International Conference
« Agricultural policy reform and the WTO : where are we heading ? »
Capri(Italy), June 23-26, 2003

Preferential agreements – Tariff Escalation: What are the consequences of the multilateral negotiations for the access of developing countries to the European market?

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1. Introduction

Since the last Uruguay Round (UR), developing countries have played a larger role in international negotiations, and this for two reasons in particular. Firstly two new important sectors for the economy of these countries – agriculture and textile - have been included in the field of the liberalisation, and secondly, because some developing countries, particularly in Latin America, have become larger exporters on the world market. With the new round of negotiations launched in Doha and the failure of the Seattle summit, one of the most challenging tasks was to give some meaning to trade and development linkages. The concerns of developing countries needed to be discussed in the negotiating mandates. Although Doha brought a number of new issues onto the WTO agenda (investment, competition…), market access remains one of the most important trading issues between developing and developed countries (Cernat et al. 2002).

After the conclusion of the UR, the strongest demands of developing countries in terms of market access in developed countries had less to do with the overall applied MFN tariffs on industrial products than the reduction of distortions affecting trade in agriculture and other specific products of interest for developing countries that are still subject to tariff peaks, tariff dispersion and tariff escalation. Tariff escalation, i.e. higher import duties on processed products than on their input commodities, is one of the objects of controversy between developed and developing countries. For importing developed countries, the tariff escalation implies advantageously low rates of duty on imported inputs in relation to the protection they receive against imported products competing with those they produce. The value-added of these processed products is then more rewarded. This creates an incentive for their production and raises a market access barrier. Conversely, such duties tend to prevent foreign suppliers from diversifying and moving into higher stages of processing, hence reducing their relative share of final value-added. This tariff escalation shifts the economic activity of exporting countries toward primary production and away from processing. (WTO, 1996). The need for developing countries to reduce their dependence on traditional primary product exports has often been stressed. Among the factors mentioned for this proposed shift is the deterioration in the terms-of-trade for primary commodities, the instability of primary product prices on international markets, and the increased employment opportunities associated with the production of manufactured goods. (Yeats, 1984, p. 77). Other authors (See Hecht, 1997) highlight the impact of tariff escalation on the environment, showing that a specialisation in primary products can lead to an excessive exploitation of natural resources and thus damage the environment.

Based on these arguments, the main part of the proposals made by developing countries at the Committee on Agriculture at the WTO underline - in the chapter concerning market access - the absolute

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This paper is partly based on a study made for the European commission (specific agreement N° SI2.345077, under framework contract N° Trade 2002/A2-01): J. Gallezot (2003). La progressivité tarifaire de l'UE vis-à-vis des produits agricoles et alimentaires. Analyse de la situation d'ensemble et cas des produits d'intérêt pour les pays en développement.

necessity of reducing or completely eliminating tariff escalation [2]. The US and Canada have also stated that tariff escalation ought to be reduced, but do not always specify how this is to be done. The EU, on the other hand, has not explicitly raised the issue in its requests for the negotiations, but has stated that increased access for processed products would be desirable (Burman et al, 2001). Finally, this demand is included in the first draft of modalities for the further commitments in the framework of the negotiations on Agriculture (called hereafter the "Harbinson proposal") (WTO, 2003).

Access of developing countries to the markets of developed ones and particularly of the EU occurs essentially through preferential agreements. These agreements define conditions of preferential accesses to the European market. However, they are not the object of multilateral international negotiations which concern more particularly the exchanges governed by the MFN regime. But one of the fears of developing countries concerning the forthcoming WTO negotiations is that their advantage is eroded by the tariff cuts of MFN duties.

In this context, the aim of this paper is to evaluate the conditions of access to the European market for developing countries, by taking into account both tariff escalation and preferential agreements. Numerous studies measure tariff escalation by only considering bound tariffs or, better, the MFN applied tariffs. However, the question is to determine whether these preferential agreements have transformed the structure of the protection applied to developing countries. Have they limited tariff escalation? Or, on the contrary, are the preferences applied to all primary products, reinforcing the bias of the tariff escalation?

This assessment concerns, first of all, the year 2000, in order to give a general picture of the actual access of developing countries on EU markets. Secondly, proposals made by Harbinson are simulated so as to estimate the impact on tariff escalation.

The paper is structured as follows: Section 2 analyses the link between tariff escalation and the Effective Protection Theory. Section 3 points out the methodological difficulties raised by the tariff escalation measure and presents our own methodology. The first originality of this study lies in the fact that we have measured the phenomena for all agricultural and food products by distinguishing the different commodity processing chains. Unlike other studies we have not limited our analysis to one specific food process. The second originality of our paper lies in the fact that we have measured tariff escalation by taking into account the tariffs applied by the EU, i.e. preferential and MFN applied tariffs. Section 4 presents the results concerning tariff escalation of European market access, notably for developing countries. The end of this section analyses the impacts of the Harbinson proposals for these countries that benefit from European preferential agreements.

2. Tariff Escalation Versus Effective Protection Theory

This trade policy debate, which concerns the reduction of tariff escalation, takes place in the context of the Effective Protection Theory developed initially by Corden (1966, 1971) or Balassa (1965). Indeed, they have shown that the protection granted to an industrial sector does not only depend on the tariffs applied to the imports of this sector but also on those paid on intermediate inputs; the twofold protection of the intermediate and final products having an impact on the unit value-added and therefore on the activity of transformation itself. Thus a higher tax on processed products increases the value added price and stimulates the activity of transformation in importing countries while reducing their imports of processed products. The resulting increase in the demand for intermediate input leads to an increase in the imports of this product, thus reinforcing the exporter's specialisation in primary commodities. It is this situation that developing countries denounce. They argue that the protection of developed countries for their processed products is, firstly , an obstacle to economic growth and employment in developing countries, and secondly, it increases

[2] These proposals are available on the WTO website http://www.wto.org

the latter's dependence on international markets in terms of raw materials, the prices of which are often unstable.

In order to understand whether the tariff structure results in a tariff bias against processed products, it is necessary to measure the effect on the value-added price of the importing country. This measure is that of the Effective Rate of protection whose algebraic formalisation can be presented simply by imagining, for example, the production of goods *j* by a transformation industry (Agri-food Industry) from inputs of goods *i* (agriculture). We suppose that one unit of output *j* necessitates the use of *aij* quantity of inputs *i* (*a1* units of good 1, *a2* units of good 2, etc)

With *pj*, the price of *j*, and *pi*, the price of *i*, the value-added price in free trade is:

$$pv = pj - \sum_i a_{ij}.p_i \text{ with i = 1,2…n}$$

If we apply a policy of protection: with *tj* and *ti*, the rates of nominal duties affecting goods *j* and *i*, the unit value-added becomes:

$$pv' = p_j(1+t_j) - \left[\sum_i a_{ij}\, pi.(1+t_i) \right] \text{ with 1,2…n}$$

If *cij=aij.pi/pj* is the cost share of input *i* in output *j*, we estimate, after simplification, the impact of the tarification on the activity of transformation into goods *j* which corresponds to the measure of the Effective Protection Rate:

$$EPR = \frac{pv' - pv}{pv} = \frac{tj - \sum_i cij.ti}{1 - \sum_i cij}$$

A positive rate corresponds to an increase of the price of the value-added and can be interpreted as a subsidy to the activity of transformation. Conversely, a negative rate corresponds to a tax on the activity of transformation.

The measure of effective protection has been the object of a great number of studies in applied economics (Ennew et al, 1990; Hassan et al, 1992, Greenaway, Tangermann, 1989, OECD, 1997; OMC 1996) underlining, in spite of the simplicity of the formulation, the difficulties and limits which this concept raises. Firstly, from a methodological point of view the identification of the many vertically linked production processes becomes complex when one does not deal with a simple and precise case (orange – orange juice or cocoa – chocolate, for example). Moreover the problem of the estimation of the technical transformation coefficients is raised.

Beyond these methodological constraints, from a theoretical point of view, several limits have also been discussed in economic literature. The effective rate of protection, which measures the impact on the-value added, is only based on the evaluation of tariffs. This implies that a tariff measures the divergence between prices under protection and free trade. This means that domestic and foreign products are perfect tradable substitutes; there is no quota or other restriction on imports (NTBs for example); competition among suppliers is perfect and the import country is a "small country" with no impact on the world price. In the case of some agricultural and food European markets this hypothesis is very strong; the European trade policy having effects on the global market and therefore, retrospective effects on its effective protection rate (Tangerman, 1989; Milner, 1992; Burman et al, 2001). The initial concept of ERP neglects not only the non-tradable goods used in the processing but also by-products generated by the process. Greenaway and Reed (1994) have revisited this concept introducing both types of products. Grubel and Lloyed (1971) have raised the problem of the possible substitution of the production factors and of the incidence on the fixity constraint of the transformation coefficients. Finally, other critics have underlined the limits of an estimation of the ERP in partial equilibrium. This implies that the consequences of the trade policy on the exchange rate and

the overall equilibrium are considered negligible. Neglecting this impact can indeed be a strong bias if one considers an important sector of the economy or if one aggregates the results. This might not be the case if there is only one sector or even sub-sectors (Tangerman, 1989; Burman, 2002).

In brief, estimation difficulties and theoretical limits are arguments according to which the measures of effective protection are subject to caution. However, the concept remains relevant: a tax on the output higher than a tax on inputs acts at once as a subsidy to the transformation activity and as one extra obstacle to the import of complex products. In this sense, it is possible to bypass the constraints of estimation of the effective protection by considering more simply the various situations of tariff escalation existing between intermediate goods used in the production and the processed product. It is then necessary to compare the level of nominal protection between inputs and outputs within the same production chain without taking into account the transformation coefficients. One can then show that simply analysing the hierarchy of duties within production chains gives liable information on the sign of the effective rate of protection, but obviously not on the intensity of the protection.

For simplification purposes, let us consider the case of one output (j) produced with only one input (i):

The Effective rate of Protection is $ERP = \frac{tj - cij.ti}{1 - cij}$ with $0 < c_{ij} < 1$, while the tariff escalation is measured from the tariff wedge between the input and the output $TW = tj - ti$

When the processed product is more protected than the input (TW> 0) then, $ERP > t_j > t_i > 0$

A higher protection on the processed product than on the input corresponds to a subsidy to the transformation activity. In this case, the effective rate of protection is necessarily positive and superior to that of the tariff applied to the processed product (j).

If the processed product and the input are equally protected (TW=0), then $ERP = t_j = t_i > 0$. Thus, even in the absence of tariff escalation, granting equal protection to both products comes down to subsidising the transformation activity.

However, if the input is more protected than the transformed product (TW< 0), one cannot systematically determine the sign of the ERP. A degression of duties can correspond to either a positive, nil or negative ERP. The ERP will be positive if and only if tj/ti>cij. In other cases, the ERP will be negative or nil. Finally, when tj=0, not only is the activity of transformation not protected but the protection on the intermediate product acts as a tax on production and corresponds to a case of negative effective protection.

It appears, therefore, that an effective protection of the production process does not merely result from a situation of tariff escalation. But, conversely, a situation of tariff escalation definitely reveals an effective protection of the activity of transformation. Lastly, in the perspective of the next negociations where it is assumed that all the tariffs will be reduced, a decrease of the effective protection will be surely obtained if the tariff reduction on processed products is higher or equal than on raw products. In the contrary, the sign of the variation of the effective protection is either positive or depends on the cost share of the input in the price of the output (Table 1).

TABLE 1: The impact of a tariff reduction on the effective protection of one sector. dtj<0 and dti.< 0

	$t^0_j > t^0_i$	$t^0_j = t^0_i$	$t^0_j < t^0_i$
$dt_j < dt_i < 0 \Leftrightarrow dTW < 0$ (*) The tariff reduction on processed product is higher than on raw product	Initial situation: tariff escalation and effective protection. Final situation: reduction of tariff escalation and effective protection	Initial situation: No tariff escalation but effective protection . Final situation: $t^1_j < t^1_i$. Reduction of the effective protection. However, a situation of effective de-protection can be created, depending on the cost share of the input in the price of the output.	Initial situation: tariff de-escalation and sign of the effective rate of protection depending on the cost share of the input in the price of the output Final situation: amplification of the phenomenon of tariff de-escalation and reduction of ERP (dERP <0).
$\lvert dt_j \rvert = \lvert dt_i \rvert \Leftrightarrow dTW = 0$	Initial situation: tariff escalation and effective protection Final situation: Maintenance of the tariff escalation but reduction of the effective protection of dti	Initial situation: no tariff escalation but effective protection Final situation: no tariff escalation and reduction of effective protection of dti	Initial situation: tariff de-escalation and sign of the effective rate of protection depending on the cost share of the input in the price of the output Final situation: the tariff de-escalation remains and reduction of ERP of dti
$dt_i < dt_j < 0 \Leftrightarrow dTW > 0$ The tariff reduction on processed product is smaller than on raw product	Initial situation: tariff escalation and effective protection Final situation: amplification of tariff escalation. dERP >0	Initial situation: no tariff escalation but effective protection Final situation: $t^1_j > t^1_i$. The effective rate of protection is still positive	Initial situation: tariff de-escalation and the sign of the effective rate of protection depends on the cost share of the input in the price of the output Final situation: The sign of the ERP depends on the cost share of the input in the price of the output.

(*)The variation of the tariff escalation and of the effective protection between two periods 0 and 1 is written:

$dTW = TW^1 - TW^0 = (t^1_j - t^1_i) - (t^0_j - t^0_i) = dt_j - dt_i$ and $dERP = ERP^1 - ERP^0 = \frac{(t^1_j - t^0_j) - cij.(t^1_i - t^0_i)}{1 - cij} = \frac{dtj - cij.dti}{1 - cij} avec\ 0 < cij < 1$

3. Methodological Issues

Examining the progressivity of duties makes it possible to categorise the effective protection by bypassing the constraints related to its estimation and in particular the problem of obtaining the value of the technical transformation coefficient . However, this approach necessitates that two essential methodological stages be solved: firstly identifying the production processes and therefore determining, from the customs nomenclature, which inputs are included in the manufacturing of the processed products, and secondly the analysis and processing of the customs tarification. In the context of this article, this latter stage is all the more important as we are discussing access of developing countries to the European market: this requires that we take into account all preferential agreements that the EU has signed with its partners. For each stage, we will start by presenting the approach followed in other recent studies concerning tariff escalation. We will then present our own approach. Five recent studies will be used as reference for our discussion: that of the World Bank (Amaji et al, 1996), the WTO (1996), the OECD (1999), the FAO (Lindland, 1997) and a more recent study by the Swedish Board of Agriculture (Burman et al, 2001). With the exception of the World Bank study, these studies have all analysed the impact of the last round of international negotiations at the WTO (the URAA) on the question of tariff escalation, Amaji et al's analysis concentrating more particularly on the measure of access to the European market of Sub-Saharan African countries.

3.1 The Identification of the Commodity Processing Chains and the Product Uses.

Determining the processes of production is a crucial and delicate stage for the analysis of tariff escalation. The division of the customs nomenclature into chapters – whether it be the Combined Nomenclature (CN8 digit level) used in the European trade database (COMEXT) or the SITC nomenclature – enables one to distinguish the level of transformation of the products but does not enable us to determine the vertical relation between the products because there is no information about the product use.

There are no official method, nor any real consensus that would help determine which list of products are used in the manufacturing of a processed product. The studies carried out by the WTO (1996) or the OECD (1999), which measure the tariff escalation applied on the market of approximately thirty countries and for all products, including agricultural and Agri-food products, remain at a highly aggregated level by distinguishing three stages of transformation (raw products, semi-processed and fully processed products). The OECD also concentrates on a few products (eight for agriculture including cocoa, soya, cotton, coffee…). A selection of individual product pairs was then made for each of the three processing stages in order to identify nominal tariff escalation between them.

The FAO study is based on the FAOSTAT classification system which provides input-ouptput relationships. The study comprises 226 processed commodities, that is 377 commodity pairs. A pair representing the processing relation between one input commodity and one output commodity, like Grapes-Grape Juice, Wheat –Wheat flour, Olives – Olive Oil…. The study carried out by the Swedish Board of Agriculture uses this method: determining tariff escalation at the level of product "pairs". They distinguish 26 product pairs at an eight-digit level. For a few products more than two processing stages are taken into account (durum wheat – durum wheat flour – pasta without eggs for example). Finally the work of Amaji et al (1996) also measures tariff escalation at primary product level, using a processing chain scheme developed by the World Bank to analyze the structure of European tariffs on 19 primary commodities exported by Africa.

One objective of this study is to cover all agricultural and agri-food products. We have chosen to measure tariff escalation, not for pairs of products but at a more aggregated level, by distinguishing three stages of transformation per commodity processing chain, while taking into account the vertical relation between the products. For this purpose, we have re-classified the first 24 chapters of the CN8-digit nomenclature (i.e. all agricultural and agri-food products) by combining two approaches:

The first approach is based on the works by the United Nation's Statistical office which has made a classification based on broad economic categories (BEC). Five uses are defined for agricultural and agri-food products (United Nations, 1989):

Intermediate goods:

- Primary agricultural products mainly for agro-food industry (AIP)
- Food processed products mainly for agro-food industry (PIP)
- Other intermediate products (OIP): Primary and processed industrial supplies for non agro-food industry (seeds, products for the textile industry, pharmaceuticals, etc. or by-products for pharmaceuticals)

Consumer goods:

- Primary agricultural products, mainly for household consumption (AFP)
- Processed food and beverages, mainly for household consumption (PFP).

Although the product use is known, the relationship between commodities is still unknown and it is still not possible to take related markets into account.

The second approach is based on the technological diagrams used in agri-food production. Thus, in collaboration with INRA technologists, and using the combined nomenclature, we have built chains of products in order to classify the product according to its production process. Nine groups were distinguished:

cereals, fruits & vegetables, dairy products, meat, beverages, sugar, oil products, condiments and other products[3].

Combining these two classifications enables us to group the products into productive categories (primary goods, intermediate goods, processed goods) while making sure - thanks to the technological diagrams- that the transformation relations between the groups of identified products are vertical. Tariff escalation is then analysed for productive categories vertically related only; i.e the relation between intermediate agricultural products (AIP) – processed intermediate products (PIP) and processed products assigned to final consumption (PFP) in each processing chain.

3.2. Analysis of the Tarification

This second stage is also important and the way it is analysed depends on the objective that one wishes to reach. The three studies of the FAO, the WTO or the OECD aiming to analyse the impact of the UR on tariff escalation, the base and bound tariffs as specified in the UR schedules of each country covered have been used. As Burman et al noted, one advantage of using bound tariffs is that it provides a measure of the degree of tariff escalation the members have negotiated. However, one of the problems related to the use of bound tariffs is that the tariffs actually applied are often considerably lower. Therefore these applied tariffs better reflect actual tariff escalation and Burman et al's analysis is based on this measure of the tarification. However, the authors rightly stress that their analysis does not take into account all tariff regimes of the EU. They limited their study to the MFN tariffs only. Because they analyse relations between the EU and the countries of Sub-Saharan Africa, Amaji et al not only take into account the duties applied in the context of the MFN regime but also those granted by the EU in the context of preferential agreements. However, when measuring the ad-valorem equivalent, they do not take into account all the specific measures of the applied tariffs

We have chosen to take into account all preferential agreements signed by the EU with its partners. This implies that we base ourselves on the tarification applied by the EU and not on the commitments made by the EU at the WTO. This requires an important methodological detour so that we obtain a precise measure of the protection applied by the EU vis a vis each of its partners. In order to simplify the presentation of the technical aspects of the tarification we shall only insist here on the most problematic elements: the treatment of the applied duty, i.e the passage from applied duty to nominal duty[4], and the definition of the group of countries according to preferential regimes.

Analysis of the Applied Duty. The main source used to analyse customs duties of the EU is the TARIC database[4] (Common Customs Tariff of the European Community) of the Directorate General for Taxation and the Customs Union (European Commission). As a complement and back up of this source, we have used the Official Journal of the European Community (for instance C102 A, C102B and annexes). These regulation documents constitute what is called the "applied duty"[5]. Indeed it is the legal basis on which the duty is applied by the customs.

Each tariff measure[6] indicates the characteristics, conditions and the amount of the duty to be applied and a period of validity, which is indicated by one start date of the regulation and one end date. The validity of these periods of application of duty can vary from one week to several months.

[3] The fishery products chain has not been considered because it is not included in the WTO agreements. This does not mean that the problems related to tariff escalation are not raised. See Burman et al's study for an analysis of this sector (2001).

[4] The applied duty is the legal basis on which the duty is applied by Customs services. The nominal duty or nominal rate is the ad-valorem conversion of the applied duty.

[4] It is a database relating tariff and non tariff regulations, the measures and application rules. This database is used as a reference system and as permanent updating of the rules for the customs services of the member states (for more detail see the Official Journal of the European Community L256/01/1999).

[5] Applied duty or formal duty (Corden, 1971, p.9).

[6] The tariff measure is a component of the customs regulation. The tariff measures that are the most used tariff applied to all WTO members (MFN rates and MFN in-quota rates),), preferential tariffs and preferential in-quota rates. In fact, there are

Furthermore, the product nomenclature used for the tarification is much more detailed than that used for the exchanges. It is defined at 10 or even 14 digits (the 8 digits of the combined nomenclature + the 2 digits of the TARIC + the 4 digits of the additional codes in some cases). The tariff regulation enables us to distinguish, for the year 2000, 4290 agricultural and agri-food "products" against only 2333 with the combined nomenclature used for trade. The detail of this tariff nomenclature makes it possible to introduce differentiated duties according to the quality of the products.

Because we adopted the year as a unit of time and the 8-digit nomenclature for the products – so as to be able to relate tariffs and exchanges - it was necessary to aggregate the basic tariff information. For this purpose, we have simply calculated arithmetic averages of the different components of duties.

From Applied to Nominal Duty. In its simplest form, the customs duty is indicated as a percentage of the price of the product at the time of customs clearance. However, for certain products and in particular for agricultural and agri-food products, the duty can be specific (amount in Euros per unit of measure – 100kg, tons, number of items, etc…) or even complex, by combining an ad-valorem part and one or several distinct, specific elements (agricultural elements, additive duty , etc…).

The conditions of comparison or aggregation of duties in the presence of specific and ad-valorem duties requires an homogeneous conversion into ad-valorem equivalent (% of the price). This indicator has the following form:

$$ad\text{ - }valorem\,equivalent\,[\%] = t = tariff\ \ [\%] + \left(\frac{specific\ measures}{price} \right)$$

The conversion of the applied duty into an ad-valorem equivalent constitutes the nominal duty or rate which depends on the components of the applied duty but also on the adopted price. Thus, if the price of the product is reduced, for example, the nominal rate (t) increases because a reduction of the price has no effect on the ad-valorem part of the duty, but increases the specific part.

In order to overcome this difficulty, several solutions – all with their share of bias – have been proposed in literature: using the world price, using the current unit values as a *proxy* of the border CIF prices or even an average of the later on several periods of time. Using the world price can be justified theoretically but it implies a hypothesis of homogeneity of the products and of perfect competition which loses its validity if we suppose that the products are differentiated according to their origin (Armington, 1969). On the other hand, the current unit value which is not a price but an approximation of a price, raises statistical problems (sources, high variability…). We have chosen to use the current unit value for each year from the statistics of the COMEXT database, by calculating the average of these unit values on tri-annual periods.

Grouping of Countries per Relevant Preferential Agreement. Taking into account the preferential agreements is a delicate exercise because of the many agreements passed by the EU with its partners – some countries have signed several agreements, and for one same agreement, all agricultural and agri-food products are not necessarily included in it. Thus, imports from a country included in a preferential regime will take place at the preferential rate for the beneficiary products, or at the MFN rate for the products that are not covered by the agreement. Panagariya (1999) rightly calls this complexity of the European preferential agreements, a « Spaghetti bowl ».

In the context of this article, the objective of which is to measure the tariff escalation applied by the EU to its partners, we must take into account the complete tarification applied by the EU. Thus, the average protection calculated per tariff regime in the rest of this article is not the average preferential tariff (which excludes the products that are not included in the agreement) but the average protection applied to the countries benefiting from the agreement. This breaking up of the regulation per signatory country also makes

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approximately fifty tariff measures: tariff suspension, preferential suspension, anti-dumping duty, prohibition, temporary exclusion, etc…

it possible to introduce elements relative to exchanges and to make homogeneous groups of preferential agreements. In order to facilitate the analysis, four zones of preference have been taken into account : « ACP countries (excl. LDCs)" (Africa - Caribbean-Pacific countries) , « GSP » (General System of Preferences), LDCs (Least Developed Countries) », « other preferences ». The Least Developed Countries are part of an intermediary category that the United Nations have defined by taking into account the main economic characteristics of these countries. Lastly, the countries benefiting from bilateral agreements have been grouped into the « other preferences » category.

4. The Findings

4.1. European Imports of Agricultural and Food Products

In the year 2000, 77% of agricultural and food products imported by the EU originated from countries benefiting from a preference (Table 2) and this proportion has been increasing since 1997 (74%). As a result the imports originating from countries that are not members of any preferential system, and are therefore subject to the MFN regime only, are decreasing, as well as their part of total imports (26% in 1997 and 23% in 2000). However, just under half (36%/77%) the imports of the EU originating from countries that have signed a preferential agreement are concerned by the preferential regime; for these countries, the other 41% of imports are carried out in the conditions of multilateral agreements (MFN). All in all the framework of multilateral agreements represents 64% of agricultural and food imports of the EU, in 2000.

TABLE 2: Evolution of agricultural and food imports by the EU per tariff regime. Imports in 1000 €

Tariff Regimes	MFN		Preferential Agreements				Total	
			MFN Tariff		Pref. Tariff			
1997	12624396	26%	19328131	40%	16241870	34%	48194397	100%
1998	12149765	25%	18618404	38%	17597536	36%	48365705	100%
1999	11821191	25%	18580860	39%	17247501	36%	47649553	100%
2000	11599325	23%	21278850	41%	18742892	36%	51621066	100%

Sources : TARIC (Taxation and Customs Union DG), Taragro (INRA), Eurostat (COMEXT). *First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish)*

The above distribution of exchanges per tariff regime can be detailed further by introducing the results for each group of preferences (Table 3). The imports originating from members of the system of generalised preferences represent in the year 2000 almost 45 % of the imports by the EU, far ahead of the nations benefiting from bilateral agreements (« other preferences ») or from the « ACP outside LDCs » or LDC agreements. However the exchanges that were really affected by a preferential system only represented one quarter of the European imports originating from countries that had signed SGP agreements, whereas almost all exchanges with the countries of the ACP or LDC agreements benefit from a preference.

TABLE 3: Distribution of agricultural and food imports by the EU according the tariff regime. Year 2000. Imports in 1000€

Tariff Regimes	MFN	Preferential Agreements		Total	(%)
		MFN Tariff	Pref. Tariff		
Other pref.		2642860	7835250	10478110	*20,3%*
ACP		50595	5103610	5154205	*10,0%*
LDCs		74663	1236987	1311650	*2,5%*
GSP		18510733	4567045	23077778	*44,7%*
MFN	11599325				*22,5%*
Total	11599325	21278850	18742892	11599325	*100,0%*
	22,5%	*41,2%*	*36,3%*	*100,0%*	

Sources : TARIC (Taxation and Customs Union DG), Taragro (INRA), Eurostat (COMEXT)
Developing countries are grouped in the following preferential agreements : ACP, LDCs, GSP and other preferences. *First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish)*

Finally, if one considers all processes of transformation (Table 4), the structure of exchanges in the year 2000 reveals the importance of imports of primary commodities destined to final consumption – AFP- (28%) and of intermediate agricultural goods – AIP – (23%). However, between 1997 and the year 2000 the European market appears to have been more open to processed products (PFP) : PFP imports represent 15.7% of the total imports in 1997 and 20% in the year 2000. At the same time the part of imports of non-processed intermediate products has clearly dropped. They represent 28.6% of the total imports in 1997 and 23% in the year 2000.

TABLE 4 : Agricultural and food imports by the EU per production process. Imports in 1000 €

Product use	1997	(%)	1998	(%)	1999	(%)	2000	(%)
AIP	13771606	28,6	13398381	27,7	11758440	24,7	11959722	23
PIP	4254546	8,8	4885227	10,1	4751637	10	4733328	9,2
PFP	7580839	15,7	8129440	16,8	9070083	19	10194478	20
AFP	13115991	27,2	12866316	26,6	13375148	28,1	14393618	28
OIP	9471416	19,7	9086341	18,9	8694245	18	10339921	21,5
Total	48194397	100%	48365705	100%	47649553	100%	51621066	100%

Sources : own calculations from TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat)
First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish). AIP : Intermediate Agricultural Products- PIP : Processed intermediate Products, PFP : Processed final products – AFP : Agricultural Final Products – OIP : Other Intermediate products

This distribution of exchanges according to the level of transformation of the products and their use reflects to some extent the specialisation between developed and developing countries (Table 5). Thus in the year 2000 the EU essentially imported basic agricultural products (62.5% of its extra-EU imports) and exported processed products (68.6% of its extra-EU exports). This inverted structure is essentially characteristic of the exchanges of the EU with developing countries, the Least Developed Countries and the members of the GSP agreements in particular. The question is whether or not a tariff escalation supports this exchange structure.

TABLE 5: Distribution of EU imports and exports per tariff zone according to the level of transformation of the products (in %). Year 2000

	Distribution of EU imports			Distribution of EU exports		
	Raw Products	Processed Products	TOTAL	Raw Product	Processed Products	TOTAL
ACP	58,15	41,85	100%	20,06	79,94	100%
Other preferences	52,05	47,95	100%	42,04	57,96	100%
LDCs	61,98	38,03	100%	25,21	74,79	100%
GSP	70,94	29,07	100%	34,26	65,74	100%
MFN	57,22	42,78	100%	23,03	76,97	100%
Total	***62,55***	***37,44***	***100***%	***31,41***	***68,59***	***100***%

Sources : TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat) Raw Products=AIP+AFP+Primary OIP, Processed Products = PIP+PFP+processed OIP *First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish)*

4.2. Tariff Escalation on the European Market Access

The analysis of nominal duties is based on the European customs regulation applied vis a vis its partners for all agricultural and food products (see section 3). The originality of this approach is that it considers the protection of the EU for each country and for each product, i.e. for the products benefiting from a tariff preference and those that do not. This enables us to make a rigorous comparison between the European multilateral tariff policy and that applied to the countries benefiting from a preference. Thus, for agricultural and food products, the average protection of the EU applied in the framework of the MFN regime is 20.7% in the year 2000. It is much lower for the countries that have signed preferential agreements. Access to the European market is highly facilitated for ACP countries (the average protection is only 5.7%) and for those of other preferential agreements (2.7%). However, only 26% of exports from GSP countries to the EU benefit from a preference and the European protection remains high (17.9%) inasmuch as a great number of products do not fall under these agreements.

The progressivity of duties (Table 6) estimated from the nominal protection reveals the existence in the year 2000 of an effective protection in the context of multilateral agreements (MFN) in all agri-food chains, but this effective protection does not necessarily play with the same intensity at all stages of the processes of the transformation :

- The « cereal, meat, sugar » production chains are subject to an effective protection that is applied to the final processed good (at the end of the transformation process).
- The effective protection is applied at the first stages of the transformation processes in the « milk, beverage, tobacco-tea-chocolate » production chain.
- Lastly, only the « Fruit, vegetable and oil products » production chains are protected (during the year 2000) at all stages of the transformation process.

The analysis, for the countries that benefit from the GSP agreement reveals several elements. The first element concerns the intensity of the preferences themselves. Unlike other preferential agreements, these preferences are relatively limited ; the highest preferential margins (that is the gap between the MFN rate and the preferential rate) observed in the fruit and vegetable production chain are only 7 points compared to margins of approximately 46 points allocated to the ACP countries for dairy products. It should also be noted that most preferences concern processed products[7]. It appears, therefore, that for the production chains and transformation processes of the countries benefiting from the GSP agreements, the situations of tariff escalation observed in the MFN regime are maintained, but reduced by the existence of preferences on processed products. This is especially the case of the « fruit and vegetable » production chain for which the progressivity's intensity[8] is lesser for these countries.

The importance of the preferences granted by the EU to the ACP countries leads to relatively low levels of applied tariffs.. This protection is below 10% for all commodities except for dairy products and non-processed meat. This preferential advantage, which is applied to all links of the chains, also makes it possible to reduce the quasi-totality of the tariff escalation observed in the context of multilateral agreements. Thus, for both coffee-cocoa-tea and fruit and vegetable production chains – the main sources of exports to the EU for these countries (62% of their sales to the EU) - the preferences reduce the European protection to rates below 2% and cancels the tariff escalation observed in the framework of the MFN regime. However, an effective protection at the first stage of transformation (AIP-PIP) remains in the « cereal », « milk », « beverage » production chains and at the last stage of production of the « sugar » and « beverage » production chains.

[7] If this is also the case for other agreements, this pattern is reinforced for the GSP agreements where only 38 products benefit from a preference against 134 for the ACP.

[8] A rough estimation of the intensity can be made thanks to the importance of the difference between the duties on input and duties on output.

The « other preferences » (bilateral agreements) group of countries also is little affected by the progressivity of duties with the exception, however, of the last stages of transformation in the « cereal », « sugar », « milk » and « oil products » production chains and the second stage of the « tobacco-tea-chocolate » production chain.

TABLE 6: Nominal progressivity vis a vis countries per preferential zone, in the year 2000.

	MFN		ACP		GSP		Other preferences	
	Non-weighted duty	Prog	Non-weighted duty	Prog.	Non-weighted duty	Prog.	Non-weighted duty	Prog.
Cereal								
AIP	24		6,3		23,8		0,2	
PIP	21,7		11,7	+	21,5		1,4	+
PFP	27,9	+	12		24,2	+	14,9	+
Fruit&veg								
AIP	7,2		0,8		5,6		0,2	
PIP	19,4	+	0,4		11,6	+	1,5	+
PFP	20,9	+	0,9		13	+	2,6	+
Meat								
AIP	34,2		16,7		34		7,3	
PIP	16,5		5,5		15,2		0,3	
PFP	26,8	+	4,6		23,9	+	1,1	+
Dairy Products								
AIP	40,7		22		40,7		6,5	
PIP	78,1	+	32,3	+	78,1	+	0,5	
PFP	41		8,3		40,5		4,8	+
Sugar								
AIP	22,5		11,7		21,7		3,5	
PIP	15,8		3		15,6		0,9	
PFP	23,8	+	8,8	+	21,5	+	12,3	+
Oil products								
AIP	1,9		0		1,7		0	
PIP	9,8	+	0		6,2	+	1	+
PFP	21,9	+	1,1	+	18,5	+	6,1	+
Beverages								
AIP	7,8		0		6,6		0,7	
PIP	22,1	+	3,5	+	18,6	+	3,6	+
PFP	18,7		5,5	+	14,8		4,1	+
Tab,Tea,Choc								
AIP	1,9		0		1,3		0	
PIP	16	+	1,7	+	13,3	+	9,8	+
PFP	14,1		1,1		9,4		4	
Others								
AIP	0		0		0		0	
PIP	13,4	+	1,8	+	8,6	+	3,8	+
PFP	16,2	+	0		4,7		1,5	

Sources : own calculations from TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat)
First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish). AIP : Intermediate Agricultural Products- PIP : Processed intermediate Products, PFP : Processed final products.

Estimating the protection with the arithmetic average of duties has, however, the drawback of granting the same importance to the tariff of each product whether or not they are the object of intense exchange. In order to counterbalance this drawback, it is common in the empirical literature to weight the tariffs by the level of imports. However, this solution presents an endogeneity bias because the level of imports also depends on the importance of the tariff protection. Indeed, this type of measure takes no account of the products that are subject to a high protection rate and which, as a consequence could penetrate the European market in the absence of exchange barriers. Both measures are therefore complementary: the

first one provides a wider view of the state of the protection applied by the EU to its partners; the second takes into account the current state of exchanges.

In the case of the European protection, the weighted average is, in 2000, often above the arithmetic average (Table 7). This is especially true vis a vis countries of the GSP for the "cereal" or fruit and vegetable production chains. This situation can be explained by the fact that most imported products are highly taxed goods, most often excluded from preferential agreements. Thus, for these production chains, when there is tariff escalation, it is amplified in relation to the non-weighted measure. Conversely, in the "meat", "oil products" and "tobacco-tea-chocolate" production chains, the weight of imports of products benefiting from preferences is higher, thus reducing the importance of the tariff escalation.

TABLE 7: Progressivity of duties vis a vis the countries in preferential zones, weighted by imports in the year 2000.

	ACP			GSP			Other preferences		
	Imports (1000€)	Weighted duty	Prog	Imports (1000€)	Weighted duty	Prog	Imports (1000€)	Weighted duty	prog
Cereal									
AIP	39506	13,8		835270	27,5		223867	3,3	
PIP	1550	21,7	+	15496	42,9	+	43699	47,3	+
PFP	8716	17,2		119603	28,3		243564	19,8	
Fruit&veg									
AIP	10622	0,5		352739	9,5		31866	1,1	
PIP	1501	0		225206	9,4		369338	3,5	+
PFP	78113	0		773617	22,9	+	477690	8,1	+
Meat									
AIP	0	0		8619	8,5		258007	18,9	
PIP	121	0		23262	2,4		3029	5,5	
PFP	3925	0		483398	14,1	+	162877	6,7	+
Dairy Products									
AIP	0			0			2964	79,4	
PIP	2304	35,4	+	38588	89,2	+	91191	7,7	
PFP	0	5,8		8322	46,2		346053	3,6	
Sugar									
AIP	996	0,4		3180	0,6		139	20,8	
PIP	758244	0		154259	22	+	134087	3,5	
PFP	32911	0,1		50975	23,1	+	106898	19,6	+
Oil products									
AIP	23744	0		1935108	0		185992	0	
PIP	26206	0		506226	6,5	+	14062	4,9	+
PFP	1095	0		11498	7,3	+	245563	6,3	+
Beverages									
AIP	0			2962	15,8		25532	11,3	
PIP	7906	0		798458	14		49410	3,9	
PFP	379600	0		811302	9,2		1079255	4	+
Tab,Tea,Choc									
AIP	1516241	0		3133211	0,3		111332	0	
PIP	262231	0,2		12337	6,6	+	27204	11,4	+
PFP	252685	1	+	910044	3,8		446473	10,6	
Others									
AIP	5609	0		1183	0		2980	0	
PIP	4741	14,1	+	40034	15	+	217555	11,6	+
PFP	78959	0		241185	11,9		315119	2,1	

Sources : own calculations from TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat)
First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish). AIP : Intermediate Agricultural Products- PIP : Processed intermediate Products, PFP : Processed final products.

For the members of the ACP agreements, exchanges concern the products that are the least taxed (except for cereals) and that benefit from a preference. Thus, the weighted progressivity is low with the exception, however, of the first stage of transformation of the "milk" production chain, but which concerns a

relatively small volume of imports. The two most important production chains, from the point of view of imports, are that of "sugar", in particular in processed intermediate goods (22% of ACP imports in the year 2000), and that " tobacco-tea-chocolate" in primary agricultural products (43% of ACP imports in the year 2000). They are not affected by the tariff escalation. Conversely, for the first stage of cereal processing, progressivity is more significant, again highlighting the weight of imports excluded from preferential agreements.

The group of countries benefiting from bilateral agreements ("other preferences") is, unlike what is observed in the non-weighted estimation, strongly marked by effective protection. In this case there exist important imports on tariff lines excluded from agreements[9]. The progressivity of duties occurs at the first stage of the processes of transformation of the "cereal", "tobacco-tea-chocolate", "other products" production chains and at the last stage of the "meat" and "sugar" chains[10]. The "fruit and vegetables" and "oil products" production chains being subject to an effective protection on all their processes of transformation.

A very first analysis of the relation between trade and tariff escalation shows that the correlation between the two is not systematically negative. A negative correlation is essentially observed for the « oil products » production chain, for the GSP countries, which are, on the European market, specialised, in raw products. The tariff escalation may appear as an obstacle to imports of processed oil products. Conversely, for fruit and vegetables and meat – other main sources of export for these countries – a first reading of table 7 suggests that the tariff escalation is not an obstacle to exchanges of processed products. However, this does not take into account agricultural products destined to final consumption, which are not directly included in the production process but which represent an alternative specialisation. These products represent 75% of exports of meat and fruit and vegetables from the GSP countries. Conversely, in the case of ACP countries, which are little affected by the influence of tariff escalation, the significant imports of processed products concern, for a great part, tropical products. Thus, to go further in this kind of analysis, it should be necessary to take into account not only products directly concerned by tariff escalation but also the others, notably the agricultural products assigned to final consumption;

4.3. The impact of the Harbinson Proposal on European Market Access

The Harbinson proposals concerning Access to the market (WTO, 2003).Tariffs, except in-quota tariffs, shall be reduced by a simple average for all agricultural products subject to a minimum reduction per tariff line. The base for the reductions shall be the final bound tariffs as specified in the Schedules of Members. Except as provided in paragraph 16 below, the tariff reductions shall be implemented in equal annual instalments over a period of [five] years, applying the following formula:

> (i) For all agricultural tariffs greater than [90 per cent *ad valorem*] the simple average reduction rate shall be [60] per cent subject to a minimum cut of [45] per cent per tariff line.
>
> (ii) For all agricultural tariffs lower than or equal to [90 per cent *ad valorem*] and greater than [15 per cent *ad valorem*] the simple average reduction rate shall be [50] per cent subject to a minimum cut of [35] per cent per tariff line.
>
> (iii) For all agricultural tariffs lower than or equal to [15 per cent *ad valorem*] the simple average reduction rate shall be [40] per cent subject to a minimum cut of [25] per cent per tariff line.

In order to simulate this proposal, we have chosen to apply the average rate of reduction defined for each above-mentioned "tariff-band", without carrying out a simulation of the strategic allocation as mentioned in the proposal. The Harbinson proposal also includes the modalities of reduction to limit tariff

[9] This group is much more heterogeneous from the point of view of the regulation. The country-products bilateral agreements are quite different.

[10] This comment excludes the "beverages" production chain, the positive progressivity of which is not significant.

escalation. Indeed, the following solution is proposed: "In applying this formula, where the tariff on a processed product is higher than the tariff for the product in its primary form, the rate of tariff reduction for the processed product shall be equivalent to that for the product in its primary form multiplied, at a minimum, by a factor of [1.3]."

This proposal implies that the processes of production be determined precisely. As mentioned earlier this exercise is a rather delicate operation. One same agricultural product can be introduced in the manufacturing of several food products and, conversely, one same food product is made out of the transformation of several agricultural products. The methodology we have adopted is a possible solution to this problem. In order to take into account the tariff escalation aspect of Harbinson's proposals we have, first of all, applied the initial proposal of reduction for each product we then calculated the average rate of protection per production process (bec) and production chain. When the average rate for the transformed products is superior to that of raw products, we apply to all products of this category, the rate of reduction corresponding to raw products affected by the coefficient of correction.

Lastly, Harbinson includes proposals concerning preferential agreements. Indeed, even if these negotiations are essentially carried out at multilateral level and only directly affect the products exchanged in the framework of the MFN regime, they have indirect effects on the agreements by reducing the preferential margins. Harbinson plans, first of all, to shift and increase the period of implementation of the effective reduction for the products that are vitally important for the exports of developing countries, and second of all to maintain as much as possible the preferential margin in the definition of the tariff reduction. In the context of this simulation, we have converted into MFN rates all the rates that were preferential initially, and which following the proposal of reduction, became higher than the MFN rates. A mechanical application of reduction of MFN duties, without taking into account the impacts for preferential agreements, would lead to situations where the preferential rate would become higher than the tax applied in the multilateral framework (MFN). This would be true of the GSP countries, in particular.

A drastic opening of the European market. The Harbinson proposals would lead to a drastic reduction of the protection rate of the European market (table 8). From an average rate of 20.7% in the year 2000, the protection applied in the framework of the MFN regime would drop to 9.4%.

TABLE 8: Evolution of the average protection of the EU (all agricultural and food products)

	MFN	ACP	Other preferences	GSP
Tariff 2000	20,7	5,3	2,7	17,9
Harbinson	9,4	4,4	2,2	9,0

Sources : own calculations from TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat)
First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish)

Access to the European market for the members of the GSP agreements would improve significantly if the Harbinson proposals were adopted. The average protection rate of the EU vis a vis the countries benefiting from the GSP would drop from 17.9% in the year 2000 to 9.0% after the negotiations. Conversely, for the ACP countries (or those that signed bilateral agreements with the EU), which benefited from an important level of preference in the year 2000, access to the market is hardly modified.

The main problem raised by this proposal is the erosion of the preferential margins granted to developing countries. Thus, for the ACP countries, this margin which, for all agricultural and food products, was of 15.4 points in the year 2000, would drop to 5 points after the WTO negotiations. The erosion of preferential margins will be mostly significant for the products for which these countries are very specialised (cocoa, sugar or cereal) (Table 9). The GSP countries, although they benefit from an important improvement of their access to the European market, would lose almost all their advantages vis a vis members of the MFN regime. On average, the preferential margin would become nil for all production chains.

In terms of progressivity of duties, the Harbinson proposal, because of the cut of tarif peaks and of the systematic correction of the rates in the case of progressivity, reduces effectively the tariff escalation of the MFN regime. Even though the latter still exists, it is largely weakened in all production chains. For the

countries of the GSP, the tariff escalation would also be significantly reduced or even cancelled for most production chains, in particular the ones that are important for these countries (cereals, fruit and vegetables, meat, sugar, coffee-tea-cocoa for instance). For the ACP countries the international negotiations would not modify the situation observed in the year 2000, in terms of tariff escalation. The latter will remain close to zero.

In such a context, if the expectations of developing countries in terms of reduction of tariff escalation were satisfied, their preferential advantages would still be deeply eroded or even cancelled. If Developing countries have to compete directly with developed countries, will they have, in this new context, the necessary resources to develop their potential of transformation?

TABLE 9: Average protection of the EU (Arithmetic average of duties). Simulations of the Harbinson proposals.

	MFN				ACP			GSP			Other preferential agreements		
	2000	Harb.	Prog. 2000	Prog. Harb	Harb.	Margin 2000	Margin Harb	Harb.	Margin 2000	Margin Harb	Harb.	Margin 2000	Margin Harb
Cereals													
AIP	24	12,1			6,1	17,7	6,1	12	0,2	0,1	0,2	23,8	11,9
PIP	21,7	11			10,2	10	0,8	10,9	0,2	0	1,1	20,3	9,9
PFP	27,9	10			8,1	15,9	1,9	9,5	3,7	0,4	8,2 +	13	1,7
Fruit&veg													
AIP	7,2	4,2			0,8	6,4	3,5	3,9	1,6	0,3	0,2	7	4
PIP	19,4	9	+	+	0,4	19	8,7	7,1 +	7,8	2	1,5 +	17,9	7,5
PFP	20,9	7,5	+		0,6	20	6,9	6,6	7,9	1	2,3 +	18,3	5,2
Meat													
AIP	34,2	16,6			14,5	17,5	2,1	16,6	0,2	0	7,3	26,9	9,3
PIP	16,5	8,5			5,3	11	3,3	8,3	1,3	0,2	0,3	16,2	8,3
PFP	26,8	10	+	+	3,3	22,2	6,8	9,2 +	2,9	0,8	1,1 +	25,7	9
Milk													
AIP	40,7	20,4			20,4	18,7	0	20,4	0	0	6,5	34,2	13,9
PIP	78,1	27,3	+	+	20,9	45,8	6,5	27,3 +	0	0	0,5	77,6	26,8
PFP	41	19,6			7,4	32,7	12,2	19,6	0,5	0	3,8 +	36,2	15,8
Sugar													
AIP	22,5	11,4			11	10,8	0,4	11	0,8	0,4	3,5	19	7,9
PIP	15,8	8,1			2,8	12,8	5,3	8,1	0,2	0	0,7	14,9	7,4
PFP	23,8	8,8	+		5,6 +	15	3,1	8,8	2,3	0	6,4 +	11,5	2,4
Oil products													
AIP	1,9	1			0	1,9	1	1	0,2	0	0	1,9	1
PIP	9,8	3,8	+	+	0	9,8	3,8	3,6	3,6	0,2	1,1	8,8	2,7
PFP	21,9	9,9	+	+	1 +	20,8	8,8	9,6 +	3,4	0,2	6,3 +	15,8	3,6
Beverages													
AIP	7,8	4,3			0	7,8	4,3	4,3	1,2	0	0,7	7,1	3,6
PIP	22,1	9,1	+	+	3,3	18,6	5,8	9,1 +	3,5	0	3,5 +	18,5	5,6
PFP	18,7	9,1			4,7 +	13,2	4,3	8,8	3,9	0,3	3,4	14,6	5,6
Tab,Tea,Choc													
AIP	1,9	1,1			0	7,8	1,1	1,1	0,6	0,1	0,1	1,9	1,1
PIP	16	7,7	+	+	1,7 +	18,6	6	7,5 +	2,7	0,2	6,5 +	6,2	1,2
PFP	14,1	7,4			1	13,2	6,4	6,9	4,7	0,5	3,1	10,1	4,3
Others													
AIP	0	0			0	1,9	0	0	0	0	0	0	0
PIP	13,4	7,4	+	+	1,8 +	14,3	5,6	6,6 +	4,8	0,8	3,4 +	9,6	4
PFP	16,2	6,8	+		0	13	6,8	4,5	11,5	2,4	1,5	14,7	5,3

Sources : own calculations from TARIC (Taxation and Customs Union DG), Taragro (INRA), COMEXT (Eurostat)

First 24 chapters of the Combined Nomenclature (excluding Chapter 03 and 1604 – Fish). AIP : Intermediate Agricultural Products- PIP : Processed intermediate Products, PFP : Processed final products.

5. Conclusion

Emerging countries are denouncing the tariff escalation practised by developed countries as an obstacle to the development of their transformation industry. This situation is particularly visible for agricultural and food products for the MFN tariffs negotiated by the EU at the WTO. However the European markets are widely open to developing countries thanks to the many preferential agreements that the EU has signed with its partners (AGP, ACE, etc…). Taking into account preferential agreements shows that in the year 2000 the phenomenon of progressivity of duties of the EU vis a vis developing countries is relatively minor except for countries benefiting from the GSP.

These results should be re-examined in light of the important modifications implemented recently by the EU towards a greater preferential opening and a stronger reduction of tariff escalation. Two major modifications should be mentioned: the Lomé agreements have been widened by the Cotonou agreements (2000) ; and above all the opening in the GSP to the LDCs (2001) by the « Everything but Arms » initiative (EBA). In the context of this latter proposal all products are exempted from taxation [12] for the least developed countries.

Moreover, the prospect of reductions announced for the next round of negociations at the WTO will modify the situation we have just examined, but they also raise several questions. If the Harbinson proposals are, they will mark for the first time the will to explicitly introduce the condition for a reduction of tariff escalation. However, the modalities of this application remain vague. No mention is made about what is a processed product and what is included in its composition ; yet these elements are strategic for the application of the reduction of tariff escalation. For this purpose a consensus must be reached : either on the list of processed products that will be affected by this reduction (similar to the Meursing table of the European tarification for instance) or on the method used to identify the basic products included in the composition of the commodities. The method used in this study or those of the FAO (Lindland, 1997) or of the Swedish Board of Agriculture (Burman et al, 2001) being possible but relatively ad-hoc solutions.

The propositions of reduction of duties quite obviously lead to a greater reduction of the progressivity of duties. However, taking into account the preferential agreements in this debate, raises, beyond the problem of tariff escalation, that of the important erosion of preferential margins resulting from these propositions. This situation forcing countries to compete more directly with each other - irrespective of their level of development - doesn't it introduce a greater difficulty for emerging countries ?

[12] With the exception of rice, sugar and bananas which are submitted to contigents.

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