

**TARIFF AND NON-TARIFF MEASURES AFFECTING MARKET ACCESS FOR
FRESH AND PROCESSED FRUITS AND VEGETABLES**

John Wainio and Barry Krissoff

Economic Research Service, U.S. Department of Agriculture

Abstract

This study examines the wide spectrum of market access barriers facing imports of fresh and processed fruits and vegetables in an effort to throw some light on the degree of protection these products encounter around the world. High tariffs, particularly during certain times of the year, remain a major impediment for expansion of global trade in fruits and vegetables. In addition to tariff protection, WTO Members have utilized numerous other instruments at their disposal to regulate the flow of fruit and vegetable imports, including antidumping and countervailing duties general safeguards, and the special agricultural safeguard created under the Uruguay Round Agreement on Agriculture.

Paper prepared for the Southern Region Trade Research Committee Conference

“WTO Impacts on U.S. Farm Policy”

New Orleans, LA June 1-3, 2005

**Tariff and Non-Tariff Measures Affecting Market Access for
Fresh and Processed Fruits and Vegetables
John Wainio and Barry Krissoff**

Introduction

Over the 10 year period since the conclusion of the Uruguay Round, global horticultural trade increased by almost 40 percent. According to Food and Agricultural Organization (FAO) trade statistics, global fruit and vegetable imports (as derived from available import data) grew from about \$70 billion (1994) to nearly \$98 billion (2003) to comprise 18 percent of global agricultural trade. In comparison, global trade in other agricultural products increased by about 35 percent during the same period. From a U.S. perspective, the trends were similar on the export side, albeit less pronounced, with fruit and vegetable exports increasing by 24 percent, reaching \$8.8 billion in 2003, versus growth of 18 percent in exports of other agricultural products. In comparison, U.S. imports of fruits and vegetables grew much faster, reaching \$13.0 billion in 2003, an increase of 86 percent over 1994. U.S. fruit and vegetable imports accounted for 24 percent of U.S. agricultural imports and 13 percent of global fruit and vegetable imports in 2003, making it the largest single importer of fruits and vegetables in the world.

The surge in U.S. imports can be traced to a number of factors (Donovan and Krissoff). Consumer demand has risen due to economic expansion and changes in consumer preferences. Consumers are benefiting from enhanced product convenience, variety, and quality and now have access to year-round availability of fresh produce that once was thought of as only seasonal. The consolidation of the grocery industry has encouraged increased coordination and integration of grower/shipper operations and improved supply chain management. A California grape, a Washington apple, or a Florida citrus shipper, for example, may forge strategic alliances or partnerships with suppliers in Chile, South Africa or Spain in order to secure a contract with a grocery retailer interested in full product lines and 12-month supplies. Technological innovations, most notably in communication, chemicals, and transportation, have also provided added impetus to international trade. For example, atmosphere-controlled cargo and remote monitoring systems have helped maintain quality and extend shelf life of perishable products. Exchange rates have also had an impact of U.S. trade in horticultural products. The overall

appreciation of the dollar during the post-Uruguay Round period reduced U.S. food and agriculture's competitiveness in foreign markets, making imports cheaper and thus, increasing competition for domestic production in the United States.

Our focus in this paper, however, is to look at the role that border policies have played, especially those policies that directly impact the degree of market access for fruit and vegetable imports in the U.S. and around the world. One of the main accomplishments of the Uruguay Round Agreement on Agriculture (AoA) was to subject agricultural trade to substantially the same rules as trade for other products. In the market access area, non-tariff barriers were converted into their tariff equivalents, all agricultural tariffs were bound, and reductions in tariffs were negotiated.¹ However, agricultural tariffs remain a major distorting feature of international trade. With a global mean of over 60 percent, agricultural tariffs have been bound at levels that, on average, exceed tariffs on industrial trade by a wide margin.² Tariff protection is highly uneven across both countries and products, with many countries having bound a large proportion of their agricultural tariffs at low or duty-free levels while maintaining tariff peaks (megatariffs), often in excess of 100 percent, on import-sensitive products, including many fresh and processed fruits and vegetables.

While agricultural tariffs are now subject to bound ceilings, which created more secure access to the markets of all WTO members, unwanted imports can still be curtailed for limited periods through a number of WTO-legal trade remedy measures. These include the safeguard mechanisms allowed under the WTO Agreement on Safeguards and those allowed under the Special Safeguards provision of the Agreement on Agriculture. Members can also regulate imports with other contingency protection measures such as antidumping (AD) and countervailing duties (CVD). In this paper we analyze the extent to which these policy tools have been applied by WTO members on trade of fresh and processed fruits and vegetables.

¹ Bound tariffs are the maximum duties that a country has committed in the WTO to apply on those goods. Under WTO rules, a country cannot apply duties higher than the bound level without notifying and compensating other members. In practice, however, applied rates are often significantly lower than the allowable bound level.

² See Gibson, et.al. (2001) for a description of how the global tariff mean for agriculture was calculated. Laird has calculated the import-weighted average tariff on industrial products at 3.9 percent. While not strictly comparable, the two number indicate the wide disparity in tariffs that exists between the two sectors.

We begin with an examination of the extent to which tariffs on high-value products were reduced under the AoA. What are the levels of post-Uruguay Round tariff protection for fresh and processed fruits and vegetables, by country and commodity, and to what degree is this trade subject to tariff rate quotas? We then look at the prevalence of contingency protection measures such as safeguards, antidumping duties, and countervailing duties in restricting trade in fresh and processed fruits and vegetables.

Tariffs and Tariff-Rate Quotas³

Tariffs – During the Uruguay Round (UR), countries agreed to convert their agricultural nontariff barriers (NTBs) to bound tariffs, a process known as tariffication. Developed countries agreed to reduce all agricultural tariffs in equal installments over 6 years, including those resulting from tariffication, by 36 percent (on a simple-average basis) subject to an allowable minimum cut of 15 percent for each tariff line.⁴ This tariff-cutting formula allowed countries considerable latitude in determining the depth of cut applied to individual products. Since the subset of tariffs most critical to a country’s agricultural sector is generally small, it was possible for countries to meet their overall tariff-cutting commitment while limiting the impact of tariff cuts on the imports of politically-sensitive commodities. To what extent were products in the fruits and vegetable sectors subject to cuts that fell below the overall average cut required by the AoA?

Table 1 compares the average depth of cut implemented as a result of the Uruguay Round for fruits, vegetables, and products and for all other agricultural products. In the developed countries, 47 percent of fruit and vegetable tariff lines were cut by less than the 36 percent

³ Tariff information is drawn from numerous sources, including the Agricultural Market Access Database (AMAD, <http://www.amad.org/>) and the United Nations Center for Trade and Development’s TRAINS database accessed through the World Bank (<http://wits.worldbank.org>). Annual tariff schedules for the United States are available from the U.S. International Trade Commission’s Interactive Tariff and Trade Dataweb at http://reportweb.usitc.gov/tariff/tariff_form.jsp.

⁴ For tariffs that were already bound, the base was the current bound rate; for existing but unbound tariffs in developed countries, the base was the tariff rate applied on September 1, 1986; and for the over-quota duties that resulted from tariffication of NTBs, the base was the level of protection provided by NTBs during the 1986-88 period. In-quota duties were not subject to reduction. The previously bound tariffs of developing countries had to be reduced on average by 24 percent (with a 10 percent minimum cut) in equal installments over 10 years.

average, as opposed to only 38 percent of other agricultural tariff lines. Tariffs on the most politically sensitive products tended to be those subject to the 15 percent minimum cut. In the fruit and vegetable sector, 18 percent of all tariffs were subject to the minimum cut versus 13 percent of other agricultural tariffs. In only 3.7 percent of cases were fruit and vegetable tariffs cut to zero in developed countries, versus 8.3 percent of other tariffs. The same figures for the developing countries would suggest just the opposite, that fruits and vegetables are less politically sensitive in these countries, with 54 percent of tariffs cut by amounts that exceeded the required 24 percent overall average and only 10.5 percent of tariffs subject to the 10 percent allowable minimum cut. A higher proportion of other agricultural tariffs (14 percent) were cut by the 10 percent minimum.

Table 2 provides more detail on the tariff cuts by product category and country.⁵ Tariffs were separated into three broad categories: fresh vegetables and certain roots and tubers (chapter 7 of the Harmonized System); fresh fruit and nuts (chapter 8); and processed vegetables, fruits, and nuts (chapter 20). Developed countries tended to impose deeper average cuts across products found in the fruits and nuts category, 43 percent, than on vegetables, 35 percent. This is primarily the result of deep cuts on tropical fruits and nuts (coconuts, bananas, pineapples, plantains, dates, mangoes, papayas, guavas, cashews, and brazil nuts) that generally do not compete with domestic production in developed countries. Many of these tariffs were cut to zero, with all duties affecting trade in tropical fruits and nuts subject to average reductions of 53 percent in developed countries. The average cut imposed by developed countries on processed fruits and vegetables was less than that on fresh products in two-thirds of all cases. In the case of developing countries, the cuts tended to be more even among the three categories.

Table 3 compares average bound fruit and vegetable tariffs with average tariffs for all other agricultural products across 115 WTO members. The bound averages across all fruit and vegetable categories range from a high of 200 percent for Bangladesh and Lesotho to a low of zero for Hong Kong and Macau. Canada, Australia, and the United States are the countries with

⁵ The countries chosen were those that cut a substantial share of their agricultural tariffs. Note that under the special and differential treatment provisions of the Uruguay Round, the least developed countries were exempt from all reduction commitments. For the other developing countries, in cases when they had previously not bound a tariff, developing countries had the flexibility to offer ceiling bindings. In these cases, the only concession required

the next lowest average tariffs in the sector. Thirty-one countries have overall bound averages of 100 percent or greater. In general, however, these countries tend to apply duties on imports that are much below their bound rates (see below). The overall averages across all categories are very similar, due largely to the fact that 56 of the listed countries have uniform tariff schedules. These countries, most of which are in Africa or the Caribbean, bound their entire agricultural tariff schedules at one uniform rate during the Uruguay Round. Among the remaining countries, however, there are some wide disparities to be found. For example, Egypt, Japan, Norway, Morocco, and Switzerland all bound their fruit and vegetable tariffs at rates that average at least 30 percentage points below the average for all other agricultural products. While Myanmar, Israel, Tunisia, Korea, and Iceland bound their fruit and vegetable tariffs at levels considerably higher than their other tariffs.

Many developed countries, including the EU, Australia, New Zealand, Norway, the United States, and Canada, Japan, have higher average bound tariffs on processed products than on fresh products. As we saw in table 2, the Uruguay Round cuts were generally greater on fresh products than processed products, which has amplified this disparity. Tariff escalation in developed countries has long been considered a major obstacle by developing countries seeking to increase their export earnings by moving beyond the production and export of primary commodities. However, many large developing countries, including Egypt, South Africa, Turkey, Colombia, China, and India also bound their processed product tariffs at levels that exceed those on fresh products. Clearly tariff escalation, is not confined to industrial countries, but is present in many developing countries as well. It should be stressed, however, that while the information in table 3 may imply the existence of differences in tariff patterns across these broad categories, a more disaggregated analysis is needed to conclude that tariff escalation exists within individual processing chains.

The wide dispersion in the height of tariffs within a country's schedule can result from a number of reasons other than the degree of processing, but underlying this dispersion is a strategy by many countries to supply made-to-measure protection, providing alternative products with differing rates of protection based on their ability to compete against imports. In the fruit and

was to bind the tariff.

vegetable sector, it is not uncommon to see wide differences in the size of tariff applied on the same product within a country. Because many fruits and vegetables are highly perishable, some countries, notably the United States, Canada, and several European countries, make use of seasonal tariffs. During certain times of the year, corresponding to periods when domestic production is available within the country, tariffs are higher than at other times. Donovan and Krissoff provide numerous examples of the large gaps that exist between in-season and out-of-season rates in selected countries and commodities. Switzerland is one of the most extensive users of seasonal tariffs, with over 30 HS6 digit products subject to differing rates throughout the year, which can range from less than 10 percent during some periods to well in excess of 100 percent during others.

Other causes of dispersion in fruit and vegetable tariffs are the result of some countries varying the size of the tariff on individual products based on container size, sugar or alcohol content, or the import price. For example, in Canada, broccoli, cauliflower, brussel sprouts, lettuce, carrots, and turnips all face tariffs that are 4 percentage points higher if shipped in packages of less than 5 lbs. (2.27 kg.) than if shipped in bulk or in packages of 5 lbs. or more. In Iceland, frozen strawberries containing added sugar are assessed a duty twice that of those with no added sugar. But, without question, the most complex fruit and vegetable tariffs in the world are those subject to the EU's "Entry Price System" for select fresh fruits (oranges, clementines, lemons, grapes, apples, pears, apricots, cherries, and peaches) and vegetables (fresh tomatoes, artichokes, and cucumbers).

The EU levies different tariffs for each product depending on the product's import price and the season. If a shipment's price equals or exceeds the EU-established entry price, a relatively small ad valorem tariff is applied. If a shipment is priced lower than the entry price, but not more than 8 percent below the entry price, an additional specific duty is assessed. If, however, the import price is more than 8 percent below the entry price, a large specific tariff (called the maximum tariff equivalent) is levied against the shipment and most likely prohibits importation. For example, fresh tomatoes (imported between June 1 and October 30) priced 8 percent below the reference price of 52.6 euro/100kg face tariffs amounting to 57 percent of its import price. Basically, the EU regime restricts an exporter's ability to increase market share based on lower

prices and efficiency. In the case of all countries that vary tariffs on individual products based on seasonality, technical factors, or entry prices, their average tariff may underestimate the actual amount of protection being provided to producers. This is because the lower rates charged during certain times of the year when protection is not needed or on products that are already priced high tends to bias their overall average tariff downward.

The averages found in table 3 are based on country's bound tariffs, the maximum rates that they have committed to in the WTO. Countries can break this commitment and assess rates above the bound tariff, but not without negotiating with the countries that would be most adversely affected by this action. They may then be required to provide compensation for their trading partner's loss of trade. In practice, however, many developing countries assess duties at levels below the allowable bound limits. Many of these lower applied tariffs are the result of unilateral or autonomous rate reductions imposed under structural adjustment programs supported by the World Bank and the IMF (Laird). While data on applied tariffs is not available for all developing countries, the numbers in table 4 show that for those countries where comprehensive data exists, the differences between bound and applied tariffs can be quite large across the range of tariffs levied on fresh and processed fruits and vegetables. Eleven of the countries shown in table 4 bound their fruit and vegetable tariffs at averages of over 100 percent, while the averages of their actual applied tariffs were significantly lower at between 20 and 43 percent in 2001. Over the entire group, the difference amounts to 47 percentage points, with the bound rates being over 3 ½ times the applied rates. The lower applied rates have probably resulted in greater imports than had these countries assessed rates equal to the bound tariffs. But, the disparity between the two rates also demonstrates the extent to which the bound rates would have to be reduced in the current multilateral trade negotiations if any additional access to these countries' markets is to result.

Turning now to a product focus, table 5 highlights the wide range of protection that the top 30 U.S. fruit and vegetable exports faced in 2001.⁶ The selected vegetable products face average tariffs ranging from 29 percent for broccoli to 95 percent for certain types of lettuce.

⁶ The product statistics in table 5 are made up of data for 50 countries for which comprehensive applied data was available.

Many of the maximum tariffs in table 5 are over-quota tariffs that were the product of the tariffication process. These tariffs are sufficiently high to preclude any trade from taking place beyond the quota amounts. Maximum applied tariffs on fresh onions and certain vegetables, for example, exceed 1,000 percent. Overall, average tariffs levied against fruits, at 27 percent are lower than those applied to vegetables, with an average of 53 percent. Average tariffs on selected fruits range from 18 percent for certain nuts to 39 percent for lemons and limes. Average tariffs on processed items range from 29 percent on canned tomatoes to 52 percent on frozen potatoes, with an overall average of 33 percent. The median tariff rates for the commodities are considerably lower than the means, ranging from 10 percent for raisins and almonds to 20 percent for fresh and frozen orange juice, reflecting the fact that the means are inflated by a few very high tariff rates, or megatariffs. U.S. exports of these 30 products face over 250 tariffs of over 100 percent within the 50 countries that make up these statistics.

Tariff-Rate Quotas – As demonstrated in the previous section, agricultural tariffs tend to be high relative to those assessed on manufactured trade. This is especially true in the case of the tariffs that were the result of tariffication. To ensure that minimum trade gains took place in products subject to these tariffs, the AoA provided for “minimum access opportunities” through the introduction of tariff-rate quotas (TRQs) to apply in cases where non-tariff barriers had been tariffied. The basic elements of a TRQ—volume of the quota, and in and over-quota tariffs—were defined in members’ tariff schedules. In cases where there were no significant imports during the base period, members established minimum access opportunities, or quotas, equal to 3 percent of consumption, which increased to 5 percent of consumption by the end of the implementation period. In cases where imports already exceeded 5 percent of consumption, countries agreed to maintain existing access opportunities. The quota amounts were to be subject to tariffs that were low enough to allow the quota to fill, with amounts above the quota level subject to the higher tariffied rates.

Forty-three WTO members currently have a combined total of 1,425 tariff rate quotas (TRQs) in their commitments. Tariffs associated with these TRQs account for about 20 percent of total agricultural tariff lines in these countries. However, the importance of TRQs in agriculture is more significant than that figure would suggest, particularly in OECD countries, where an

estimated 55 percent of the value of agricultural production is protected by TRQs and an estimated 46 percent of agricultural imports come in under TRQs (de Gorter, et.al.). Approximately 40 percent of the 1,425 tariff quotas are minimum access quotas with the remaining 60 percent being current access quotas which were largely implemented to continue preferential access to developing countries or maintain historical access in cases where imports accounted for more than 5 percent of domestic consumption (e.g., wheat in Japan, sugar in the U.S.).

The WTO classifies TRQs by means of 12 broad product categories under which the fruit and vegetable sector ranks first with 371 TRQs, followed by meat products with 258, and cereals with 227 (WTO, 2002). Table 6 lists the countries that have TRQs in the fruit and vegetable sector. Four of the five countries reporting the highest number of fruit and vegetable TRQs are industrial European countries. Norway ranks first with 117 TRQs, followed by Poland with 37, Hungary 33, and the EU and Barbados 25.⁷ In addition to Barbados, other developing countries in the top 10 in number of TRQs include Taiwan, South Korea, and South Africa. The United States has 6 fruit and vegetable TRQs, covering various categories of green olives, peanut butter, and satsumas in airtight containers. Over the 6 year period, 1995-2000, the average fill rate for fruit and vegetable TRQs was 69 percent. Table 6 shows fill rates by country for all TRQs notified to the WTO in 2000. Colombia, Guatemala, and Israel filled all of their fruit and vegetable TRQs in 2000, although Norway led all countries with 59 filled TRQs.

Unfortunately, TRQ fill rates do not, by themselves, give an accurate picture of whether further trade liberalization, whether in the form of enlarging the quota or reducing the over-quota tariff, will result in increased trade. A fill rate of less than 100 percent may not imply that no increased trade is likely to occur when quotas are enlarged if demand and supply conditions are such that the in-quota tariff is binding. In the ongoing Doha multilateral negotiations, some countries have proposed that in-quota tariffs all be cut to zero in order to ensure that they are not prohibiting the quota from filling. Nor does a fill rate of below 100 percent mean that the in-quota tariff is binding, if the TRQ administration method is the binding constraint; how TRQs are administered

⁷ Note, however, that 75 of these TRQs were created by five countries (Poland, Hungary, the Czech Republic, the Slovak Republic, and Slovenia) that have now joined the EU. It is not clear what will

is also an issue in the Doha negotiations. In addition, TRQs may not fill if the lowest cost suppliers were provided limited or no market access under the TRQ. In the Doha talks, countries are expected to require that any additional increases in the size of the quota be open to all exporters on an MFN basis. Another consideration about fill rates is that the WTO numbers can be misleading due to aggregation problems: a subset of some commodity or country groupings may have zero fill rates and others a 100 percent, or even greater than 100 percent, fill rate (de Gorter, et.al.). Some countries only report imports up to the quota level when additional imports are known to take place at the in-quota tariff, thus biasing the effective fill rates downward. Trade-weighted fill rates would be more indicative of import performance under TRQs.

The AoA allows countries that converted non-tariff barriers on agricultural commodities to tariffs to make use of Special Agricultural Safeguards (SSGs), provided they reserved this right in their tariff schedules. The SSGs were created to alleviate the fears of some WTO Members that tariffication would result in domestic producers facing competition from a surge in imports that might put them out of business before they had time to adjust. Under the SSG provision, WTO members are allowed to temporarily rollback trade liberalization during a specified marketing period. When the period is over, the safeguard must be removed, although it can be reemployed the following year. The SSG provision allows countries to levy this additional, time-limited duty on an imported product if the import volume exceeds a pre-set (according to WTO guidelines) volume trigger, or the price of the imported product is below the set trigger level. The AoA provides general guidelines for setting trigger levels and for calculating additional duties when an SSG action is to be taken. The SSGs can only be used on products that were tariffied and they cannot be used on imports within the TRQ. Unlike with the WTO's general safeguards (discussed below) there is no need to show that injury has occurred in these cases. In practice, the special agricultural safeguard has been used in relatively few cases, although some countries have used the SSG repeatedly to protect certain products.

Thirty-nine of the 43 members with TRQs reserved in their tariff schedules the right to have, subject to the relevant conditions being met, recourse to the special agricultural safeguard (SSG). Of these, 14 have notified that they have taken action under the SSG sometime during the 1995-

happen under these TRQs.

2004 period. Only 8 countries, however, have taken SSG actions on imports of fruits and vegetables (table 7). Two-thirds of the total 299 actions have been by the EU, including 82 actions to halt the import of citrus fruit at some point in the marketing year, 21 actions against apples, 20 against pears, 16 against tomatoes, and 14 each against cucumbers and cherries. All of these products are subject to seasonal tariffs, the height of which is inversely related to the price of the imported product. Clearly, these high rates are not protective enough for EU producers throughout the year. The SSG is supposed to provide an industry with time to adjust to increased competition from imports, but the frequency with which these actions have been taken by the EU suggests that some of its fruit and vegetable industries have simply not been able to adjust over time (table 8).

WTO Trade Remedy Measures

In the course of the last century governments of industrialized nations devised three basic trade remedies as defense measures against imports causing injury to domestic industry: antidumping duties (ADD), countervailing duties (CVD), and safeguards (see Box). The first two measures are meant to offset “unfair trade” created by foreign firms dumping goods in the international market (AD measures) or by foreign governments subsidizing exports (CV measures). Before a country can impose either AD or CV measures they must also show that the dumped or subsidized imports cause or threaten to cause material injury to the domestic industry. The third trade remedy measure is specifically designed to protect industries that are injured because of trade liberalization. In the case of safeguards, there is no need for proof of unfair trade practices (dumping or subsidization), although the need to show “serious injury” in a safeguard investigation is more demanding than the material injury standard under AD/CVD law.

Antidumping and Countervailing Duties – AD/CV duties are not strictly tariffs, although they are sometimes referred to as para-tariff measures (Laird). Because they are WTO-consistent measures taken against “unfair trade,” they are not subject to market access negotiations, but they are being reviewed within the WTO Negotiating Group on Rules. Table 9 shows the extent to which antidumping laws have been used on fruit and vegetable trade since the conclusion of the Uruguay Round. During the period under review, fruit and vegetable trade comprised

between 16 and 18 percent of agricultural trade, yet this trade was targeted in 27 percent of all agricultural AD cases initiated. Of the 36 investigations initiated against trade in fruits or vegetables, measures were imposed in 61 percent of all cases versus only 39 percent of the cases against other agricultural trade.⁸ Because of their perishability, fruits and vegetables may be more likely to be dumped than storable commodities, while domestic producers may be more likely to seek protection from imports for the same reason.

On December 31, 2003, the stock of active antidumping measures imposed on agricultural trade was equal to 58 measures, 24 of which were on fruit and vegetable imports. Forty-six of the 58 AD measures in place in 2003 were imposed since the Uruguay Round, while the other 9 had been in place since before 1995. Five of the 9 involved fruits and vegetables: 2 measures by Canada against U.S. potatoes, and 3 measures by the U.S. against China (garlic), Brazil (frozen concentrated orange juice), and Iran (in-shell pistachios).

There were only 22 countervailing duties in place on December 31, 2003, only 5 of which were against imports of fruits and vegetables. Three of these were on canned peaches, one by Australia on product from Greece, and two by New Zealand and Argentina on product from the entire European Union. The other two were on roasted and raw pistachios from Iran, imposed by the U.S. Investigations of alleged dumping have been more widespread than subsidy investigations since the Uruguay Round ended. This is no doubt partly due to the Due Restraint provisions (commonly referred to as the "Peace Clause") found in Article VII of the Agreement on Agriculture, which declares that domestic support measures that conform fully to the provisions of the Agreement are to be considered non-actionable subsidies for purposes of countervailing duties. Despite the Peace Clause, CVD investigations targeting agricultural trade are still more likely to occur than those targeting non-agricultural trade, a reflection of the level of subsidies granted to the agricultural sector. CVD measures accounted for 28 percent of all measures in place on agricultural trade in 2003, having dropped from 40 percent of the total in 1994, versus only 5 percent of all measures in place on non-agricultural trade.

8

With respect to the fruits, vegetables, and products targeted by antidumping investigations during the post-Uruguay Round period, the U.S. has been the most active user of AD law against these products accounting for 14 of the 36 investigations, 9 of which resulted in measure being applied. The U.S. has investigated 8 different countries and 10 different products during this time. Fruit and vegetable exports from China were the most frequent overall target of countries, accounting for 8 of the investigations, 3 by the U.S. The U.S. has been the target of 5 investigations, 4 of them by our NAFTA partners and one by Costa Rica. Three of these investigations resulted in the imposition of antidumping measures, one of which, an antidumping duty by Canada against U.S. exports of red delicious apples has since been rescinded. Of the 22 cases that have resulted in the imposition of duties or price undertakings, 20 were still in place as of June 30, 2004.

The EU is noticeably absent from the list of users of AD laws, having conducted no investigations against fruit and vegetable trade during this period. This may be a reflection of how thoroughly the EU manages agricultural imports through its numerous TRQs, its use of SSGs, and its numerous preferential trading arrangements. In contrast to the lack of measures imposed by the EU, EU countries have been a favorite target of countries imposing these measures, particularly CVD measures. Fifteen of the 58 AD measures and 18 of the 22 CVD measures in place in 2003 were levied against imports from EU countries.

Safeguards – The WTO Agreement on Safeguards allows members to impose temporary border control measures if a surge of imports causes or threatens to cause serious injury to the domestic industry. The Safeguard Agreement grants members imposing a safeguard a three-year retaliation-free period, if the measures taken conform to the Agreement’s provisions and if they are the result of an absolute increase in the quantity of imports from the exporting country. After three years, adversely affected trading partners can seek compensation through consultations or, if no agreement is reached, can retaliate by raising tariffs on imports from the country applying the safeguard. While CVD and AD actions apply only to particular exporters, safeguards are meant to apply to all suppliers, although the special and differential treatment provisions of the Safeguards Agreement exempt actions against developing countries with import market shares of less than 3 percent of the importing countries market, unless the cumulative shares of developing

countries is greater than 9 percent. The Safeguards Agreement has a stronger burden of proof for “material injury” than the AD/CVD Agreements, requiring a causal link to be made between “increased imports of the product concerned and serious injury or threat thereof.”

Safeguard investigations tend to be disproportionately concentrated in a few industries, with agricultural imports on the receiving end in about a third of all investigations notified to the WTO since 1995. This compares with only about 5 percent of all AD investigations and about 25 percent of all CVD investigations involving agricultural imports. When quantified on the basis of whether a safeguard investigation actually resulted in a measure being imposed, the proportion accounted for by agricultural products jumps to 50 percent. Table 11 shows all of the safeguard actions on agricultural trade reported by WTO members between 1995 and 2004. Eleven of the 44 actions brought against agricultural imports have been against fruits and vegetables, only four of which resulted in the imposition of a safeguard. The U.S. has been the most active user with investigations initiated against tomatoes (1995 and 1996) and peppers (1996). In neither of these cases were the imports found to cause injury to the industry.

Conclusion

Part of the task in writing this paper was to shed some light on how countries use various trade policy instruments to regulate imports of fresh and processed fruits and vegetables. In the aftermath of the Uruguay Round Agreement, it is probably safe to say that fruit and vegetable import markets are as open as they’ve ever been. The use of non-tariff barriers such as quantitative import restrictions, variable import levies, discretionary licensing, and voluntary import restraints have been largely prohibited and tariffs have undergone cuts. Our results show that, while fruit and vegetable tariffs tended to be cut by lower amounts than other agricultural tariffs, the average post-Uruguay Round tariffs facing fruit and vegetable exports is slightly lower than the overall agricultural average.

Nevertheless, high tariffs in some fruit and vegetable markets continue to be a significant barrier restricting international trade. Tariff protection is highly uneven across both countries and products in the fruit and vegetable sector. The protective effect of these tariffs can be magnified

when lower tariffs are levied on the raw materials (tariff escalation). The practice of levying low or zero tariffs on imports of primary products, with tariffs escalating as products undergo increased processing, continues to be an enduring feature of many countries' tariff regimes. Our results indicate that many countries tended to cut tariffs on processed fruits and vegetables trade by lesser amounts than on trade of the fresh product, which would have amplified the level effective rate of protection provided to processed products. This suggests that the problem of tariff escalation may not be addressed if, in the Doha negotiations, governments are once again allowed the sort of tariff-cutting discretion they had in the Uruguay Round. A practical solution to this problem would be to apply a harmonization tariff-cutting formula, which automatically cuts higher rates by greater amounts than lower rates. A harmonization formula that delivers deep cuts may also result in bound tariffs being cut below applied rates in many developing countries, thereby resulting in increased trade in some markets.

Many countries' agricultural tariff averages are inflated by the presence of a few extremely high tariff peaks, often in excess of 100 percent. It is generally felt that, because of this, the average may overestimate the level of protection provided to the agricultural sector. However, it is also true that the subset of tariffs most critical to a country's agricultural sector is generally small and the highest tariffs can be found on these "politically sensitive" products. A number of these products are found in the fruits and vegetable sector, and in many cases, the tariff averages imposed on their trade may be underestimated, notwithstanding the existence of numerous tariff peaks. The reason is that, because of their perishability, fruits and vegetables are subject to a high degree of seasonal tariffs. The existence of numerous low rates levied during times of the year when protection is not needed biases the overall average downward. The same is true when countries vary tariffs on individual products based on technical factors or entry prices. The lower rates charged on products with higher prices or on products in smaller containers (as opposed to bulk shipments) tends to bias the overall average tariff downward. The use of seasonal and technical tariffs or tariffs based on entry prices can restrict an exporter's ability to increase market share based on lower prices and efficiency.

In addition to tariffs, countries have other means at their disposal to regulate imports of fruits and vegetables. The most extensively used has been the special agricultural safeguard mechanism

for products subject to tariffication during the Uruguay Round. Even though the over-quota tariffs associated with tariff-rate quotas are generally high, some countries have actively supplemented the tariff protection these rates provide to their fruit and vegetable producers by activating even higher tariffs through the SSG mechanism. Antidumping and countervailing duties have also been used by some countries to restrict trade of fruits and vegetables. While fruit and vegetable imports account for between 16 and 18 percent of global agricultural imports, they are the target in 27 percent of all agricultural antidumping investigations and account for 36 percent of all antidumping measures imposed on agricultural trade in the post-Uruguay Round period. The U.S. is the most active user of antidumping laws in this sector and has recommended that these laws be strengthened to make it easier to impose antidumping duties on “unfair trade” of seasonal and perishable products. A U.S. proposal made to the WTO Negotiating Group on Rules contends that, because producers of perishable, seasonal, and cyclical products face unique challenges in the marketplace and may be more vulnerable to dumped imports than other producers, the current trade remedies could be improved in addressing the problems facing this area. In particular, the U.S. proposal states that the lack of clarity in the WTO rules may lead to delayed or ineffective relief for these producers.

The continued globalization of food markets coupled with multilateral efforts to further decrease agricultural tariffs through the Doha Development Agenda will expand opportunities for growth in agricultural trade. This study’s empirical analysis demonstrates the need to deal with a number of complex technical issues in the market access talks. In particular, the use of seasonal and technical tariffs, and the practice of varying of tariffs based on entry prices should be addressed in order to increase transparency in tariffs and assure that countries do not focus their larger cuts on tariffs that provide little protection while committing to minimal cuts on those tariffs that actually restrict trade. As the number of antidumping and safeguard cases initiated against fruit and vegetable trade in the post-Uruguay Round period demonstrates, the pressure to adjust to increased competition sometimes results in efforts by countries to pursue alternative forms of protection. Such actions can limit the potential gains from trade liberalization.

References

- Cernat, L., S. Laird, and A. Turrini (2002). "Back to Basics: Market Access Issues in the Doha Agenda," Trade Analysis Branch, DITC, UNCTAD, Geneva, 19 March.
- de Gorter, Harry and Erika Kliauga (2004). "Reducing Tariffs *versus* Expanding Quotas in Liberalizing Agricultural Trade," in *Agricultural Trade Reform and the Doha Development Agenda*, Martin , Will and Kym Anderson, ed., World Bank.
- Donovan, Jason and Barry Krissoff (2001). "Trade Issues Facing U.S. Horticulture in the WTO Negotiations," USDA-ERS electronic outlook report no. VGS-285-01, August.
- Finger, J. M. and A. Olechowski, editors (1987). *The Uruguay Round: A Handbook on the Multilateral Trade Negotiations*, The World Bank, Washington, D.C.
- Food and Agricultural Organization. FAOSTAT trade data, 2004. <http://faostat.fao.org/faostat>
- GATT Secretariat (1994). *The Results of the Uruguay Round of Multilateral Trade Negotiations - The Legal Texts*, Geneva, June.
- Gibson, P., J. Wainio, D. Whitley, and M. Bohman (2001). *Profiles of Tariffs in Global Agricultural Markets*, Agricultural Economic Report No. 796, ERS-USDA, Washington D.C., January.
- Laird, Sam (1988). "Multilateral Approaches to Market Access Negotiations," WTO-Trade Policy Review Division, Staff Working Paper, TPRD 98-02.
- U.S. International Trade Commission (2001). *Processed Foods and Beverages: A Description of Tariff and Non-tariff Barriers for Major Products and Their Impact on Trade*, Publication 3455, October, Washington, DC.
- World Trade Organization (2000a), *Special Agricultural Safeguard - Background Paper by the Secretariat*, G/AG/NG/S/9, 6 June.
- World Trade Organization (2000b), *Report of the Committee on Safeguards to the Council for Trade in Goods*, G/L/409, 23 November.
- World Trade Organization (2001a). *WTO Agriculture Negotiations: The Issues, and Where We Are Now*. February. http://www.wto.org/wto/english/tratop_e/agric_e/news_bkgrnd00_contents_e.htm.
- World Trade Organization (2001b). *Market Access: Unfinished Business — Post-Uruguay Round Inventory and Issues*. Special Study No. 6, http://www.wto.org/english/res_e/booksp_e/spec_e.htm

tm#No. 6.

World Trade Organization (2001c). *Tariff Quota Administration Methods and Tariff Quota Fill*. G/AG/NG/S/8/Rev.1. May 18.

World Trade Organization (2002), *Special Agricultural Safeguard - Background Paper by the Secretariat*, G/AG/NG/S/9/Rev.1, 19 February.

World Trade Organization (various years), *Report of the Committee on Safeguards to the Council for Trade in Goods*, G/L/*.

Table 1: Size of Uruguay Round Tariff Cuts, Selected Countries

Size of Tariff Cut	No. of Tariff Lines	Proportion of Tariffs	No. of Tariff Lines	Proportion of Tariffs
	<i>Fruit & Vegetables</i>		<i>All Other Agricultural Products</i>	
<i>Developed Countries</i>				
< 36%	1,370	46.6%	2,731	38.3%
36%	450	15.3%	1,635	23.0%
> 36%	1,120	38.1%	2,758	38.7%
<i>Total tariff lines</i>	2,940	100%	7,124	100%
<i>minimum cut (15%)</i>	527	17.9%	944	13.3%
<i>100% cut</i>	109	3.7%	594	8.3%
<i>Developing Countries^{1/}</i>				
< 24%	2,299	45.7%	7,351	42.7%
24%	10	0.2%	2,176	12.6%
> 24%	2,727	54.2%	7,679	44.6%
<i>Total tariff lines</i>	5,036	100%	17,206	100%
<i>minimum cut (10%)</i>	530	10.5%	2,404	14.0%
<i>100% cut</i>	18	0.4%	185	1.1%

Source: Economic Research Service, USDA

1/ As recognized by the WTO, where countries have the ability to self-select their status as developing countries.

Table 2: Size of Uruguay Round Tariff Cuts on Fruits, Vegetables and Products, by Country

Country	Fresh Vegetables	Fresh Fruits	Processed Products
	<i>Average Depth of Tariff Cut</i>		
<i>Developed Countries</i>			
<i>Australia</i>	-48.5%	-49.7%	-29.9%
<i>Bulgaria</i>	-37.7%	-38.2%	-43.4%
<i>Canada</i>	-37.0%	-40.1%	-35.8%
<i>European Union</i>	-35.6%	-30.4%	-25.6%
<i>Iceland</i>	-19.7%	-49.7%	-35.1%
<i>Japan</i>	-38.7%	-42.9%	-37.2%
<i>New Zealand</i>	-33.2%	-48.7%	-45.1%
<i>Norway</i>	-31.0%	-48.9%	-35.4%
<i>Singapore</i>	-64.1%	-64.3%	-63.0%
<i>Switzerland</i>	-24.4%	-44.4%	-29.1%
<i>United States</i>	-40.1%	-35.4%	-36.7%
<i>Avg. across all developed countries</i>	-35.3%	-43.1%	-34.9%
<i>Developing Countries</i>			
<i>Barbados</i>	-23.4%	-24.2%	-24.1%
<i>Brazil</i>	-37.2%	-35.9%	-62.3%
<i>China</i>	-17.1%	-30.2%	-32.9%
<i>Colombia</i>	-29.3%	-30.0%	-25.4%
<i>Costa Rica</i>	-19.3%	-21.8%	-20.9%
<i>Egypt</i>	-32.7%	-24.4%	-25.0%
<i>El Salvador</i>	-24.4%	-19.8%	-20.0%
<i>Guatemala</i>	-11.9%	-14.0%	-12.8%
<i>India</i>	-33.6%	-31.0%	-51.8%
<i>Indonesia</i>	-41.8%	-45.2%	-43.2%
<i>Israel</i>	-17.1%	-17.0%	-19.0%
<i>Korea, Republic of</i>	-11.9%	-21.5%	-19.5%
<i>Malaysia</i>	-26.0%	-31.9%	-27.4%
<i>Mexico</i>	-27.1%	-19.8%	-21.9%
<i>Morocco</i>	-24.4%	-24.4%	-24.4%
<i>Namibia</i>	-28.0%	-29.4%	-28.3%
<i>Nepal</i>	-23.6%	-31.4%	-20.5%
<i>Philippines</i>	-25.9%	-21.3%	-23.0%
<i>Romania</i>	-25.1%	-28.1%	-23.8%
<i>Saint Lucia</i>	-23.5%	-21.1%	-23.5%
<i>South Africa</i>	-28.0%	-29.4%	-33.2%
<i>Sri Lanka</i>	-24.2%	-24.2%	-24.2%
<i>Swaziland</i>	-28.0%	-29.4%	-28.3%
<i>Taiwan</i>	-22.1%	-19.8%	-24.5%
<i>Thailand</i>	-31.1%	-34.5%	-46.1%
<i>Tunisia</i>	-20.8%	-23.3%	-22.0%
<i>Turkey</i>	-16.7%	-20.1%	-21.8%
<i>Uruguay</i>	-37.6%	-39.8%	-41.0%
<i>Venezuela</i>	-25.8%	-31.2%	-23.1%
<i>Avg. across all developing countries</i>	-25.2%	-27.0%	-29.2%

Source: Economic Research Service, USDA

Table 3: Average Bound Tariffs for Fresh and Processed Fruits and Vegetables

Country	Fresh vegetables	Fresh fruits	Processed fruits & vegetables	All fruit & vegetable tariffs	All other agricultural tariffs
<i>Albania</i>	11	10	19	15	9
<i>Angola</i>	55	55	55	55	55
<i>Antigua Barbuda</i>	100	100	100	100	100
<i>Argentina</i>	35	34	35	34	32
<i>Australia</i>	4	2	9	5	3
<i>Bahrain</i>	35	35	35	35	35
<i>Bangladesh</i>	200	200	200	200	200
<i>Barbados</i>	121	103	105	110	112
<i>Belize</i>	100	100	100	100	100
<i>Benin</i>	60	60	60	60	60
<i>Bolivia</i>	40	40	40	40	40
<i>Botswana</i>	11	7	20	13	21
<i>Brazil</i>	32	35	36	35	37
<i>Brunei</i>	25	25	25	25	25
<i>Burkina Faso</i>	100	100	100	100	100
<i>Burundi</i>	100	100	100	100	100
<i>Cameroon</i>	80	80	80	80	80
<i>Canada</i>	5	3	6	5	23
<i>Cen African Rep</i>	30	30	30	30	30
<i>Chad</i>	80	80	80	80	80
<i>Chile</i>	25	25	25	25	27
<i>China</i>	11	19	21	16	15
<i>Colombia</i>	81	69	86	78	98
<i>Congo (DROC)</i>	55	55	55	55	55
<i>Congo (ROC)</i>	30	30	30	30	30
<i>Congo, Dem. Rep.</i>	55	55	55	55	54
<i>Costa Rica</i>	44	44	43	44	45
<i>Cote d'Ivoire</i>	15	15	15	15	15
<i>Cuba</i>	39	39	40	39	36
<i>Djibouti</i>	40	40	40	40	40
<i>Dominica</i>	121	116	123	120	113
<i>Dominica Is</i>	121	114	123	120	113
<i>Dominican Rep</i>	43	40	40	41	38
<i>Ecuador</i>	22	24	28	25	26
<i>Egypt</i>	23	52	54	42	111
<i>El Salvador</i>	41	38	40	39	43
<i>European Union</i>	12	9	22	18	21
<i>Fiji</i>	40	40	40	40	40
<i>Gabon</i>	60	60	60	60	60
<i>Gambia</i>	110	110	110	110	110
<i>Ghana</i>	99	99	99	99	99
<i>Grenada Is</i>	107	119	94	105	98

Table 3: Average Bound Tariffs for Fresh and Processed Fruits and Vegetables
(continued)

Country	Fresh vegetables	Fresh fruits	Processed fruits & vegetables	All fruit & vegetable tariffs	All other agricultural tariffs
<i>Guatemala</i>	45	44	39	43	51
<i>Guinea</i>	40	40	40	40	40
<i>Guinea-Bissau</i>	40	40	40	40	40
<i>Guyana</i>	100	100	100	100	100
<i>Haiti</i>	16	16	16	16	16
<i>Honduras</i>	32	32	33	32	32
<i>Hong Kong</i>	0	0	0	0	0
<i>Iceland</i>	233	13	36	91	67
<i>India</i>	105	100	106	104	117
<i>Indonesia</i>	46	47	48	47	48
<i>Israel</i>	125	109	107	113	57
<i>Jamaica</i>	100	100	100	100	100
<i>Japan</i>	38	9	16	20	68
<i>Kenya</i>	100	100	100	100	100
<i>Korea</i>	62	44	43	50	22
<i>Kuwait</i>	100	100	100	100	100
<i>Lesotho</i>	200	200	200	200	200
<i>Macao</i>	0	0	0	0	0
<i>Madagascar</i>	30	30	30	30	30
<i>Malawi</i>	125	125	125	125	121
<i>Malaysia</i>	8	29	14	15	9
<i>Maldives Is</i>	30	30	30	30	30
<i>Mali</i>	60	60	60	60	60
<i>Mauritania</i>	50	30	25	37	38
<i>Mauritius</i>	114	117	121	117	120
<i>Mexico</i>	40	38	40	39	46
<i>Mongolia</i>	20	18	16	18	19
<i>Morocco</i>	34	34	34	34	72
<i>Mozambique</i>	100	100	100	100	100
<i>Myanmar</i>	143	162	165	155	87
<i>Namibia</i>	34	21	34	29	42
<i>Nepal</i>	47	38	41	42	42
<i>New Zealand</i>	7	3	16	10	6
<i>Nicaragua</i>	42	40	40	41	47
<i>Niger</i>	50	50	50	50	50
<i>Nigeria</i>	150	150	150	150	150
<i>Norway</i>	83	50	71	66	112
<i>Oman</i>	29	30	14	24	28
<i>Pakistan</i>	100	101	100	101	97
<i>Panama</i>	27	9	21	20	32
<i>Papua New Guin</i>	45	45	45	45	45
<i>Paraguay</i>	34	29	32	32	33
<i>Peru</i>	30	30	30	30	31

Table 3: Average Bound Tariffs for Fresh and Processed Fruits and Vegetables
(continued)

Country	Fresh vegetables	Fresh fruits	Processed fruits & vegetables	All fruit & vegetable tariffs	All other agricultural tariffs
<i>Philippines</i>	38	40	40	39	33
<i>Qatar</i>	15	15	15	15	15
<i>Romania</i>	49	78	121	93	120
<i>Rwanda</i>	80	80	80	80	80
<i>Senegal</i>	30	30	30	30	30
<i>Sierra Leone</i>	40	40	40	40	40
<i>Singapore</i>	10	10	9	10	10
<i>Solomon Is</i>	80	80	80	80	80
<i>South Africa</i>	34	21	44	34	41
<i>Sri Lanka</i>	50	50	50	50	50
<i>St Kitts-Nevis</i>	100	100	100	100	100
<i>St Lucia Is</i>	127	133	114	123	114
<i>St Vinc & Gren</i>	130	130	130	130	130
<i>Suriname</i>	20	20	20	20	20
<i>Swaziland</i>	34	21	34	29	42
<i>Switzerland</i>	114	22	58	77	107
<i>Taiwan</i>	22	39	29	30	28
<i>Tanzania</i>	120	120	120	120	120
<i>Thailand</i>	40	39	32	37	29
<i>Togo</i>	80	80	80	80	80
<i>Trin & Tobago</i>	100	100	100	100	100
<i>Tunisia</i>	137	159	135	144	109
<i>Turkey</i>	33	46	51	45	51
<i>Uganda</i>	80	78	80	79	77
<i>United Arab Em</i>	15	15	15	15	15
<i>United States</i>	6	4	9	7	11
<i>Uruguay</i>	34	33	36	34	34
<i>Venezuela</i>	37	34	39	37	61
<i>Zambia</i>	125	125	125	125	122
<i>Zimbabwe</i>	150	150	150	150	150
<i>Overall Average</i>	61	57	57	58	59

Source: World Bank WITS Trade Data Warehouse and Economic Research Service, USDA

Table 4: Comparison between average bound and applied tariffs, selected countries

Country	Average tariff across all fruit and vegetable tariff lines		
	Bound Tariffs	2001 Applied Tariffs	Difference
<i>Malawi</i>	125	20	105
<i>Zambia</i>	125	24	101
<i>St Lucia Is</i>	123	25	98
<i>Mauritius</i>	117	26	91
<i>Dominica</i>	120	39	81
<i>Grenada Is</i>	105	25	81
<i>Pakistan</i>	101	23	78
<i>Guyana</i>	100	25	75
<i>Kenya</i>	100	28	72
<i>Barbados</i>	110	43	67
<i>India</i>	104	38	66
<i>Uganda</i>	79	15	64
<i>Colombia</i>	78	16	62
<i>Togo</i>	80	19	61
<i>Cameroon</i>	80	30	50
<i>Bolivia</i>	40	10	30
<i>Costa Rica</i>	44	14	30
<i>Philippines</i>	39	12	28
<i>Cuba</i>	39	11	28
<i>Nicaragua</i>	41	13	28
<i>Nepal</i>	42	16	26
<i>El Salvador</i>	39	13	26
<i>Argentina</i>	34	12	22
<i>Uruguay</i>	34	12	22
<i>Brazil</i>	35	13	22
<i>Oman</i>	24	4	20
<i>Dominican Rep</i>	41	20	21
<i>Venezuela</i>	37	16	21
<i>Paraguay</i>	32	12	20
<i>Mauritania</i>	37	17	19
<i>Honduras</i>	32	14	19
<i>Chile</i>	25	8	17
<i>Mongolia</i>	18	7	11

Source: World Bank WITS Trade Data Warehouse and Economic Research Service, USDA

Table 5: Mean, median, and maximum tariffs faced by top 30 U.S. fruit and vegetable exports 1/

Selected products 2/	Mean	Median	Max	Megatariffs
	--- Percent ---			Number
Other lettuce: fresh	95	15	691	14
Head lettuce	67	15	950	8
Vegetables nes: fresh	54	15	1,702	22
Potatoes: frozen	52	18	544	13
Tomatoes: fresh	50	14	587	11
Onions: fresh	47	12	1,063	11
Juice mixtures	39	17	545	14
Lemons and limes	39	15	318	10
Apples: fresh	37	15	553	6
Orange juice: frozen	34	20	165	9
Oranges: fresh	32	15	318	5
Potatoes: fresh	31	12	230	6
Orange juice	31	20	165	8
Pears: fresh	30	12	438	7
Grapefruit: fresh	30	15	318	5
Juices nes 3/	30	15	165	18
Strawberries: fresh	30	15	167	7
Peanuts: prepared	29	15	318	7
Sweet corn: canned	29	15	343	5
Melons	29	15	166	12
Tomatoes: canned	29	16	210	15
Broccoli	29	15	170	9
Grapes: fresh	28	12	349	5
Raisins	25	10	340	5
Cherries: fresh	23	15	165	3
Almonds: shelled	22	10	165	4
Walnuts: shelled	22	15	165	3
Prunes	20	14	165	3
Peaches: fresh	20	12	165	3
Nuts, nes 3/	18	11	165	6

Source: World Bank WITS Trade Data Warehouse and Economic Research Service, USDA

1/ Tariffs are applied MFN tariffs levied in 2001.

2/ Products are at the HS 6-digit level and ranked according to export value in 2001.

3/ "Not elsewhere stated."

Table 6: Fruit and Vegetable Tariff-Rate Quotas and Fill Rates, 2000

WTO Member	No. of TRQs	No. of TRQs Notified	No. of TRQs Filled	Simple Avg. Fill Rate
<i>Barbados</i>	25	25	17	78
<i>Brazil</i>	1			
<i>Bulgaria</i>	15			
<i>Chinese Taipei</i>	13			
<i>Colombia</i>	3	2	2	100
<i>Costa Rica</i>	1			
<i>Czech Rep.</i>	2	2	0	27
<i>Dominican Rep.</i>	3	3	0	84
<i>EU-15</i>	25	23	10	62
<i>Guatemala</i>	3	1	1	100
<i>Hungary</i>	33	28	6	57
<i>Iceland</i>	18			
<i>Israel</i>	4	4	4	100
<i>Japan</i>	1	1	0	96
<i>Korea</i>	20			
<i>Malaysia</i>	1			
<i>Mexico</i>	2			
<i>New Zealand</i>	2	2	1	51
<i>Nicaragua</i>	1			
<i>Norway</i>	117	106	59	72
<i>Panama</i>	4			
<i>Philippines</i>	1			
<i>Poland</i>	37	1		5
<i>Romania</i>	1			
<i>Slovak Rep.</i>	2	2	1	72
<i>Slovenia</i>	1	1	0	22
<i>South Africa</i>	12	11	2	46
<i>Switzerland</i>	9			
<i>Thailand</i>	5	5	2	40
<i>Tunisia</i>	3			
<i>United States</i>	6	6	1	87
<i>All Members</i>	371	223	106	65

Source: WTO (G/AG/NG/S/8/Rev.1), member notifications to the WTO Committee on Agriculture, and Economic Research Service, USDA.

Table 7: Application of Special Agricultural Safeguards by Country, 1995-2003

Product 1/	Costa Rica	EU-15	Japan	Korea	Philippines	Poland	Taiwan	United States	Total
<i>Tomatoes: Fresh or Chilled</i>		16				14			30
<i>Onions, Shallots, Garlic, Leeks</i>					1		1		2
<i>Cucumbers, Gherkins: Fresh or Chilled</i>		14				10			24
<i>Other Vegetables: Fresh or Chilled</i>		8							8
<i>Dried Vegetables</i>							5		5
<i>Dried Leguminous Vegetables: Shelled</i>	1		8	10			2		21
<i>Other Nuts: Fresh or Dried</i>							2		2
<i>Citrus Fruit: Fresh or Dried</i>		82					2		84
<i>Grapes: Fresh or Dried</i>		10							10
<i>Apples, Pears, Quinces: Fresh</i>		41					2		43
<i>Apricots, Cherries, Peaches, Nectarines: Fresh</i>		30							30
<i>Other Fruit: Fresh</i>							3		3
<i>Tomatoes: Prepared or Preserved</i>						16			16
<i>Other Vegetables: Prepared or Preserved</i>							4		4
<i>Other Fruits, Nuts: Prepared or Preserved</i>							1	16	17
All Products	1	201	8	10	1	40	22	16	299

Source: WTO (G/AG/NG/S/9/Rev.1 member notifications to the WTO Committee on Agriculture, and Economic Research Service, USDA.

1/ The country totals are based on all notifications by Members through the 1st¹ quarter of 2004 and are incomplete to the extent that some Members have not submitted notifications for all years.

2/ Products are at the HS 4-digit level.

Table 8: Application of Special Agricultural Safeguards by Year

Product 1/	1995	1996	1997	1998	1999	2000	2001	2002	2003	Total
<i>Tomatoes: Fresh or Chilled</i>		4	8	1	1	1	4	6	5	30
<i>Onions, Shallots, Garlic, Leeks</i>								2		2
<i>Cucumbers, Gherkins: Fresh or Chilled</i>		2	4	2	2	2	2	6	4	24
<i>Other Vegetables: Fresh or Chilled</i>				2	2	2	2			8
<i>Dried Vegetables</i>								3	2	5
<i>Dried Leguminous Vegetables: Shelled</i>		1	2	2	5	5		3	3	21
<i>Other Nuts: Fresh or Dried</i>								1	1	2
<i>Citrus Fruit: Fresh or Dried</i>		28	26	7	7	7	7	1	1	84
<i>Grapes: Fresh or Dried</i>			2	2	2	2	2			10
<i>Apples, Pears, Quinces: Fresh</i>		13		7	7	7	7	2		43
<i>Apricots, Cherries, Peaches, Nectarines: Fresh</i>			6	6	6	6	6			30
<i>Other Fruit: Fresh</i>								2	1	3
<i>Tomatoes: Prepared or Preserved</i>			1			1	5	9		16
<i>Other Vegetables: Prepared or Preserved</i>								4		4
<i>Other Fruits, Nuts: Prepared or Preserved</i>		2	2	2	2	3	3	3		17
All Products	0	50	51	31	34	36	38	42	17	299

Source: WTO (G/AG/NG/S/9/Rev.1) and member notifications to the WTO Committee on Agriculture, and Economic Research Service, USDA.

1/ Products are at the HS 4-digit level.

Table 9: Antidumping Actions in Agriculture, 1994-2003

Action	Fresh Vegetables	Fresh Fruits	Processed Products	Fruits and Vegetables	All Other Products	All Agricultural Products
Cases Initiated	12	6	18	36	99	135
<i>Measure Imposed</i>	7	3	12	22	39	61
<i>No dumping found</i>	0	0	2	2	9	11
<i>No injury found</i>	2	3	1	6	19	25
<i>Case withdrawn/terminated</i>	3	0	1	4	15	19
<i>Case Ongoing</i>	0	0	1	1	3	4
<i>Other</i>	0	0	1	1	14	15
<i>Probability that Measure Imposed</i>	58%	50%	67%	61%	39%	45%
<i>Number of Active Measures on 12/31/2003</i>	8	4	12	24	34	58

Source: Member notifications to the WTO Committee on Antidumping Practices and Economic Research Service, USDA.

Table 10: Antidumping Actions on Fruit and Vegetable Imports, 1994-2003

Importer	Exporter	Product	Year Case Initiated	Outcome of Investigation
		Fresh Vegetables		
<i>Brazil</i>	China	Garlic, fresh or refrigerated	1994	Affirmative
<i>United States</i>	China	Fresh garlic	1994	Affirmative
<i>Canada</i>	China	Garlic - Fresh (1 /7-31 /12)	1996	Affirmative
<i>South Africa</i>	China	Garlic	1999	Affirmative
<i>Canada</i>	China	Garlic - Fresh, Frozen	2000	Affirmative
<i>Canada</i>	Vietnam	Garlic	2000	Affirmative
<i>United States</i>	Mexico	Fresh tomatoes	1996	Affirmative 1/
<i>Canada</i>	United States	Fresh tomatoes	2001	No injury found
<i>United States</i>	Canada	Greenhouse Tomatoes	2001	No injury found
<i>Costa Rica</i>	Guatemala	Dried onion	1996	Terminated
<i>Costa Rica</i>	Nicaragua	Dried onion	1996	Terminated
<i>Costa Rica</i>	United States	Dried onion	1996	Terminated
		Fresh Fruits		
<i>United States</i>	Chile	IQF Red Raspberries	2001	Affirmative
<i>Mexico</i>	United States	Apples	1997	Affirmative 2/
<i>Canada</i>	United States	Red Delicious apples	1994	Affirmative 3/
<i>Canada</i>	United States	Golden Delicious apples	1994	No injury found
<i>United States</i>	Chile	Table Grapes	2001	No injury found
<i>United States</i>	Mexico	Table Grapes	2001	No injury found
		Processed Products		
<i>Australia</i>	Indonesia	Pineapple Juice, concentrate	2001	de minimus 4/
<i>United States</i>	Thailand	Canned pineapple fruit	1994	Affirmative
<i>New Zealand</i>	South Africa	Canned peaches	1996	Affirmative
<i>Brazil</i>	China	Mushrooms preserved and/or prepared	1997	Affirmative
<i>New Zealand</i>	Greece	Canned peaches	1997	Affirmative
<i>United States</i>	Chile	Preserved Mushrooms	1998	Affirmative
<i>United States</i>	China	Preserved Mushrooms	1998	Affirmative
<i>United States</i>	India	Preserved Mushrooms	1998	Affirmative
<i>United States</i>	Indonesia	Preserved Mushrooms	1998	Affirmative
<i>United States</i>	China	Non-Frozen Apple Juice Concentrate	1999	Affirmative
<i>Australia</i>	Thailand	Pineapple Juice, concentrate	2001	Affirmative
<i>Australia</i>	Thailand	Pineapple, tinned fruit	2001	Affirmative
<i>New Zealand</i>	South Africa	Canned apricots	1996	Affirmative 3/
<i>Mexico</i>	Greece	Peach halves in syrup, canned	1997	No dumping found
<i>Australia</i>	Indonesia	Pineapple, tinned fruit	2001	No dumping found
<i>United States</i>	India	Oleoresin Paprika	2001	No injury found
<i>Brazil</i>	Greece	Canned peaches	2000	Terminated
<i>United States</i>	Turkey	Certain Processed Hazelnuts	2003	Terminated

Source: Member notifications to the WTO Committee on Antidumping Practices and Economic Research Service, USDA.

1/ A price undertaking was applied in 1998; after it expired in 2002 a duty was imposed.

2/ Price undertaking.

3/ Duty has been rescinded.

4/ No duty imposed because trade was under de minimus level.

Table 11: Summary of WTO General Safeguard Investigations on Agricultural Imports, 1995-2003

Country	Product	Year Case Initiated	Outcome of injury investigation	Decision on applying safeguard
<i>Argentina</i>	Peaches	2001	Affirmative	Affirmative
<i>Australia</i>	Swine meat	1998	Affirmative	Negative
<i>Brazil</i>	Coconuts	2001	Affirmative	Affirmative
<i>Chile</i>	Fructose	2002	Affirmative	Affirmative
<i>Chile</i>	Glucose	2002	Terminated	N.A
<i>Chile</i>	Mixed oils	2000	Negative	Negative
<i>Chile</i>	Liquid & powdered milk	2000	Affirmative	Affirmative
<i>Chile</i>	Wheat, wheat flour, cane & beet sugar, edible vegetable oils	1999	Affirmative	Affirmative
<i>Costa Rica</i>	Rice	2002	Ongoing	N.A
<i>Czech Rep</i>	Cane and beet sugar	1999	Affirmative	Affirmative
<i>Czech Rep</i>	Cocoa Powder	2001	Affirmative	Affirmative
<i>Czech Re</i>	Isoglucose	2000	Affirmative	Affirmative
<i>Czech Rep</i>	Citric acid	2002	N/A	Negative
<i>Egypt</i>	Powdered milk	2000	Affirmative	Affirmative
<i>El Salvador</i>	Pork	2000	Affirmative	Affirmative
<i>El Salvador</i>	Rice	2000	Affirmative	Affirmative
<i>Estonia</i>	Swine meat	2003	Ongoing	N.A
<i>EU</i>	Mandarins	2003	Affirmative	Affirmative
<i>Hungary</i>	Sugar	2003	Affirmative	Affirmative
<i>India</i>	Vegetable oil	2002	Ongoing	N.A
<i>India</i>	Starches and manioc based sago	2004	Ongoing	N.A
<i>Japan</i>	Shiitake mushrooms	2000	Terminated	N.A
<i>Japan</i>	Tatami-Omote	2000	Terminated	N.A
<i>Japan</i>	Welsh onions	2000	Terminated	N.A
<i>Jordan</i>	Biscuits	2000	Affirmative	Affirmative
<i>Jordan</i>	Chocolate	2000	Terminated	N.A
<i>Jordan</i>	Pasta	2002	Affirmative	Affirmative
<i>Jordan</i>	Aerated water	2002	Terminated	N.A
<i>Korea</i>	Garlic	1999	Affirmative	Affirmative
<i>Korea</i>	Dairy products	1996	Affirmative	Affirmative
<i>Korea</i>	Soybean oil	1995	Affirmative	Negative
<i>Latvia</i>	Live pig and pork	2002	Affirmative	Affirmative
<i>Latvia</i>	Pork	1999	Affirmative	Affirmative
<i>Lithuania</i>	Pastry yeast	1999	Affirmative	Affirmative
<i>Moldova</i>	Sugar	2003	Affirmative	Affirmative
<i>Morocco</i>	Bananas	2000	Affirmative	Affirmative
<i>Philippines</i>	Tomato paste	1998	Terminated	N.A
<i>Slovakia</i>	Pork	1999	N.A	Negative
<i>Slovakia</i>	Sugar	2000	Affirmative	Affirmative
<i>Slovenia</i>	Swine meat	1998	Negative	Negative
<i>United States</i>	Wheat gluten	1997	Affirmative	Affirmative
<i>United States</i>	Lamb meat	1998	Affirmative	Affirmative
<i>United States</i>	Tomatoes & peppers	1996	Negative	Negative
<i>United States</i>	Tomatoes	1995	Negative	Negative

Source: WTO, *Report of the Committee on Safeguards to the Council for Trade in Goods*, various years, and Economic Research Service, USDA.