AGRICULTURAL LIBERALIZATION IN MULTILATERAL AND REGIONAL TRADE NEGOTIATIONS[1]

By

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ABSTRACT

Agriculture is a strategic issue for the Western Hemispheric countries for both regional and multilateral trade negotiations. However, because of their diversity, countries in the region sometimes pursue different or even conflicting objectives regarding the liberalization of agricultural trade. This paper provides measures the level of tariff protection and subsidies according to different methods and introduces new indicators to evaluate tariff protection in bilateral and regional trade agreements. It also provides specific recommendations to policymakers.

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1. INTRODUCTION

For most Western Hemispheric countries agriculture is a sensitive, complex and heterogeneous sector, and its relevance and meaning vary from country to country. Agricultural trade in the Western Hemisphere (WH) totals US$ 200 billion and accounts for approximately 30% of the world's agricultural trade and 9% of total trade in this region. Overall, it absorbs a considerable portion of the economically active population, and represents a high percentage of GDP and exports. For small economies such as most of the Caribbean countries, it means a strong dependence on preferential or duty-free access agreements like the Generalized System of Preferences (GSP) or the Lomé-Cotonou Agreements between the European Union (EU) and the African, Caribbean, and Pacific (ACP) countries. The elimination of subsidies is a sensitive issue for the "net food importers" countries, since they depend strongly on low-cost food imports and consequently resist the elimination of export incentives in the developed world such as agricultural export and credit subsidies and food aid mechanisms. For medium-sized economies such as Brazil and Argentina, agriculture is a competitive sector with strong potential to generate trade balance surpluses. These countries can be expected to demand further liberalization. For large economies like the EU, the United States (US) and Japan, agriculture is a politically sensitive sector due to the pressure that lobby groups exert on the lawmaking process. As a result, agriculture is a strategic issue for all American countries for both regional and multilateral trade negotiations.

After a short introduction, the second chapter *(market access for agricultural products in the Western Hemisphere and in the EU)* employs various methods to measure the level of tariff protection in agricultural and non-agricultural products. This section introduces new indicators to evaluate tariff protection in bilateral and regional integration agreements. The third chapter *(overview of domestic and export agricultural subsidies in the world)* presents different sources of data and methodologies available to measure subsidies and compares their results according to different criteria. Finally, the conclusions present special recommendations for policymakers, based on the findings of this research paper.

2. Market Access for Agricultural Products in the Western Hemisphere and in the EU

Decades ago, high tariffs were the major cause of restricted market access. As a result most of the GATT's efforts were dedicated to successive tariff reductions. Today, protection is a much more complex subject with many different faces. Table 2.1 shows that agricultural protectionism has been evolving very fast in new directions that are not yet completely covered by the rules of the international trading system. Actually, a few measures have been fully or partially covered by the URAA, while some are covered by additional WTO Agreements (TBT, SPS), and others will hopefully be negotiated in future rounds.

TABLE 2.1. THE EVOLUTION OF WORLD AGRICULTURAL PROTECTIONISM

Policy Instruments	Regulatory Institution/Agreement
• Tariffs and Tariff Rate Quotas	Agreement on Agriculture (UR)
• Non-Tariff Barriers (Technical/Sanitary)	TBT & SPS (UR)
• Subsidies (Domestic, Export)	Agreement on Agriculture (UR)
• Export Credits and Food Aid	No multilateral discipline
• Antidumping and Safeguards	GATT Article VI and ASCM.
• Labor standards	No multilateral discipline
• Environmental issues	Issue for WTO Doha Round
• Non Trade Concerns	Issue for WTO Doha Round

UR – GATT Uruguay Round of Multilateral Negotiations
TBT – Agreement on Technical Barriers to Trade
SPS – Agreement on Sanitary and Phytosanitary Measures
Article VI – Antidumping Measures
ASCM – Agreement on Subsidies and Countervailing Measures

Despite the achievements of the URAA, agriculture continues to be the most protected sector in the world economy.[2] Although *ad-valorem* tariffs continue to be the main instrument for trade protection, agricultural products are unique in that they are also protected through specific and mixed tariffs, tariff rate quotas (TRQs), sanitary restrictions, domestic and export subsidies, and non-tariff barriers (price bands, licensing, standards, prohibitions, state trading enterprises, etc.).

[2]. Gibson *et. al* (2002) estimate that the simple global average for most-favored-nation (MFN) bound tariff on agricultural imports will exceed 60% even after all the cuts that countries carry out through the World Trade Organization Agreement on Agriculture.

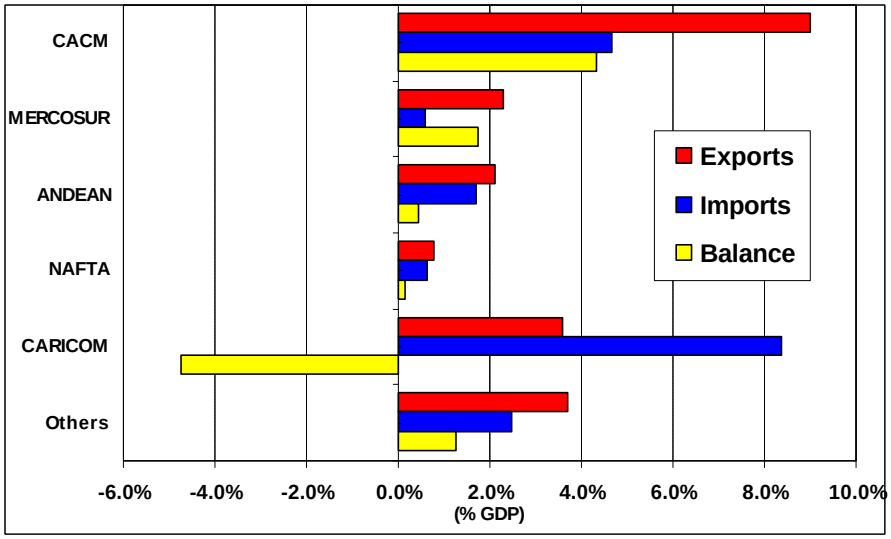
This section will examine some of those policy instruments affecting agricultural market access throughout the Western Hemisphere. It analyzes current agricultural trade in the region as well as tariff profiles and comparative levels of protectionism. New indicators to evaluate tariff protection in bilateral and RTAs are introduced.

2.1. Tariff Structure and Trade Profile in the Western Hemisphere

2.1.1. Comparative Trade Profile

Approximately half of the countries included in this study have agricultural trade surpluses while the other half have agricultural trade deficits. Figure 2.1 shows trade performance as a share of GDP of the five regional blocs within the Western Hemisphere. Even though NAFTA is by far the major hemispheric trader of agricultural products, it has the smallest trade as a percentage of GDP. Mercosur and Central America have the largest trade surplus in relative terms, while the 15 Caribbean countries show an overall deficit, mainly concentrated in food products. Specifically, in 2000, the United States, Argentina, Brazil and Canada had the largest agricultural trade surpluses, respectively; Mexico, Venezuela, the Bahamas and the Dominican Republic had the largest deficits (see Appendix A).

FIGURE 2.1. TOTAL AGRICULTURAL TRADE IN THE WESTERN HEMISPHERE AS SHARE OF GDP (2000)

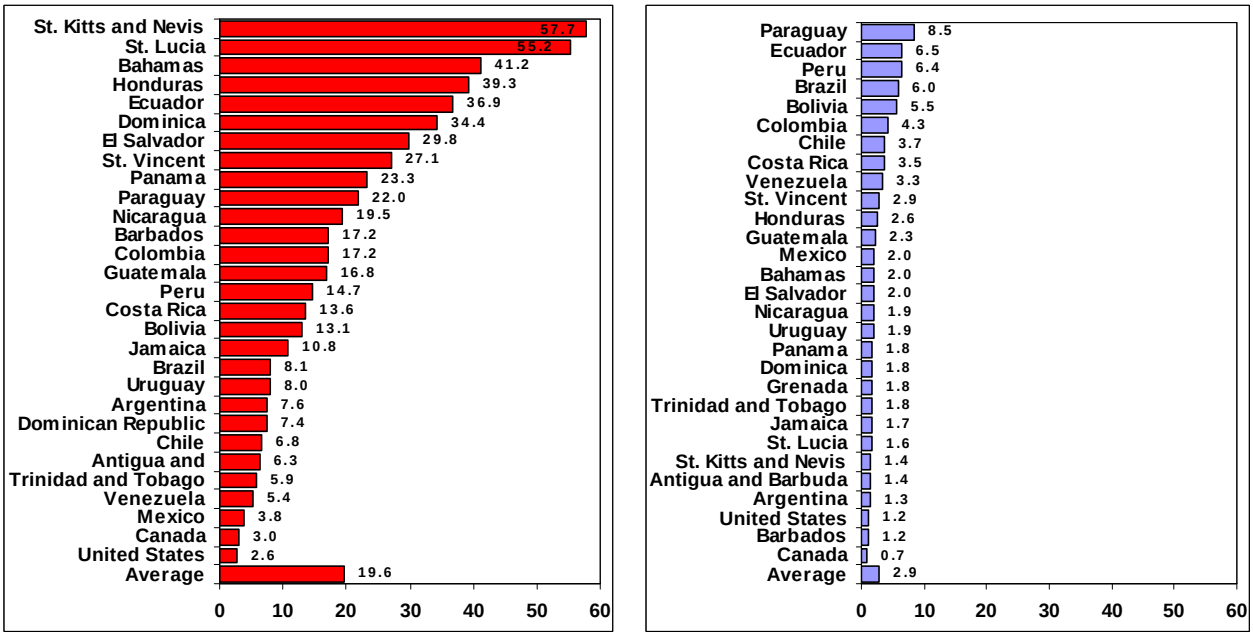


Note: Others are Chile, the Dominican Republic and Panama.
Source: 2001 Hemispheric Database of the Americas.

The concentration of exports within some specific agricultural product groups is a clear phenomenon in Latin American and Caribbean countries. The Hirschmann-Herfindahl Index (HHI)[3] can be used to measure the level of trade concentration in specific products. According to the HHI, exports are approximately seven times more concentrated than imports. Caribbean and Central American countries have the highest levels of export concentration in specific products (see figure 2.2). Examples are St. Kitts and Nevis, where raw sugar represents 75 percent of agricultural exports; St. Lucia, where bananas and beer represent 92 percent of exports; and Honduras, with coffee and bananas representing 74 percent of exports.

FIGURE 2.2. AGRICULTURAL TRADE CONCENTRATION IN THE WH: THE HIRSCHMANN-HERFINDAHL INDEX

EXPORTS **IMPORTS**

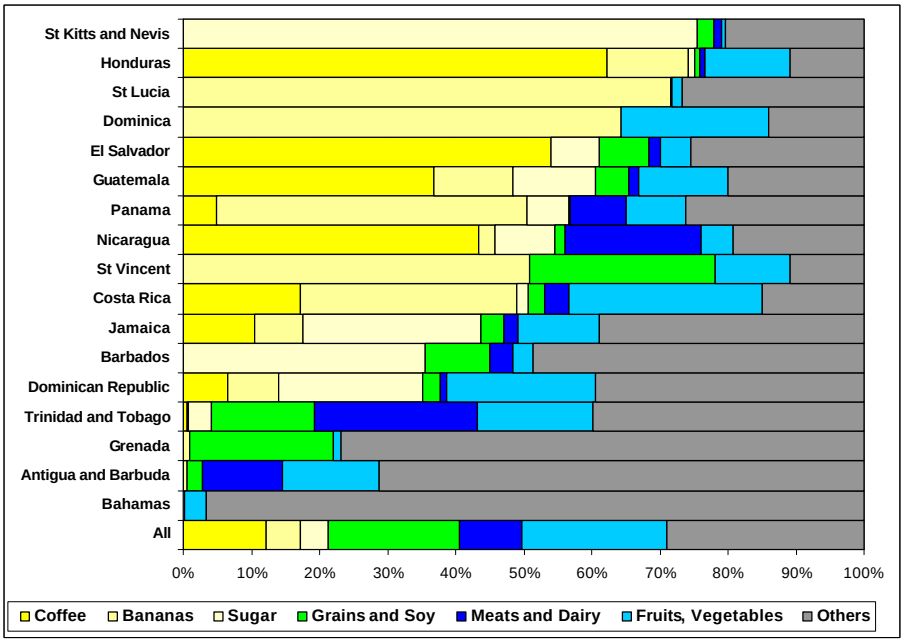


Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

[3]. The Hirschmann-Herfindahl Index (HHI) is equal to the sum of the squared shares of all products (tariff lines) exported, where *i* stands for a particular product and *n* is the total number of products. When a single export product or tariff line produces all the revenues, the HHI equals 100; when export revenues are evenly distributed over a large number of products, HHI approaches zero.

$$HHI = \sum_{i}^{n} \left(X_i \Big/ \sum_{i}^{n} X_i \right)^2 * 100$$

FIGURE 2.3. AGRICULTURAL EXPORT CONCENTRATION FOR CARIBBEAN AND CENTRAL AMERICAN COUNTRIES (2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.
Note: All – Average for all LAC countries.

Figure 2.3 clearly shows that 10 WH countries have more than 50% of their agricultural exports concentrated in only 3 products: coffee, bananas and sugar. The most diversified countries in terms of exports are the United States, Canada and Mexico.

2.1.2. Applied Methodology and Data Compilation

The first step in developing tariff profiles by country and by main group of products is to convert specific and mixed tariffs[4] into *ad-valorem* equivalents (AVE). According to the WTO, *ad-valorem* equivalents are usually calculated "either by comparing collected custom revenues to the value of imports or by comparing unit values of traded products with the applied non *ad-valorem* tariff". The methodology followed in this study to obtain *ad-valorem* equivalents was to divide the product's specific rate by its import price. In this case the price was calculated by dividing the value of imports by the quantity of imports. Where no trade data was available, the price of the closest related product was used. The data used corresponds to year 2000 and

[4]. Specific tariffs are tariffs that are set as a monetary amount per unit of import, i.e. a product can have a specific tariff, which charges $1.50 per kilogram. Countries may also combine *ad-valorem* and specific tariffs so that a product's tariff may be the sum of the *ad-valorem* tariff plus the specific tariff, called mixed or compound tariffs.

comes from the 2001 Hemispheric Database of the Americas (HDA) and the Agricultural Market Access Database (AMAD).

This section uses data collected by the Inter-American Development Bank and compiled in the 2001 Hemispheric Database of the Americas for 30 of the 34 FTAA member countries (excluding Belize, Suriname, Guyana and Haiti, due to lack of trade-related data). The study uses primarily Most Favored Nation (MFN) applied rates, since these will be the tariffs used in the FTAA negotiations. However, to provide a realistic overview of the current level of trade protection the analysis was extended to include preferential and intra-bloc tariffs[5].

In order to analyze and compare protection levels, several country databases were created for specific countries using data from the year 2000.[6] The objective was to compile all trade-related data available for products by country in one database. The databases contain data in both 6- and 8-digit (or more) Harmonized System Code tariff lines,[7] and include product descriptions, MFN *ad-valorem* tariffs, MFN specific and mixed tariffs, preferential rates, and *ad-valorem* equivalents for such tariffs, imports value, quantity, imports price, exports value, export volume, indication of whether the tariff is a Tariff Rate Quota (TRQ)[8], and tariff peaks (see appendix A). In addition, the data was further analyzed on an aggregate basis by being grouped into 32 "sensitive"[9] groups of products based on the International Bilateral Agricultural Trade (IBAT) Database. Once all tariffs were expressed in terms of *ad-valorem* equivalents, we were able to calculate the number of tariff lines and TRQs, mean, median, tariff dispersion, maximum and minimum tariffs, and frequency distributions. J.C. Bureau from INRA-France provided data for the European Union.

Up to the 6-digit Harmonized System level (HS6), tariff schedules across countries use identical categories, which are established by the World Trade Organization, to aggregate different products. Beyond the 6-digit level, this correspondence does not exit, since aggregation may differ from country to country. Thus, in order to calculate the weighted average tariffs in sections 2.2 and 2.3, each country's tariff lines and trade flow data were aggregated into 5113 category definitions to conform to the Harmonized System at the 6-digit level. Agricultural products were aggregated into 676 tariff lines while non-agricultural products were aggregated into 4437 tariff

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5. For different methodologies to measure trade protection in agriculture see Bouët (2000) and Bouët, Fontagné, Mimouni & Kirchbach (2002).
6. For some countries where 2000 data was not available 1999 data was utilized.
7. "Tariff lines" refer to the category to which WTO members legally establish tariff applies.
8. A TRQ is a two-tiered tariff under which a limited volume of goods (the quota amount) can be imported under the lower *in-quota* tariff, with any additional import quantity being subjected to a higher *over-quota* tariff. For more details, see IATRC (2000) and Skully (2001a).
9. "Sensitive products" are those accounting for a large percentage of a country's total exports and that face relative high import barriers.

lines (a subgroup of 833 tariff lines was used for textile products).[10] Furthermore, for these two sections, the over-quota tariff rate was used when TRQs´ tariffs were aggregated at the 6-digit level. Wainio and Gibson (2001) have stressed that TRQs do, in most cases, represent a binding constraint on additional trade. As such, over-quota rates give a more accurate account of the level of protection provided by the tariff schedule and should be used to reflect the overall restrictive nature of a country's trade policy. However, it should be noted that this might overestimate the impact of TRQs, in the case where in-quota rates are not 100% utilized for a product. Nevertheless, any approach entails some kind of bias: using the simple mean underestimates while using maximum does overestimates the effect of TRQs.

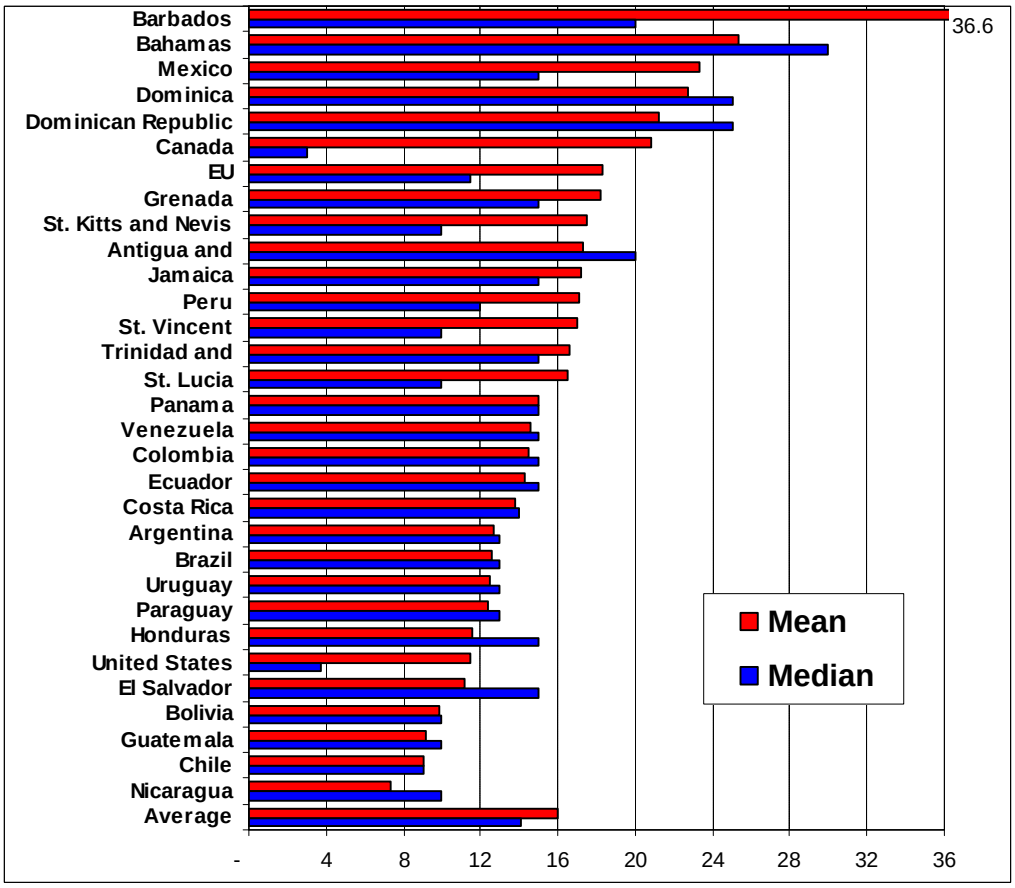
2.1.3. Comparative Tariff Structure

The most commonly used methods to measure tariff protection are the mean to depict the overall level of tariffs, and the standard deviation to measure tariff dispersion. Overall, the average tariff on agricultural products in the region is 16 percent, with Barbados, the Bahamas, Mexico, Dominica, the Dominican Republic and Canada having the highest AVE, averaging over 20 percent. Nicaragua, Chile, Guatemala and Bolivia have the lowest average tariffs, below 10 percent (Figure 2.4 and Appendix A). However, aggregates such as the mean and dispersion do not tell the whole story. For example, comparing the mean and the median of a country's tariff schedule may provide more valuable insights into the agricultural trade policy of different countries.[11]

[10]. The definition of the WTO Harmonized system for Agricultural sector is covered by the following chapters: 1 to 24 less fish and fish products; 2905.43 (manitol); 2905.44 (sorbitol); 33.01 (essential oils); 35.01 to 35.05 (albuminoidal substances, modified starches, glues); 3809.10 (finishing agents); 3823.60 (sorbitol n.e.p); 41.01 to 41.03 (hides and skins); 43.01 (raw fur skins); 50.01 to 50.03 (raw silk and silk waste); 51.01 to 51.03 (wool and animal hair); 52.01 to 52.03 (raw cotton, waste and cotton carded or combed); 53.01 (raw flax); 53.02 (raw hemp). All other chapters were considered to be industrial (non-agricultural) sectors.

[11]. The arithmetic mean is what is commonly called the average and is the sum of all the scores divided by the number of scores. Dispersion is measured through the standard deviation, which measures the degree to which a value varies from the distribution mean. The median is the midpoint of a tariff schedule's distribution in ascending order of value: half the scores are above the median and half are below the median.

FIGURE 2.4. COMPARATIVE TARIFF STRUCTURE IN AGRICULTURE (HS8 2000)

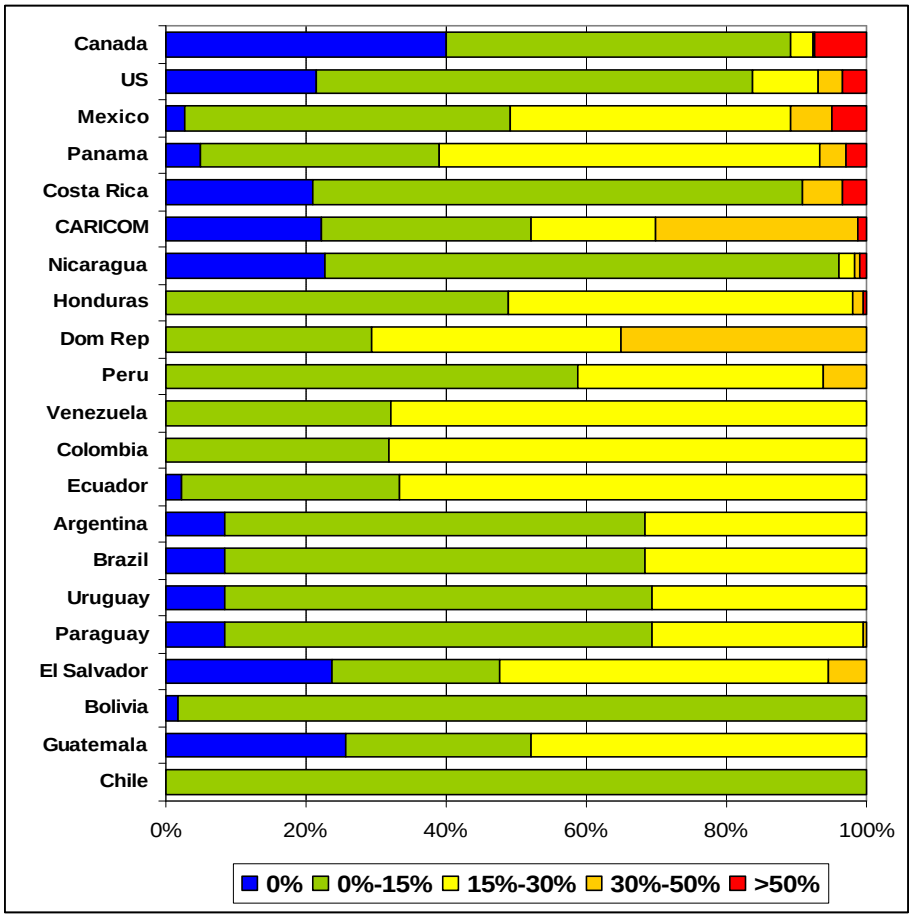


Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

Most WH countries have close mean and median tariffs. The median indicates the midpoint of the AVE tariff's schedule distribution in an ascending order of value. Nevertheless, in countries like the US, Canada and Mexico, the median is far lower than the mean. This indicates the simultaneous presence of a large number of tariff lines far below the mean, and a few tariffs lines with very high rates (greater than 50%) commonly named "tariff peaks" or "megatariffs". In other words, NAFTA countries are characterized by the application of very high tariffs on a very small group of politically sensitive products, while the rest of their tariffs are kept at low levels[12] (see figure 2.5). The opposite is true for some Central American and Caribbean countries, where a large number of tariffs lines are set at high levels (greater than 15%), but a small group of very low and even zero tariffs exert downward pressure on the mean.

[12]. Olarreaga and Soloaga (1997) study several industry conditions that are correlated to high tariff protection, including high levels of industry concentration, low import penetration ratios, low share of sector production that is purchased by other sectors as intermediaries, high labor/capital ratio, and a small share of intra-industry trades.

FIGURE 2.5. COMPARATIVE TARIFF STRUCTURE: FREQUENCY DISTRIBUTION AT HS8 (2000)



Source: 2001 Hemispheric Database of the Americas.

In fact, NAFTA countries have disparate means and medians, with high dispersion of rates and the highest levels of maximum tariffs in the Western Hemisphere. Canada ranks first in the highest tariffs: 98 tariff lines are above 50%, with some products from the milling industry reaching equivalent rates of up to 530%. In the case of the US, four percent of its tariff lines (sixty-one lines) have rates above 50%, and up to 350% on some tobacco products. Nevertheless, the US large proportion of low rates (83% of its tariff lines have rates below 15%) offsets the impact of its megatariffs and ultimately results in a low overall average. In the case of Mexico, 5.1% of its tariff lines (54 tariff lines) are above 50%, and up to 260%, but Mexico also represents the third highest mean among all FTAA countries (23%). Canada is the country that has the largest percentage of zero tariffs (40.1%), however it is also the country with the highest amount of tariff rates above 50% (7.3%). Mercosur countries have only a small percentage of

zero tariffs (8.4%), but do not have MFN *ad-valorem* tariffs that are above 30% (only one third of the tariffs lines are above 15%).

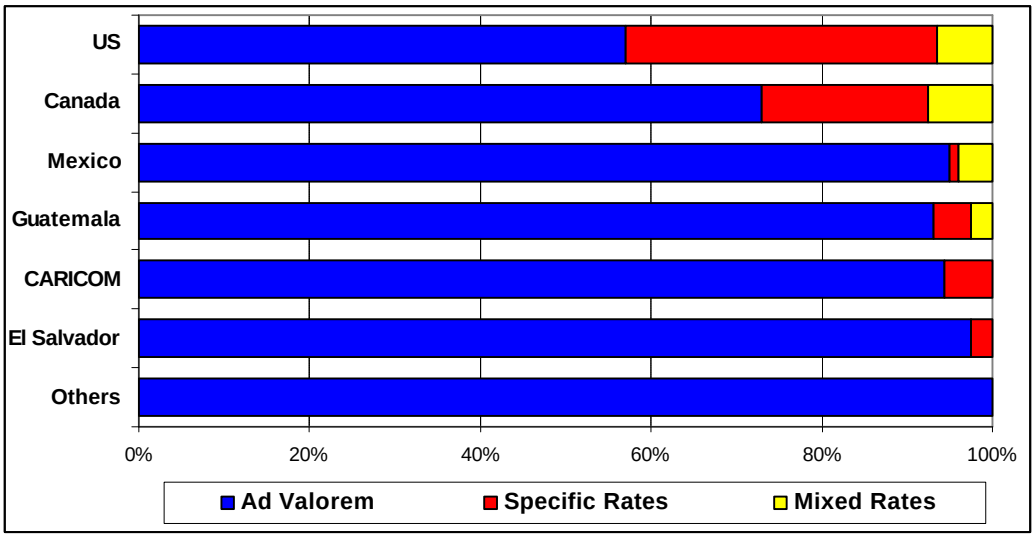
It is interesting to notice that all South American countries except Peru have means and medians that are very close. This shows that the process of liberalization after the 1980's was accomplished without exclusions in the agricultural sector. Mercosur countries in particular have experienced a strong convergence in their agricultural tariffs. Their means are all approximately 12%; medians are exactly 13%; and their standard deviations are about 6%. Andean countries have means and medians between 10% and 17% and dispersions below 6.5%. Chile is a special case. Even though its *ad-valorem* tariffs appear to be one of the lowest, set at 9% for all products, agricultural imports are subject to price bands[13] and other restrictions that significantly protect against imports. This is a clear example of how the existence of non-tariff barriers makes measurement of tariff protection a difficult task.

Another important measure of tariff protection is the type of tariff applied. Tariff barriers in agriculture are not only based on *ad-valorem* tariffs (high means and presence of peaks), but also on the extensive use of specific and mixed tariffs, and tariff-rate quotas[14]. NAFTA countries particularly stand out with their use of this kind of tariffs. More than 43% of US tariffs are non *ad-valorem* (specific or mixed), followed by Canada with 27% and Mexico with 5% (see figure 2.6). Some Caribbean countries such as Antigua, Barbados, and the Bahamas, also widely apply specific tariffs, resulting in higher protection according to the level of competitiveness of the exporting country. All the other Latin American countries use only *ad-valorem* tariffs, with the exceptions of El Salvador and Guatemala.

[13]. Price bands regulate markets so prices remain within a specified range. In the case of Chile, for example, the price band for wheat is a pair of variable tariffs: one increase to defend a floor price and one decreases to defend the ceiling price. The band has two tariffs, an *ad-valorem* tariff that is always imposed, and a specific tariff that is determined by a tariff algorithm. When international prices are between the floor and the ceiling, the specific tariff is zero and only the *ad-valorem* tariff is imposed. When the international prices are below the floor or above the ceiling, the specific tariff is increased or lowered to keep the price within the set limits. The price band loses its capacity to offset international prices when the tariff increase reaches its bound level or when it is decreased to zero. See Skully (2001b).

[14]. *Ad-valorem* tariffs are calculated as a percentage of the value of the goods, which is normally the CIF (cost, insurance and freight). Specific tariffs are calculated as a percentage or a fixed amount per volume units (i.e., kilograms), and consequently result in higher protection levels the more competitive the exporting country is (lower import prices result in higher *ad-valorem* equivalents). Mixed or compound tariffs are a combination of *ad-valorem* plus specific rates.

FIGURE 2.6. COMPARATIVE TARIFF STRUCTURE: *AD-VALOREM*, SPECIFIC AND MIXED TARIFFS (HS8 2000)



Source: 2001 Hemispheric Database of the Americas.
Note: Others account for all other South American countries.

2.2. Measuring Tariff Protection for Sensitive Export Products

A country that mainly exports raw sugar and bananas is not interested in the overall level of tariffs imposed by another partner, but only on the tariffs imposed on its main exports. In fact, this country will concentrate in the additional access it can gain for its primary traded products through multilateral and regional negotiations. Statistical aggregates such as those shown in the previous section 2.1 (e.g., means, medians and dispersions) do not measure the real importance and levels of tariff protection on very specific and sensitive products.

A better technique to access the real level of tariff protection would be to use weighted averages instead of simple means, since these take into account the proportional relevance of sensitive products rather than treating all products equally. The question that arises when calculating weighted averages is what values should be used to properly weight the tariffs that a country faces. Values such as production, consumption, import or export appear to be the natural candidates, but given that the purpose is to measure trade protection, only imports and exports should be considered. However, using import values produces a downward bias because the imports of items facing high tariffs will have little weight, as these high tariffs are likely to create "trade chilling" effects by restraining or even impeding trade. For example, even though the Brazilian sugar industry is very competitive, representing 57% of the WH total sugar exports, it only accounts for approximately 10% of US total sugar imports. This is due to the high above

quota tariff applied to sugar imports. Thus, weighted average tariffs should depend on the importer tariffs and the composition of a country total exports to the world (not the exports between partners)[15]. This approach emphasizes those tariffs in importing countries that are of greatest importance for exporting countries, and provides a dynamic view of the level of protection that each country imposes and faces in regards to its trading partners. Another advantage of this approach is that by using global export values, potential trade gains are incorporated, providing a more accurate picture of each country´s relative competitiveness. For instance, in the case of sugar, it is expected that once the U.S. high over-quotas sugar tariffs are eliminated, Brazil share in the U.S. total sugar import would increase. Figure 2.7 compares the values of US imposed MFN tariffs using the weighted average and simple mean method for each one of its WH partners. The figure shows that most countries face a weighted tariff in the US that is higher than the simple mean tariff (CARICOM corresponds to 10 countries of the Caribbean Community). This illustrates that these countries' sensitive exports face high tariffs. Brazil faces the highest weighted average tariff for agricultural products (35.4%) mainly explained by the high tariffs on its tobacco, sugar and orange juice exports. Venezuela's high value is mostly due to tobacco and dairy products.

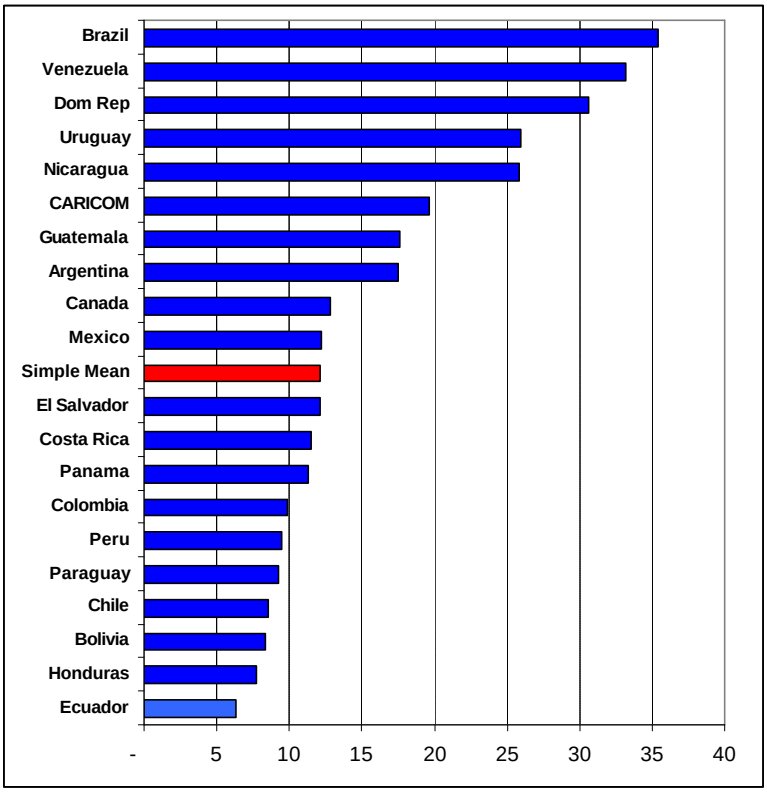
Appendix B provides a table with the average agricultural MFN tariffs weighted by total exports for all WH countries and the European Union. Using this methodology, on a bilateral basis the highest average duty would be faced by Ecuador (83.8%), Panama (76.1%) and Uruguay (75.3%) respectively if all their products were exported to the EU. In the case of Ecuador and Panama, the high tariff barriers applied to bananas can explain the elevated values to a great extent. Uruguay, on the other hand, faces high tariffs on its meat and diary products exports. If only the WH countries are considered, the highest tariffs are faced by the Dominican Republic (55.3%) and CARICOM (51.7%) both against Mexico, and Uruguay (51.1%) against Canada. For most Caribbean countries and the Dominican Republic, high duties on sugar are the main cause while for Uruguay, the main reason is still its dairy products. Overall, Mexico has the most protected market for agricultural products, followed by the European Union. Compared to all WH countries, Mexico's average agricultural tariff is approximately 37%.

[15]. Share of exports of product *i* in total global exports for each country is calculated as follows:

$$y_i^B = x_w^i \Big/ \sum_{i=1}^{n} x_w^i$$

where: x_w^i = country's total exports of tariff line *i* to the world

FIGURE 2.7. US IMPOSED MFN AGRICULTURAL TARIFFS WEIGHTED BY EACH PARTNERS EXPORTS (HS6 MAX)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

2.3. Comparing Tariff Protection in the Western Hemisphere

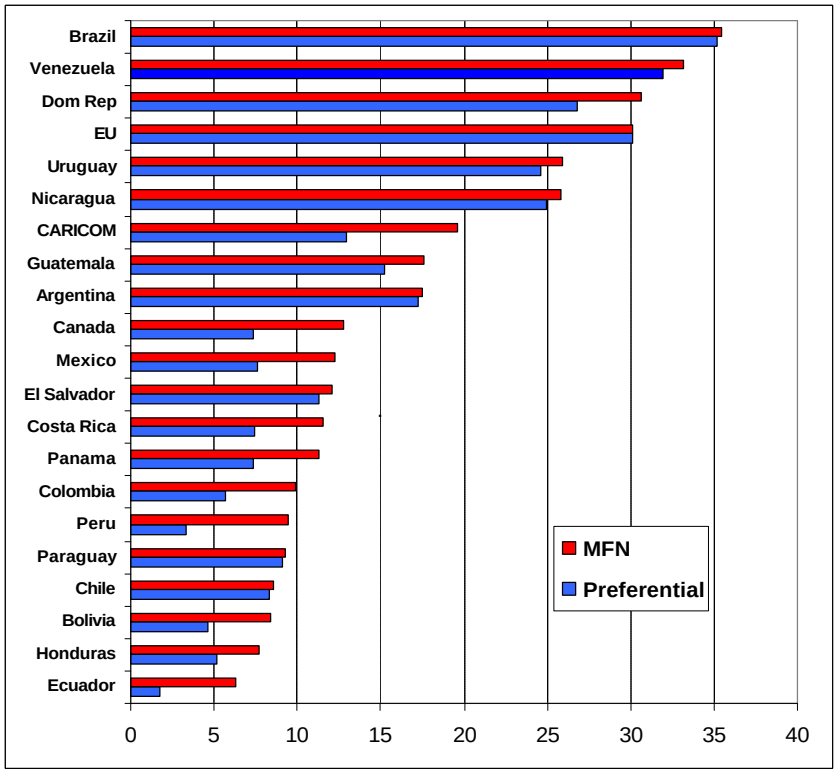
So far, in the former sections, we have concentrated our analyses on the MFN tariff barriers faced by agricultural products. However, to provide a realistic picture of the effects of trade liberalization two other factors should be taken into consideration: (a) MFN versus Preferential Tariffs and (b) Agricultural versus Industrial Tariffs.

Most-Favored-Nation (MFN) versus Preferential Tariffs

The first factor is the existence of many preferential trade agreements and free trade areas in the Western Hemisphere. During the last decade more than 30 bilateral and regional agreements have been negotiated in the region. These agreements have significantly increased trade between partners by providing preferential or duty-free access to a large portion of hemispheric trade. When these preferential agreements are taken into consideration a different

picture emerges. Figure 2.8 compares the US MFN and preferential imposed tariffs, weighted by exports, for agricultural products. In the case of Ecuador preferential access provides a 73% reduction in the tariff, decreasing it from the 6.3% to 1.7%. For Canada and Mexico, which are partners in the NAFTA, the tariff is reduced by approximately 40%.

FIGURE 2.8. US 2000 MFN VS PREFERENTIAL IMPOSED AGRICULTURAL TARIFFS (%)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

It is also interesting to note that most of the so-called small economies - Caribbean and Central American countries - experience a significant decrease in the level of tariff protection, because of the unilateral preferential access granted by the US for the few commodities that make the bulk of their exports, such as coffee, cocoa, sugar and bananas (see figure 2.6). This provides a striking example of how a reduction in the tariffs faced by a few sensitive products can significantly impact the overall level of tariff barrier faced by a country. However, in the case of many South American countries, preferential access does not notably decrease the overall agricultural tariff barriers (since these agreements do not provide access to sensitive products). Therefore, using MFN rates to measure tariff protection creates, in some cases, an upward bias.

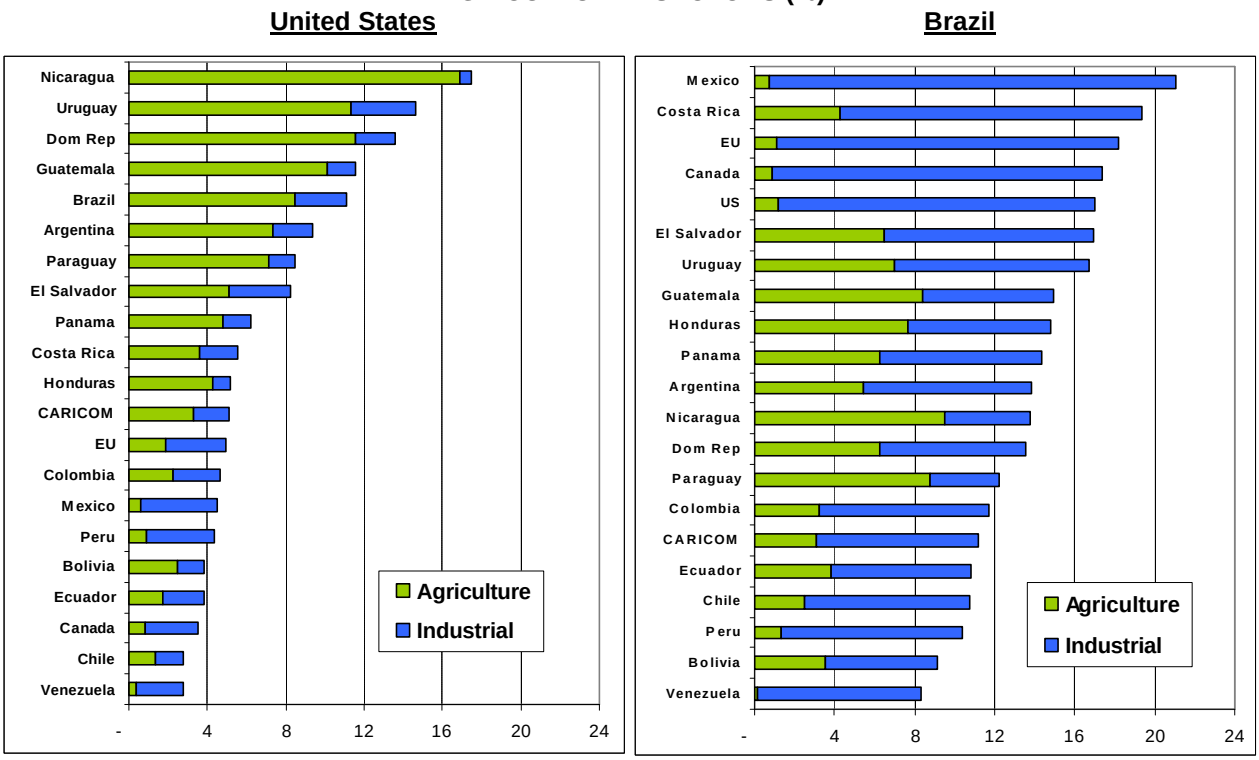
Appendix B provides a table with the average agricultural preferential tariffs, weighted by total exports, for the WH countries and the European Union.

Tariffs on Agricultural versus Industrial Sectors

The second factor to be considered is that any negotiation that addresses the liberalization of trade barriers for agricultural goods will encompass trade offs. Many of the countries that face relative high tariff barriers for their agricultural exports impose, on the other hand, relative higher import tariff protection on non-agricultural products. It is thus expected that any decrease in the level of tariff protection in the agricultural sector will require further liberalization of non-agricultural sectors. Any investigation of the effects of trade liberalization would be incomplete if only one sector is taken into consideration. In the subsequent sections non-agricultural products were denominated as “industrial” products.

Figure 2.9 displays the breakdown of the MFN tariff protection imposed by Brazil and the US divided by sectors (agriculture and industry). The graph shows that in many cases a greater part of the overall tariff imposed by Brazil is due to industrial tariffs (especially in the case of the NAFTA countries). Almost 90% of the 17% overall weighted average tariff faced by the US in Brazil corresponds to tariffs imposed on its industrial exports. In the case of the US, the inverse is true for almost all WH countries. A greater part of the overall tariff is due to agricultural tariff barriers. Of the 11% overall tariff faced by Brazilian exports into the US, for example, more than 75% is imposed on its agricultural exports.

FIGURE 2.9: BRAZIL AND US 2000 MFN IMPOSED TARIFFS DIVIDED BETWEEN INDUSTRIAL AND AGRICULTURAL SECTORS (%)

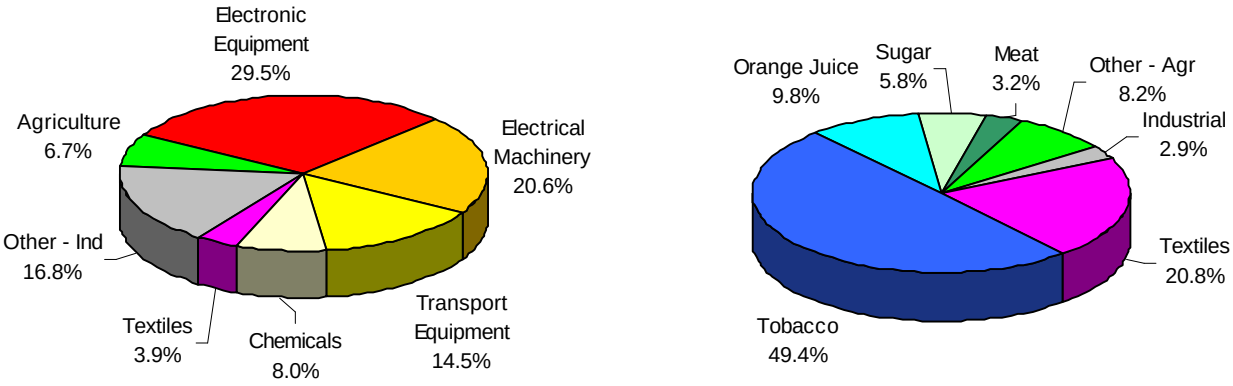


Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

One of the advantages of using weighted average tariffs is that the above breakdown exercise can be further segmented. This provides a comprehensive overview of the sensitive products utilizing both tariff and trade flow information. Figure 2.10 presents such an analyses. For the US, the three most sensitive product categories are electronic equipment, electrical machinery and transport equipment, with the first two counting for approximately 50% of the overall tariff level. In the case of Brazil, tobacco, textiles, orange juice and sugar are the most sensitive products, while tobacco makes up for almost half of the total overall weighted tariff.

FIGURE 2.10: BREAKDOWN OF OVERALL MFN IMPOSED TARIFFS BY SENSITIVE PRODUCTS (HS6 2000)

Brazil on the U.S. (17.0%) **U.S. on Brazil (11.1%)**



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

2.3.1. Evaluating Tariff Protection in a Bilateral Agreement: the "Relative Tariff Ratio" Index (RTR)

The previous section demonstrated that one of the challenges that exists in trade negotiations is the measurement and comparison of relative levels of tariff protection between trading partners. An index that measures the effects of trade liberalization in a bilateral negotiation is the Relative Tariff Ratio (RTR) Index, originally developed by Sandrey (2000), and further developed by Wainio & Gibson (2002) and Gehlhar and Wainio (2002). The index considers the bilateral protection between two countries, where each tariff line of country A is weighted by country's B total exports to the world for the same tariff line, and vice versa. The index is constructed as the ratio between a country's faced tariffs in the numerator and its imposed tariffs in the denominator[16]. In general, a ratio close to one means that both countries have similar tariff protection, and thus face/impose comparable barriers. However, this does not reflect the levels of tariffs, only their relative ratios. A ratio of 3.9 between the US and Mexico means that for

[16]. The Relative Tariff Ratio Index is always calculated on a bilateral basis, or:

$$RTR_{AB} = \frac{\sum_{i}^{n}\left(X_i^B . Y_i^A\right)}{\sum_{i}^{n}\left(X_i^A . Y_i^B\right)}$$

Where, *A*, *B* = Countries *A* and *B*
X_i = *ad-valorem* equivalent (AVE) tariff rate for product *i*
Y_i = share of exports of product *i* in total exports

every percentage point that Mexico faces in the US, US faces 3.9 points in Mexico, or an RTR index of 3.9/1.0. Conversely, the ratio between Mexico and the US is 0.3, or an index of 0.3/1.0 (= 1.0/3.9). The main advantage of the RTR index is that it summarizes a large amount of trade flows and tariff levels data into a concise number, which can be easily interpreted.

TABLE 2.2: U.S. MFN AND PREFERENTIAL RTR INDEX FOR WH COUNTRIES (HS6 2000)

RTR	MFN Tariffs			Preferential Tariffs		
	All	Agr	Ind	All	Agr	Ind
Argentina	1.5	0.8	4.0	1.8	0.8	9.8
Brazil	1.5	0.4	5.0	1.8	0.4	14.3
Paraguay	1.4	1.5	2.0	1.6	1.5	8.9
Uruguay	0.8	0.5	2.0	1.0	0.6	5.1
Canada	1.7	2.9	1.1	4.6	3.5	--
Mexico	3.9	4.2	3.6	9.2	3.5	16.5
Chile	3.2	1.1	5.4	4.2	1.1	9.6
Dom Rep	1.0	0.6	4.0	1.2	0.7	12.9
Panama	1.6	2.1	3.4	2.7	3.3	10.2
Costa Rica	0.8	1.5	1.2	1.7	2.3	5.5
Guatemala	0.4	0.8	1.2	0.5	1.0	5.7
Honduras	1.1	2.0	2.5	1.9	2.9	8.4
Nicaragua	0.2	0.5	1.3	0.2	0.5	14.4
El Salvador	0.6	1.0	0.7	0.8	1.1	2.1
Bolivia	2.3	1.2	5	6.5	2.1	731
Colombia	2.3	1.6	3	8.2	2.8	265
Ecuador	1.7	2.4	2	13.6	9.0	2,959
Peru	2.9	1.9	3	39.1	5.3	2,434
Venezuela	4.0	0.5	4.4	4.4	0.5	4.8
CARICOM	2.5	1.1	5.4	4.4	1.7	14.9
EU	1.1	0.9	1.0	1.1	0.9	1.0

Note: Canada's imposed tariff is equal to zero, so the RTR index tends to the infinite.
Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

Table 2.2 contrasts US MFN and preferential RTR index figures for the agricultural and industrial (non-agricultural) sectors. In most cases, the US RTR preferential index has higher values than the MFN one, especially for industrial products from the Andean Community countries (for Ecuador the ratio increased from 2 to almost 3,000). In the case of the Andean countries, this extreme increase from MFN to Preferential can be explained by the fact that the US has practically reduced all import tariffs to zero to improve trade flow and help in the war against drug trafficking. The problem is that as the imposed tariff approximates zero, the RTR tends towards infinity. As a result, when imposed tariffs are very close to zero the RTR index has to be interpreted very cautiously (to better understand the underlying dynamics one should reflect on the imposed and faced tariffs values itself). Nevertheless, these high ratios indicate

that the reduction of tariffs by the US under the preferential agreement has not been followed by a proportional decline in tariffs on the part of the Andean Community.

It is interesting to notice that this increase in the RTR index also occurs for Mexico and Canada, both partners in NAFTA. In the case of Canada, the overall index increased from 1.7 to 4.6, and for Mexico from 3.9 to 9.2. This implies that the US has provided relatively more access than it has gained from its partners in the NAFTA, when taking into consideration the RTR methodology. Furthermore, this liberalization has been primarily granted for industrial products.[17] In the case of Mexico, the RTR industrial index increased from 3.6 to 16.5, however the RTR agricultural index was reduced from 4.2 to 3.5. In other words, while Mexico has reduced agricultural barriers, the US has provided more access to industrial imports, in relative terms. On the other hand, for countries that have unilateral trade agreements with the U.S., the Preferential RTR index will be lower than the MFN RTR index. This is the case since these countries have gained market access without reciprocity.

The above illustration provides a powerful example of how useful the RTR index can be for measuring trade liberalization on a bilateral basis. The index can be used as a practical tool to appraise progress in a free trade agreement, and as a starting point to identify potential sectors that negotiators should focus on. Therefore, a next step would be to calculate several years to capture trends, since only one year may not be fully representative. However, we should reflect upon the fact that the RTR index is limited in terms of accuracy. Sandrey (2000) warns that he would be hesitant to utilize the Index to analyze less and least developed economies, since income effects would make some of the assumptions unrealistic. However, he did point out that this does not invalidate the examination of exports from the developing world to the developed world. Overall, we believe that the potential data gains of using the RTR far outweigh its deficiencies.

2.3.2. Evaluating Tariff Protection in a Regional Integration Agreement: the "Regional Export Sensitive Tariff" Index (REST)

Building on the RTR index, we propose an extension of the RTR index at the regional level called the "Regional Export Sensitive Tariff" Index (REST). The REST index aggregates all tariffs faced and imposed by each country at the regional level into a single indicator, representing a ratio of the weighted value of those tariffs.

[17]. For Canada the RTR industrial index could not be calculated since tariffs faced and imposed are zero.

The index measures each country's *faced* tariffs from its partners weighted by its *total exports* in the numerator, and each country's *imposed* tariffs weighted by the *total exports* of all its partners in the denominator, calculated one by one, based on a potential Regional Integration Agreement (RIA). Each combination of tariffs and share of export ratios for one country is weighted by the relative importance of total exports to the region in the case of *faced* tariffs, and total imports in the case of *imposed* tariffs[18]. Both the RTR and the REST indices can be used to gauge the concessions that each country makes relative to those it receives, in the event of the elimination of trade barriers. The advantage of the REST index is that it can go far beyond the bilateral level, and address the important issue of liberalization at a regional or multilateral level.

However, the REST index, like the RTR index, does have limitations, and is more of a pragmatic mercantilist tool rather than an elegant academic measure. Two of these limitations do deserve special attention: the first limitation is that the REST index is based on tariffs and therefore does not take Non Tariff Barriers (NTBs) into account, such as TBT and SPS barriers. Such barriers are extremely difficult to quantify and may one day become a major barrier to agricultural trade. SPS requirements, for instance, can impede trade to small economies due to the lack of financial and human resources to implement and administer the required procedures.

The second limitation is that the index fails to incorporate the effects of elasticity and trade substitution that may occur once barriers decrease. It assumes that all of a country's sectoral exports will uniformly go to all its partners in the regional agreement. This is somewhat implausible, especially in the case of exports from big to small economies. However, the index is largely influenced by each country's sensitive exports to its most important partners, giving marginal importance to other products and countries. Thus, the REST index contrasts countries' competitive products with major trading partners' barriers. It seems unrealistic to assume that 92% of a Caribbean country's imports from the US will be industrial products (agriculture corresponded for only 8% of the US total exports in 2000). This seems even more unlikely when

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18. $$REST_A = \frac{\sum_{R \neq A}^{N} \left\{ \left(X_R^A / X_T^A \right) \sum_{i=1}^{n} x_i^R \cdot y_i^A \right\}}{\sum_{R \neq A}^{N} \left\{ \left(M_R^A / M_T^A \right) \sum_{i=1}^{n} x_i^A \cdot y_i^R \right\}}$$

Where: A, B, C,…, N = member countries of an RTA and R is any country

x_i^A = maximum *ad-valorem* equivalent tariff rate at HS-96 level for tariff line i in country A,

y_i^A = share of exports of i in total exports, M_R^A = country A's total imports from country R,

M_T^A = country A's total imports from all RTA countries,

X_R^A = country A's total exports to country R,

X_T^A = country A's total exports to all RTA countries.

we consider that these countries are net food importers and do have a relatively low level of income per capita. Nonetheless, since the Caribbean Community does represent less than 1% of US total exports in the WH, it has a small weight in the US REST index.

In sum, the advantages presented by a practical and concise figure that provides a measurement for sensitive products tariff barriers in a regional agreement, far outweigh any of the limitations mentioned. Therefore, the index could be used in negotiations to provide a valid and useful way to measure the “mercantilist progress” and “balanced concessions” that are behind most regional trade negotiations.

One final issue should be taken into account to avoid bias when using MFN data to compute the REST index. Preexisting regional Free Trade Area (FTA) agreements have to be considered when calculating the index by using preferential tariffs or assuming a zero tariff. This is the case since trade has already been liberalized under such agreements; undoubtedly increasing trade flows between its partners. In other words, existing FTA’s have already created trade and thus would induce bias in an index that is trying to gauge the level of distortion in trade flows produced by high tariff rates. Only trade data from non-Mercosur countries was used, for instance, to compute the Argentinean MFN REST in the FTAA. As a result the Argentinean MFN REST value measures the concessions that the country makes relative to those it receives while only taking into account the WH countries outside the Mercosur agreement. The same approach was used for the Andean Community, the Central American Common Market (CACM) and the NAFTA countries. It should be emphasized that such a concern does not exist when preferential tariffs are used to calculate the REST. In this case the existing trade flows do accurately reflect the applied preferential tariffs and thus no distortion has to be accounted for. So, when calculating the Preferential REST for the FTAA, each country was weighted against all other WH.

Table 2.3 summarizes the main strengths and weaknesses of the RTR and REST indexes.

TABLE 2.3: SUMMARY OF STRENGTHS AND WEAKNESSES OF THE RTR AND REST INDEXES

Strengths	Weaknesses
• Pragmatic measure that can be easily interpreted. • Summarizes a large amount of trade flows and tariff level data into a simple and concise number. • Tariffs are weighted according to their importance with trading partners (index is mostly influenced by sensitive products and major trading partners). • Excellent instrument for trade negotiators. Useful to set starting points and measure progress in FTA. • Highlights potential sectors of possible negotiation difficulty.	• Ignores elasticity effects and substitutions possibilities that may occur once trade barriers decrease. • Assumptions could be unrealistic for some least developed countries. • Does not account for non-tariff measures and subsidies (SPS, TBT, anti-dumping, export restrictions, etc.). • REST calculation has no sense when tariffs tend to zero.

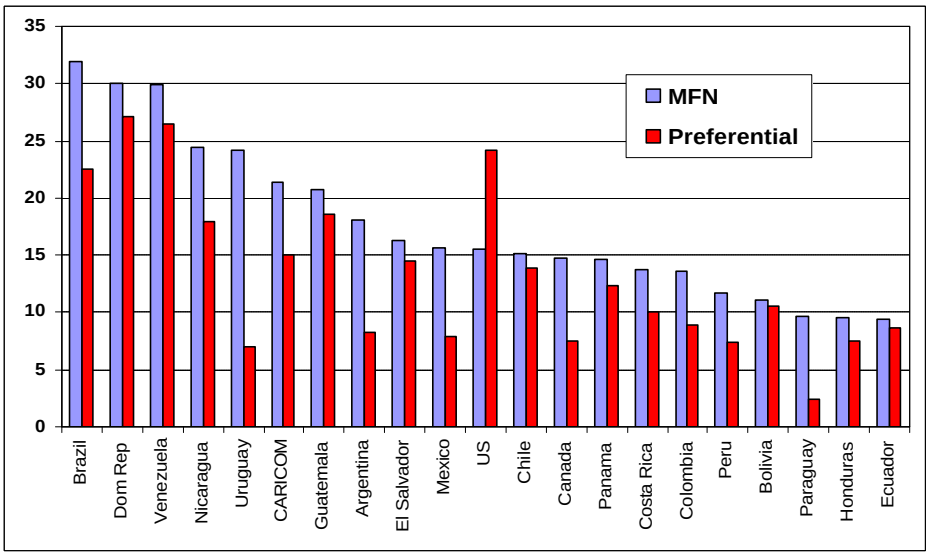
Source: authors, based on Sandrey (2000), Wainio & Gibson (2001), and Gehlhar and Wainio (2002).

Appendix C provides a table with the aggregated regional tariffs that are weighted, faced and imposed for WH countries, and the respective REST index (both MFN and Preferential). As illustrated for the bilateral case of Brazil and the US, a breakdown of these aggregated tariffs by product could provide a comprehensive overview of a country's sensitive export products on the regional level. Figure 2.11 displays the faced tariff for agricultural products while figure 2.12 displays imposed tariffs for industrial products. It can be observed that faced agricultural tariffs are twice as high on average as imposed industrial tariffs. Moreover, most countries experience a significant decrease in the regional agricultural tariff level when preferential agreements are taken into consideration. The same does not hold true when industrial imposed tariffs are analyzed. One possible interpretation is that trade for sensitive industrial products has already been liberalized, for the most part, while many sensitive agricultural products still depend on preferential treaties for market access.

When considering MFN figures, Brazil's agricultural exports face the highest barriers in the Hemisphere. On the other hand, Brazil ranks second place in terms of imposed protection on industrial imports. Canada and the US are the countries that impose the lowest industrial tariffs for all partners: about 3% in the case of MFN tariffs and practically zero when preferential rates are considered. It is interesting to note that the US agricultural preferential faced tariff is actually higher than the MFN tariff. This is the case since the MFN calculations for "regional" tariffs do not take into consideration trade between existing RTA members (NAFTA members in this case). The preferential tariff ends up being higher because the US still faces some protection on

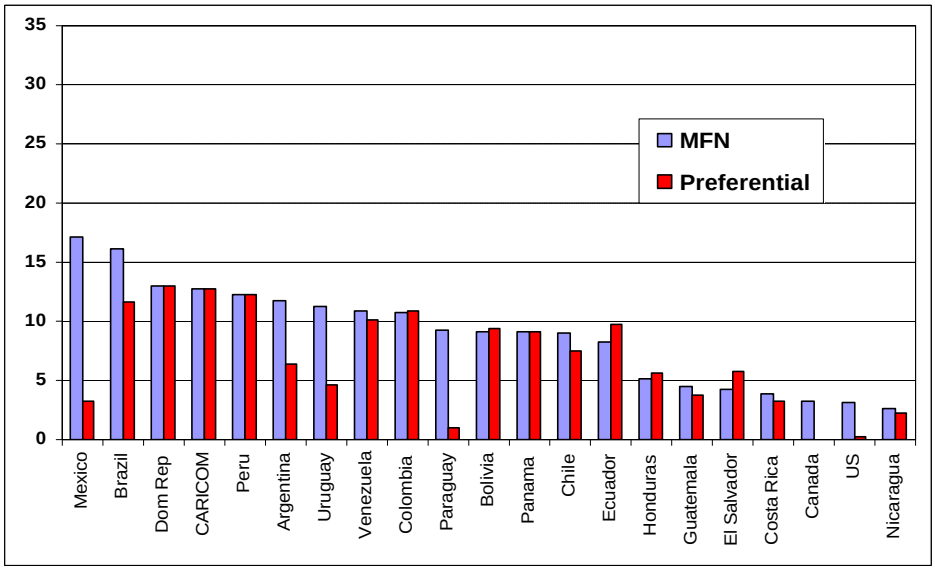
agricultural exports from other NAFTA members (section 2.3.1 pointed out that the US has provided relatively more access than it has gained from its NAFTA partners).

FIGURE 2.11. WH COUNTRIES FACED TARIFFS ON AGRICULTURAL PRODUCTS (MFN AND PREFERENTIAL, HS-6, 2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

FIGURE 2.12. WH COUNTRIES IMPOSED TARIFFS ON INDUSTRIAL PRODUCTS: (MFN AND PREFERENTIAL, HS-6, 2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

Table 2.4 presents the results for the MFN and Preferential REST index for the whole economy, industrial sector and agriculture. To provide an easy visual interpretation, REST index figures from 0.8 to 1.2 represent similar tariff protections and are depicted in yellow. REST index numbers above 1.2 characterize higher faced than imposed weighted tariffs, therefore indicating a protectionist reality that could be reversed (depicted in green). When the index is below 0.8 it denotes lower faced than imposed tariffs, and therefore a country that would be a net liberalizer in that sector (symbolized in red).

TABLE 2.4. THE "REGIONAL EXPORT SENSITIVE TARIFFS" INDEX (REST) BY SECTORS FOR WH COUNTRIES (MFN AND PREFERENTIAL, HS-6, 2000)

REST		MFN			Preferential		
		All	Ind	Agr	All	Ind	Agr
Mercosur	Argentina	0.9	0.4	1.2	0.7	0.3	1.1
	Brazil	0.7	0.3	2.2	0.7	0.3	2.2
	Paraguay	0.9	0.7	0.7	1.8	0.6	1.4
	Uruguay	1.4	0.9	1.7	1.1	0.7	1.5
NAFTA	Canada	1.7	4.2	0.5	0.4	13.3	0.3
	Mexico	0.7	0.9	0.4	0.2	0.2	0.3
	US	1.4	3.6	0.7	3.2	11.7	2.5
	Chile	0.9	0.8	1.7	1.0	0.8	1.9
	Dom Rep	1.1	0.4	1.7	1.0	0.3	1.5
	Panama	1.0	1.1	0.6	0.9	1.0	0.5
CACM	Costa Rica	1.6	1.4	0.8	1.2	1.2	0.6
	Guatemala	2.8	1.8	1.3	2.7	1.7	1.4
	Honduras	1.2	0.8	0.6	0.8	0.5	0.5
	Nicaragua	5.5	3.6	1.9	4.0	2.5	1.5
	El Salvador	2.4	2.1	1.3	1.3	0.9	1.1
Andean	Bolivia	0.8	0.7	1.1	0.8	0.7	1.1
	Colombia	0.7	0.5	0.8	0.4	0.3	0.6
	Ecuador	0.7	0.6	0.6	0.6	0.5	0.6
	Peru	0.5	0.5	0.6	0.3	0.3	0.4
	Venezuela	0.4	0.4	1.9	0.5	0.4	1.8
	CARICOM	0.5	0.3	0.9	0.4	0.2	0.6

Note: CAR – Caribbean Community countries.
Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

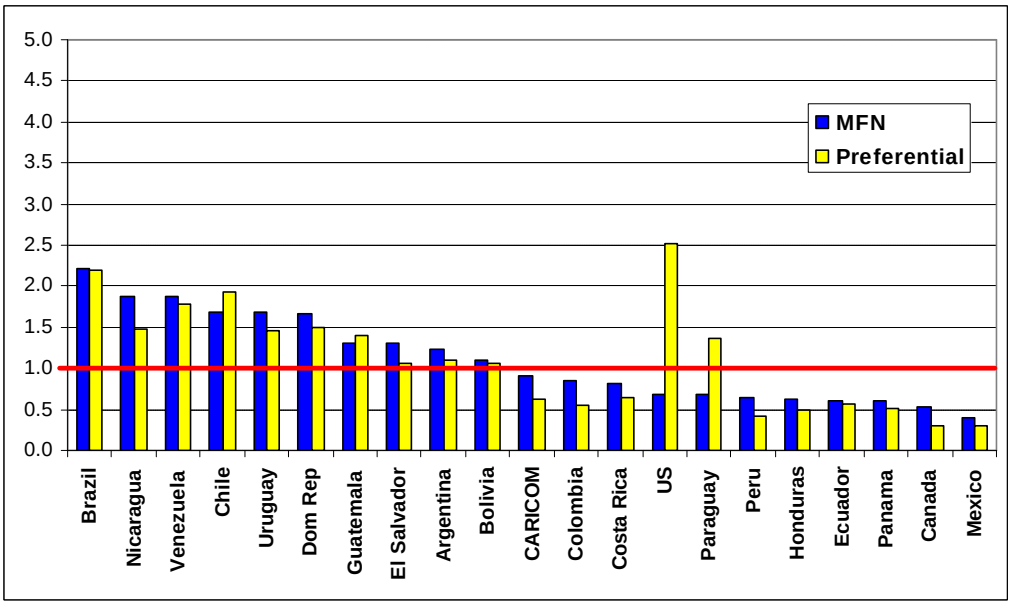
In general, a REST ratio close to one can be interpreted as an overall evenness between a country's tariff regime and that of its regional partners. Consequently, the objective of RTAs´ negotiations could be to progress towards REST values that are close to one for all partners. This does not necessarily mean that all tariffs should be close to zero. It rather implies that

countries will have equivalent access for their most sensitive products exports at the regional level. Below we provide a detailed analysis of the REST index results for different sectors.

Agricultural Sector

Figure 2.13 and table 2.4 present the calculation of the REST Index for agricultural products using MFN and Preferential tariffs. The figure shows very clearly that NAFTA, Caribbean and most Andean countries impose higher weighted MFN tariffs than they face in the WH (REST below 1). The biggest face-off is Mexico and Canada, where high tariffs imposed on a very small group of key products are significant to potential FTAA partners. In other words, these countries are net liberalizers within the integration process in terms of agricultural tariff protection.

FIGURE 2.13. THE REST INDEX FOR AGRICULTURAL TRADE IN THE AMERICAS (HS6 2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

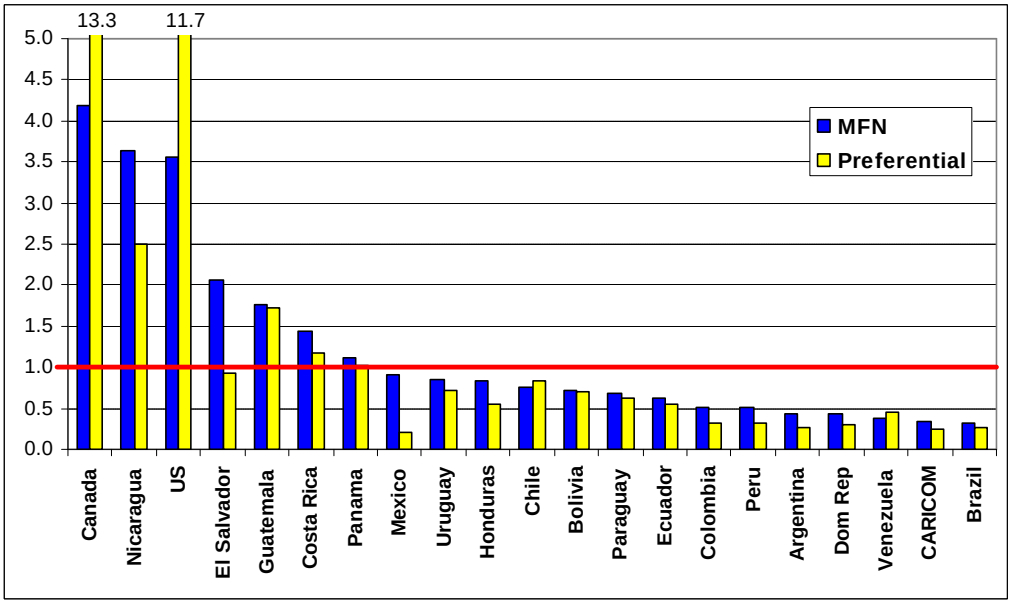
On the other hand, Chile and most Mercosur and Central American countries would obtain net gains in terms of agricultural market access. Brazil would rank first in this process above Uruguay, Chile and Argentina, as a result of the very high tariffs faced by Brazil's sensitive products such as sugar, orange juice and tobacco, especially in the US. There are no major differences between the MFN and preferential REST figures for most countries other than the

US and Paraguay. In fact, as we have mentioned previously the US case has provided more access in agriculture trade to its NAFTA partners than it has received. Regarding Paraguay its preferential REST is higher, because it has provided virtually free access to its Mercosur partners, while it still encounters some tariff barriers.

Industrial Sector

Figure 2.14 and table 2.4 provide an overview of the REST index for industrial products. The figure offers a very different view than the one provided by the agricultural REST. The US, Canada, and most Central American nations are the countries that have the highest industrial REST. These high ratios are mainly due to the fact that these countries apply very low tariffs on industrial imports. The very high preferential REST value for Canada and the US is a result of the near zero tariff that these countries impose on Mexico. These preferential ratios should be interpreted carefully, since they do not necessarily correspond to possible high trade offs (Canada faced tariff is approximately 0.44 while the imposed tariff is 0.03). For most Central American countries, the above one REST ratio is a consequence of their below average imposed tariffs, when these are compared to most South American countries and Mexico (they still imposed higher tariff barriers than the US and Canada).

FIGURE 2.14. THE REST INDEX FOR INDUSTRIAL TRADE IN THE AMERICAS (HS6 2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations.

Most Mercosur and Caribbean countries would become net liberalizers in the FTAA in industrial products, as they still enforce higher tariffs (especially when compared to the US and Canada). However, as is shown in figures 2.11 and 2.12, tariff barriers on industrial products are50% smaller on average than barriers on agricultural products. Even though there are still some segments in the industrial sector where further trade liberalization can be achieved, there is still much to be accomplished in the agricultural sector.

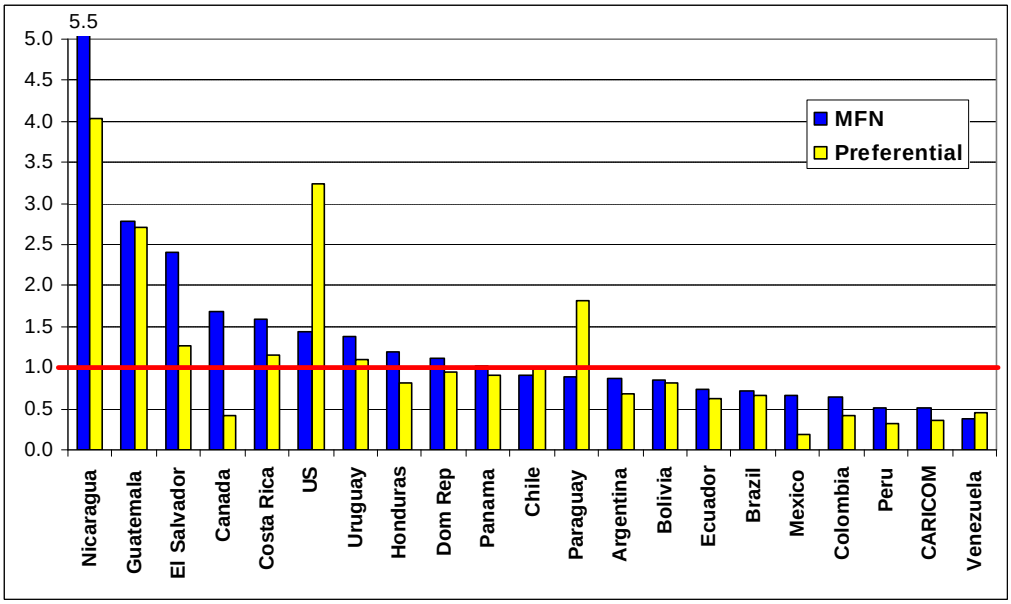
All (Industry & Agriculture)

To complete our examination using the REST index we computed each country's overall ratio, combining both industrial and agricultural tariff barriers (figure 2.15 and table 2.4). Through this analysis we can get a better understanding of all the trade-offs that would take place in an FTAA. Most Central American countries face higher tariffs than they impose, regardless of the tariff universe under consideration (MFN or preferential). These countries would have a strong interest in pushing the trade liberalization process forward. Actually, they would have net gains in overall market access from a simultaneous decrease on agricultural tariff barriers in North America and industrial tariffs in South America[19]. The countries in the best position are Nicaragua, Guatemala and El Salvador. Panama, The Dominican Republic and Chile are countries that have REST close to one. These countries sensitive products enjoy a relatively even access at the regional level.

The US is also a country that would benefit from a regional trade agreement, independent of the tariff universe considered. Its preferential REST ratio is the second highest since the country has provided more access than it has gained from several of its FTAA partners. Furthermore, even though the US does impose "megatariffs" on some agricultural products, agriculture represented only about 8% of total US exports in 2000. Canada has a REST above one for MFN tariffs and below one for preferential rates. This country would gain from a decrease in industrial tariff barriers in Latin America. On the other hand, the US still imposes relative higher agricultural tariff barriers towards its NAFTA partners and most South American countries. Mexico would become a net liberalizer, both in agriculture and industry, independent of the tariff scheme.

[19]. These results are very similar to those obtained by Diao *et. al.* (2002) in their CGE scenarios for the FTAA.

FIGURE 2.15. THE REST INDEX FOR TRADE IN THE AMERICAS (HS6 2000)



Source: 2001 Hemispheric Database of the Americas. INT-IDB calculations

Mercosur and most Andean and Caribbean countries would become net liberalizers in the process. Mercosur countries would gain from liberalization of agricultural markets but would have to trade this off with the liberalization of their own high industrial tariffs. For the Andean and Caribbean countries, the below one REST ratio is largely a result of the existing FTA's that they have with the US. Under these FTA's, Andean and Caribbean countries have gained more access than they have provided (mainly for industrial products).

In summary, it is important for all WH countries to consider the potential gains of balanced FTAA negotiations for the different sectors as well as the setbacks that they could face in the absence of this agreement. It is our opinion that the REST index has the potential to become a powerful tool to help negotiators understand the dynamics that underlie tariff barriers and trade flows for sensitive products in any regional or multilateral trade negotiation process.

3. Overview of Domestic and Export Agricultural Subsidies in the World

One of the major breakthroughs of the URAA was the recognition of the direct link between agricultural subsidies and international trade. This was accompanied by the identification of the need to include agriculture in the world trading system, and under the same conditions as those applying to non-agricultural products. The agreement aimed at identifying and reducing the measures that have potential trade distorting effects on international trade[20].

Export subsidies for industrial products have been prohibited during the eight multilateral rounds of the GATT. Nevertheless, in the case of agriculture, these subsidies were only subject to limited disciplines and reductions. In terms of domestic support, agricultural policies were classified in four boxes according to their potential to distort trade. Measures that have zero or minimal effects on production and trade were placed into the "green box," and were exempted from any expenditure limits. In addition to measures covered by the green box, two other categories of domestic support were exempted from reduction commitments under the URAA: certain developmental policies in developing countries which fall into the "S&D box" and government payments under production-limiting programs which were placed into the "blue box". All other measures of domestic support were considered as production and trade distorting, and are allocated into the "amber box". Amber box subsidies are measured through an indicator named Total Aggregate Measurement of Support (AMS), which is subject to reduction commitments under the Agreement. In addition, the agreement required countries to notify all their export subsidies. This section provides an overview of the evolution of the use of domestic and exports subsidies in the world, in general, and in the EU and the US, in particular, during the implementation period of the Agreement.[21] In order to present a coherent view of the ongoing trends and their potential influence on multilateral and regional negotiations, data was analyzed through a comparative approach[22] using three different sources: WTO notifications on domestic support, OECD and governments published official data (see Box 3.1). Based on this approach, the evolution of domestic measures of support are discussed using different methodologies and various criteria and ratios, such as the amount of subsidies granted per hectare and per producer, for example. An analysis by product is also provided to help identify the most sensitive sectors.

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[20]. For more details on trade distortions arising from domestic support policies, see Blandford (2001), Burfisher (2001), Josling (1998), OECD (1998) and Diakosavvas (2001).

[21]. The implementation period of the URAA was 1995-2000 for developed countries, and 1995-2004 for developing countries.

[22]. For other comparisons of agricultural support between countries, see Young et. al. (2002), Burfisher et. al. (2001), Diakosavvas (2001) and ABARE (2000).

BOX 3.1.

Sources of Information and Methodologies to Measure Agricultural Subsidies

A. World Trade Organization: Notifications of members for domestic support

WTO members classifies their domestic agricultural programs in four categories:

Green box: to qualify measures that should not be, or only minimally, trade distorting and they are exempted from reduction commitments. Programs must be financed by the government and must not provide price support to producers. Generally, they are not directed towards particular products, and include direct income supports for farmers that are decoupled from the current level of production or prices. Green box measures also include disaster assistance, government programs on research, and pest and disease control.

S&D box: A Special and Differential Treatment is granted to developing countries because government measures of assistance are seen as part of the development programs of these countries to encourage agricultural and rural development. These measures are exempted from domestic support reduction commitments that would otherwise be applicable to such measures.

Blue box: It covers direct payments under production-limiting programs (production quotas and land set-aside programs) that must be based on fixed area or yield or on 85% or less of the base level of production or head of livestock. Currently, very few WTO members are using the blue box.

Amber box: It includes any other domestic support measure that is production and/or trade distorting. Thirty WTO members have committed to reducing their AMS by 20% by the year 2000 – 13% by 2004, only for developing countries. Amber box subsidies affecting less than 5% of the value of production are exempt of commitments, due to a mechanism called "*de minimis*". Members without commitments have to keep their AMS within the "*de minimis* level", which is 5% for developed countries and 10% for developing countries. Nonexempt policies include market price support (MPS), and output and input subsidies. To calculate the MPS element of the AMS the gap between the applied government administered price and a fixed external reference price (fixed at its nominal 1986-88 average) was multiplied by the quantity of production eligible to receive the administered price for each commodity. Trade policies are included only for commodities for which there is an administered price support program.

Export Subsidies: In the URAA, the following practices are subject to reduction commitments as export subsidies: (i) the provision by governments of direct subsidies, including payments-in-kind, contingent on export performance; (ii) the sale or disposal for export by governments of noncommercial stocks of agricultural products at a price lower than the comparable price charged for the like product to buyers in the domestic market; (iii) payments on the export of an agricultural product that are financed by virtue of governmental action; (iv) the provision of subsidies to reduce the costs of marketing exports of agricultural products; (v) internal transport and freight charges on export shipments, provided or mandated by governments, on terms more favorable than for domestic shipments; (vi) subsidies for agricultural products contingent on their incorporation into exported products. Under the URAA, new export subsidies are banned. 25 WTO members can subsidize exports, but they had to reduce the value of subsidized exports by 36% and the volume by 21% during the implementation period (1995-2000). Countries without commitments cannot subsidize exports at all. The commitments did not include export credit schemes and food aid disciplines.

BOX 3.1. *(continued)*

B. Organization for Economic Co-operation and Development: Producer Support Estimate (PSE)

The Producer Support Estimate or PSE is the basic estimate of agricultural protection and support for agriculture calculated by the OECD since the mid-80's. The PSE is an indicator of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, measured at farm gate level. It is the result of policy measures regardless of their nature, objectives or impacts on farm production or income, across all countries. Support is expressed as a percentage of gross farm receipts (%PSE), and shows the amount of support to farmers, irrespective of the sectoral structure of a given country. For this reason, the %PSE is the most widely used indicator for comparisons of support across countries, commodities, and time. The PSE has two components: **MPS** and **budgetary outlays**. The effects of trade policies are included in the measure of MPS, which is calculated as the gap between the domestic producer price and a current world reference price for each commodity. The main difference between the PSE and the AMS is that: 1) the PSE uses the price received by producers while the AMS uses the current government administered price; 2) the PSE utilizes the current international reference prices while the AMS utilizes the external reference price for 1986-1988.

Budgetary outlays (PSE without MPS) encompass payments based on output; payments based on area planted or number of animals; payments based on historical entitlements; payments based on input use; payments based on input constraints, and payments based on over-all farming income and miscellaneous payments. The indicator measures more than just the "subsidy element".

C. Government Outlays

Data on EU agricultural outlays comes from the European Agricultural Guidance and Guarantee Fund (EAGGF), and Financial Reports and the Agricultural Situation in the EU Reports. The years mentioned are financial years starting January 1 and ending December 31. Government expenditures for the US are based on the Commodity Credit Corporation (CCC) net outlays provided by the Farm Service Agency (FSA) of the United States Department of Agriculture. The years mentioned are fiscal years beginning on October 1 and ending on September 30. Fiscal years are designated by the calendar year in which they end.

3.1. Evolution of domestic and export subsidies according to WTO notifications

Figure 3.1 displays the evolution of domestic and export subsidy notifications in the world. The concentration of support in three major groups contrasts sharply with the low levels of subsidies in the rest of the world. Indeed, more than 95% of domestic support measures and export subsidies are concentrated in the US, EU and "like-minded" protectionist countries[23].

In keeping with this tendency worldwide, figures for the EU and the like-minded group – countries that reported the highest level of AMS agricultural support at the beginning of the

[23]. In this section, the "like-minded" group of countries is defined as Japan, Korea, Czech Republic, Hungary, Iceland, Norway, Poland and Switzerland.

implementation period – present a downward trend in terms of current US dollars. Nevertheless, the share of trade distorting instruments in the EU is still considerable. In particular, the EU continues to rely extensively on blue box measures that are somewhat trade distorting but are exempted from reduction commitments. As a result, this element could play an important role in the redefinition of the blue box in 2003,[24] a definition that other WTO members will probably challenge. With 23% of its total granted domestic support from 1995 to 1999 concentrated in the blue box, the EU is the only member (with Norway) to intensively use this instrument. If the blue box were to be eliminated in 2003, the EU would be very close to its AMS commitment (by 2% in 1999). With respect to the US, its overall level of support remains almost constant but its AMS, although kept below its commitment limits, increased significantly after 1998.

TABLE 3.1. WTO NOTIFICATIONS FOR DOMESTIC SUPPORT AND EXPORT SUBSIDIES

	Domestic Support[1]			Export Subsidies		
US$ Million	1995	1998	(%)[2]	1995	1998	(%)[2]
United States	6,214	10,400	7.1%	26	147	1.5%
Mexico	452	1,258	0.8%	-	5	0.1%
Canada	568	522	0.5%	38	-	0.2%
Venezuela	542	211	0.4%	3	5	0.1%
Argentina	123	83	0.1%	-	-	0.0%
Colombia	58	10	0.0%	18	23	0.3%
Brazil	-	83	0.0%	-	-	0.0%
Costa Rica	-	-	0.0%	-	123	0.8%
FTAA	7,957	12,567	8.8%	85	303	3.1%
European Union	64,436	52,453	58.1%	6,292	5,995	88.0%
"Like Minded"	44,716	11,479	31.1%	619	440	7.6%
Others	2,427	934	2.0%	116	62	1.3%
WORLD	119,536	77,433	100.0%	7,112	6,800	100.0%

1. Notifications of Total AMS reduction commitments in Amber Box.
2. Average 1995-1998.
Source: WTO.

The evolution of domestic and export subsidy notifications in the Western Hemisphere compared to all other major players in the world, is illustrated in Table 3.1. Most potential FTAA members have low levels on both categories of subsidies, but the US has been increasing its domestic support in recent years, a trend expected to continue with the approval of the Farm Bill 2002 (the Farm Security and Rural Investment Act of 2002). WH countries have traditionally had very low levels of export subsidies and would easily be able to eliminate such subsidies in the near future. However, other similar measures — such as officially supported export credits on

[24]. The Agenda 2000 encompassed the last reform of the Common Agricultural Policy for the period 2000-2006, which still relies in many aspects on the “blue box” exemption to be extended with a potential increase in compensatory payments, in return for further reduction in government-supported prices.

agriculture, the abuse of international food aid programs, the presence of state trading enterprises, and export restrictions — have been used in the region and could be relevant in multilateral and regional trade negotiations.

3.2. Comparing WTO, OECD and Official Governments Data on Domestic Support

The discipline on domestic support commitments proved to be the least binding for many countries as current total AMS has been kept below commitment levels. Although expenditures on agricultural policies with the greatest potential to affect production and trade have decreased since 1995, the actual impact of this reduction has been limited mainly because the agreed reductions only apply to the AMS and exclude blue and green-box measures as well as the amber box subsidies affecting less than 5% of the value of production (*de minimis* level*).*[25] In fact, when measured by other methodologies, the evolution of the level of domestic support contrasts with the picture presented until now. Figures 3.2 and 3.3 compare the evolution of domestic subsidies in the EU and the US according to three different sources – WTO notifications in amber and blue box, OECD and government official data. Contrary to the downward trend shown by the AMS indicator, both Producer Support Estimate (PSE) and official government figures increased between 1995 and 2001, both in the EU and US. Two versions of the PSE indicator are presented. In the second one, the market price support (MPS) component has been removed to facilitate comparisons with government payments (see Box 3.1).

Figures 3.2 and 3.3 also indicate the level of domestic support vis-à-vis the amber box reduction commitments assumed by the two countries. In both cases the gap between commitments and current expenditures has been narrowing over this period. Furthermore, according to Hart and Babcock (2002), US subsidies would have exceeded the allowed WTO limits ($ 19.9 billion in

[25]. There are several reasons why the AMS is a poor indicator of production and trade distortions, among them the following: a) Total AMS production commitments are sector-wide, not product-specific (as is the PSE). This gives countries the opportunity to reduce support on some products leaving other products' support unchanged or even higher. Countries' notifications show that some of them have increased support to certain specific products. b) The market price support component of the AMS is based on the domestic administered support price and a fixed base-period world reference price (1986-1988). The domestic administered support price is a poor proxy for measuring the domestic market price because, in many important cases, it is not representative of actual internal supported prices, while the fixed external reference price of support does not represent the actual border price. This calls into question the measure of price support as defined by the URAA (the PSE uses current international reference prices). c) The exclusion of price support in cases where no administered price exists provides wide flexibility to governments in choosing policy instruments. d) The AMS only includes support provided through domestic measures and it does not capture distortions arising from trade measures that are excluded from the AMS provisions (e.g. tariffs and export subsidies). For more details, see Diakosavvas (2001) and Blandford (2001).

1999 and $19.1 billion in 2000)[26], mainly because low world prices in the late 1990s did trigger high marketing loan and marketing loss assistance expenditures. This scenario would have occurred if the US could not have extensively used the "de minimis" provisions**.** Whether or not the US amber box expenditures continue exceeding commitments after the approval of the 2002 Farm Bill depends on factors that cannot easily be predicted.[27] In any case, as a result of the additional $ 73.5 billion encompassed in the 2002 Farm Bill the overall level of domestic support will remain significant.

3.2.1. Share of Domestic Support in the Value of Agricultural Output

Under the URAA, the EU's established commitments are more than three times higher than those of the US. The EU is still spending more than twice the amount of US subsidies. A similar trend can also be observed if we compare, in global terms, the share of domestic support in the value of the two countries' production (Figures 3.4 and 3.5[28]). However, if we consider the expenditures made by governments and the PSE indicator without MPS, we find that the gap between the EU and the US outlays has shrunk dramatically due to a surge in US payments during the last three years. In fact, in response to the deterioration of world prices Congress adopted four large emergency packages between 1998 and 2001, and dramatically increased the level of US farm support.

In July 2002 the US presented an ambitious package of reform to the WTO, The package had the following objectives: the reduction of trade barriers for agricultural products, greater equity in world agriculture, and expanding growth opportunities for international trade in agricultural products. Regarding domestic support, the US proposed to bring down trade distorting subsidies (amber and blue box measures) to substantially lower levels than those currently allowed by fixing the limit on expenditures at 5 percent of a country's total value of agricultural production over a 5-year period. As can be seen in Figure 3.5, the proposal of the US is an attempt to return to its 1995-1997 levels of domestic support. Even though many have questioned the real US intentions regarding agricultural liberalization, after the 2002 Farm Bill was passed, the current proposition actually serves various US interests. First, the 5-percent

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[26]. In order to see the real level of trade distorting domestic support, current AMS and "*de minimis"* levels are included in the amber box.

[27]. For more details on WTO commitment and its implication for the 2002 Farm Bill, see Becker (2002) and Hart & Babcock (2002), ABARE Current Issues (October 2001), Korves and Skorburg (2000).

[28]. In figures 3.4 and 3.5, PSE as a % of the agricultural is calculated as follows: PSE *divided by* total value of production at farm gates. It is not calculated as the OECD %PSE, which is obtained using the following formula: PSE/(Q.PP + PP) *100; where Q.PP is the value of production at producers prices and PP is PSE *minus* MPS.

rule would harmonize the level of support that is permitted among WTO members. Second, a strict commitment at the multilateral level would be a way to pin down US domestic policies and avoid future escalations in domestic support as occurred in the late 1990s. Finally, it would force the EU to significantly curb its use of subsidies and as a result deeply reform the Common Agricultural Policy.

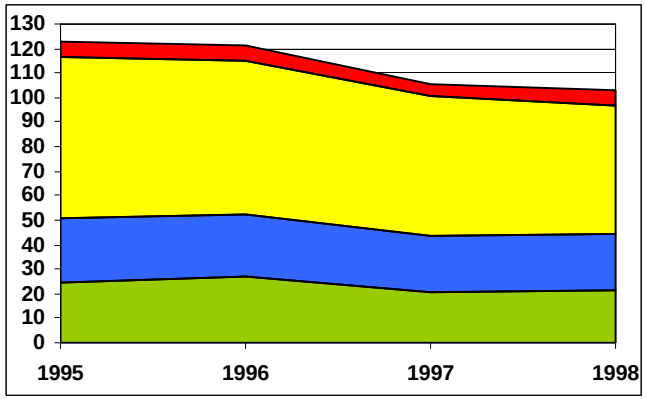
The US proposal faces strong domestic and international resistance. Domestically, resistance comes from sectors that could lose with trade liberalization, such as dairy, sugar and orange juice. At an international level, the EU and the like-minded group both object, and argue that this proposition is much more demanding for the Europeans than for the US. Figure 3.4 shows the extent to which the EU would have to cut its domestic measures of support if the US proposal were adopted. Compared to the reduction the US should make, the difference is striking (a reduction of 72% for the EU versus 49% for the US, based on 2001 data).

3.2.2. Domestic Support Granted per Hectare and per Farmer

If we use other criteria, the imbalance in cost that the two countries would have to bear is not as clear. Figures 3.6 and 3.7 show the amount of domestic subsidies per hectare in the two countries. It is worth noting that the quantity of support per hectare increased between 1995 and 2001, while the surface of land used for agricultural purposes decreased. Although the difference in the level of domestic support per hectare granted on both sides of the Atlantic is impressive, we need to keep in mind that domestic subsidies in the US are highly concentrated within a small basket of products. In fact, the US heavily supports the grain and cotton sector while it does not subsidy the production of beef, poultry and pork meats. As a consequence, if pastures were removed from the land area used for agriculture purposes, the amount of domestic support per hectare in the US would be much higher. Furthermore, if we compare the level of domestic support granted per farmer in the EU and the US, as shown in Figures 3.8 and 3.9, we see that American producers are receiving more support than the Europeans – a situation that presents a different picture regarding the efforts that need to be made if the 5 percent rule were enforced. The main reason for these results is that there are three times less farmers in the US than in the EU, and therefore subsidies are highly concentrated, especially in the mid-western states.

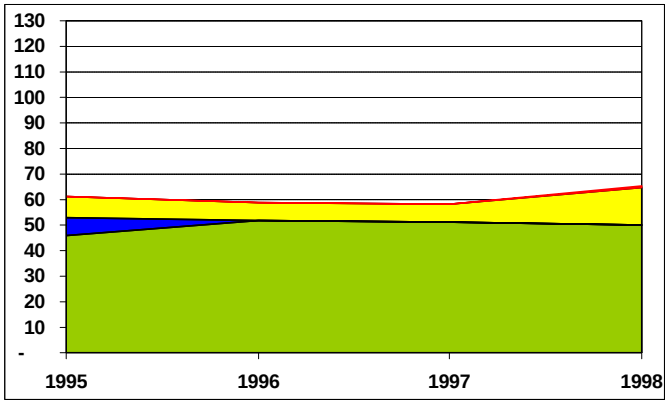
FIGURE 3.1. WTO NOTIFICATIONS OF DOMESTIC SUPPORT AND EXPORT SUBSIDIES IN THE WORLD (US$ BILLIONS)

A. European Union



Note: Amber box includes "*de minimis*" level.
Source: WTO notifications.

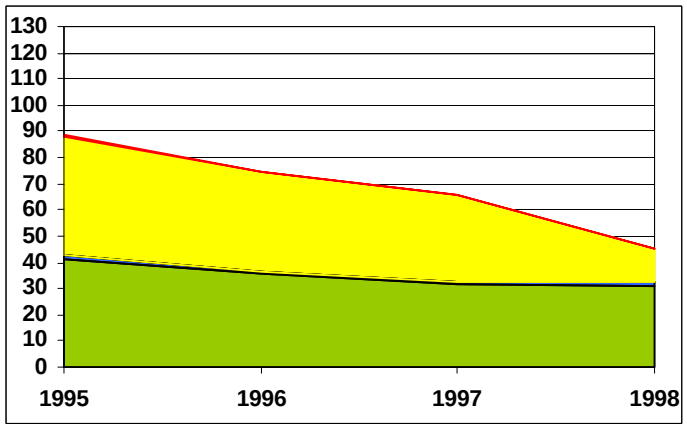
B. United States



Note: Amber box includes "*de minimis*" level.
Source: WTO notifications.

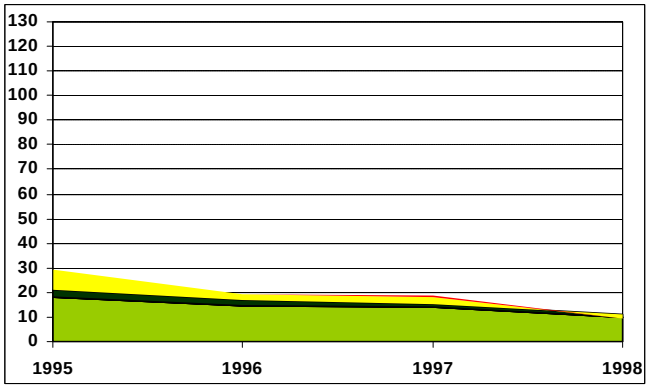
LEGEND
Green box
Blue box
Amber box
S&D box
Export subsidies

C. Like-Minded Countries



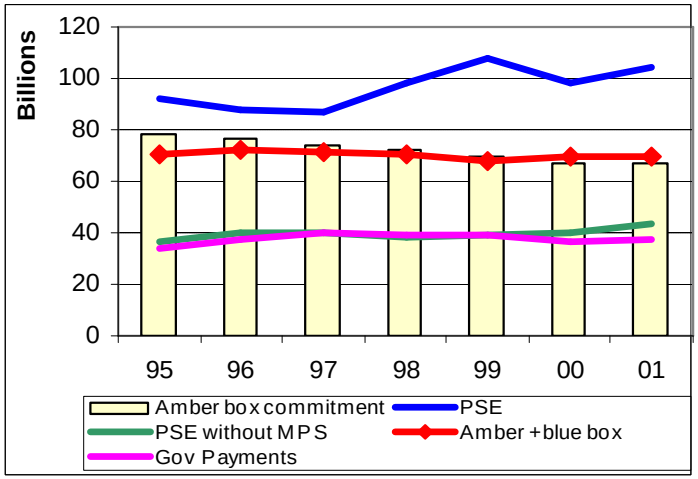
Note: Amber box includes "*de minimis*" level.
Source: WTO notifications.

D. Rest of the World



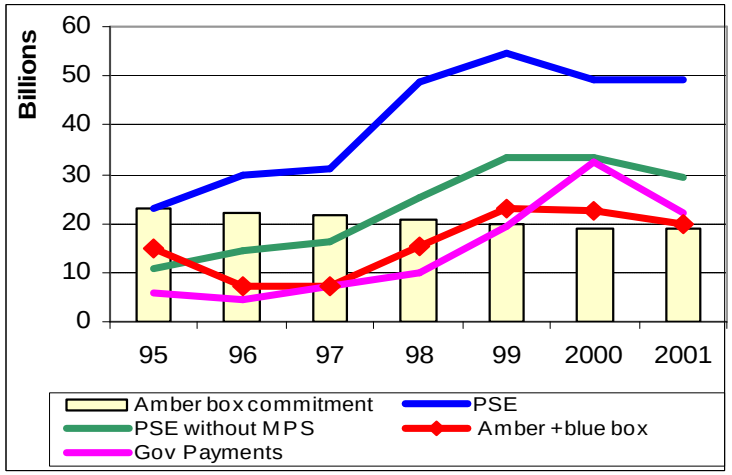
Note: Amber box includes "*de minimis*" level.
Amber box for 1998 is incomplete for most countries.
Source: WTO notifications.

FIGURE 3.2. EUROPEAN UNION: COMPARING DOMESTIC SUPPORT MEASURES (Euro)



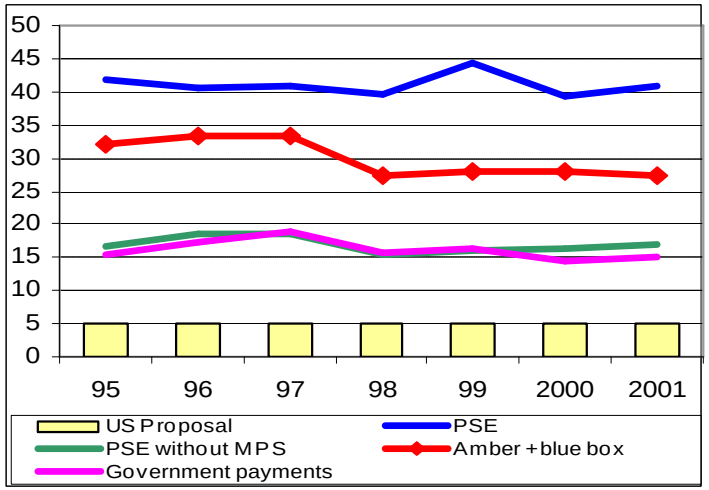
Note: Amber box includes "*de minimis*". Forecasts for 2000-01
Source: WTO, OECD, European Commission, FAPRI.

FIGURE 3.3. UNITED STATES: COMPARING DOMESTIC SUPPORT MEASURES (US$)



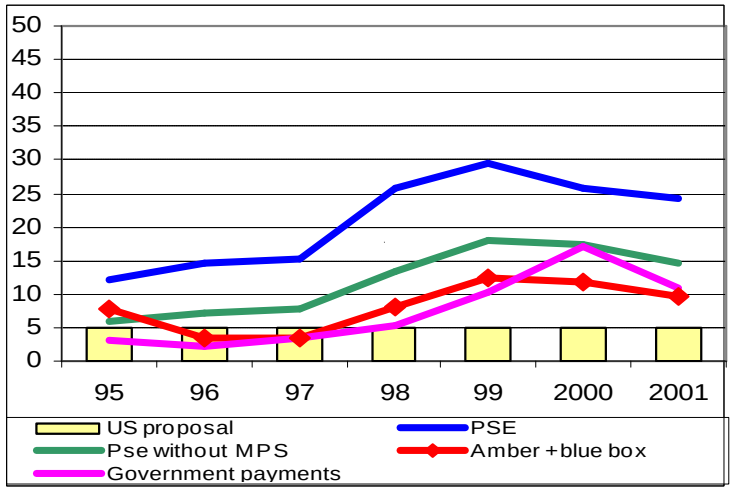
Note: Amber box includes "*de minimis*". Forecasts for 1999-01
Source: WTO, OECD, USDA-FSA, FAPRI.

FIGURE 3.4. EUROPEAN UNION: DOMESTIC SUPPORT AS A % OF THE AGRICULTURAL OUTPUT



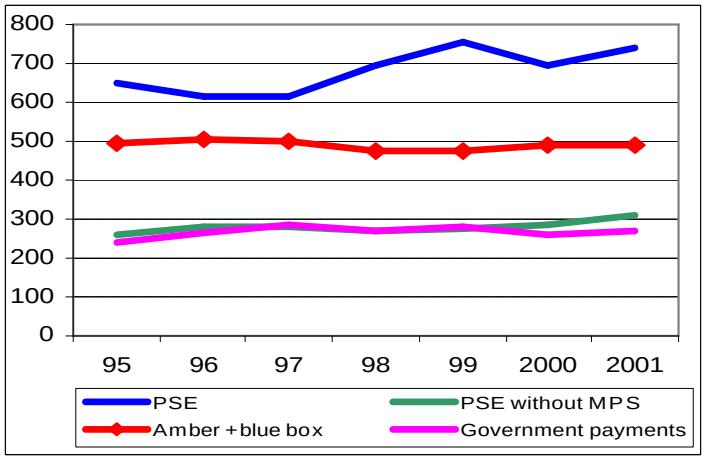
Note: Amber box includes "*de minimis*". Forecasts for 2000-01
Source: WTO, OECD, European Commission, FAPRI.

FIGURE 3.5. UNITED STATES: DOMESTIC SUPPORT AS A % OF THE AGRICULTURAL OUTPUT



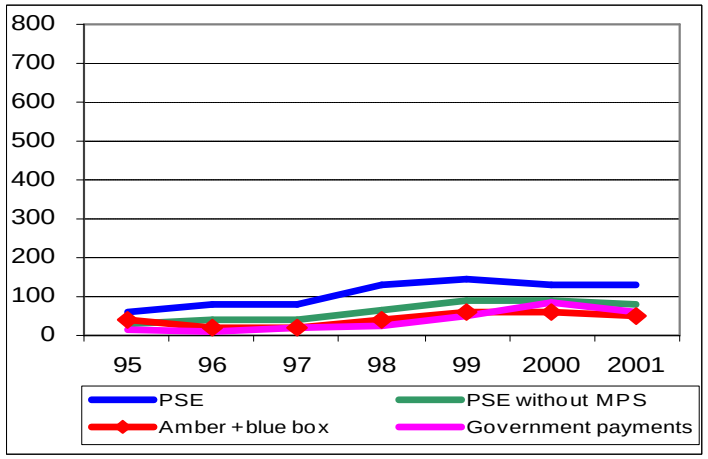
Note: Amber box includes "*de minimis*". Forecasts for 1999-01.
Source: WTO, OECD, USDA-FSA, FAPRI.

FIGURE 3.6. EUROPEAN UNION: DOMESTIC SUPPORT PER HECTARE (Euros)



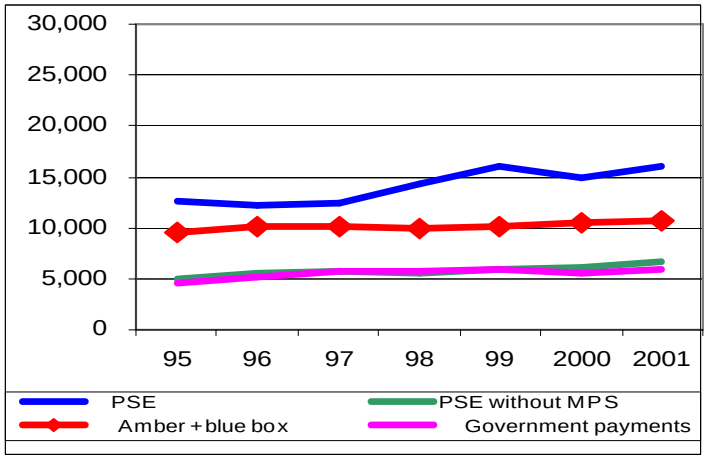
Note: Amber box includes "*de minimis".* Forecasts for 2000-01
Source: WTO, OECD, European Commission, FAPRI, FAO.

FIGURE 3.7. UNITED STATES: DOMESTIC SUPPORT PER HECTARE (US$)



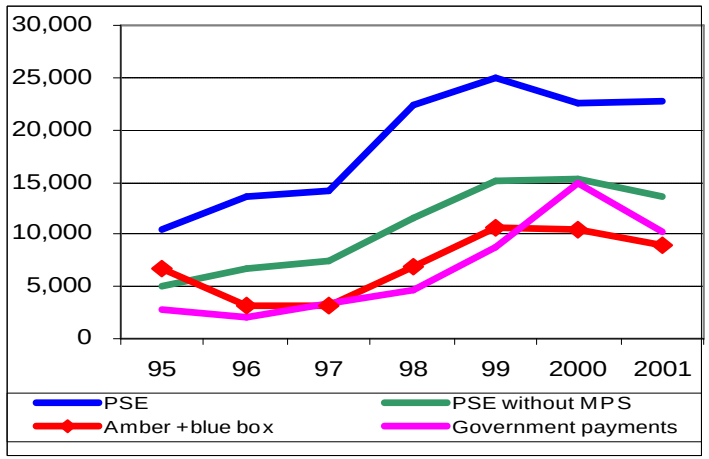
Note: Amber box includes "*de minimis.* Forecasts for 1999-01
Source: WTO, OECD, USDA-FSA, FAPRI.

FIGURE 3.8. EUROPEAN UNION: DOMESTIC SUPPORT PER FARMER (Euros)



Note: Amber box includes "*de minimis".* Forecasts for 2000-01
Source: WTO, OECD, European Commission, FAPRI.

FIGURE 3.9. UNITED STATES: DOMESTIC SUPPORT PER FARMER (US$)



Note: Amber box includes "*de minimis".* Forecasts for 1999-01.
Source: WTO, OECD, USDA-FSA, FAPRI.

3.2.3. Distribution of Domestic Support by Products

Figures 3.10 to 3.12 present the distribution of domestic support by products in the EU, US and like-minded countries. Generally speaking, the graphs based on PSE without MPS data and government payments should be close since both methodologies shows the real government outlays intended for producers. Some payments, such as compensatory and loan deficiency payments are direct payments to producers, while others are indirect payments, such as export programs and promotion export measures. With respect to the graphs displaying amber and blue box data on one side and PSE data on the other side, differences in the obtained results can be attributed to the fact that the former excludes green box programs while the latter measures the overall level of domestic support. In addition, the two methodologies use different definitions to calculate MPS (for more details, see Box 3.1). As a matter of fact, the gap between PSE and amber *plus* blue box reflects the weaknesses of the AMS indicator that have enabled some countries to use any possible loopholes to actually maintain or increase their agricultural protection.

European Union

In the case of the EU, Figure 3.10 shows that data reported for government payments and PSE without MPS are consistent, while strong differences are displayed in amber *plus* blue box and PSE. The level of support for dairy and poultry and pork is larger in PSE than in amber *plus* blue box whereas the opposite occurs with cereals. These differences are due to the divergence in methodology when measuring support for prices. In addition, PSE not only measures government subsidies but also trade barriers, such as tariffs and tariff rate quotas that increase substantially domestic prices at the farm gate level compared to world prices. As a result, if cuts in amber *plus* blue box are made in dairy, the reduction on the overall level of support for this sector would be less than expected because a large share of the internal market prices for this sector is managed through border measures. Therefore, for products that benefit from border protection, a real reduction in the level of domestic support could only occur if market access for these goods is enhanced at the same time as subsidies are cut. This relation between trade policy and domestic support explains why reduction commitments are easier to reach for some products than others.[29] The share of MPS in the overall support for agriculture is the part paid

[29]. For more details on the relationship between domestic support and trade policies, see De Gorter (1999).

by the consumers. In the EU, this component reached 60%[30] by the year 2000, revealing that consumers, rather than governments, bear the largest cost of the agricultural protection.

United States

As Figure 3.11 shows, dissimilarities between government official outlays and PSE without MPS in the US are greater than in the EU. For instance, the absence of government payments for the meat sectors (beef, poultry and pork) contrasts with the data provided by the PSE without MPS indicator. The point is that in PSE, support for these sectors is concentrated in payments based on input use (interest concessions, fuel tax reductions and subsidies for grazing and irrigation) and to a lesser extent in payments based on overall farming income that are not necessarily product specific.[31] Therefore these payments may be included in the category "non-product specific" of the government payments data. When comparing amber *plus* blue box and PSE, impressive differences arise not only with respect to products but also in the overall level of support. According to amber *plus* blue box projections, agricultural support did not reach US$ 20 billion in 2001 while the OECD reported a PSE amounting almost US$ 50 billion. PSE level for meats (beef and poultry and pork), dairy and cereals are significantly higher than the support reported in amber *plus* blue box probably due to the fact that these products benefit from border protections that are included in the PSE measure but are absent from the amber *plus* blue box calculations. In addition, the "*de minimis* and non-product specific" category deserves special attention. Since 1997 the US has been using this category intensively, and it is exempted from reduction commitments. According to Hart and Babcock (2002), as a result of the forecasted recuperation in world prices the US could increase even its spending even more with "*de minimis*". In fact, higher international prices would raise production values, and as a consequence the "*de minimis*" exemption limits. Contrary to the EU, the US government largely finances the costs of supporting agriculture (68% of PSE was paid by the government in 2000).[32] However, for certain commodities the costs borne by consumers are disproportionate. For instance, in 2000 consumers paid 85% and 80%, respectively, of the support granted to the dairy and sugar industry, two of the largest subsidized sectors in the US.

[30]. According to the OECD definition of market price support.
[31]. Payments based on input use include explicit and implicit payments affecting specific variable input costs; the cost of on-farm technical, sanitary and phytosanitary services; or affecting specific fixed input costs, including investment costs. Payments based on overall farming income do not depend on the production of specific commodities or on the use of specific fixed or variable inputs (OECD, 2001).
[32]. Calculated according to the OECD methodology: PSE *minus* market price support.

Like-Minded Countries[33]

As illustrated in Figure 3.12, the cost of supporting agriculture in like-minded countries is almost exclusively borne by consumers (88%).[34] Dissimilarities between amber *plus* blue box level of support and PSE are even more impressive in like-minded countries, than in the EU or the US[35]. Furthermore, trends reversed in 1998 when Japan changed its program supporting the rice sector. Japan had traditionally supported this sector through the management of an administered price that maintains domestic prices at 5 or 6 times higher than world prices. In 1997, Japan's AMS for rice amounted to $19 billion, of which $18 billion was MPS. In 1998, Japan notified the WTO that the government had stopped intervening in the price formation of rice, reducing its AMS in this sector to zero. However, according to the OECD, the internal prices for rice in Japan in 1998 were more than 5 times import parity. In fact, prices for rice were not affected by the change in government policy since the rice industry in Japan is heavily protected by border measures.

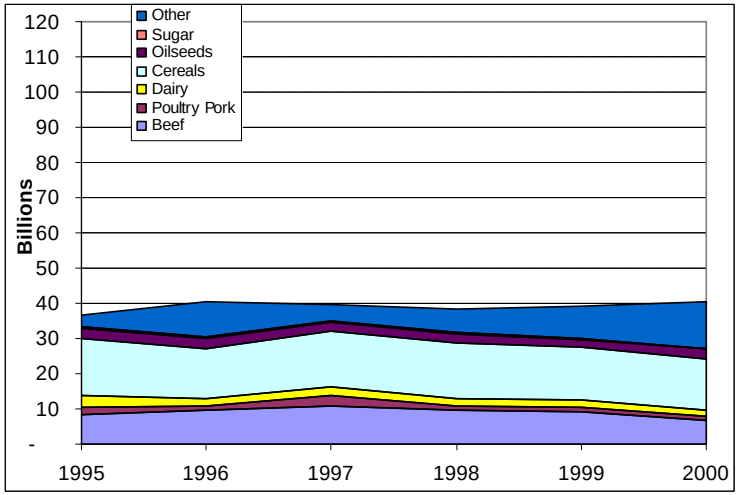
This example illustrates one of the various weaknesses in the measurement of the price support element of the AMS that enables some countries to reduce their AMS substantially, even though their actual level of market distorting price support remains very high. It should be noticed that the simultaneous use of several protectionist instruments, such as high tariffs combined with official administration of prices as it was the case in Japan, can lead to a double-counting of the level of protection a product benefits from. Nonetheless, countries should not be allowed to determine their AMS commitments based on a level of support, which is double-counted for determined products. In fact once a country has eliminated one of the measure of support it used to give to product A – the official administered price of rice in Japan for instance – then this country is free to spend the equivalent amount (US$ 19 billions in the case of Japan) to support other products or measures that were not or less subsidized before, while the actual level of support received by the producers of product A remains unchanged. The support granted by the US to the dairy sector is another illustrative case. In 1998, the US notified a US$ 4.3 billion product-specific AMS for dairy using the difference between the CCC support price and the base price times production. But in 1998 actual spending on the dairy program was only about US$ 140 million because the base price was much lower than 1998 prices. So, the notified AMS really overstates protection. According to ABARE (2000), actual milk prices in the US are supported through a combination of restrictions on imports through tariff quotas, export subsidies and regional pricing and movement restriction arrangements, that are independent of

[33]. Like-minded countries are the Czech Republic Hungary, Iceland, Japan, Korea, Norway, Poland and Switzerland.
[34]. According to the OECD definition of market price support.
[35]. Government payments are not included due to the difficulty of obtaining official data from the eight countries included in the "like-minded" group in this paper.

the administered price that is used for AMS purposes. If the administered support price were abolished, it would not alter internal supported prices for milk, but it could provide a potential for the US to claim that it had no price support, and also virtually no AMS in milk. Such a change could be used to increase the available level of amber box support for other product and measures by about 20%, without altering the actual levels of support for milk. However, it is interesting to note that the 2002 Act's dairy market-loss payment program now looks like costing about three times what it was scored as costing when the Farm Bill was passed in May 2002 because milk prices have declined a lot. This could easily mean adding US$ 2 billion to the product-specific AMS in 2003, in addition to the US$ 4.3 billion, which will continue because the CCC support price continues at the same rate as before.

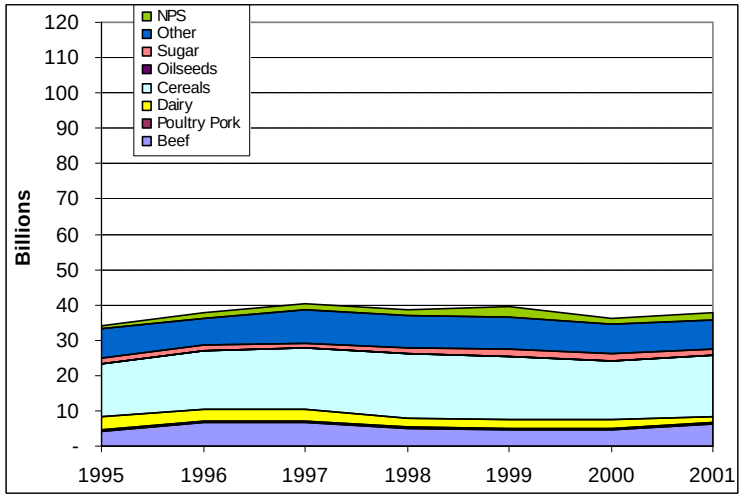
FIGURE 3.10. EUROPEAN UNION: DISTRIBUTION OF DOMESTIC SUPPORT BY PRODUCT (Euros)

A. PSE without MPS



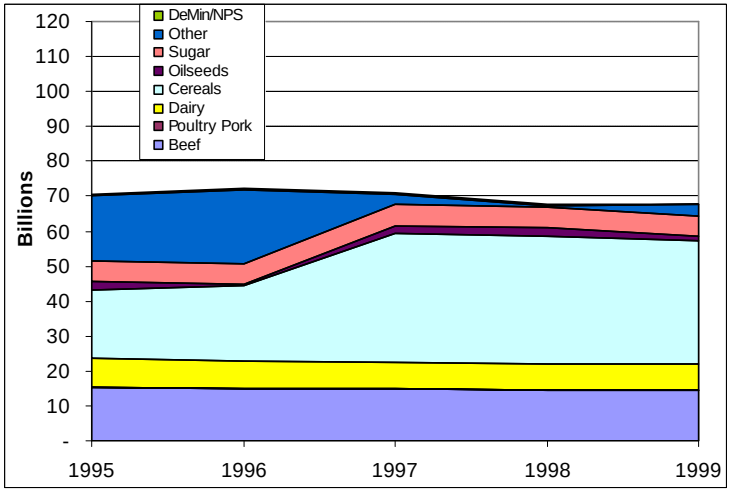
Source: OECD.

B. Government payments



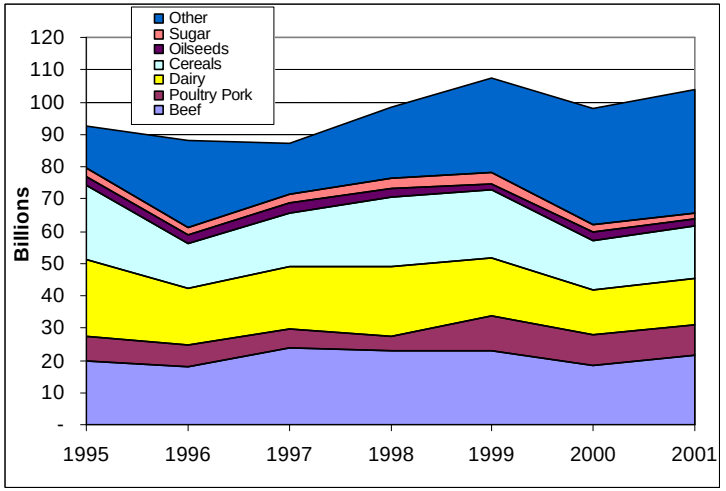
Source: European Commission.

C. Amber *plus* Blue boxes



Source: WTO notifications.

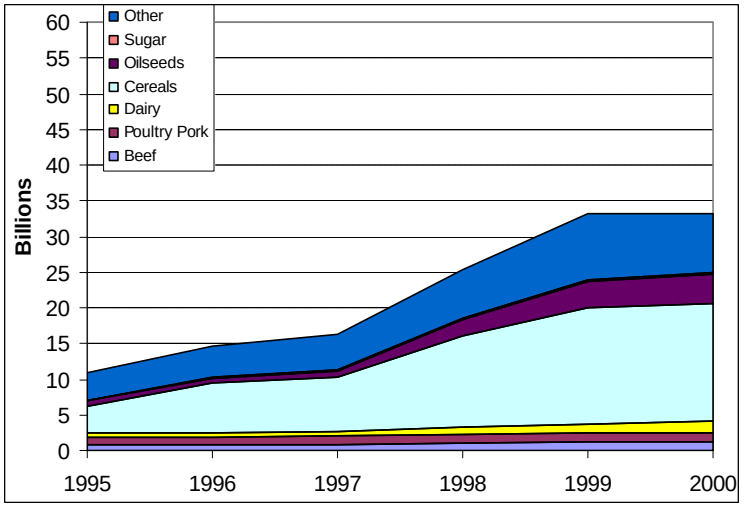
D. PSE



Source: OECD.

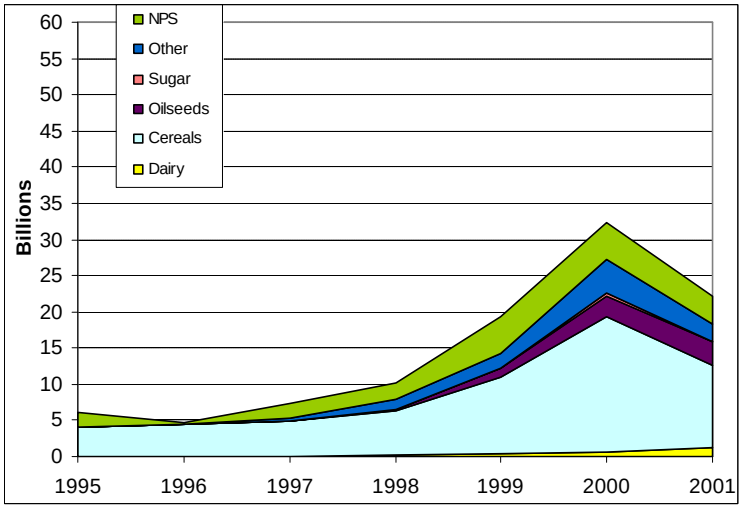
FIGURE 3.11. UNITED STATES: DISTRIBUTION OF DOMESTIC SUPPORT BY PRODUCT (US$)

A. PSE without MPS



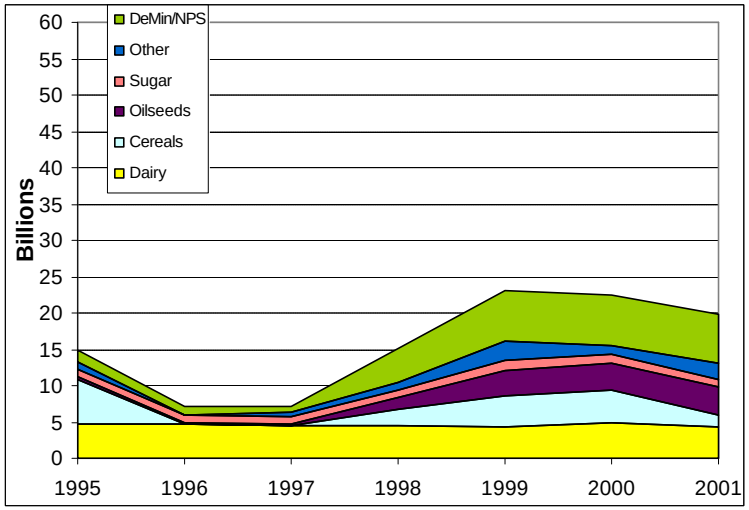
Source: OECD.

B. Government payments



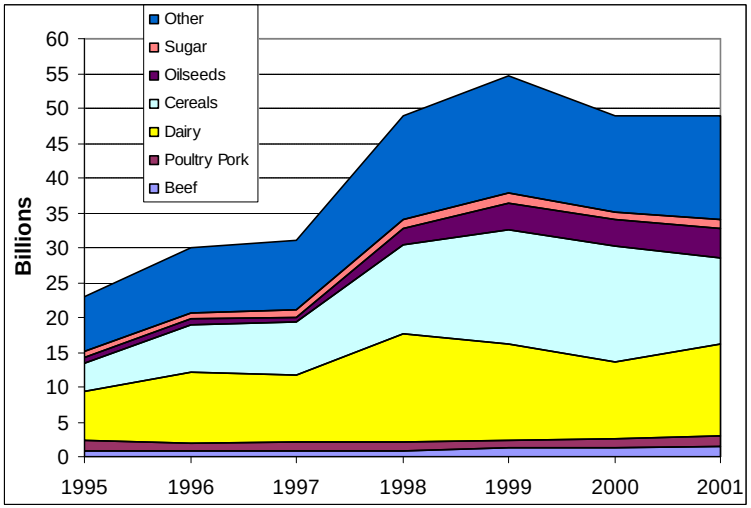
Source: USDA –FSA.

C. Amber *plus* Blue boxes



Source: WTO notifications, FAPRI. Forecasts for 1999-01.

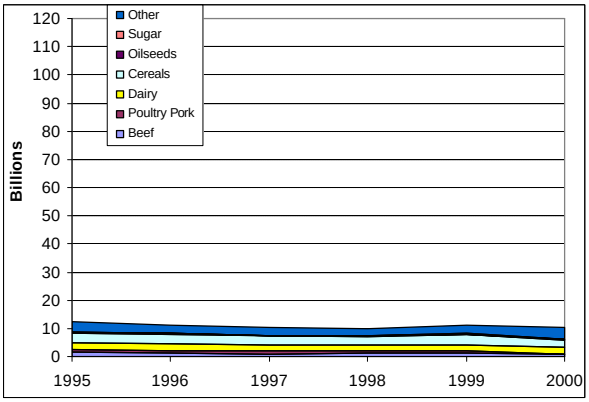
D. PSE



Source: OECD.

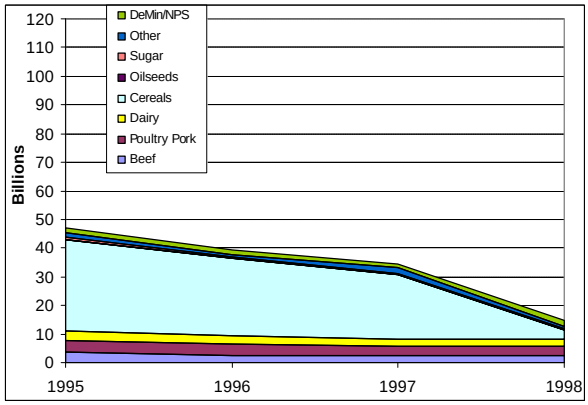
FIGURE 3.12. LIKE-MINDED COUNTRIES[36]: DISTRIBUTION OF DOMESTIC SUPPORT BY PRODUCT (US$)

A. PSE without MPS



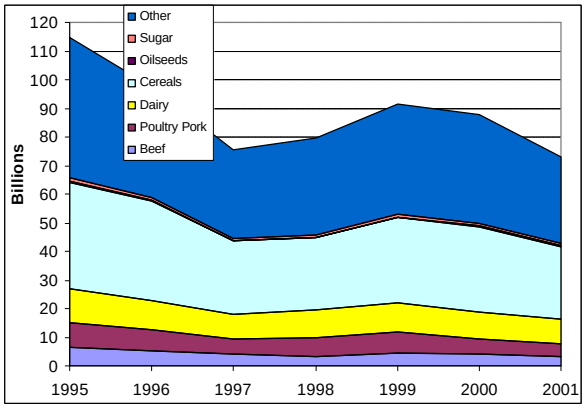
Source: OECD.

B. Amber *plus* Blue boxes



Source: WTO notifications.

C. PSE



Source: OECD.

[36]. Like-minded countries are the Czech Republic, Hungary, Iceland, Japan, Korea, Norway, Poland and Switzerland.

4. Conclusions and Policy Recommendations

Considering the complexity and heterogeneousness of the agricultural sector in the Americas and its strategic importance both in regional and multilateral negotiations, these are our main conclusions and policy recommendations:

1. **Simultaneous barriers to agricultural trade**. Countries use several different trade distorting instruments in agriculture. Tariffs are the most commonly used, but other protection mechanisms such as TBT and sanitary restrictions, domestic support and export subsidies may also distort trade and are difficult to evaluate. Even tariffs barriers are difficult to measure since specific, mixed and TRQs are widely used by some WH countries. On one hand, the highest overall level of high agricultural tariffs has been observed on very small Caribbean islands. This represents a high tax on local poor consumers. On the other hand, developed countries are characterized by the application of very high tariffs to a very small group of politically sensitive products, while the rest of their tariffs are kept at very low levels. These sensitive products are further protected through specific and mixed tariffs, TRQs and other non-tariff barriers such as SPS and TBT.
2. **Export concentration**. In the majority of the Western Hemisphere countries, agricultural exports are highly concentrated in a small basket of specific products. Indeed for 10 countries coffee, bananas and sugar represent more than 50% of their agricultural exports. As a result, potential deadlocks in the negotiations will probably concern a very reduced group of products such as dairy, meats, sugar, tobacco, grains and fruits.
3. **Key issues in regional and multilateral agricultural trade negotiations**. Agriculture is an area that encompasses different systemic and non-systemic issues. Topics such as subsidies are systemic issues since any reduction of their use by one country will benefit all countries that this country trades with, and could have potential spillovers on world prices and market-shares. Subsidies are much better addressed through multilateral negotiations, such as the Doha Development Agenda of the WTO. On the other hand, market access issues, such as tariffs, TRQs and some non-tariff barriers, are non-systemic issues since they can be negotiated on a country-by-country basis without benefiting other trading partners. Market access is much better addressed in a bilateral or regional framework as negotiations between a reduced number of countries allow for deeper trade liberalization, normally starting

with applied tariffs. So if WH countries continue to invest political and human capital in the FTAA process, the launch of the WTO Development Agenda will be beneficial for hemispheric agricultural integration. The new round will allow for the separation of the two most sensitive issues - market access and subsidies - with market access being primarily discussed at a regional level and subsidies at the multilateral level. However, it is legitimate for competitive countries in agriculture to try to secure that other systemic issues (such as environment disciplines or intellectual property rights) would be addressed through multilateral negotiations. In this case, some FTAA issues could be Doha *plus* while others not.

4. **RTR and REST as useful tools to balance tariff concessions**. The best solution for trade liberalization in the WH would be to implement zero tariffs for all products without exceptions. The use of exception lists would certainly remove most of the "real" protected products from a RIA, and therefore undermine potential gains that could be achieved through such an agreement. However, if countries do insist on exceptions lists and/or a long tariff phase-out period, negotiators could use the RTR and REST indexes as a valid and useful tool to balance concessions and achieve progress in bilateral and regional agreements. Furthermore, they can also be used to detect potentially difficult sectors for future negotiations.

5. **Market Access in the WH: main gains and trade-offs**. The Central American countries, which face, on average, higher protection than they impose, would have the highest relative net gains in terms of overall market access, after a simultaneous lowering of agricultural tariff barriers in North America and industrial tariffs in South America. As regards the Mercosur countries, however, the agricultural sector liberalization will encompass trade-offs. While these countries would definitely gain from agricultural liberalization, they would also need to become net liberalizers of their industrial sector. The opposite is true for NAFTA countries. NAFTA countries will need to make trade-offs in terms of offering a broad agricultural access in order to secure access for industrial products.

6. **Subsidies: URAA loopholes and the need to avoid exceptions**. The URAA provides too many ways to avoid domestic and export subsidies reductions. The blue box encompassing payments only partially decoupled from the production that still produce distorting effects, the presence of trade-distorting programs into the green box, the absence of disciplines on export credit guarantees and the abuse of food aid programs are examples of the current loopholes. In addition, some countries take advantage of the *"de minimis"* exemption and non-product specific subsidies to

increase their level of domestic support without exceeding their WTO commitments. In our opinion, *de minimis* exemptions should be eliminated, and reductions commitments should be also established on a product-by-product basis. The S&D box is another exception that could be phased out if the majority of developing countries continue to be unable to use it. These countries are not applying trade-distorting subsidies, and there is no reason to keep or create boxes that will not really be used. If countries are really keen to eliminate all trade and production distorting subsidies, in the long run they should avoid any kind of exceptions.

7. **Full decoupling of payments**. Negotiators should target the full decoupling of the government payments to producers, as the best way to prevent distortion of production and trade. In other words, payments should be fully decoupled from the volume of production, planted area or animal unit.

8. **Market access should be enhanced at the same time that subsidies are cut**. Reductions in subsidies are very much related to market access enhancement and vice-versa. In fact, both subsidies through MPS and border measures (tariffs, TRQs, non-tariff barriers, etc.) contribute simultaneously to the fact that producer prices are set at higher levels when compared to world prices. The way MPS is calculated (depending on whether government administered prices are used or not) is particularly important because it has serious consequences in terms of which subsidies should be phased out for each product to really liberalize trade. For instance, Japan claimed to have eliminated amber box support for rice after it abolished the government-administered price for this product. However actual prices paid to producers remained unchanged for this sector, as they are still supported through border measures. This example illustrates that a real reduction in the level of domestic support could only happen if market access is enhanced at the same time that subsidies are cut. Comprehensive results could only be achieved if market access and subsidies are addressed at the same time. In the case that they are addressed in regional and multilateral parallel negotiations, policymakers should try to build a “global single undertaking” provision between these processes.

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Washington, April 5, 2003

Appendix A
Trade and Tariff Structure in the WH

Table 1. Agricultural Sector Trade and MFN Tariff Structure of the Western Hemisphere countries at HS 8 digit level (2000)

		Country	Trade Balance ('000)	Nb of Tariff Lines		Frequency Distribution of Tariff Rates					Main Statistics				TRQs
				Ad Val	Non Ad Val[1]	0%	0%-15%	15%-30%	30%-50%	>50%	Mean	Median	St Dev	Max	
1	Mercosul	Argentina	9,494,815	940	-	79	564	296	1	-	12.7	13.0	5.9	32.0	-
2	Mercosul	Brazil	8,050,652	940	-	79	565	296	-	-	12.6	13.0	5.8	27.0	4
3	Mercosul	Paraguay	302,221	945	-	79	576	286	4	-	12.3	13.0	5.6	30.0	-
4	Mercosul	Uruguay	579,329	908	-	77	552	279	-	-	12.4	13.0	5.6	23.0	-
5	NAFTA	Mexico	(2,101,401)	1,016	53	30	496	427	62	54	23.3	15.0	37.8	260.0	68
6	NAFTA	Canada	4,142,472	979	362	538	656	46	3	98	22.4	3.0	63.1	538.0	123
7	NAFTA	United States	14,237,485	989	747	372	1,083	161	59	61	11.4	3.7	32.0	350.0	376
8	Andean	Bolivia	169,664	873	-	15	858	-	-	-	9.8	10.0	1.3	10.0	0
9	Andean	Colombia	1,441,657	881	-	-	280	601	-	-	14.5	15.0	5.5	20.0	66
10	Andean	Ecuador	1,117,100	865	-	20	268	577	-	-	14.3	15.0	5.7	20.0	21
11	Andean	Peru	(258,173)	900	-	-	530	314	56	-	17.1	12.0	6.5	30.0	0
12	Andean	Venezuela	(1,309,192)	865	-	-	278	591	-	-	14.6	15.0	5.4	20.0	59
13	CACM	Costa Rica	1,241,539	1,138	-	238	796	-	64	40	13.8	14.0	20.0	162.0	73
14	CACM	Guatemala	919,306	811	60	208	215	388	-	-	9.2	10.0	6.5	20.0	31
15	CACM	Honduras	98,404	869	-	-	425	426	13	5	11.5	15.0	8.4	55.0	0
16	CACM	Nicaragua	141,281	869	-	197	638	18	7	9	7.3	10.0	7.4	76.7	17
17	CACM	El Salvador	(90,269)	937	25	217	217	429	49	-	11.2	15.0	8.9	40.0	37
18	Others	Chile	1,567,390	747	-	-	747	-	-	-	9.0	9.0	-	9.0	0
19	Others	Dominican Republic	(327,892)	778	-	-	229	277	272	-	21.2	25.0	10.6	35.0	0
20	Others	Panama	(67,856)	1,334	-	67	455	723	48	41	15.0	15.0	20.8	300.0	57
21	Caribbean Community	Antigua and Barbuda	(73,457)	999	19	218	246	208	327	-	17.3	20.0	14.7	45.0	0
22	Caribbean Community	Trinidad and Tobago	(49,375)	1,000	24	389	80	245	284	2	16.6	15.0	16.7	75.0	0
23	Caribbean Community	St. Lucia	(43,929)	1,024	-	285	238	173	328	-	16.5	10.0	16.0	45.0	0
24	Caribbean Community	St. Kitts and Nevis	(27,211)	998	22	257	257	120	364	-	17.5	10.0	16.3	40.0	0
25	Caribbean Community	Jamaica	(133,611)	1,021	-	410	61	224	321	5	17.2	15.0	17.0	75.0	0
26	Caribbean Community	Grenada	(19,639)	1,015	1	120	351	219	324	-	18.2	15.0	15.1	40.0	0
27	Caribbean Community	Dominica	(8,666)	579	439	159	55	78	287	-	22.7	25.0	17.9	45.0	0
28	Caribbean Community	Barbados	(94,877)	886	27	-	349	194	246	97	36.6	20.0	51.6	243.0	37
29	Caribbean Community	Bahamas	(615,499)	676	-	152	788	-	-	3	25.4	30.0	17.6	260.0	0
30	Caribbean Community	St. Vincent	(4,874)	1,007	13	117	392	228	270	-	17.0	10.0	15.0	40.0	0
Sum or Average			**38,277,394**	**926**	**60**	**144**	**442**	**261**	**113**	**14**	**16.0**	**14.1**	**15.4**	**98.9**	**969**
31	EU	EU-15	(4,625,098)	1,227	852	845	505	513	136	80	18.3	11.5	24.5	251.6	256

Note: 1. Non ad valorem = sum of all specific and mixed rates.
Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 2. Industrial Sector Trade and MFN Tariff Structure of the Western Hemisphere countries at HS 8 digit level (2000)

		Country	Trade Balance ('000)	Nb of Tariff Lines		Frequency Distribution of Tariff Rates					Main Statistics			
				Ad Val	Non Ad Val[1]	0%	0%-15%	15%-30%	30%-50%	>50%	Mean	Median	St Dev	Max
1	Mercosul	Argentina	(8,591,613)	8,431	-	391	4,631	3,368	41	-	13.4	15.0	6.8	33.0
2	Mercosul	Brazil	(13,958,529)	8,431	-	63	3,841	4,489	38	-	14.3	17.0	6.9	35.0
3	Mercosul	Paraguay	(1,490,719)	8,450	-	397	5,216	2,837	-	-	11.5	11.0	6.7	28.0
4	Mercosul	Uruguay	(1,748,646)	7,945	-	338	4,627	2,980	-	-	12.1	13.0	7.0	23.0
5	NAFTA	Mexico	(1,672,518)	10,272	19	194	5,268	4,345	484	-	15.6	13.0	8.1	35.0
6	NAFTA	Canada	14,088,476	6,777	47	3,291	2,855	677	1	-	4.4	2.5	5.8	41.3
7	NAFTA	United States	(478,163,301)	7,894	546	2,766	5,227	384	58	5	4.5	3.0	5.8	58.4
8	Andean	Bolivia	(573,441)	5,815	-	390	5,425	-	-	-	9.1	10.0	2.7	10.0
9	Andean	Colombia	192,215	5,740	-	120	4,357	1,253	10	-	11.3	10.0	6.2	35.0
10	Andean	Ecuador	283,231	4,509	-	109	3,373	1,020	-	7	10.9	10.0	7.0	99.0
11	Andean	Peru	(329,516)	5,694	-	-	4,995	699	-	-	13.0	12.0	2.6	20.0
12	Andean	Venezuela	17,373,749	5,742	-	38	4,435	1,257	12	-	11.6	10.0	6.0	35.0
13	CACM	Costa Rica	(1,787,135)	5,119	-	2,671	2,443	-	5	-	4.8	-	5.7	49.0
14	CACM	Guatemala	(3,104,732)	5,079	17	2,593	1,788	714	-	1	5.3	-	7.5	25.0
15	CACM	Honduras	(1,961,542)	5,044	-	-	3,926	1,111	7	-	6.9	1.0	7.5	35.0
16	CACM	Nicaragua	(1,230,168)	5,018	-	2,636	2,382	-	-	-	3.4	-	3.9	15.0
17	CACM	El Salvador	(2,374,375)	5,157	-	2,627	1,830	700	-	-	6.7	-	8.4	30.0
18	Others	Chile	(456,412)	5,105	-	-	5,105	-	-	-	9.0	9.0	-	9.0
19	Others	Dominican Republic	(4,826,041)	5,163	-	-	2,838	1,935	390	-	17.3	15.0	10.1	35.0
20	Others	Panama	(2,538,561)	7,213	-	325	6,860	24	2	2	8.2	10.0	5.8	87.0
21	Caribbean Community	Antigua and Barbuda	(230,467)	5,277	-	631	3,082	1,509	45	10	10.9	5.0	10.6	70.0
22	Caribbean Community	Trinidad and Tobago	(626,901)	5,268	2	2,401	1,555	1,213	101	-	7.6	2.0	9.9	45.0
23	Caribbean Community	St. Lucia	(228,631)	5,275	-	2,159	1,729	1,190	172	25	9.0	5.0	11.4	95.0
24	Caribbean Community	St. Kitts and Nevis	(120,848)	5,279	-	1,186	2,490	1,477	116	10	10.9	5.0	11.6	70.0
25	Caribbean Community	Jamaica	(1,307,825)	5,216	-	3,360	602	1,157	97	-	6.7	-	10.0	40.0
26	Caribbean Community	Grenada	(123,467)	5,082	-	221	3,575	1,141	145	-	10.0	5.0	8.4	40.0
27	Caribbean Community	Dominica	(70,919)	5,275	-	226	3,769	1,128	152	-	10.8	5.0	9.7	45.0
28	Caribbean Community	Barbados	(715,563)	5,043	-	-	3,701	1,161	142	39	11.0	5.0	11.7	145.0
29	Caribbean Community	Bahamas	(3,306,719)	4,896	-	247	210	715	3,617	107	32.0	35.0	11.4	100.0
30	Caribbean Community	St. Vincent	(131,971)	5,257	-	406	3,577	1,153	121	-	9.6	5.0	8.3	40.0
Sum or Average			**(499,732,889)**	**6,016**	**21**	**993**	**3,524**	**1,321**	**192**	**7**	**10.4**	**7.8**	**7.4**	**47.6**
31	EU	EU-15	(66,693,698)	10,659	41	2,314	8,176	210	-	-	4.7	3.7	4.4	26.0

Note: 1. Non ad valorem = sum of all specific and mixed rates.
Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Appendix B
Export Weighted Tariffs for WH Countries

Table 1.a. Agricultural MFN Tariffs Weighted by Export at HS 6 digit level (2000)

		Mercosur				NAFTA						CACM					Andean					Caricom	EU
Imposed/Faced Tariffs		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
MFN	Argentina		14.5	11.6	16.0	14.2	15.8	14.1	15.4	17.1	15.1	13.9	15.0	13.8	14.9	15.7	12.0	14.7	13.7	14.0	16.4	18.9	17.8
	Brazil	13.0		11.4	16.0	14.1	15.7	14.0	15.4	16.5	14.9	13.9	14.5	13.8	14.5	15.5	12.0	14.4	13.8	14.0	16.5	18.2	17.6
	Paraguay	12.7	14.1		15.2	13.7	15.5	13.7	14.0	18.7	15.2	13.9	15.7	13.9	15.1	15.9	12.1	15.0	13.7	14.2	16.2	19.8	16.4
	Uruguay	12.7	14.1	11.6		13.7	15.4	13.8	15.2	16.6	14.4	13.7	14.4	13.8	14.1	14.5	11.7	14.4	13.7	13.9	16.4	16.0	16.9
	Canada	27.9	31.4	4.8	51.1		18.0	36.9	32.3	30.9	19.1	19.4	14.0	3.4	25.5	39.4	19.8	14.8	7.3	13.2	29.9	40.2	67.6
	Mexico	45.6	49.8	25.2	38.7	35.1		50.8	32.0	55.3	32.6	28.2	37.9	25.3	37.9	44.3	21.8	38.5	30.1	26.5	30.3	51.7	44.5
	United States	17.5	35.4	9.3	25.9	12.8	12.2		8.6	30.6	11.3	11.5	17.6	7.7	25.8	12.1	8.4	9.9	6.3	9.5	33.2	19.6	30.1
	Chile	9.0	9.0	9.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Dominican Republic	14.3	15.2	9.0	22.8	19.7	24.3	18.0	27.6		22.3	22.6	19.1	17.7	18.0	19.6	10.9	20.9	25.0	21.6	22.9	24.7	23.1
	Panama	13.1	35.9	14.6	45.9	18.6	18.4	24.1	14.1	44.0		18.2	32.3	17.1	30.0	25.5	12.3	25.3	16.3	18.9	20.7	42.7	25.8
	Costa Rica	10.2	19.3	5.1	24.8	13.7	15.4	17.2	14.6	21.6	17.9		18.3	14.9	21.6	17.5	8.6	17.0	14.1	14.5	14.2	22.2	21.5
	Guatemala	10.6	12.9	4.9	40.4	12.9	39.4	14.8	17.0	19.5	15.8	14.9		14.7	15.3	16.2	7.7	15.0	15.5	14.1	30.6	26.7	18.0
	Honduras	9.2	15.1	6.4	22.6	11.6	16.3	15.1	16.3	20.2	17.9	17.7	19.4		17.2	19.1	7.6	18.5	17.3	16.6	18.4	21.9	16.1
	Nicaragua	8.7	17.8	4.5	16.8	7.2	10.4	13.5	9.4	18.6	12.2	10.4	15.0	10.2		13.6	6.4	12.7	10.3	10.4	9.9	18.3	10.7
	El Salvador	8.3	12.6	4.9	20.3	12.4	16.9	12.4	14.6	19.5	16.8	15.0	17.4	15.1	17.1		7.2	16.4	14.7	14.4	15.1	22.3	17.3
	Bolivia	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
	Colombia	16.6	16.3	15.3	18.6	16.3	16.1	16.1	16.3	16.9	15.6	14.7	13.8	12.5	14.3	14.1	16.1		14.4	14.0	17.4	17.7	17.6
	Ecuador	15.9	16.1	14.0	18.5	15.4	16.0	15.4	16.0	16.9	15.2	14.6	13.8	12.5	14.0	14.0	15.9	13.0		14.0	17.3	17.7	17.1
	Peru	17.4	17.8	14.4	24.1	20.1	18.0	17.8	21.1	17.2	20.6	21.2	18.9	20.2	19.9	19.0	13.9	18.4	21.6		17.2	17.9	18.5
	Venezuela	16.6	16.3	15.2	18.6	16.3	16.1	16.0	16.3	16.9	15.6	14.8	13.9	12.5	14.3	14.1	16.1	13.1	15.0	14.1		17.8	17.5
	CARICOM	17.4	23.7	13.8	23.3	19.8	37.7	22.6	30.3	31.9	34.8	36.0	30.9	34.4	28.5	30.7	20.6	33.2	34.7	29.0	30.9		25.6
	European Union	19.7	20.4	16.3	75.3	29.4	19.9	28.4	16.6	35.3	76.1	54.2	28.1	21.9	32.8	14.9	6.9	30.7	83.8	11.0	28.1	41.4	
	Average	15.5	19.9	11.0	26.4	16.0	17.9	18.7	17.8	23.0	20.1	18.5	18.5	15.0	19.5	18.8	12.2	17.8	19.1	15.1	20.0	23.6	21.8

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 1.b. Agricultural Preferential Tariffs Weighted by Export at HS 6 digit level (2000)

	Imposed/Faced Tariffs	Mercosur				NAFTA						CACM					Andean					Caricom	EU
		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
Preferential	Argentina		1.9	0.2	0.1	14.2	15.8	14.1	15.4	17.1	15.1	13.9	15.0	13.8	14.9	15.7	12.0	14.7	13.7	14.0	16.4	18.9	17.8
	Brazil	0.0		0.0	0.0	14.1	15.7	14.0	15.4	16.5	14.9	13.9	14.5	13.8	14.5	15.5	12.0	14.4	13.8	14.0	16.5	18.2	17.6
	Paraguay	0.0	0.0		0.0	13.7	15.5	13.7	8.1	18.7	15.2	13.9	15.7	13.9	15.1	15.9	3.2	15.0	13.7	14.2	16.2	19.8	16.4
	Uruguay	0.0	0.7	0.0		13.7	15.4	13.8	15.2	16.6	14.4	13.7	14.4	13.8	14.1	14.5	11.7	14.4	13.7	13.9	16.4	16.0	16.9
	Canada	27.9	31.4	4.8	51.1		9.2	25.6	17.6	30.9	19.1	19.4	14.0	3.4	25.5	39.4	19.8	14.8	7.3	13.2	29.9	23.8	67.6
	Mexico	45.6	49.8	25.2	38.7	7.3		26.5	30.0	55.3	32.6	20.6	37.9	25.3	24.2	44.3	17.5	19.4	30.1	26.5	19.2	18.3	44.5
	United States	17.3	35.2	9.1	24.6	7.3	7.6		8.3	26.8	7.3	7.4	15.3	5.2	24.9	11.3	4.7	5.7	1.7	3.4	32.0	13.0	30.1
	Chile	9.0	9.0	9.0	9.0	9.0	0.4	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	0.4	1.3	1.6	9.0	9.0
	Dominican Republic	14.3	15.2	9.0	22.8	19.7	24.3	18.0	27.6		22.3	22.6	19.1	17.7	18.0	19.6	10.9	20.9	25.0	21.6	22.9	24.7	23.1
	Panama	13.1	35.9	14.6	45.9	18.6	18.4	24.1	14.1	44.0		18.2	32.3	17.1	30.0	25.5	12.3	25.3	16.3	18.9	20.7	42.7	25.8
	Costa Rica	10.2	19.3	5.1	24.8	13.7	7.0	17.2	14.6	21.6	12.3		11.3	9.2	10.2	11.3	8.6	17.0	14.1	14.5	14.2	22.2	21.5
	Guatemala	10.6	12.9	4.9	40.4	12.9	12.9	14.8	17.0	11.2	15.8	2.4		9.3	6.4	8.0	7.7	15.0	15.5	14.1	30.6	26.7	18.0
	Honduras	9.2	15.1	6.4	22.6	11.6	13.8	15.1	16.3	20.2	17.9	17.7	19.4		17.2	19.1	7.6	18.5	17.3	16.6	18.4	21.9	16.1
	Nicaragua	8.7	17.8	4.5	16.8	7.2	8.1	13.5	9.4	18.6	10.0	2.7	10.5	6.7		9.4	6.4	12.7	10.3	10.4	9.9	18.3	10.7
	El Salvador	8.3	12.6	4.9	20.3	12.4	16.9	12.4	14.6	19.5	16.8	15.0	17.4	15.1	17.1		7.2	16.4	14.7	14.4	15.1	22.3	17.3
	Bolivia	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	10.0	10.0		10.0	10.0	10.0	10.0	10.0	10.0
	Colombia	16.6	14.9	15.3	18.6	16.3	16.1	16.1	16.0	16.9	15.6	14.5	13.8	12.5	14.3	13.5	16.1		14.4	13.5	17.4	17.7	17.6
	Ecuador	15.9	16.1	14.0	18.5	15.4	16.0	15.4	16.0	16.9	15.2	14.6	13.8	12.5	14.0	14.0	15.9	13.0		14.0	17.3	17.7	17.1
	Peru	15.0	17.2	14.4	24.1	20.1	18.0	17.8	21.1	17.2	20.6	21.2	18.9	20.2	19.9	19.0	13.9	18.4	21.6		17.2	17.9	18.5
	Venezuela	13.1	13.6	10.2	18.0	16.3	16.1	16.0	2.5	16.9	15.6	14.8	13.9	12.5	14.3	14.1	2.6	5.7	11.1	1.8		17.8	17.5
	CARICOM	17.4	23.7	13.8	23.3	19.8	37.7	22.6	30.3	31.9	34.8	36.0	30.9	34.4	28.5	30.7	20.6	33.2	34.7	29.0	30.9		25.6
	European Union	19.7	20.3	16.3	75.3	29.4	19.9	28.4	16.6	27.9	76.1	52.1	26.6	19.6	32.0	13.9	4.7	27.9	81.9	5.7	21.1	32.2	
	Average	13.4	17.7	9.1	24.0	14.4	15.0	17.0	16.0	22.1	19.5	16.8	17.8	14.0	17.8	17.8	10.7	16.2	18.2	13.6	18.8	20.4	21.8

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 2.a. Industrial MFN Tariffs Weighted by Export at HS 6 digit level (2000)

	Imposed/Faced Tariffs	Mercosur				NAFTA						CACM					Andean					Caricom	EU
		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
MFN	Argentina		14.6	14.8	17.0	15.4	18.3	14.2	9.7	11.1	13.8	13.8	14.8	15.9	12.3	18.2	7.0	8.2	5.7	9.8	4.0	8.6	16.2
	Brazil	14.4		14.9	17.3	17.6	21.3	17.3	9.8	11.7	14.0	21.8	15.6	16.0	12.4	18.1	7.9	11.0	9.6	10.0	8.2	9.7	18.2
	Paraguay	9.4	11.3		14.2	10.8	13.8	11.3	9.2	9.9	13.2	13.6	13.7	15.4	11.7	16.6	6.3	7.2	5.0	9.3	3.0	7.8	12.3
	Uruguay	10.5	12.0	14.1		11.7	14.7	11.5	8.9	10.8	13.6	11.7	14.1	15.3	11.9	17.2	5.5	7.5	5.3	9.3	3.8	8.1	12.9
	Canada	3.6	3.7	6.0	6.2		4.8	3.3	1.1	6.7	3.3	3.7	5.0	4.7	3.3	7.8	1.8	3.5	2.0	3.4	2.4	4.2	4.3
	Mexico	16.6	17.1	20.0	19.4	16.7		14.9	14.6	16.5	25.8	12.6	18.9	21.4	23.3	21.5	13.1	15.7	16.7	14.6	14.5	12.9	17.2
	United States	3.5	3.5	5.7	5.8	2.9	4.2		1.7	3.3	2.4	2.9	3.3	2.0	1.8	5.4	1.9	3.1	2.8	3.8	2.4	2.2	3.3
	Chile	9.0	9.0	9.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Dominican Republic	15.2	14.9	22.6	21.6	15.7	17.4	12.9	11.0		26.4	12.6	17.9	21.1	24.8	22.2	11.4	12.9	12.7	14.0	11.0	11.0	15.4
	Panama	9.7	9.6	11.9	11.2	9.3	9.3	8.4	10.0	21.7		7.6	8.7	12.7	13.1	12.9	7.3	7.2	6.6	9.8	11.3	5.5	9.4
	Costa Rica	5.4	4.8	8.2	8.1	5.7	6.4	3.5	3.0	6.7	9.7		8.2	10.3	8.8	10.2	3.5	5.2	4.8	4.9	4.7	3.4	4.9
	Guatemala	5.7	5.9	11.2	10.3	7.3	7.9	4.1	3.1	5.6	10.3	6.0		11.5	9.5	12.7	5.3	5.9	4.5	5.8	3.2	4.8	6.0
	Honduras	9.9	6.6	9.9	10.7	10.6	10.9	5.0	4.0	9.3	11.6	6.4	11.9		9.9	13.1	6.4	11.9	14.6	6.6	14.9	7.7	7.5
	Nicaragua	3.7	3.1	5.5	5.4	4.2	4.1	2.3	2.1	4.5	7.8	2.9	5.0	7.3		6.4	3.8	3.4	3.2	3.9	2.9	3.4	3.2
	El Salvador	5.7	5.6	10.6	10.5	7.6	8.5	3.9	3.1	5.6	10.3	6.3	9.6	11.5	9.4		4.1	5.9	5.2	5.9	3.7	4.3	6.4
	Bolivia	9.6	8.8	9.9	9.8	9.5	9.6	9.0	9.9	10.0	10.0	9.9	9.8	9.8	9.9	9.9		9.8	10.0	10.0	10.0	9.8	8.8
	Colombia	13.2	12.0	13.4	15.6	14.3	15.1	10.3	8.8	10.4	17.5	10.2	14.0	16.1	16.7	15.8	7.7		12.9	11.1	11.3	9.8	12.4
	Ecuador	15.0	7.9	13.2	12.6	6.5	5.5	5.7	8.7	35.2	26.4	8.7	12.2	15.3	19.9	20.0	8.0	14.7		14.4	32.9	8.5	7.9
	Peru	12.1	12.5	13.1	12.9	12.1	12.6	12.3	12.1	12.2	12.4	12.9	12.8	12.6	12.2	13.7	12.3	12.6	12.1		12.0	12.4	12.5
	Venezuela	13.3	12.0	12.6	16.1	14.2	15.3	10.6	8.4	10.3	17.6	10.2	13.9	16.1	16.7	15.8	8.4	12.1	12.9	11.1		9.7	12.6
	CARICOM	15.2	13.5	13.3	16.9	16.2	16.9	11.7	10.8	18.4	30.9	11.9	14.9	19.8	27.5	18.8	8.3	11.6	13.3	10.1	14.6		13.9
	European Union	4.8	4.2	4.9	6.7	4.5	5.0	3.1	2.6	2.7	11.0	3.1	3.7	3.2	10.4	5.5	1.5	3.0	4.4	2.5	1.8	4.0	
	Average	9.8	9.2	11.7	12.3	10.6	11.0	8.8	7.3	11.0	14.1	9.4	11.3	12.7	13.1	13.8	6.7	8.6	8.3	8.5	8.7	7.5	10.2

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 2.b. Industrial Preferential Tariffs Weighted by Export at HS 6 digit level (2000)

	Imposed/Faced Tariffs	Mercosur				NAFTA						CACM					Andean					Caricom	EU
		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
Preferential	Argentina		1.6	0.0	2.7	15.4	18.3	14.2	9.7	11.1	13.8	13.8	14.8	15.9	12.3	18.2	7.0	8.2	5.7	9.8	4.0	8.6	16.2
	Brazil	0.0		0.0	0.0	17.6	21.3	17.3	9.8	11.7	14.0	21.8	15.6	16.0	12.4	18.1	7.9	11.0	9.6	10.0	8.2	9.7	18.2
	Paraguay	0.0	0.0		0.0	10.8	13.8	11.3	3.1	9.9	13.2	13.6	13.7	15.4	11.7	16.6	2.6	7.2	5.0	9.3	3.0	7.8	12.3
	Uruguay	1.9	1.4	0.0		11.7	14.7	11.5	8.9	10.8	13.6	11.7	14.1	15.3	11.9	17.2	5.5	7.5	5.3	9.3	3.8	8.1	12.9
	Canada	3.6	3.7	6.0	6.2		0.7	0.0	0.0	6.7	3.3	3.7	5.0	4.7	3.3	7.8	1.8	3.5	2.0	3.4	2.4	0.9	4.3
	Mexico	16.6	17.1	20.0	19.4	2.7		2.8	14.6	16.5	25.8	10.1	18.9	21.4	12.8	21.5	12.7	7.3	16.7	14.6	4.5	7.6	17.2
	United States	1.4	1.2	1.3	2.2	0.0	0.2		0.9	1.0	0.8	0.6	0.7	0.6	0.2	1.9	0.0	0.0	0.0	0.0	2.2	0.8	3.3
	Chile	9.0	9.0	9.0	9.0	9.0	1.7	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	5.7	1.0	5.7	9.0	9.0
	Dominican Republic	15.2	14.9	22.6	21.6	15.7	17.4	12.9	11.0		26.4	12.6	17.9	21.1	24.8	22.2	11.4	12.9	12.7	14.0	11.0	11.0	15.4
	Panama	9.7	9.6	11.9	11.2	9.3	9.3	8.4	10.0	21.7		7.6	8.7	12.7	13.1	12.9	7.3	7.2	6.6	9.8	11.3	5.5	9.4
	Costa Rica	5.4	4.8	8.2	8.1	5.7	0.7	3.5	3.0	6.7	8.6		0.3	0.3	1.7	1.2	3.5	5.2	4.8	4.9	4.7	3.4	4.9
	Guatemala	5.7	5.9	11.2	10.3	7.3	6.7	4.1	3.1	3.6	10.3	0.1		0.0	0.4	0.8	5.3	5.9	4.5	5.8	3.2	4.8	6.0
	Honduras	9.9	6.6	9.9	10.7	10.6	9.2	5.0	4.0	9.3	11.6	6.4	11.9		9.9	13.1	6.4	11.9	14.6	6.6	14.9	7.7	7.5
	Nicaragua	3.7	3.1	5.5	5.4	4.2	3.6	2.3	2.1	4.5	6.9	0.1	0.0	0.0		0.8	3.8	3.4	3.2	3.9	2.9	3.4	3.2
	El Salvador	5.7	5.6	10.6	10.5	7.6	8.5	3.9	3.1	5.6	10.3	6.3	9.6	11.5	9.4		4.1	5.9	5.2	5.9	3.7	4.3	6.4
	Bolivia	9.6	8.8	9.9	9.8	9.5	9.6	9.0	9.9	10.0	10.0	9.9	9.8	9.8	9.9	9.9		9.8	10.0	10.0	10.0	9.8	8.8
	Colombia	13.2	11.7	13.4	15.6	14.3	15.1	10.3	8.8	10.4	17.5	10.2	14.0	16.1	16.7	15.8	7.7		12.9	10.2	11.3	9.8	12.4
	Ecuador	15.0	7.9	13.2	12.6	6.5	5.5	5.7	8.7	35.2	26.4	8.7	12.2	15.3	19.9	20.0	8.0	14.7		14.4	32.9	8.5	7.9
	Peru	10.9	11.1	13.1	12.9	12.1	12.6	12.3	12.1	12.2	12.4	12.9	12.8	12.6	12.2	13.7	12.3	12.6	12.1		12.0	12.4	12.5
	Venezuela	9.9	10.7	12.2	15.6	14.2	15.3	10.6	1.9	10.3	17.6	10.2	13.9	16.1	16.7	15.8	2.6	2.0	0.9	2.5		9.7	12.6
	CARICOM	15.2	13.5	13.3	16.9	16.2	16.9	11.7	10.8	18.4	30.9	11.9	14.9	19.8	27.5	18.8	8.3	11.6	13.3	10.1	14.6		13.9
	European Union	4.8	4.2	4.9	6.7	4.5	1.8	3.1	2.6	0.6	11.0	2.5	3.2	1.9	2.2	5.1	1.5	2.7	1.4	1.9	1.8	2.4	
	Average	7.9	7.3	9.3	9.9	9.8	9.7	8.0	6.6	10.7	14.0	8.7	10.5	11.2	11.3	12.4	6.1	7.6	7.2	7.5	8.0	6.9	10.2

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 3.b. Overall MFN Tariffs Weighted by Export at HS 6 digit level (2000)

	Imposed/Faced Tariffs	Mercosur				NAFTA						CACM					Andean					Caricom	EU
		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
MFN	Argentina		14.5	12.4	16.6	15.4	18.2	14.2	10.6	13.4	14.4	13.9	14.9	14.8	14.0	17.1	8.5	9.7	7.9	10.2	4.2	10.3	16.3
	Brazil	13.8		12.2	16.7	17.4	21.0	17.0	10.7	13.5	14.4	19.4	15.0	14.8	13.8	17.0	9.1	11.7	10.8	10.4	8.3	11.2	18.2
	Paraguay	10.8	11.9		14.7	11.0	13.9	11.5	9.9	13.2	14.1	13.7	14.8	14.6	14.0	16.3	8.0	9.0	7.4	9.7	3.2	9.8	12.6
	Uruguay	11.4	12.5	12.2		11.8	14.7	11.7	9.9	13.0	13.9	12.3	14.3	14.5	13.4	16.0	7.4	9.0	7.6	9.8	4.0	9.4	13.1
	Canada	13.8	10.3	5.1	25.9		5.4	6.1	6.2	15.8	10.0	8.6	10.2	4.0	17.8	21.1	7.1	6.0	3.5	4.3	2.7	10.3	8.2
	Mexico	28.7	24.9	24.0	27.8	17.8		17.8	17.4	31.2	28.7	17.4	29.8	23.6	32.9	31.1	15.7	20.8	20.5	15.8	14.7	19.4	18.9
	United States	9.4	11.1	8.5	14.6	3.6	4.5		2.8	13.6	6.2	5.6	11.6	5.2	17.5	8.2	3.9	4.7	3.8	4.4	2.8	5.1	4.9
	Chile	9.0	9.0	9.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Dominican Republic	14.8	15.0	12.2	22.1	16.0	17.7	13.3	13.6		24.7	15.7	18.6	19.2	20.4	21.1	11.2	14.7	16.1	14.8	11.1	13.3	15.9
	Panama	11.1	15.9	14.0	26.4	9.9	9.7	9.7	10.6	30.2		10.9	22.3	15.2	24.2	18.2	8.7	11.2	9.3	10.7	11.4	11.7	10.4
	Costa Rica	7.4	8.3	5.8	15.4	6.2	6.8	4.6	4.9	12.3	13.1		14.0	12.8	17.1	13.3	5.0	7.8	7.4	5.8	4.8	6.5	6.0
	Guatemala	7.8	7.6	6.4	23.5	7.7	9.4	5.0	5.4	10.8	12.6	8.8		13.3	13.3	14.2	6.0	7.9	7.5	6.6	3.4	8.5	6.8
	Honduras	9.6	8.7	7.2	15.9	10.7	11.1	5.8	6.0	13.4	14.2	9.9	16.2		14.7	15.6	6.7	13.3	15.3	7.6	15.0	10.1	8.0
	Nicaragua	5.8	6.6	4.7	10.4	4.4	4.4	3.2	3.3	9.8	9.6	5.2	10.8	8.9		9.4	4.6	5.5	5.2	4.5	3.0	5.9	3.7
	El Salvador	6.8	7.3	6.2	14.8	7.9	8.9	4.6	5.0	10.9	13.0	9.0	14.1	13.5	14.4		5.0	8.2	7.8	6.7	3.8	7.3	7.1
	Bolivia	9.7	9.1	10.0	9.9	9.5	9.6	9.0	9.9	10.0	9.9	10.0	9.9	9.9	10.0	9.9		9.8	10.0	10.0	10.0	9.9	8.9
	Colombia	14.6	13.0	14.8	16.9	14.4	15.1	10.8	10.0	12.8	16.7	11.6	13.9	14.1	15.1	15.1	10.2		13.3	11.4	11.4	11.1	12.7
	Ecuador	15.4	9.8	13.8	15.2	7.0	6.0	6.5	9.9	28.3	21.7	10.5	13.1	13.7	16.0	17.5	10.4	14.3		14.3	32.7	10.0	8.5
	Peru	14.3	13.8	14.1	17.8	12.6	12.9	12.7	13.5	14.1	15.8	15.5	16.3	16.8	17.2	15.9	12.8	13.9	14.8		12.1	13.3	12.9
	Venezuela	14.7	13.1	14.6	17.2	14.4	15.3	11.0	9.7	12.8	16.7	11.6	13.9	14.1	15.1	15.1	10.7	12.3	13.5	11.4		11.1	12.9
	CARICOM	16.1	15.9	13.7	19.7	16.4	17.9	12.6	13.9	23.5	32.5	19.4	24.1	27.9	28.1	23.8	11.9	16.4	19.2	11.9	14.7		14.7
	European Union	11.0	8.0	13.6	36.7	6.0	5.7	5.2	4.8	15.0	38.5	18.9	17.8	13.5	25.0	9.5	3.1	9.2	26.5	3.3	2.1	10.3	
	Average	12.2	11.7	11.2	18.4	10.9	11.3	9.6	9.0	15.6	16.7	12.2	15.5	14.0	17.3	15.9	8.3	10.7	11.3	9.2	8.8	10.2	10.9

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 3.a. Overall Preferential Tariffs Weighted by Export at HS 6 digit level (2000)

	Imposed/Faced Tariffs	Mercosur				NAFTA						CACM					Andean					Caricom	EU
		ARG	BRA	PAR	URU	CAN	MEX	USA	CHI	DOM	PAN	CR	GTM	HND	NIC	SLV	BOL	COL	ECU	PER	VEN	Caricom	EU
Preferential	Argentina		1.7	0.2	1.5	15.4	18.2	14.2	10.6	13.4	14.4	13.9	14.9	14.8	14.0	17.1	8.5	9.7	7.9	10.2	4.2	10.3	16.3
	Brazil	0.0		0.0	0.0	17.4	21.0	17.0	10.7	13.5	14.4	19.4	15.0	14.8	13.8	17.0	9.1	11.7	10.8	10.4	8.3	11.2	1.1
	Paraguay	0.0	0.0		0.0	11.0	13.9	11.5	3.9	13.2	14.1	13.7	14.8	14.6	14.0	16.3	2.8	9.0	7.4	9.7	3.2	9.8	12.6
	Uruguay	1.1	1.3	0.0		11.8	14.7	11.7	9.9	13.0	13.9	12.3	14.3	14.5	13.4	16.0	7.4	9.0	7.6	9.8	4.0	9.4	13.1
	Canada	13.8	10.3	5.1	25.9		1.1	2.1	2.9	15.8	10.0	8.6	10.2	4.0	17.8	21.1	7.1	6.0	3.5	4.3	2.7	4.8	8.2
	Mexico	28.7	24.9	24.0	27.8	3.0		4.8	17.1	31.2	28.7	13.4	29.8	23.6	20.2	31.1	14.1	10.0	20.5	15.8	4.7	9.4	18.9
	United States	8.1	9.3	7.3	12.0	0.5	0.5		2.1	10.8	3.6	2.7	9.1	3.1	16.4	5.8	1.4	1.3	0.5	0.3	2.5	2.8	4.9
	Chile	9.0	9.0	9.0	9.0	9.0	1.7	9.0		9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	4.2	1.0	5.6	9.0	9.0
	Dominican Republic	14.8	15.0	12.2	22.1	16.0	17.7	13.3	13.6		24.7	15.7	18.6	19.2	20.4	21.1	11.2	14.7	16.1	14.8	11.1	13.3	15.9
	Panama	11.1	15.9	14.0	26.4	9.9	9.7	9.7	10.6	30.2		10.9	22.3	15.2	24.2	18.2	8.7	11.2	9.3	10.7	11.4	11.7	10.4
	Costa Rica	7.4	8.3	5.8	15.4	6.2	1.0	4.6	4.9	12.3	10.2		6.7	5.2	7.3	5.4	5.0	7.8	7.4	5.8	4.8	6.5	6.0
	Guatemala	7.8	7.6	6.4	23.5	7.7	7.0	5.0	5.4	6.5	12.6	0.8		5.2	4.3	3.8	6.0	7.9	7.5	6.6	3.4	8.5	6.8
	Honduras	9.6	8.7	7.2	15.9	10.7	9.4	5.8	6.0	13.4	14.2	9.9	16.2		14.7	15.6	6.7	13.3	15.3	7.6	15.0	10.1	8.0
	Nicaragua	5.8	6.6	4.7	10.4	4.4	3.8	3.2	3.3	9.8	8.2	0.9	6.1	3.7		4.4	4.6	5.5	5.2	4.5	3.0	5.9	3.7
	El Salvador	6.8	7.3	6.2	14.8	7.9	8.9	4.6	5.0	10.9	13.0	9.0	14.1	13.5	14.4		5.0	8.2	7.8	6.7	3.8	7.3	7.1
	Bolivia	9.7	9.1	10.0	9.9	9.5	9.6	9.0	9.9	10.0	9.9	10.0	9.9	9.9	10.0	9.9		9.8	10.0	10.0	10.0	9.9	8.9
	Colombia	14.6	12.4	14.8	16.9	14.4	15.1	10.8	9.9	12.8	16.7	11.5	13.9	14.1	15.1	14.8	10.2		13.3	10.5	11.4	11.1	12.7
	Ecuador	15.4	9.8	13.8	15.2	7.0	6.0	6.5	9.9	28.3	21.7	10.5	13.1	13.7	16.0	17.5	10.4	14.3		14.3	32.7	10.0	8.5
	Peru	12.6	12.6	14.1	17.8	12.6	12.9	12.7	13.5	14.1	15.8	15.5	16.3	16.8	17.2	15.9	12.8	13.9	14.8		12.1	13.3	12.9
	Venezuela	11.2	11.4	10.6	16.7	14.4	15.3	11.0	2.0	12.8	16.7	11.6	13.9	14.1	15.1	15.1	2.6	2.9	3.8	2.4		11.1	12.9
	CARICOM	16.1	15.9	13.7	19.7	16.4	17.9	12.6	13.9	23.5	32.5	19.4	24.1	27.9	28.1	23.8	11.9	16.4	19.2	11.9	14.7		14.7
	European Union	11.0	8.0	13.6	36.7	6.0	2.6	5.2	4.8	10.9	38.5	17.9	16.7	11.7	21.7	8.8	2.5	8.3	23.8	2.3	2.0	7.5	
	Average	10.2	9.8	9.2	16.1	10.1	9.9	8.8	8.1	15.0	16.3	11.3	14.7	12.8	15.6	14.7	7.5	9.5	10.3	8.1	8.1	9.2	10.1

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Appendix C
The Regional Export Sensitive Tariff Index (REST)

Table 1.a. The MFN REST Index for WH countries at HS 6 digit level (2000)

MFN	Imposed			Faced			REST		
	All	Ind	Agr	All	Ind	Agr	All	Ind	Agr
Argentina	12.2	11.7	14.6	10.6	5.2	18.1	0.9	0.4	1.2
Brazil	16.1	16.2	14.4	11.7	5.4	32.0	0.7	0.3	2.2
Paraguay	9.9	9.3	14.1	8.9	6.4	9.6	0.9	0.7	0.7
Uruguay	11.7	11.3	14.4	16.0	9.7	24.2	1.4	0.9	1.7
Canada	8.2	3.3	27.7	13.8	13.7	14.7	1.7	4.2	0.5
Mexico	23.8	17.1	38.8	15.6	15.6	15.7	0.7	0.9	0.4
US	7.9	3.1	22.6	11.3	10.9	15.5	1.4	3.6	0.7
Chile	9.0	9.0	9.0	8.2	6.8	15.2	0.9	0.8	1.7
Dom Rep	13.4	13.0	18.1	14.9	5.7	30.0	1.1	0.4	1.7
Panama	11.7	9.1	24.2	12.0	10.2	14.6	1.0	1.1	0.6
Costa Rica	5.1	3.9	17.0	8.1	5.6	13.7	1.6	1.4	0.8
Guatemala	5.5	4.5	15.7	15.3	8.0	20.7	2.8	1.8	1.3
Honduras	6.0	5.2	15.1	7.2	4.3	9.5	1.2	0.8	0.6
Nicaragua	3.5	2.6	13.0	19.2	9.4	24.4	5.5	3.6	1.9
El Salvador	5.0	4.2	12.5	11.9	8.7	16.3	2.4	2.1	1.3
Bolivia	9.3	9.1	10.0	7.8	6.5	11.0	0.8	0.7	1.1
Colombia	11.3	10.8	16.1	7.3	5.5	13.6	0.7	0.5	0.8
Ecuador	8.6	8.3	15.4	6.3	5.1	9.4	0.7	0.6	0.6
Peru	13.0	12.3	18.3	6.8	6.3	11.6	0.5	0.5	0.6
Venezuela	11.4	10.9	16.0	4.4	4.1	29.9	0.4	0.4	1.9
CARICOM	14.0	12.8	23.7	7.2	4.3	21.4	0.5	0.3	0.9

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.

Table 1.b. The Preferential REST Index for WH countries at HS 6 digit level (2000)

Preferential	Imposed			Faced			F/I		
	All	Ind	Agr	All	Ind	Agr	All	Ind	Agr
Argentina	6.5	6.3	7.6	4.5	1.7	8.3	0.7	0.3	1.1
Brazil	11.5	11.6	10.3	7.7	3.0	22.6	0.7	0.3	2.2
Paraguay	1.1	1.0	1.8	2.0	0.7	2.5	1.8	0.6	1.4
Uruguay	4.4	4.6	4.8	4.9	3.3	6.9	1.1	0.7	1.5
Canada	2.1	0.0	25.5	0.9	0.4	7.5	0.4	13.3	0.3
Mexico	5.2	3.2	26.3	1.0	0.6	7.9	0.2	0.2	0.3
US	1.4	0.2	9.6	4.5	2.7	24.2	3.2	11.7	2.5
Chile	7.5	7.5	7.2	7.5	6.3	13.8	1.0	0.8	1.9
Dom Rep	13.4	13.0	18.1	12.8	4.1	27.2	1.0	0.3	1.5
Panama	11.7	9.1	24.2	10.5	9.3	12.3	0.9	1.0	0.5
Costa Rica	5.0	3.2	15.7	5.7	3.8	10.1	1.2	1.2	0.6
Guatemala	5.0	3.7	13.2	13.4	6.4	18.6	2.7	1.7	1.4
Honduras	6.7	5.6	15.4	5.5	3.1	7.5	0.8	0.5	0.5
Nicaragua	3.4	2.3	12.1	13.7	5.7	18.0	4.0	2.5	1.5
El Salvador	7.2	5.7	13.6	9.2	5.3	14.5	1.3	0.9	1.1
Bolivia	9.5	9.4	10.0	7.7	6.6	10.5	0.8	0.7	1.1
Colombia	11.3	10.9	16.1	4.7	3.5	8.9	0.4	0.3	0.6
Ecuador	10.0	9.7	15.2	6.2	5.3	8.6	0.6	0.5	0.6
Peru	13.0	12.2	18.2	4.2	3.9	7.4	0.3	0.3	0.4
Venezuela	10.6	10.1	14.9	4.8	4.5	26.4	0.5	0.4	1.8
CARICOM	14.0	12.8	23.7	5.1	3.1	15.0	0.4	0.2	0.6

Source: 2001 Hemispheric Database of the Americas and AMAD. IDB-INT calculations.