
Market Access Barriers in Agriculture and Options for Reform

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Agricultural protection and subsidies account for about two-thirds of the trade distortion caused by government policies. And most of the distortion traceable to agricultural policies is generated by import barriers. For that reason, negotiating wider market access in agriculture is critical to the success of the Doha Round.¹

The World Trade Organization (WTO) Agriculture Framework Agreement of July 2004 calls for significant tariff cuts using a tiered formula that imposes larger percentage cuts in higher tariffs. (See table 1 for a summary of all of the provisions.) This proposed approach is a vast improvement over the average-cut formula applied in the Uruguay Round Agreement on Agriculture, which allows countries to meet their commitments through large proportional reductions in tariffs that were already low and small reductions in high tariffs.

The new formula still will require substantial cuts in tariffs before meaningful trade liberalization is realized. This is because of the prevalence in agriculture of tariff peaks (a small number of tariff lines protect the bulk of domestic production), binding “overhang” (bound tariffs are above applied tariffs), “water” in the tariff (tariff reductions initially have no impact), and tariff escalation (higher tariffs on processed raw materials). Furthermore, the Framework Agreement contains a Sensitive Product designation that would allow some commodities to escape the full extent of tariff cuts in exchange for an expansion of tariff rate quotas (TRQs).

A fundamental requirement for success in any trade negotiation is balance between flexibility and discipline. There must be enough flexibility to accommodate the unique needs of each member, and enough discipline to yield the gains in export market opportunities that are the *raison d'être* of trade negotiations. The tiered formula appears to strike a balance between discipline and flexibility by creating bands that allow for progressive tariff cuts. But Sensitive Products may introduce flexibility at the cost of the discipline needed to widen market access. The level of trade liberalization realized, therefore, will depend critically on *key details*, such as the level of tariff cuts in each tier, the maximum tariff level to be negotiated, reductions in tariff escalation, and the requirement for an overall cut in average tariffs.

This note analyzes these issues and lays out some options for meaningful trade liberalization, consistent with the language and provisions outlined in the Framework Agreement.

Table 1. Summary of the market access provisions of the WTO Framework Agreement on Agriculture

Tariff cuts	<ul style="list-style-type: none"> ▪Substantial improvement in market access through tariff reductions from bound rates. ▪Single approach for all countries: tiered formula to ensure progressivity. Types of commitments within bands and number of bands to be negotiated. ▪Role of a tariff cap to be evaluated. ▪Designation of an "appropriate number" of sensitive products, which would be subject to a mix of tariff cuts and TRQ expansion.
Tariff rate quotas	<ul style="list-style-type: none"> ▪Reduce in-quota tariffs and improve administration (as part of balance of concessions). ▪Some TRQ expansion for all sensitive products.
Safeguards	<ul style="list-style-type: none"> ▪Future of special agricultural safeguard (SSG) under negotiation. ▪Establish new special safeguard mechanism (SSM) for developing countries.
Special and differential treatment for developing countries	<ul style="list-style-type: none"> ▪Proportionately less tariff reductions for developing countries, with longer implementation period. ▪Developing countries may designate special products on criteria of "food and livelihood security," which would be subject to more flexible treatment. ▪Fullest possible liberalization of trade in tropical products and alternatives to illicit narcotic crops by developed countries.
Other	<ul style="list-style-type: none"> ▪Tariff escalation reduced by formula to be agreed upon. ▪Erosion of preferences to be addressed using Harbinson paragraph 16 as reference.

Source: Josling (2005).

Background

Although developing countries have almost doubled their share of world trade in manufactures over the last two decades, their share in agricultural trade has remained about 30 percent. During the 1990s, the growth of developing-country agricultural exports to industrial countries slowed as exports to other developing countries accelerated. Today's middle-income countries have managed to increase their global market share, principally by entering other developing countries' markets and by aggressively diversifying into nontraditional exports, such as seafood products, fruits, vegetables, cut flowers, and processed foods. Growth of these nontraditional exports, which generally have low protection, has outpaced growth of traditional commodities by three to one (figure 1). Meanwhile, many low-income countries have had less success; their share of world agricultural trade has declined.

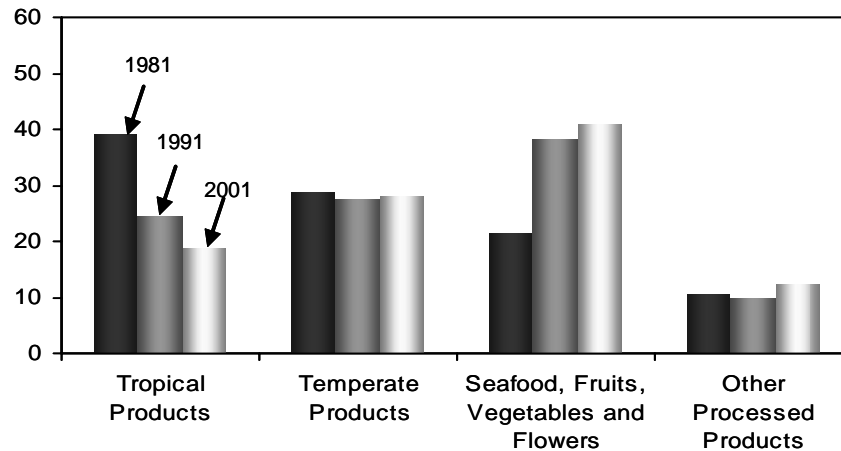
These trade patterns reflect the structure of global protection. Although the conversion of nontariff barriers to tariffs during the Uruguay Round was an important step forward, import protection in agriculture remains high, nontransparent, and antidevelopment. Average agricultural tariffs remain much higher than manufacturing tariffs, which average less than 4 percent and are about 10 percent of what they were 60 years ago. The average agricultural tariff is 62 percent, by contrast, with high variation among countries and commodities. In addition, about 50 percent of domestic production in countries belonging to the Organization for Economic

Cooperation and Development (OECD) is protected by TRQs. Studies show that preferences to developing countries barely begin to compensate for these high levels of protection (Brenton and Ikezuki 2005).

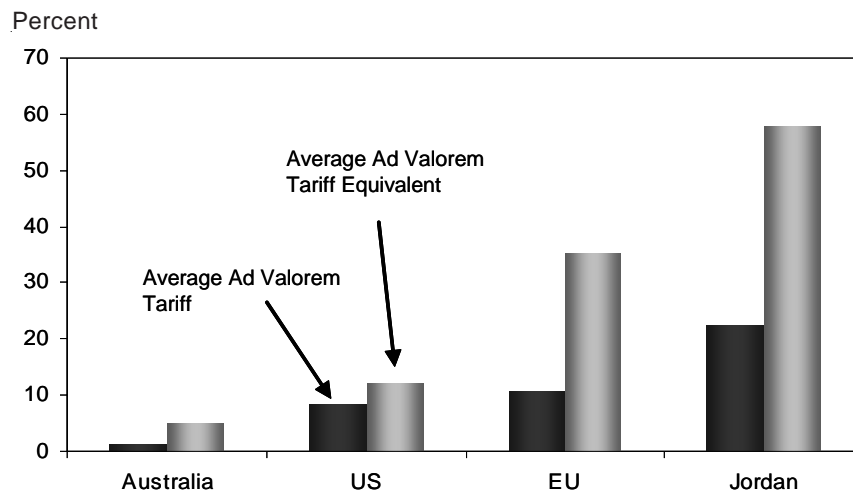
Widespread use of specific tariffs in developed countries (which make up two-thirds of their agricultural tariffs) obscure actual levels of protection, because specific duties are generally higher than the simpler and more transparent *ad valorem* tariffs that are generally used in developing countries (figure 2). The use of specific tariffs causes a bias against developing countries because it results in higher tariffs on lower-priced imports. Even more important are the cyclical implications of such tariff structures: as world price go down, specific tariffs go up when expressed in percentage terms. While conversion of specific tariffs into *ad valorem* form would be desirable in principle, it would raise many of the dangers that emerged in the conversion of nontariff barriers into tariffs during the Uruguay Round. To avoid another round of “dirty tariffication” through large, covert increases in protection, it will be important during the conversion of specific tariffs to include in the modalities governing the negotiations a provision to ensure that a transparent approach is followed (similar to paragraph 9 of the Harbinson Draft).²

Figure 1. Developing country exports have surged in nontraditional products with low protection

Composition of developing countries exports, percent



Note: Tropical products: coffee, cocoa, tea, nuts, spices, textile fibers, sugar and confectionery. Temperate products: meats, milk, dairy, grains, animal feed, edible oil, and oil seeds. Other processed products include: tobacco and cigarettes, alcoholic and nonalcoholic beverages, and other processed food.
Source: World Bank 2003.

Figure 2. Specific duties hide high protection

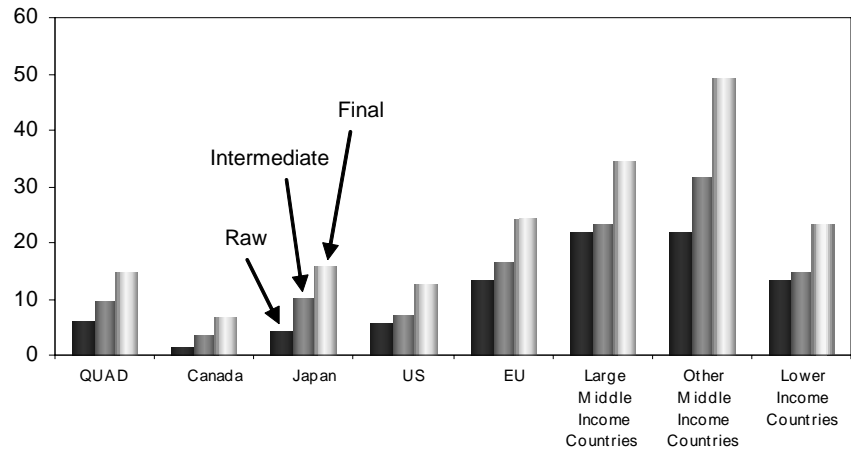
Source: World Bank 2003.

Tariffs are typically higher for processed raw materials (figure 3). By discouraging diversification into value-added and processed products—areas in which trade is expanding rapidly—such escalation punishes investors in developing countries who seek to add value to production for export. It also helps account for developing countries’ generally poor penetration of developed-country markets in processed foods.

Two other key features of agricultural tariffs are the large difference between bound and applied rates and their extremely high peaks. The first feature, known as “binding overhang” (figure 4), means that a larger reduction in bound rates must be made before applied rates change. High peaks result in large differences between average rates and maximum tariff rates (called “tariff dispersion”) in developed countries (table 2), compared with developing countries, which are characterized by low tariff dispersion. Developing countries have higher average agricultural tariffs than industrial countries, but the level of protection in developed countries is higher than average tariffs (figure 5) because of the prevalence of tariff peaks: just a few tariff lines protect most of domestic production in high-income countries. One consequence of those peaks is that most of the economic welfare cost of global agricultural distortions is accounted for by a small number of commodities. Rice and beef alone are responsible for the bulk of that cost, with sugar, oilseeds and other livestock products accounting for another quarter (table 3).

Figure 3. Tariffs escalate for final products

Average tariffs, percent



Source: World Bank 2003.

Table 2. Tariff Peaks and Variance in Selected Countries (percent)

Country or Group	Average Tariff	Maximum Tariff	Standard Deviation
Canada	4.1	238.0	13.5
Japan	10.9	50.0	10.1
United States	9.9	350.0	26.5
European Union	19.0	506.3	27.3
Republic of Korea	39.9	917.0	107.9
Brazil	13.2	55.0	5.6
Costa Rica	14.2	154.0	18.0
Morocco	67.4	376.5	70.6
Indonesia	8.9	170.0	25.6
Malawi	16.5	25.0	8.5
Togo	15.6	20.0	6.1
Uganda	13.6	15.0	3.2

Source: Aksoy 2005.

Tariff rate quotas

Tariff rate quotas (TRQs) on imports, implemented in the Uruguay Round Agreement on Agriculture for sectors in which nontariff barriers were converted into tariffs, are a complicating factor. Countries agreed to allocate quotas for imports up to 5 percent of domestic consumption (“minimum access” quotas) and to safeguard current levels of access if imports exceeded 5 percent of consumption (“current access” quotas). Countries were to permit imports under the quota at lower tariffs (called the “in-quota” tariff), whereas imports over the quota would face the higher MFN tariff. In-quota tariffs, unlike over-quota tariffs, were neither bound nor reduced in the Agreement on Agriculture. The average over-quota bound tariff of 115 percent is substantially higher than both the average in-quota tariff and the average tariff for all of agriculture, both of which are 59 percent.

But TRQs are the source of a host of potential problems. First, because they protect about 50 percent of OECD agricultural production, it would be unwise to allow all the products they protect to be deemed Sensitive Products, as was suggested in some proposals before the July 2004 Framework Agreement. Second, many quotas are not filled, suggesting that reductions in over-quota tariffs may have less impact than might otherwise be expected. Actual problems with TRQs are evident, as well. The first-come, first-served approach to their administration (used by many countries), for example, sometimes causes imports to be rushed and domestic prices to fall. Import licenses allocated on demand allow high-cost firms to operate, while licenses allocated on the basis of historical shares fail to ensure competition. Some state trading enterprises have been known to import low-quality products for animal feed to fulfill their obligations yet continue to protect their domestic farmers. More problems abound from a plethora of additional regulations. For example, seasonal licenses, time limits, limits per firm, and a domestic purchase requirement all impose extra costs on importing firms. These and several other regulations were found (de Gorter and Klianga 2005) to affect over \$30 billion in trade. For these reasons, it is doubtful that the path to wider market access in agriculture lies through TRQs.

Designing the tariff reduction formula

Large cuts in high tariffs are the key to unlocking the development potential of market access in agriculture. The July 2004 Framework Agreement advanced the agricultural market access negotiations in several ways. By moving from the flawed average-cut methodology imbedded in the Uruguay Round Agreement on Agriculture, it provides scope to increase market access by making the greatest reductions in the highest and most distorting tariffs. But the thresholds and number of bands have yet to be negotiated.

The tiered approach of the Framework Agreement ensures some degree of harmonization of national systems of agricultural tariffs (although much less than could be achieved using a Swiss formula that not only reduces higher tariffs more than lower tariffs but also has a common maximum tariff for all countries). But the tiered formula poses some critical design issues—among them the placement of the bands, the depth of cuts, and the presence or absence of a tariff cap. Recognizing these issues, the G-20 proposal of July 8, 2005, proposes a tariff cap of 100 percent for developed countries and 150 percent for developing countries. Scenarios analyzed by the World Bank (Jean, Laborde and Martin 2005) show that only formulas that bring about very deep cuts in bound rates will have a substantial impact on average applied tariffs and hence on market access, particularly when allowance is made for some degree of slippage from designations of Sensitive and Special Products. A progressive tariff reduction formula that imposed cuts of 45, 70, and 75 percent in bound tariffs in developed countries would reduce the average tariffs facing developing countries from 15 percent to 10 percent—an important gain in market access, but only one-third of the way to complete liberalization.

The need to limit the number of tariff lines for Sensitive Products is also recognized in the G-20 proposal. The scenario analysis of the World Bank found extraordinary sensitivity of the results to self-selected Sensitive and Special Products. For example, if 2 percent of tariff lines are excluded from reductions as Sensitive Products and a further 2 percent as Special Products in developing

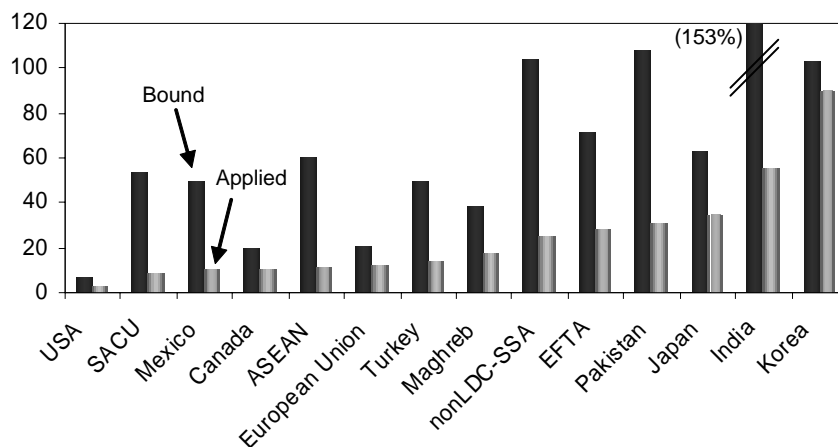
Table 3. Commodity contributions to global welfare cost of food and agricultural subsidies and tariffs

	Share of total welfare cost of protection (percent)
Rice	35
Beef and sheepmeat	18
Sugar	8
Oilseeds	7
Pork and poultry	6
Dairy products	5
Coarse grains	5
Wheat	4
Other processed food	12
Total	100

Source: Unpublished GTAP model results by K. Anderson and E. Valenzuela, World Bank (September, 2005).

Figure 4. Bound tariffs exceed applied rates

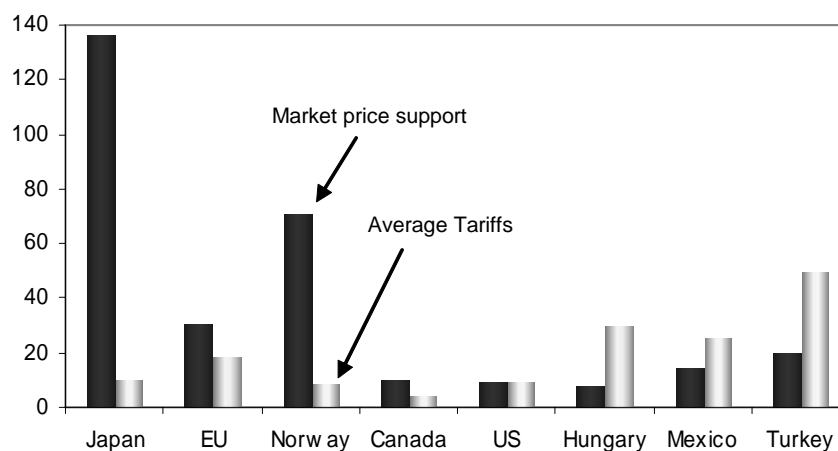
Bound and applied tariffs on agriculture, percent



Source: Jean, Laborde and Martin 2006.

Figure 5. Border protection and average tariffs for selected countries

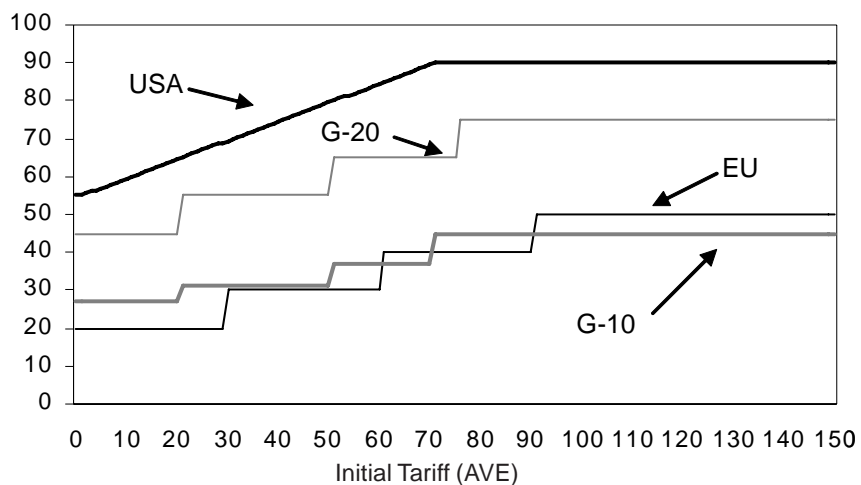
Border protection and average tariffs for selected countries, percent



Note: MPS measures the tariff equivalent of all tariff and nontariff barriers to imports using OECD data but excludes protection afforded by taxpayer-funded production subsidies and the like.
Source: World Bank 2003.

Figure 6. Bands and Cuts for Developed Countries: Proposals

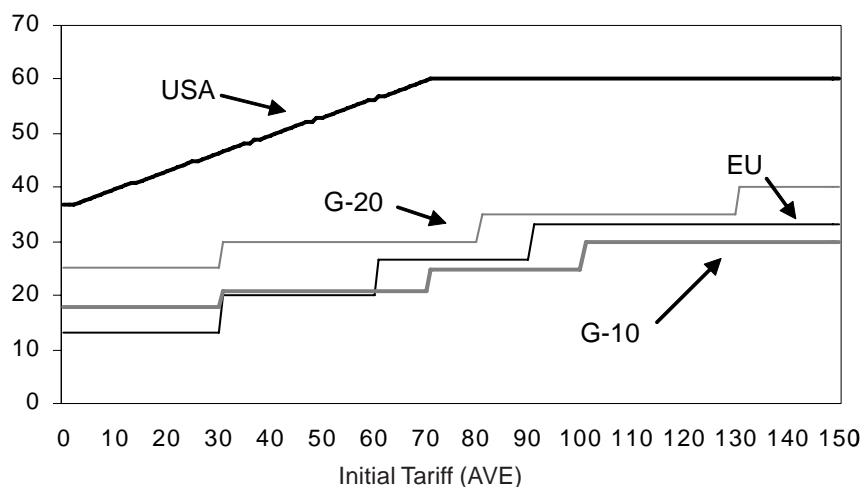
Proposed cut



Source: Marcos Jank, Institute for International Trade Negotiations (ICONE), 2005.

Figure 7. Bands and Cuts for Developing Countries: Proposals

Proposed cut



Source: Marcos Jank, Institute for International Trade Negotiations (ICONE), 2005.

countries, the liberalization of applied duties is reduced by two-thirds overall and much more in Canada, Japan, and Republic of Korea. The cut in applied tariffs falls even more—by 80 percent. A tariff cap would help reduce the losses to liberalization resulting from designations of Sensitive and Special Products, particularly by bringing about substantial reductions on cereals. Clearly, if the Doha Round is to be successful in increasing market access, it will be important to ensure (a) that only a small share of products is accorded special treatment, (b) that substantial reductions in protection are made even on these products, or (c) that the number of products is restricted in a more meaningful way than by restricting the number of tariff lines.

Another design issue related to the simple tiered formula is the discontinuities between bands that can result from a system of higher cuts for tariffs in bands with higher tariff rates. Assume, for example, a tariff threshold of 90 percent. If there were a 10 percentage point difference between the rates of cut, tariffs just over that threshold would end up nearly 10 percentage points below tariffs at the threshold. One possible solution to this problem is to implement a tiered formula similar to that of a progressive income tax, whereby higher marginal rates of reduction are made on tariffs in higher tariff bands. Another possibility is a rate of cut that increases with the height of the tariff.

Recent reform proposals by the U.S. (2005), the G-20 (2005), the EU (2005) and the G-10 (2005) have elaborated considerably on the Framework. These proposals specify tiered formulas for tariff reduction with maximum reduction rates in industrial countries of 90 percent, 75 percent, 60 percent and 45 percent respectively. In developing countries, the cuts are smaller, and increases in cuts take place from higher tariff levels. The relationship between the proposed cuts is shown in figures 6 and 7. The proposals also differ crucially in the number of “sensitive” products allowed; the U.S. proposed 1 percent of tariff lines, the EU has proposed 8 percent and the G-10 has proposed 10 or 15 percent. Jean, Laborde and Martin (2005) show that even 2 percent of sensitive products can almost eliminate the market access gains resulting from a tiered formula.

Policy options

If governments wish to promote development through increased market access, they have several options:

- Limit the number of tariff lines in the Sensitive and Special Product categories. Research shows that placing just 2 percent of tariff lines in those categories can eviscerate the benefits of trade liberalization.
- Impose a tariff cap at the 100 percent level suggested by the G-20 to overcome the effects of tariff peaks, binding overhang, and gaps between applied tariffs and the protection actually provided.
- Impose an overall reduction in average tariffs to ensure that the tiered approach is effective and as a further guard against the adverse effects of the Sensitive

and Special Product categories.

- Build progressivity into every tariff band to ensure reduction in tariff escalation and avoid discontinuities or overlap between tariffs in the bands.
- Convert all specific tariffs into *ad valorem* equivalents using a transparent methodology that will not allow a clandestine increase in protection.
- Encourage full participation by developing countries, especially as Special Products designations could reduce their liberalization substantially.
- Require reductions in in-quota tariffs, or eliminate them altogether. In-quota tariffs can put a significant brake on the trade liberalizing effects of quota expansion.
- Increase minimum access quotas from 5 percent to 10 percent of domestic consumption in the base year.
- Expand current access quotas, which account for 58 percent of trade under TRQs. Because minimum access quotas frequently go unfilled, an expansion in current access quotas may be more effective.
- Do not leave to importing countries the choice of whether to reduce over-quota tariffs *or* expand quotas. Research shows that the minimum trade expansion under each scenario is far less than either the tariff reduction or quota expansion scenario alone, so governments wishing to protect farmers can do so more easily if given the choice.
- Switch all TRQs to applied tariffs with no limits on imports, or require the licenses to be auctioned. Quota underfill frequently indicates potential problems with administration methods.
- Phase out TRQ regulations such as time limits, past trading performance, limits per firm, seasonal quotas, and domestic purchase requirements because they impose costs on importing firms and may contribute to high rates of underfilled quotas.

Notes

1. This note draws on findings from a research project funded by the United Kingdom's Department for International Development and the World Bank-Netherlands Partnership program. It was written by Kym Anderson and William J. Martin, both Lead Economists in the World Bank Development Research Group (DECRG)) and the International Trade Department and by Harry de Gorter, Associate Professor of Agricultural Economics at Cornell University in Ithaca, New York.

2. The former negotiations' chairperson, Stuart Harbinson, drafted a "modalities" paper in 2003 in search for a compromise to lead to a final agreement (WTO 2003). The "modalities" are targets (including numerical targets) for achieving the objectives of the negotiations, as well as issues related to rules.

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References

- Aksoy, M.A. 2005. "Global Agricultural Trade Policies." In *Global Agricultural Trade and Developing Countries* (chapter 3), ed. A. Aksoy and J. Beghin. Washington, DC: World Bank.
- Brenton, P. and T. Ikesuki. 2005. "The Impact of Agricultural Trade Preferences, with Particular Attention to the Least Developed Countries." In *Global Agricultural Trade and Developing Countries* (chapter 4), ed. A. Aksoy and J. Beghin. Washington, DC: World Bank.
- de Gorter, H., and E. Kliauga. 2005. "Reducing Tariffs versus Expanding Tariff Rate Quotas." In *Agricultural Trade Reform and the Doha Development Agenda* (chapter 5), ed. K. Anderson and W. Martin. New York: Palgrave Macmillan.
- EU. 2005. "Making Hong Kong a Success: Europe's Contribution." European Commission, Brussels, October 28, 2005.
- G-10. 2005. G-10 Agriculture Proposal. October 10, 2005. www.insidetrade.com.
- G-20. 2005. G-20 Proposal on Market Access. October 12, 2005. www.insidetrade.com.
- Jean, S., D. Laborde, and W. Martin. 2005. "Consequences of Alternative Formulas for Agricultural Tariff Cuts." In *Agricultural Trade Reform and the Doha Development Agenda* (chapter 4), ed. K. Anderson and W. Martin. New York: Palgrave Macmillan.
- Josling, T. 2005. "The WTO Agricultural Negotiations: Progress and Prospects." *Choices* 20 (2)
- Martin, W. 2004. "Market Access in Agriculture: Beyond the Blender." Trade Note 17. Development Research Group, World Bank, Washington, DC. July.
<http://web.worldbank.org/WEBSITE/EXTERNAL/TOPICS/TRADE/0,contentMDK:20115046~pagePK:148956~piPK:216618~theSitePK:239071,00.html>.
- U.S. 2005. U.S. Proposal for Bold Reform in Global Agricultural Trade. October 10, 2005. www.ustr.gov.
- World Bank. 2003. "Agricultural Policies and Trade." In *Global Economic Prospects 2004: Realizing the Development Promise of the Doha Agenda* (chapter 3). Washington, DC: World Bank.
- WTO. 2003. "Negotiations on Agriculture: First Draft of Modalities for Future Commitments." WTO Document TN/AG/W/1/Rev.1 Geneva.