results from the construction of a detailed database of TRQs implemented in the EU at the HS8 tariff line level from 1997 to 2002 and subsequently aggregated by countries and commodities. Combining both tariff gaps and quotas, TRQs are usually expected to procure rents to countries which export in-quota. The examination of 87 EU TRQs in place from 1997 to 2002 shows that, while the preference margin is potentially high for TRQs as a whole, the potential rent is lower. Moreover, this potential rent is mainly concentrated on bananas and sugar, because TRQs are binding for those two commodities. As a result, only a few exporting countries are able to enjoy this potential rent: Latin American countries for bananas and ACP countries for sugar.

The analysis of potential rent is only the first step in quantifying the overall importance of TRQs to developing countries. Two further steps are required to convert this into effective rent. The first step would examine the extent to which preferred exporters are competitive at world market prices. The higher the costs of production of preferred exporters relative to the world price, the lower the effective rent they enjoy, although some of this lost rent is replaced by the export surplus enjoyed on in-quota exports which would not materialise in the absence of the TRQ. The second step would examine the extent to which this effective rent is collected by the exporting country or by firms or other agents in the importing country. This is determined in part by the way in which licences for the limited volume of in-quota imports are allocated, as well as the competitive structure of the market.

Latin American exporters are highly competitive suppliers, and this trade does generate significant rents, as evidenced by the series of challenges under WTO rules to the way the EU administers the import licences for Latin American bananas. The situation for ACP sugar exporters is somewhat different. Here, the guaranteed market price paid to exporters ensures that rent, where it exists, accrues to the exporting countries. On the other hand, many ACP sugar exporters, particularly those in the Caribbean, are not competitive at world market prices and much of the benefit of the potential rent is dissipated in higher costs of production. In both cases, reform of the market regimes is likely to reduce the significance of any rents which do accrue to developing country exporters over time. Where TRQs are replaced by preferential tariff-only regimes, as in the case of bananas, there is the possibility of

maintaining preferential treatment through different levels of tariffs according to origin, removing any rent seeking behaviour of exporters. But, if the MFN tariff is subsequently decreased as a result of liberalisation agreements, this presents the risk of preference erosion for less developed countries (as happened to ACP countries in the case of bananas).

Information on the negotiating positions in the WTO Doha Development Agenda indicate that TRQs are likely to survive into the future, and may even increase in importance linked to the treatment of sensitive products in the market access pillar. For example, if the EU opts to designate a number of tariff lines as sensitive, this would require the introduction of new TRQs or the enlargement of existing ones. Early drafts of the negotiating modalities suggest that these would be opened on a global, non-discriminatory basis and would not allocate specific amounts to preferred beneficiaries. Depending on their trading position (competitive exporter versus less competitive one), the evolution of TRQ rules may have different consequences for the export markets of different groups of developing countries.

## **Glossary of Abbreviations**

ACP : African Caribbean Pacific

*TRQ notation*

AMAD : Agricultural Market Access Database

Q : Size of the quota

CEEC : Central and Eastern European Countries

t : In-quota tariff

EPA : Economic Partnership Agreements

T : Out of quota tariff

EU : European Union

APM : Actual Preference Margin

LDC : Less Developed Countries

PPM : Potential Preference Margin

TRQ : Tariff Rate Quota

HS8, HS4 : Harmonized System 8 digits, 4 digits

MFN : Most Favoured Nation

WTO : World Trade Organisation

URAA : Uruguay Round Agreement on Agriculture

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