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**AGRIFOOD MARKET INTEGRATION:  
PERSPECTIVES FROM  
DEVELOPING COUNTRIES**

*Fabio R. Chaddad, Patricia Aguillar and  
Marcos S. Jank*

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# **AGRIFOOD MARKET INTEGRATION: PERSPECTIVES FROM DEVELOPING COUNTRIES**

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## **INTRODUCTION**

Beginning in the 1980s, both Mexico and Brazil adopted liberal, market oriented policies, which significantly impacted their agrifood economies. Following four decades of state involvement in agriculture, Mexico started to dismantle direct intervention policies in the mid-1980s. Agricultural policy liberalization included the closing or sale of state-owned enterprises, the elimination of agricultural price supports and subsidies, the Ejido land reform program, and trade liberalization under GATT's Uruguay Round and the North American Free Trade Agreement (NAFTA). Despite the benefits of trade liberalization in terms of modernization of agricultural production and increased trade and foreign direct investments (FDI), the inclusion of agriculture in NAFTA has provoked a deep controversy in Mexico (Yunez-Naude and Paredes, 2003).

Not unlike Mexico, Brazil started its own economic reform program in the early 1990s, which included control of inflation, macroeconomic stability, privatization of state-owned companies, industry deregulation, dismantling of agricultural credit and price support policies, and increased international integration with the advent of MERCOSUR. These changes have significantly impacted the competitiveness of the agrifood sector in Brazil, which has experienced substantial, export-led growth (Azevedo, Chaddad and Farina, 2004). Exhibits 1 and 2 show the economic importance of the agrifood sector and international trade performance of Mexico and Brazil relative to other countries. Brazil is now the third net agrifood exporter in the world – following the United States (US) and the European Union (EU) – after enjoying an annual growth rate of 6.3% in exports since 1990. Mexico's trade performance has also been impressive during the same period, with an annual growth rate of almost 10% since 1990.

<Insert Exhibit 1>

<Insert Exhibit 2>

Given the economic importance of the agrifood sector in both countries, the objective of this paper is to discuss their perspectives on agrifood market integration focusing on three commodities: corn, cotton and orange juice. We will establish the position of these two countries with respect to US and Canada farm policies as they relate to the three pillars of trade liberalization identified by the World Trade Organization (WTO): market access, domestic subsidies and export competition. In doing so, the paper intends to contribute to our understanding of the constraints to increased policy coordination in NAFTA and eventually in the Free Trade Area of the Americas (FTAA).

## **DEVELOPING COUNTRIES' PERSPECTIVES ON AGRIFOOD INTEGRATION**

The process of agrifood market integration in North America and eventually in the whole of the Americas cannot be understood separately from multilateral trade negotiations occurring under the auspices of the WTO Doha Round. This new round of trade negotiations is also known as the “development round” because of its commitment to advancing developing countries’ economic interests and concerns. Following the collapse of the September 2003 trade talks in Cancun, Mexico, an ambitious agenda was set at the July 2004 negotiation round in Geneva. The 147 WTO member countries agreed to substantial reforms in agricultural trade, including increases in market access, reductions in domestic support and the elimination of export subsidies.

To better understand the challenges that lie ahead, it is fundamental to analyze the main results of the Doha Work Program agreed upon in Geneva, in particular:

- Export competition: This is the area in which the most positive results were obtained. The text explicitly states that “members agree to establish detailed modalities ensuring the parallel elimination of all forms of export subsidies and disciplines on all export measures with equivalent effect by a credible end date.” It calls for the end of export subsidies and for significant advances regarding

export credit disciplines, distorting practices by exporting State Trading Enterprises, and the abuse of food aid programs.

- Domestic support: In this issue there are good and bad news. The negative side relates to the so-called “blue box” reform, which could in the future accommodate some agricultural policy instruments created by the 2002 US Farm Bill (such as counter-cyclical payments) and the reform of the Common Agricultural Policy in the EU. The good news is that the text sets ambitious priorities regarding the elimination of cotton subsidies. The protection for cotton is likely to be dismantled sooner than for other products due to pressures from various African countries and NGOs, and to the results of the cotton dispute Brazil has led against the US (details in a subsequent section). Another positive outcome was that negotiators agreed on an overall reduction at the base level of all trade-distorting domestic support, as measured by the Final Bound Total AMS (Amber Box), the permitted “de minimis” level and the level agreed for Blue Box payments (Exhibit 3). A reduction of 20% in such overall level for trade-distorting subsidies will occur in the first year of the implementation period. However, the size of the overall reduction will become one of the hottest topics under discussion in the next phase of the negotiations.

<Insert Exhibit 3>

- Market access for agricultural goods: This area remains fairly static and, therefore, will demand the greatest efforts from negotiators in the future. The only good news is the proposal for deeper cuts on higher tariffs (progressiveness in tariff reductions). However, the framework ensures flexibility for some “sensitive” products which will benefit from tariff quotas and lower tariff cuts. The exact meaning of what a sensitive product is has not yet been defined.

Though this phase of the Doha Round ended with a good amount of benefits, there is a lot of work to be done. Significant details – particularly the definition of modalities

that will be used to reduce tariffs and subsidies – were left for resolution at the December 2005 ministerial in Hong Kong.

In addition to making progress towards freer trade in agrifood, Geneva's process consolidated a new dynamics where the traditional "Quad" – i.e., the US, the EU, Japan and Canada – consensus was replaced by a negotiating format requiring continuous efforts to harmonize the positions of key developed and developing countries. Fostered by a new economic geography in the world, the G-20 emerged as block of developing countries led by Brazil and India with the common goal of fighting against agricultural protectionist policies in developed countries. Unlike traditional coalitions formed by a homogenous group of countries with similar interests, the G-20 is a very heterogeneous, pragmatic and agile coalition with good technical capacity to support international trade negotiations.

The trouble for the G-20 lies in the internal contradictions linked to the group's difficulties in coming to common ground to advance strategies beyond agricultural issues or even to open its own agricultural markets (Jank, 2005). Brazil probably is one of the countries with the most to gain from a broad agricultural liberalization, but it is reluctant to open its markets for industrial goods and services. China tries to block further opening of its agricultural and services sectors, even though it could be the main beneficiary of a global liberalization of industrial tariffs. India resists opening its markets in agricultural and non-agricultural goods, even though it has strong potential to be a world-class exporter of services.

In addition to the G-20, other coalitions emerged such as the coalition of 32 less developed countries (LDCs), the G-90 and the G-33. These coalitions now join other established interest groups – the US, the EU, the Cairns group and the G-10 – in the chessboard of multilateral trade negotiations (Exhibit 4). The main implication to multilateral trade negotiations at the WTO is that the old North-South paradigm is no longer valid.

<Insert Exhibit 4>

Considering the three pillars of trade liberalization identified by the WTO – market access, domestic subsidies and export competition – Jank (2005) observes complexity, heterogeneity, and conflict of interests among developing countries. Regarding market access, at least four different positions can be identified. The group of 32 LDCs has adopted a “no commitment” policy, signaling their unwillingness to open their borders to agrifood trade because it would expose their farmers to competition from developed countries’ subsidies. The largest group – formed by these same 32 LDCs, the G-90 and the G-33 – is concerned about preference erosion of their special, differential treatment such as evidenced in the sugar case against the EU. A third group is formed by populous countries with large rural populations – including China, India and Indonesia – who will play a central role in the Doha Round negotiations. This group tends to hold a defensive position in agrifood trade but has offensive interests in industrial goods (China) and services (India). Lastly, there is a group of roughly 15 “free-traders” that are the main beneficiaries of more open boarders to agrifood trade. These countries are net exporters of agrifood products and include Argentina, Brazil, Chile, South Africa, Thailand and some Central American countries. **Patricia: how would you characterize Mexico’s position in these issues?**

Developing countries also have conflicting interests and concerns regarding domestic subsidies to agricultural production. There are at least 56 developing countries that are net food importers who do not oppose domestic subsidies in developed countries, as they tend to depress world food and agricultural commodity prices. On the other hand, the group of net food exporters is vehemently opposed to the unfair competition from subsidies in the US, EU and other developed countries. While the EU started to “green” and partial decouple its subsidies with the 2003 Fischler reform of the Common Agricultural Policy (CAP) because of internal budget constraints and the enlargement process, the US has increased its subsidies since the 1996 FAIR Act and subsequent supplemental legislation authorizing emergency relief programs (Exhibit 5). These “emergency” payments became permanent in the 2002 Farm Bill, renamed countercyclical payments. In addition to substantially increasing the level of agricultural subsidies, the 2002 Farm Bill represented a strong reversal of the trend to decouple producer support from

production levels. Simply put, the Doha Round will not achieve its objectives if the US does not reduce and decouple its subsidies in the next Farm Bill.

<Insert Exhibit 5>

In addition to the WTO Doha Round, agrifood trade integration is also affected by multilateral negotiations under the Free Trade Area of the Americas (FTAA). The evolution of FTAA negotiations – from full-fledged, to “light”, “à la carte” and now almost dead (Jank and Arashiro, 2004) – has exposed the constraints to increased trade integration in the hemisphere, particularly the opposing views of the US and Brazil. The US has offensive interests in the majority of the negotiating areas, but is defensive in antidumping and agriculture. The defensive position of the US in agriculture is related to domestic subsidies (which is discussed in the cotton case section below) and (lack of) market access for a group of products that benefit from significant protection, including sugar, tobacco, peanuts and citrus fruits (the effects of which are dealt with in the orange juice section below). Brazil, on the other hand, has adopted an offensive position in agrifood trade issues, but has been overly sensitive in issues important to US interests, including services, investments and intellectual property (Zabludovsky, 2004).

As the FTAA negotiation process has shown little progress, the US followed a “competitive liberalization” policy, signing bilateral free trade agreements with 12 countries in a hub-and-spoke format. In addition, 67 bilateral agreements involving countries in the hemisphere have been signed so far (Exhibit 6). The risk of this approach is the emergence of the now famous image of the “spaghetti bowl” suggested by Jagdish Bhagwati, with diversions in trade, investment and employment leading to a decreased level of engagement in the FTAA integration process (Robertson, 2004). For those who defend the multilateral trading system, the proliferation of trade agreements raises concerns as to whether the bilateral movement is compatible, and even helpful to, the promotion of building blocs for trade liberalization or if it may cause more harm by diminishing the level of engagement of various actors in international trade negotiations.



<Insert Exhibit 6>

## **AGRIFOOD INTEGRATION IN SPECIFIC COMMODITIES**

Given the backdrop of the new dynamics that have emerged in multilateral negotiations in the WTO, this section of the paper intends to further explore the perspectives of developing countries – Brazil and Mexico in particular – in specific agrifood chains, including corn, cotton and orange juice. In doing so, the paper discusses the implications to US and Canadian farm policies regarding market access, domestic support, and export subsidies.

### **Corn (Patricia Aguillar)**

#### **Brazil's WTO Cotton Case: Implications to US Farm Policy**

On September 27, 2002, Brazil filed two dispute cases against US cotton subsidies and EU sugar export subsidies at the Dispute Settlement Understanding (DSU) of the WTO. Both cases constituted the first time a developing country challenged developed countries' agricultural production and export subsidies. Cotton is one of the most distorted commodities in the world due to high levels of government subsidies and barriers to trade. According to the International Cotton Advisory Committee (2002), worldwide assistance to cotton producers ranged between \$3.8 to \$5.8 billion between 1997 and 2002, while the value of the global cotton market bottomed at roughly \$20 billion in 2002. In addition to domestic support, some cotton-exporting countries protect their producers with tariffs or tariff-rate quotas (TRQs). While developing countries – including Argentina, Brazil and India – impose tariffs on cotton imports ranging from 5% to 15%, the US adopts a TRQ system with a tariff of 4.4 cents/kilogram within quota and 31.4 cents/kilogram outside quota.

Between December 2000 and May 2002, the world price of cotton declined by 40%, reaching the lowest cotton price adjusted for inflation since the 1930s. This historically low cotton price level triggered US price-based support programs (Exhibit 7). As a result, US cotton producers received payments ranging between \$1.9 and \$3.9 billion during the 1998-2002 marketing years, which exceeded the 1992 level of \$1.4 billion. This constituted a violation of Article 13 of the Agreement on Agriculture – also known as the Peace Clause – the main claim of Brazil’s cotton case against the US. In addition, Brazil also claimed that the export credit program and Step 2 payments were in fact export subsidies, which were prohibited under the Agreement on Agriculture.

<Insert Exhibit 7>

Brazil’s cotton case argued that US cotton subsidies caused “serious prejudice” to Brazilian cotton producers because of two reasons. First, econometric analysis by an expert witness showed that US cotton subsidies caused depressed cotton prices, costing Brazilian producers \$478 million in lost revenues between 1999 and 2002 (Sumner, 2003). Second, US cotton subsidies allowed US producers to gain world market share in detriment of Brazilian producers. Despite declining world cotton prices, US cotton producers actually increased acreage by almost 15%. In other words, US cotton subsidies provided an additional incentive to produce. The resulting increase in production caused the US share in the world market to more than double, from less than 20% to roughly 40%, between 1998 and 2002 (USDA, 2004).

On June 18, 2004, the WTO dispute panel issued its final ruling, agreeing with Brazil on most of its claims and recommending the US to eliminate or modify the offending programs (WTO, 2004). The main findings of the WTO dispute panel can be summarized as follows: (1) US cotton subsidy levels between 1998 and 2002 exceeded the 1992 level and thus are not protected under the Peace Clause; (2) all US price-based cotton programs – including marketing loss assistance payments (counter-cyclical payments in the 2002 Farm Bill), the marketing loan program, and the Step 2 program – caused world price suppression and serious prejudice to Brazilian producers; (3) US support programs decoupled from

prices – including direct payments (called Agricultural Market Transition Assistance – AMTA) and crop insurance payments – did not contribute to price suppression; (4) direct payments, however, did not qualify as green box because of the prohibition on fruit and vegetable planting; (5) US cotton subsidies did not contribute to an increase in US world market share; and (6) both the Step 2 program and the export credit guarantee program (GSM) were characterized as export subsidies.

Even though Brazil focused its case on US cotton subsidies, this WTO ruling may have far reaching consequences. This is so because the general programs (direct payments, countercyclical payments, marketing loans, crop insurance and export credit guarantee programs) constitute the vast majority of US agricultural support that flows to producers. These programs are in effect for several crops – including corn and soybeans – not just for cotton. Consequently, if the cotton ruling stands, changes in these programs for all program crops may be warranted.

In particular, two findings of the WTO cotton panel will force the US to reexamine its farm programs. First, the panel’s finding that direct payments did not qualify as green box implies that the US has mistakenly notified \$6 billion in annual direct payments as green box, instead of amber box (“dirty decoupling”). Second, the panel also ruled that price-based support programs – including countercyclical payments and marketing loans – acted as a price floor and thus shielded US producers from market signals. Adjusting these price support programs would also affect other commodities. The US has decided to appeal this ruling in an attempt to overrule the WTO decision, signaling that it would not unilaterally liberalize its commodity programs without concessions from other countries. Perhaps more importantly, the US Congress will now have to discuss how to incorporate the constraints imposed by the WTO rulings on the 2006 Farm Bill.

### **Orange Juice: The Effects of (Lack of) Market Access on Trade, Investment and Strategic Alliances**

Changes in trade barriers and capital flows create opportunities for redesigning the agrifood chain. In the most prominent view, trade barriers foster foreign direct investment as an alternative to deeply explore competencies that may be replicated in the host country (Dunning, 1998). Inasmuch as the relative cost of exporting increases when trade barriers are higher, firms may prefer to expand its sales by investing in a new plant in the host country. As a consequence, the higher the trade barriers, the higher the foreign direct investment will be. On the other hand, the institutional harmonization that emerges with market integration may promote foreign direct investments because firms are more likely to invest when they know the rules that govern market competition. Moreover, the institutional environment tends to be more stable the more integrated are the economies, with positive effects on the level of investment. NAFTA and MERCOSUR are illustrative cases, as lower trade barriers were associated to increases in foreign direct investment between countries in both trade blocks.

The orange juice chain in the US and Brazil, the key-players in the frozen concentrated orange juice (FCOJ) industry, provides an interesting illustration of how changes in market integration provide incentives for foreign direct investment and the redesign of the food chain (Azevedo, Chaddad and Farina, 2004). Combined, Brazil and the US are responsible for half of the world's total supply of oranges and 85% of orange juice processing capacity. More strikingly, orange production and processing is concentrated in just two states: Florida (US) and Sao Paulo (Brazil). Both industries compete globally in intermediary product markets, particularly in frozen concentrated orange juice (FCOJ). The Brazilian orange juice industry is the largest in volume and arguably the most competitive in the world. Brazilian FCOJ exports account for 85% of total international trade despite high tariff rates in major export markets – including the EU, the US and East Asia. Its competitiveness is based on low input costs, efficiency in plant operation and the bulk transportation system. The bulk transportation system alone allows for cost savings of 15% of final FCOJ price relative to the use of the traditional 200-liter barrel. Even the US industry does not extensively use bulk transportation, given that orange juice deliveries are dispersed in several distribution channels.

The Brazilian orange juice industry is highly concentrated, since the four leading processors control almost 75% of total crushing capacity. Two family-owned domestic companies founded in the 1960s – Cutrale and Citrosuco – dominate the industry. They have a combined 50% share of the industry’s total crushing capacity. The concentration in crushing capacity is similar to the one observed in FCOJ exports (Neves, Marino and Nassar, 2002). The main variable that dictates competition in the FCOJ industry is control of the bulk transportation system, which includes dedicated trucks, bulk terminal ports of embarkation and of entry, and tank farm vessels. Although there are about 30 orange processing companies in Brazil, the four leading processors control the entire bulk transportation system. Since Brazilian exports are predominantly in FCOJ form and bulk transportation systems generate significant cost savings, these four processors also hold dominant positions in export markets.

With regard to the industry structure in US, there are currently 52 citrus processing plants in Florida. Citrus juice products shipped by Florida processors were valued at US\$3.5 billion in the 1999-2000 season (Hodges et al., 2001). The two largest orange juice brands – Minute Made (Coca Cola Co.) and Tropicana (PepsiCo) – have a combined market share of over 50%. Citrus World, a marketing cooperative formed by citrus packinghouses in Florida, owns the third largest orange juice brand called Florida’s Natural (Jacobs, 1994).

The four leading companies in Brazil are key players in the Florida industry, following the acquisition of incumbent plants during the 1990s. Since their entry in US market, the two largest US orange juice brands discontinued their crushing operations to focus on blending and marketing its products. This strategic movement is analyzed in more detail below.

The US is one of the most open economies in the world. Agriculture, however, remains as an exception. For the so-called “sensitive” agricultural products – tobacco, sugar, ethanol, orange juice and dairy, among others – the US applies a system of “chirurgical” intervention, imposing a combination of prohibitive tariffs, tariff rate quotas, special safeguards and subsidies. Exhibit 8 illustrates the persistent protectionism of

developed countries in agriculture. While Mercosur's tariff structure is symmetrical, with a lower standard deviation, the US and the EU tariff structures are characterized by asymmetrical distributions, with tariff peaks and high tariff dispersion. Additionally, Brazil mainly uses *ad valorem* tariffs, in contrast to the US reliance on other forms of protection against imports, including specific lump-sum tariffs, tariff rate quotas and non-tariff barriers such as sanitary and phytosanitary (SPS) restrictions. It is worth mentioning that both countries operate with average tariff rates below the world agriculture tariff rate, which averages 62% (Gibson et al., 2001).

<Insert Exhibit 8>

Consequently, the US tends to be more open to international trade while heavily protecting selected industries against foreign competition. Among those is the FCOJ industry, which receives protection against imports from several countries, but particularly from the competitive Brazilian FCOJ industry.

As Jank *et al.* (2001) point out, the US strategy of chirurgic protection impacts directly the main export products of the Brazilian agrifood system. The orange juice is a remarkable example of this type of "chirurgic protection." To protect Florida citrus and orange juice production, imports from outside NAFTA have to pay a specific tariff rate of US\$0.297 per SSE<sup>1</sup> gallon for FCOJ and US\$0.175 per SSE gallon for not-from-concentrate (NFC) orange juice. As tariff rates for FCOJ are a fixed amount for a given volume, the effective protection increases when the price of the FCOJ falls and decreases when it becomes more expensive. For the average price of 2002, the specific tariff rate for FCOJ and NFC was equivalent to an *ad valorem* tariff rate of 56.7% and 13.7% respectively (Neves, Marino and Nassar, 2002). The effective protection of NFC seems lower but it is increased by the "natural" protection of high transportation costs, as it weights roughly 6 times more for an equivalent level of orange juice.

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<sup>1</sup> Single Strength Equivalent corresponds to a gallon at 11.8° Brix.

Exhibit 9 presents the import tariff rate for FCOJ in the US for different countries in the last 15 years and scheduled until 2007. Two relevant conclusions may be drawn from the data. First, the protection of Florida's industry is not equitable, inasmuch as Mexico and Caribbean countries receive a favorable treatment as closer trading partners. Second, the tariff has been declining but there is no further perspective of lower trade barriers for Brazil in the years ahead.

<Insert Exhibit 9>

The changes in tariff rates in the last 15 years had an important impact on US imports of FCOJ (Exhibit 10). The main effect was a significant decrease in US imports since the early 1990s. The second effect was a decrease in Brazil's share and a concomitant increase in imports from Caribbean countries, which face no tariff rates. The expected fall of tariff rates on imports from Mexico after 2007 will probably have an additional negative effect on imports from Brazil.

<Insert Exhibit 10>

This scenario of changes in trading rules between Brazil and the US not only affected trade flows, but created new investment opportunities, particularly towards the redesign of the citrus chain, with remarkable consequences on trade and foreign direct investment. In the 1990s, the four leading firms in the Brazilian orange juice industry – Cutrale, Citrusuco, Cargill and Dreyfus – started operations in Florida by acquiring existing plants formerly operated by US companies. The explicit motivation for this strategic movement was the increasing difficulties that these firms faced in accessing the US market, which is the world's largest in terms of orange juice volume. Since the late 1980s, Brazilian frozen concentrated orange juice (FCOJ) exports to the United States have been declining in both absolute and relative terms. In the 1990s the US became increasingly self-sufficient as orange production became less vulnerable to freezes, the result of the relocation of orange groves to southern Florida. Consequently, Brazilian FCOJ exports to the US fell from roughly half of total Brazilian exports in the 1980s to less than 20% in the late 1990s.

Three factors caused the decline in Brazilian FCOJ exports to the United States. First, as already mentioned, FCOJ is subjected to “chirurgical protection” by the US tariff rate system. Second, other countries enjoy preferential tariff rates, which further reduce the competitiveness of Brazilian exports. Third, orange juice consumption in the US has been marked by a trend towards NFC juice. The share of NFC in the US market accounts for almost 50% of total orange juice volume. There is a “natural” trade barrier in the case of NFC juice because it has more than five times the weight and volume of equivalent FCOJ, and its transportation requires greater effort in quality control. It is noteworthy that, logistics barriers notwithstanding, Brazil began exporting NFC to the United States in 2002, at approximately 3% of FCOJ exports.

The acquisition of US plants by Brazil-based processors is part of their growth strategy in response to the self-sufficiency of US domestic production. However, this movement caused a rearrangement of the US orange juice production chain and was beneficial to the beverage companies that were former owners of the acquired plants.

In the early 1990s, the major US orange juice processors were large and diversified beverage companies, including Coca-Cola (Minute Maid) and PepsiCo (Tropicana). Their main business is ready-to-drink beverages that require specific competence and expertise in marketing and branding. By means of diversification, these beverage companies are able to explore economies of scope in an extensive line of products. In the juice business, they need a reliable source of orange juice both in terms of regularity and quality, in order to keep up with their branding efforts. Until the early 1990s, transaction costs reasoning explains why Coca Cola and Pepsi operated their own citrus processing plants, which were dedicated assets to the beverage industry. In addition to the vertically integrated beverage companies, smaller independent citrus processors sold orange juice to beverage companies or retail chains by means of supply contracts.

Until 1990, the largest beverage companies, such as Minute Maid and Tropicana, operated in the beverage industry, citrus processing and, in some cases, orange groves. At



the start of the 1990s there was a transformation in the US orange juice industry. The family-owned Brazilian company Cutrale acquired Minute Maid plants. Subsequently, Citrosuco bought the citrus processing plant of Alcoma, a citrus grower that used to be vertically integrated in processing. Then Cargill – whose citrus department is based in Brazil – also entered the Florida market, acquiring the Procter and Gamble plant. Dreyfus followed and bought the processing plant of Winter Garden (Fernandes, 2003).

The distinguished efficiency of Brazilian companies in orange processing partially explains these acquisitions. In addition, this capability could not be fully explored with plants located in Brazil, as trade barriers protect Florida production. What is remarkable in the orange juice case, however, is that Brazilian companies and the US beverage industry are not in essence competitors. Instead of competing, Cutrale and Minute Maid developed a strategic alliance, which is the basis for the vertical disintegration in the US orange juice chain in the 1990s. Counting on a reliable and efficient orange juice supply, beverage companies shifted their focus to their primary business in order to fully explore their competencies in marketing –particularly in blends, branding and distribution channels – and the economies of scope in their beverage product line. Consequently, the acquisition of US citrus processing plants by Brazilian companies is part of the orange juice chain restructuring, which led to a more efficient form of organization.

The orange juice case provides an interesting example of the interaction between trade, FDI and strategic alliances among US and Brazilian companies. In particular, the high and selective trade barriers for Brazil's FCOJ in the US has negative effects on Brazilian producers, who cannot benefit from their comparative advantages, but does not necessarily harm Brazilian processors. Without such trade barriers, Brazilian companies would probably reduce orange juice production in Florida and substitute for imports originating from their Brazilian operations. Nevertheless, the strategic alliance between Brazilian orange juice processors and US beverage companies will probably expand to other countries in the region.

## **SUMMARY AND CONCLUSIONS**

**(Note: Still need to incorporate Patricia's corn analysis and Mexico's perspectives)**

There is a new economic geography in the world, led by developing countries that have undertaken structural reforms and corrected macroeconomic fundamentals. This new economic geography is reflected in a myriad of new trade agreements and in a new, dynamic geometry of actors and interests at the Doha Round of multilateral negotiations at the World Trade Organization (WTO), with emphasis on the G-20 group of developing countries led by Brazil and India. Unlike traditional coalitions formed by a homogenous group of countries with similar interests, the G-20 is a very heterogeneous, pragmatic and agile coalition, fighting mostly for the reduction of agricultural protectionism practiced by developed countries.

As far as Brazil is concerned, the creation of the G-20 can be considered the most positive achievement of President Lula's trade policy, since the successful sugar and cotton disputes brought by Brazil at the WTO started in the previous administration. While the cotton case has significant implications to domestic support, and especially the US farm policy, the sugar case reinforces the trend towards elimination of all forms of export subsidies including trade monopolies. In addition to the G-20, other coalitions emerged such as the coalition of 32 less developed countries (LDCs), the G-90 and the G-33. These coalitions now join other established interest groups – the US, the EU, the Cairns group and the G-10 – in the chessboard of multilateral trade negotiations. The main implication to multilateral trade negotiations at the WTO is that the old North-South paradigm is no longer valid.

The experience of the G-20 shows that with focus and coordination it is possible to obtain positive results, though it is still early to celebrate. That being said, the success of the Doha Round reposes today on three factors. First, the US must implement the WTO dispute settlement body's decision on the cotton case and cut its agricultural subsidies much beyond cotton. The position of Brazil and other agrifood "free traders" is that the Doha Round cannot produce results that are inferior to what has been achieved in the cotton

decision. In this crucial moment, it is necessary to be extremely attentive to the US attempt to “sell” in the Doha Round negotiating process decisions already mandated by the WTO’s appellate body.

Second, the negotiations depend on the capacity of countries with offensive positions in market access – the US and Brazil included – to convince the EU, Switzerland, Norway, Japan, Korea as well as key G-20 members (especially China and India) to open their agricultural markets, of course respecting some special and differential treatment for developing countries (such as a slower pace of tariff reductions). The truth is that everyone is somehow responsible for market access failures, and if the G-20 becomes an obstructionist force, all the liberalizing ambitions of Doha can go to waste. It is up to Brazil, for example, to accept a comprehensive opening of its own domestic agricultural markets, as long as there is compatible reciprocity from all major players. It is important to remember that the large food markets of the future are in Asia and that, therefore, Brazil cannot be extremely complacent with the protectionist positions of its G-20 partners in agricultural market access. To succeed in this endeavor, Brazil must take to heart its interest of a generalized opening of commodity and food markets, supporting all those positions which may lead to more market access. The G-20 is only one instrument that Brazil has been using to advance the Doha Round ambitious mandate for agriculture.

Third, Brazil must advance the internal debate regarding industrial goods and services access. This is an area where Brazil lacks the necessary diligence to identify its offensive and defensive interests for the long term. Reciprocal market opening agreements in these two areas have a tendency to bring positive net results to society, as well as lead to correct public policies and build stronger institutions. Less efficient sectors, it is true, may be losers, but the WTO is the best forum to seek flexibility in the modalities, timing and degree of opening.

Finally, it is worth noting, in the area of non-agricultural goods, the effort underway for the negotiation of sector agreements aimed at the accelerated tariff reduction. In principle, sector agreements are as undesirable as preferential trade agreements. While the

latter discriminate against the most efficient suppliers that are left out, sector agreements discriminate against the most sensitive products, as the opening of these sectors ends up being delayed. Yet, reality is always far from ideal, and there are good chances for these sectoral initiatives to come to fruition for industrial goods. If that happens, Brazil's agricultural sector should demand parallel initiatives for the sector, so it is not left out. The US took the lead in this area proposing sectoral agreements for beef, oilseeds and fruits and vegetables, sectors that represent about 60% of Brazil's agricultural exports. Brazil should study the issue in depth, even if this is a "third best" solution with little chance of success, but which could, in theory at least, bring investment and trade in areas which are of great interest.

In sum, the US and Brazil have common interests in agriculture. Both countries are big winners of agrifood trade liberalization, both at the WTO and the FTAA, and thus hold offensive positions in market access. In addition, both countries have been victims of increasing sanitary restrictions from China, Russia and other important import markets. Unlike the EU, however, the US does not recognize the regionalization principle which allows for the consideration of parts of a country territory as disease-free zones. For countries with a territorial extension, such as Brazil and Argentina, the requirement of disease eradication in the whole territory makes exports of fresh bovine meat to the US unfeasible. The non-recognition of the regionalization principle affects not only Mercosur but the US itself. For example, the crisis caused by a case of "mad cow" disease in the state of Washington negatively affected US beef exports as a whole.

Despite these common interests important divergences remain. Chief among those is domestic support of agricultural production in the US, as evidenced in the cotton case. In the case of agricultural export subsidies, the US is more open to negotiation, given that the country's utilization of this mechanism is quite rare. Second, is the "chirurgical" protection of sensitive products in the US that harm important agrifood sectors in Brazil, as shown in the orange juice case. If offers for highly sensitive products appear to be impossible, then broad access for comparable products could be granted, e.g., ethanol instead of sugar or different meats instead of orange juice.

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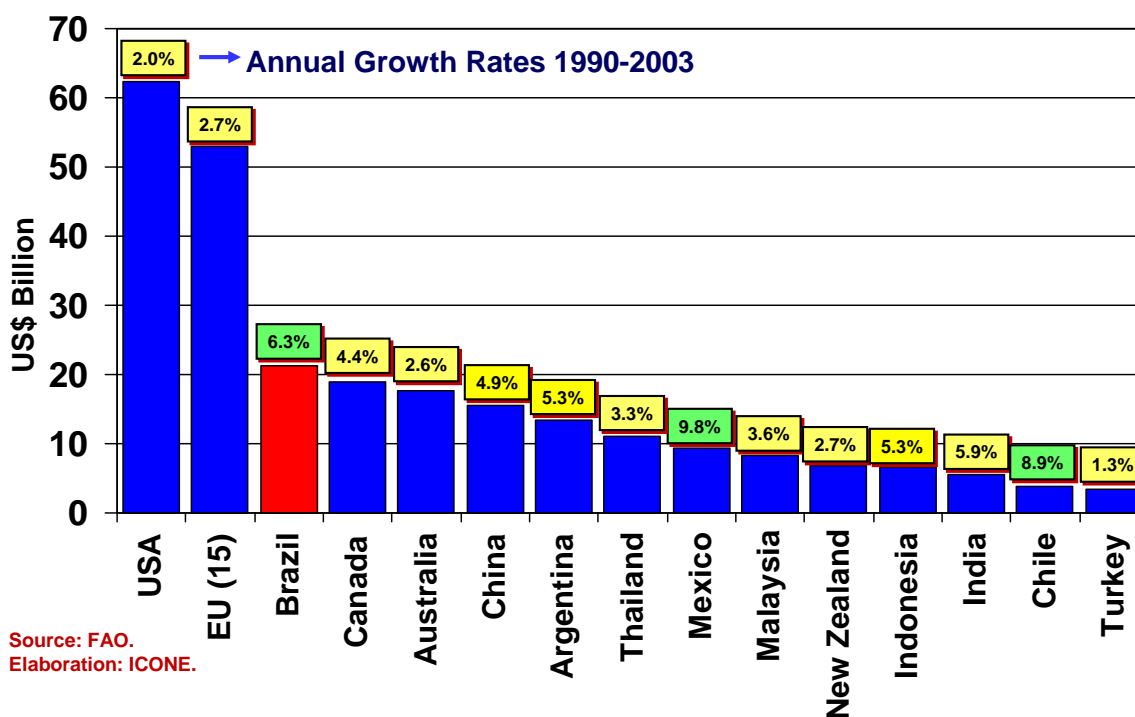
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**Exhibit 1. Economic Importance of the Agrifood Industry in Selected Countries (2003)**

	Mexico	Brazil	U.S.
<b>Agribusiness</b>	Patricia: do you have data for Mexico?	US\$ 165 billion (33% of GDP)	US\$ 998 billion (9% of GDP)
<b>Agriculture</b>	Patricia: do you have data for Mexico?	US\$ 52 billion (10% of GDP)	US\$ 154 billion (1.4% of GDP)

Source: Azevedo, Chaddad and Farina, 2004.

**Exhibit 2. International Trade Performance of Selected Countries (2003)**



**Exhibit 3. Overall and Applied Levels of Domestic Support and Export Subsidies in the EU and the US**

		European Union (Euro Billion)		Unites States (USD Billion)	
		Overall Level <sup>5</sup>	Applied Level <sup>6</sup>	Overall Level	Applied Level
<b>Trade Distorting Domestic Support</b>	AMS <sup>1</sup>	67.2	43.7	19.1	14.4
	De Minimis <sup>2</sup>	12.2	0.54	9.9	6.8
	Blue Box <sup>3</sup>	12.2	22.2	9.9	-
	Total	91.6	66.4	38.9	21.2
	Initial Commitment <sup>4</sup>	73.3	-	31.1	-
<b>Export Subsidies</b>		7.5	2.6	0.6	0.1

<sup>(1)</sup> AMS: product and non-product specific price support and governmental direct payments, all coupled with the current level of production (Amber Box).

<sup>(2)</sup> De Minimis: product and non-product specific distorting payments limited to 5% value of the total agricultural production.

<sup>(3)</sup> Blue Box: income compensatory payments decoupled from the current level of production that may be limited to 5% of the value of the total agricultural production.

<sup>(4)</sup> Initial Commitment: trade distorting support ceiling at the first year of the implementation period of the new agreement, equivalent to 80% of the overall level.

<sup>(5)</sup> Overall level: sum of all trade distorting support (amber box, de minimis and blue box, all still under negotiation) at the first year of the implementation period.

<sup>(6)</sup> Applied Level: notified value according to the latest WTO notification (2000 for the EU and 2001 for the US).

Source: Icone



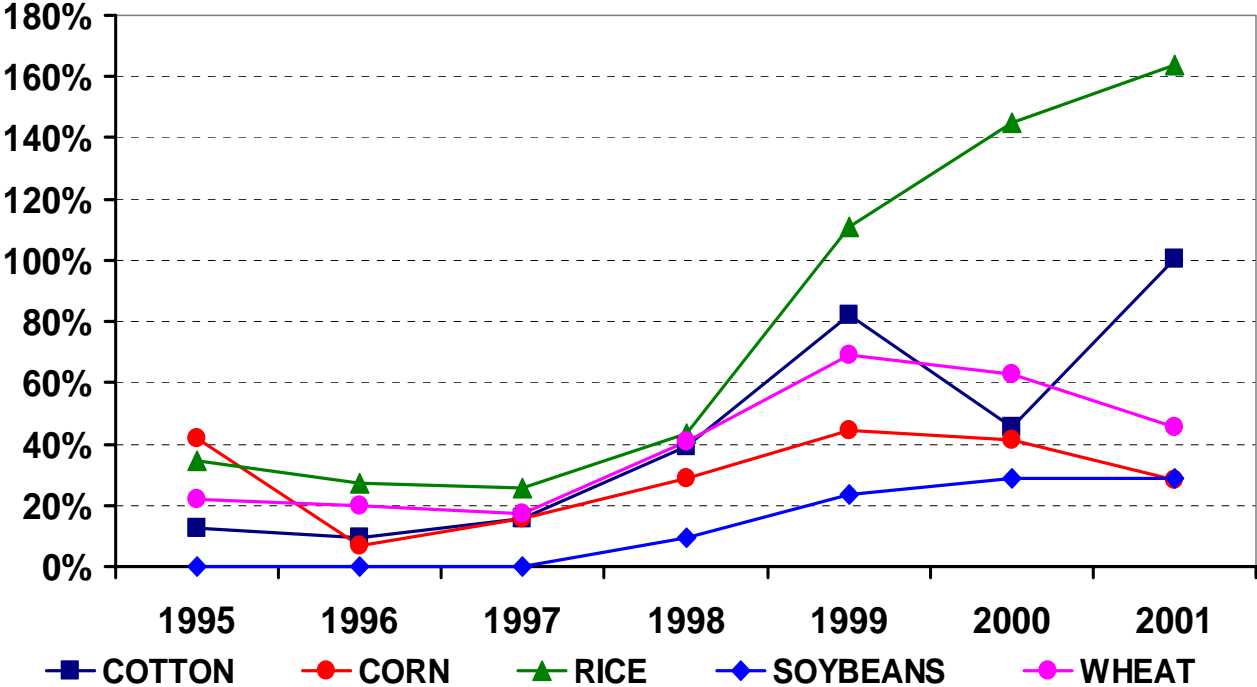
**Exhibit 4. WTO Doha Round Interest Groups**

Group	Countries	Agriculture		Industrial Goods	Services
		Subsidies	Access		
United States		Red	Red	Green	Green
European Union		Red	Red	Green	Green
Free traders (Cairns)	Australia, New Zealand, Chile	Green	Green	Green	Green
Ag resistant countries	G10 (Japan, Korea, Taiwan, Switzerland, Norway, etc.)	Red	Red	Green	Green
G-20 main players	Brazil, Argentina, Thailand	Green	Red	Red	Red
	China	Green	Red	Green	Red
	India	Red	Red	Red	Green
Developing: SP, preference erosion	G-90 and G-33	Red	Red	Red	Red
Developing: net food importers	LDCs and others	Red	Red	Red	Red

 = Offensive position       = Defensive position

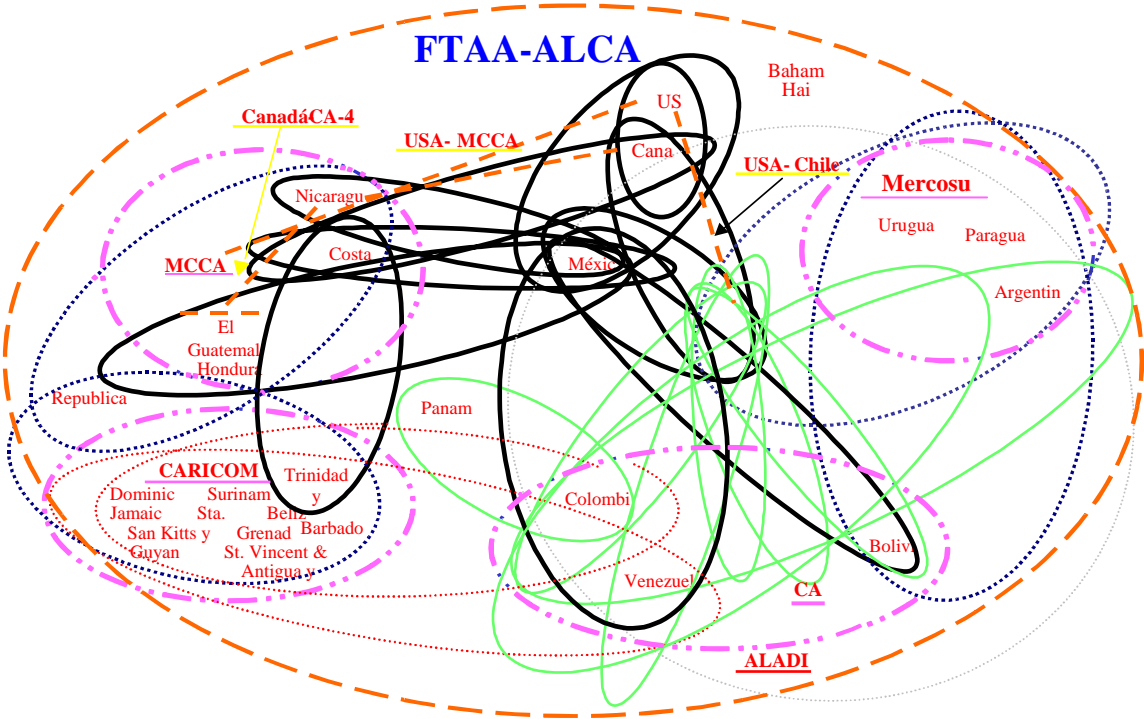
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**Exhibit 5. Share of Subsidies in US Agricultural Production (1995-2001)**



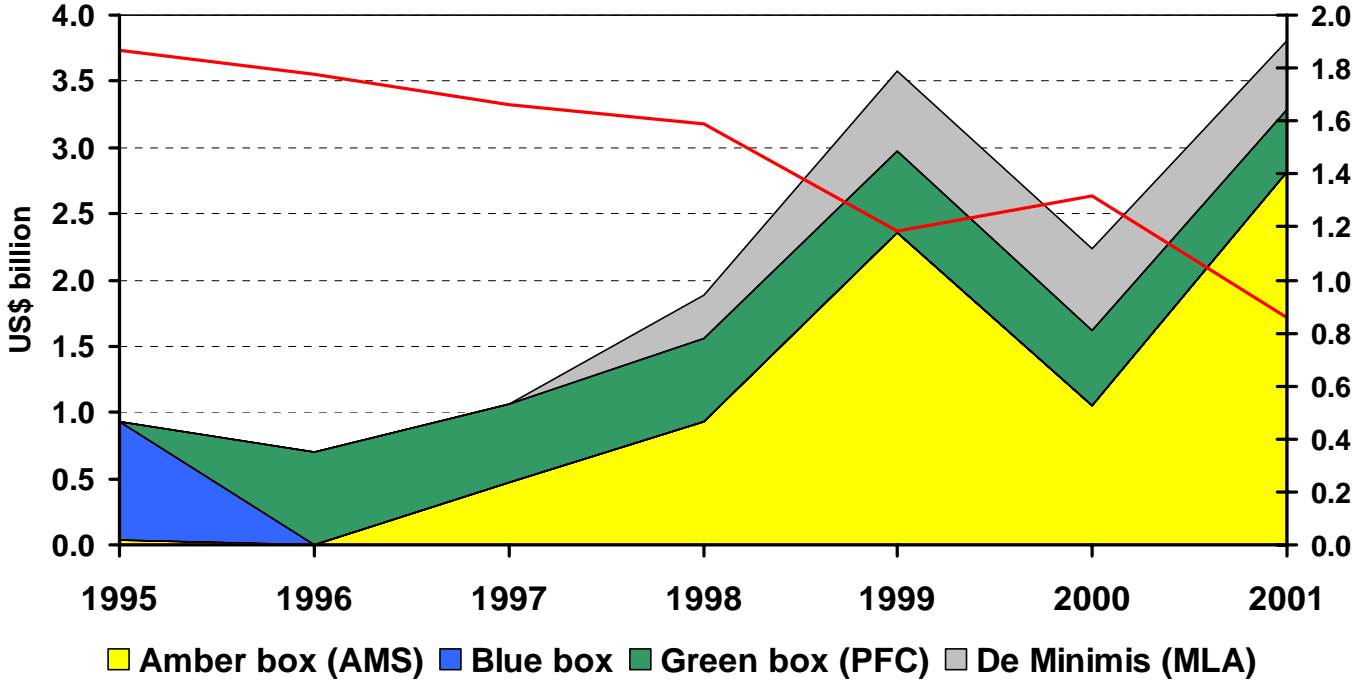
Source: Icone

**Exhibit 6. “Spaghetti Bowl” of Preferential Trade Agreements in the Americas**



Source: IDB-IPES 2002

**Exhibit 7. US Cotton Subsidies and World Cotton Prices in USD 1000/MT (1995-2001)**



Source: Icone.

**Exhibit 8. Comparative Tariff Structure: Mercosur, EU-15 and US**

Tariff Profile (HS - 8 digits)	Agricultural Goods			Industrial Goods		
	Mercosur	EU-15	US	Mercosur	EU-15	US
<b>Mean</b>	9.9%	29.3%	12.4%	10.9%	4.4%	4.2%
<b>Median</b>	10.0%	14.4%	4.4%	14.0%	3.0%	2.9%
<b>Standard deviation</b>	5.0%	40.3%	29.8%	6.7%	4.2%	5.6%
<b>Maximum</b>	20.0%	277.2%	350.0%	35.0%	26.0%	58.5%
<b>Nb of Tariff lines (A)</b>	959	2,091	1,808	8,771	8,187	8,698
<b>Nb tariff lines &gt; 30% (B)</b>	0	636	102	53	0	46
<b>% (B/A)</b>	0.0%	30.4%	5.6%	0.6%	0.0%	0.5%

**Note:** All minimum tariffs are zero. Estimates for Mercosur do not take into account the one hundred exceptions to the Common External Tariff, allowed for each member country.

**Sources:** European Commission; Brazilian Ministry of Industry, Development and Foreign Trade; United States International Trade Commission.

**Elaboration:** ICONE.

**Exhibit 9. Tariff Rate Quota Schedule for Imported FCOJ into the US (US\$/SEE gallon)**

Year	Mexico			Canada	Caribbean	Brazil
	In-Quota <sup>a</sup>	Over-Quota <sup>b</sup>	Snapback <sup>c</sup>			
1989	n/a	n/a	n/a	0.3143	free	0.3502
1991	n/a	n/a	n/a	0.2423	free	0.3502
1993	n/a	n/a	n/a	0.1742	free	0.3502
1995	0.1751	0.3327	0.3415	0.1022	free	0.3415
1997	0.1751	0.3152	0.3237	0.0341	free	0.3237
1999	0.1751	0.2977	0.3059	free	free	0.3059
2001	0.1751	0.2977	0.2972	free	free	0.2972
2003	0.1751	0.2977	0.2972	free	free	0.2972
2005	0.1751	0.1786	0.2972	free	free	0.2972
2007	0.0595	0.0595	0.2972	free	free	0.2972

a. Tariff applied to first 40 million single strength equivalent (SSE) gallons of FCOJ imports from Mexico.

b. Tariff applied to imports from Mexico exceeding 40 million SSE gallons of FCOJ up to 70 million SSE gallons from 1994 through 2002, and up to 90 million SSE gallons from 2003 through 2008.

c. Tariff applied to imports from Mexico exceeding 70 million SSE gallons in 1994-2002 and 90 million SSE gallons in 2003-2008.

Source: NAFTA, Office of the U.S. Trade Representative; Fernandes (2003).

**Exhibit 10. US Imports of FCOJ from Selected Countries (USD 1,000)**

	1989	1991	1993	1995	1997	1999	2001	2003
<b>Brazil</b>	463,169	220,843	202,282	103,949	124,572	218,820	109,115	196,323
<b>Mexico</b>	58,092	43,907	16,503	63,929	43,481	49,526	28,189	6,905
<b>Costa Rica</b>	0,656	1,736	2,448	6,984	18,096	16,461	33,718	35,608
<b>Belize</b>	8,532	4,029	6,695	8,389	16,089	13,077	19,667	11,304
<b>Canada</b>	0,257	0,918	2,115	2,963	2,466	4,224	4,867	5,569
<b>Honduras</b>	0,602	0,547	1,674	2,818	3,632	1,437	4,776	1,794
<b>Dominican Rep</b>	0,000	0,296	0,578	0,495	1,317	0,160	1,416	1,903
<b>Others</b>	7,914	2,481	1,962	1,834	0,894	2,298	0,956	5,507
<b>Total</b>	539,222	274,757	234,257	191,361	210,547	306,003	202,704	264,913

Source: U.S. International Trade Commission (USITC, 2003).