

From Uruguay to Doha: Agricultural Trade Negotiations at the World Trade Organization

Thomas C. Beierle

March 2002 • Discussion Paper 02–13



RESOURCES
FOR THE FUTURE

Resources for the Future
1616 P Street, NW
Washington, D.C. 20036
Telephone: 202–328–5000
Fax: 202–939–3460
Internet: <http://www.rff.org>

© 2002 Resources for the Future. All rights reserved. No portion of this paper may be reproduced without permission of the authors.

Discussion papers are research materials circulated by their authors for purposes of information and discussion. They have not necessarily undergone formal peer review or editorial treatment.

From Uruguay to Doha: Agricultural Trade Negotiations at the World Trade Organization

Thomas C. Beierle

Abstract

This paper examines current agricultural trade negotiations at the World Trade Organization, with particular attention to the relationship between liberalization and developing countries' economic growth and food security. Agriculture remains one of the most highly protected arenas of international trade. The cost of such protection falls particularly hard on developing countries, where agriculture typically accounts for a much higher share of economic output, exports, and employment than in developed countries. Although the 1994 Uruguay Round of trade talks succeeded in bringing agriculture into the rules-based trading system, it did little to actually reduce agricultural trade protection. This paper describes how three important actors in the agricultural trading system—the United States, the European Union, and developing countries—are positioning themselves in the current talks to deal with the unfinished business from the Uruguay Round.

Key Words: Trade, Agriculture, World Trade Organization (WTO), General Agreement on Tariffs and Trade (GATT)

JEL Classification Numbers: F130

Executive Summary

Agriculture remains one of the most highly protected arenas of international trade. Tariffs average around 4% for industrial goods but 62% on agricultural products. Governments, particularly in rich developed countries, also continue to subsidize domestic farmers in ways that substantially distort trade by favoring domestic production and exports over imports from abroad.

The cost of agricultural protection falls particularly hard on developing countries, where agriculture typically accounts for a much higher share of economic output, exports, and employment than in developed countries. Agricultural sector growth is critical to many developing countries' overall economic growth, and reform of protectionist policies promises many billions of dollars of annual benefits to developing countries as a whole. Agricultural trade liberalization has important implications for developing countries' food security as well, particularly by boosting incomes to pay for food. But liberalization may also raise some countries' food bills, and international rules can constrain domestic policy choices for feeding the poor.

The system of rules governing multilateral international trade, now under the auspices of the World Trade Organization (WTO), has only recently sought to reduce agricultural trade protection through an agreement adopted in 1994, at the end of the Uruguay Round of trade talks. Officially known as the Uruguay Round Agreement on Agriculture, it introduced disciplines on tariffs and certain types of subsidies. Developed countries implemented the disciplines between 1995 and 2000; developing countries have until 2004. Starting in spring 2000, WTO members met again to negotiate how to continue the reform process. In November 2001, at the WTO Ministerial Conference in Doha, Qatar, they agreed to incorporate agricultural negotiations into a comprehensive new trade negotiating round.

This paper examines the current round of agricultural trade negotiations. To establish the context for the talks, it outlines the relationship between agricultural trade liberalization and developing countries' economic growth and food security, and it details what was accomplished as a result of the Uruguay Round. The paper then describes what three important parties—the United States, the European Union, and developing countries—seek in the current talks. It outlines areas of agreement and disagreement and makes some predictions about the direction in which negotiations may go.

Trade Liberalization, Economic Growth, and Food Security

Protectionist policies typically elevate domestic food prices and, for large trading countries, depress prices on world markets. Tariffs, export subsidies, price supports and other such policies maintained by the United States and the European Union, for example, disadvantage developing country producers by restricting imports of their products and reducing the prices they can receive in other markets around the world.

An analysis by the Economic Research Service of the U.S. Department of Agriculture (USDA) shows that liberalizing agricultural trade would raise world prices by 12% and result in annual welfare gains for developing countries of up to \$21 billion annually, if investment and productivity gains are factored in. (Developed countries benefit as well, by up to \$35 billion.) Other analyses predict even greater gains for developing countries from agricultural trade liberalization.

Rising agricultural production and overall income in developing countries promise to reduce food insecurity as well. Indeed, USDA predicts a 6% decrease in the need for food aid if markets are liberalized. But the relationship between trade liberalization and food security is complex, and liberalization may create some new barriers to reducing food security in some places. With higher world market prices, countries that import a large share of their food may become more food insecure. Trade rules may also constrain domestic policymakers in their choice of policies for addressing food security. Past trade talks have sought to address such food security concerns, and members have proposed new ideas in the current round.

Implementation of the Uruguay Round Agreement on Agriculture

Although the WTO's predecessor, the General Agreement on Tariffs and Trade (GATT), was established in 1947, it was not until 1994 that countries agreed to apply to agriculture the same type of trade disciplines governing international commerce in manufactured goods. The Uruguay Round Agreement on Agriculture required countries to convert nontariff barriers into tariffs and to reduce those tariffs over time. It set reduction commitments for export subsidies and certain kinds of domestic support. And it established a set of reduced commitments and exemptions under the heading of "special and differential treatment" for developing countries.

Between 1995 and 2000, developed countries finished implementing their commitments under the 1994 agreement. Although they have largely met the letter of the law, overall trade protection has not decreased appreciably. Negotiated details of how commitments were established and measured have made the agreement largely ineffective in forcing members like

the United States and the European Union to reform protectionist agricultural policies. The principal success of the Uruguay Round was to define trade-distorting policies, establish what was allowed, and introduce the notion of reduction commitments. The hard choices involved in tightening the system to the point that it forces real change in protectionist agricultural policies have fallen to the current round of talks.

Doha and Beyond: The Current Round of Negotiations

Current negotiations are taking up the unfinished business from the Uruguay Round in an atmosphere much changed from the traditional GATT process. Importantly, developing countries now have a more influential and more coordinated voice. For example, in talks leading up to Doha, about a quarter of the negotiating proposals came exclusively from African countries. Just prior to the Doha Ministerial, 133 developing countries signed a lengthy set of joint demands. With the one-country, one-vote system, the WTO looks much more like the United Nations than what was characterized as the GATT's rich men's club.

New demands from developing countries have joined traditional battles among large developed country trading partners to sketch out the areas of agreement and disagreement in current talks. As in the Uruguay Round, the principal areas of negotiation involve market access, export support, domestic support, and special and differential treatment for developing countries.

On market access, the major negotiating coalitions agree that further reductions in tariffs, along with reforms to a system of tariff rate quotas, are needed. However, there are strong disagreements over how to measure tariff reductions, and the details will determine the extent of market access.

On export support, the European Union will consider reducing its export subsidies (it accounts for 90% of them worldwide) only if WTO disciplines are extended to other export support policies, such as export credit and food aid policies very important to the United States. Developing countries argue that the export support policies of both the European Union and the United States tilt the playing field by forcing poor farmers to compete with rich treasuries in Brussels and Washington.

The European Union, the United States, and developing countries nominally agree on the need to reduce domestic subsidies to farmers, but they differ over the details. The European Union seeks to retain exemptions for certain types of domestic support crucial to its Common Agricultural Policy. The United States wants to continue to channel large amounts of money into

the exempt “green box.” Developing countries would like to see all forms of domestic subsidies reduced, while retaining some ability to subsidize their own farmers.

On special and differential treatment, developed countries largely support marginal changes to the system established in the Uruguay Round. Developing countries have proposed a new “development box” that would give them far greater flexibility to introduce protectionist measures to promote economic growth and food security.

What Does the Future Hold?

The outcomes of these international negotiations will be highly influenced by the domestic politics of member countries. Although the United States is promoting market liberalization abroad, it is constrained in agreeing to disciplines on traditional subsidies to farmers at home. The European Union is defensive of its agricultural support policies in the international talks, but the accession of poorer member countries will increasingly strain the ability of current European Union members to support expanded farm programs. Although developing countries seek new export markets in rich countries, many feel burned by structural adjustment programs that have compelled them to unilaterally drop protectionist barriers at home. These and other domestic issues will ultimately establish the boundaries of what members can agree to in multilateral talks.

Two simple scenarios illustrate the directions in which agricultural trade talks might head. First is the liberalization scenario, in which members agree to disciplines that force their governments to liberalize trade through real policy changes in tariffs and subsidies. Second is a deliberalization scenario, in which members allow one another to pursue domestic political agendas by continuing trade-distorting farm support and creating exemptions and accounting methods that make liberalization commitments merely symbolic.

In the Uruguay Round, countries tended to the latter of these scenarios. Talks initiated in Doha could go either way. The power of U.S. and European domestic constituencies for continued farm support and developing countries’ demands for more policy flexibility suggest that the liberalization scenario is certainly not a given. However, by trading off gains and losses from agriculture with gains and losses in other trade sectors—a distinct possibility now that agriculture is part of a comprehensive round—developed countries may agree to reduce agricultural protection for gains elsewhere, such as strengthened intellectual property rules.

What is certain about the current round is that outcomes must be much more responsive to the economic development and food security needs of developing countries. The legitimacy of

the World Trade Organization depends on its ability to deliver benefits to those developing countries that now make up most of its membership.

Contents

1. Introduction.....	1
Agricultural Trade and Protection	3
Reducing Protection: GATT and the WTO	5
Major Negotiating Parties	6
2. Trade Protection, Economic Growth, and Food Security.....	8
The Economics of Trade.....	8
The Three Pillars of Trade Protection and a Classification of Countries	12
Agricultural Trade and Food Security in Developing Countries	14
3. Implementation of the Uruguay Round Agreement on Agriculture	17
Market Access.....	18
Export Support.....	23
Domestic Support.....	28
Special and Differential Treatment.....	37
Summary of Implementation	38
4. Negotiating Positions and Likely Outcomes in Current Negotiations	39
Market Access.....	41
Export Support.....	43
Domestic Support.....	44
Special and Differential Treatment.....	46
Summary of the State of Negotiations	47
5. Conclusion: What Does the Future Hold?.....	49

From Uruguay to Doha: Agricultural Trade Negotiations at the World Trade Organization

Thomas C. Beierle*

1. Introduction

On November 14, 2001—a day after the scheduled close of the ministerial meeting of the World Trade Organization (WTO) in Doha, Qatar—trade negotiators emerged from all-night talks with a ministerial declaration in hand. The 142 member countries of the WTO had agreed to launch a new round of trade negotiations. Although agreement was tenuous and compromises fragile, the multilateral system that sets rules governing international trade was back on track after the Seattle debacle in 1999.

Some parties could claim important victories from Doha. Developing countries won new rights to override drug patents on medicines for serious public health threats, such as AIDS. China and Taiwan became official members of the WTO. The European Union left the talks with investment and competition on the negotiating agenda and stronger commitments from trading partners to incorporate environmental concerns into future trade negotiations.

In the area of agriculture, it was an achievement just to decide to continue negotiating as part of a comprehensive round at all. Two years of positioning, analysis, and prenegotiation had principally served to clarify the chasms separating WTO members on many issues. The ministerial declaration did not commit members to specific agricultural trade reforms, but it set the direction of talks toward further liberalization of agricultural trade.

Unlike most areas of international trade, agriculture is still characterized by complex webs of tariffs, quotas, subsidies, and other forms of agricultural support. Since the inception of the WTO's precursor, the General Agreement on Tariffs and Trade (GATT) in 1947, countries have resisted agricultural trade liberalization. It was not until the Uruguay Round Agreement on Agriculture (URAA) in 1994 that countries began to apply to agriculture the kinds of disciplines that have long governed trade in manufactured products. The URAA allowed six years for implementation, and members agreed to begin further negotiations one year before the end of that period. These negotiations have been underway since March 2000, and the agreement in Doha made them part of a comprehensive new round of talks.

This paper examines what has been accomplished since the Uruguay Round, what proposals have been made for further reform, and what the likely outcomes of future negotiations may be. The analysis focuses on three sets of actors in the multilateral trading system: the United States, the European Union, and developing countries.

By virtue of their wealth, size, and domestic farm policies, the United States and the European Union have long been the prime movers in both agricultural trade and agricultural trade negotiations. They are the largest importers and exporters of agricultural commodities and are naturally interested in expanding their markets. At the same time, long traditions of support for farmers in both the United States and the European Union have created constituencies highly resistant to reforms that would expose domestic agriculture to increased foreign competition.

Developing countries have long been part of the world trading system, but they have only recently begun to exert influence in its system of governance. With their large base of membership in the WTO, they are better able to flex their collective muscles in what has been broadly labeled the “development round” of trade negotiations. The growth of the agricultural sector is the key to many developing countries’ overall economic development, and agricultural trade has many implications for their ability to feed their populations. Simulation models of agricultural trade routinely demonstrate that liberalization would expand developing countries’ agricultural production, with attendant benefits for the economy, exports, and rural employment.¹

This introductory section continues with an overview of the current state of agricultural trade and protection. It briefly recaps the history of the Uruguay Round and the events leading up to the Doha Ministerial and outlines the major negotiating coalitions.

Section 2 describes much of what is at stake in the agricultural trade talks by discussing the economics of trade protection and the relationship between trade and food security. This section can be skipped by readers already familiar with these issues.

Section 3 focuses on the URAA and its implementation. It describes how concrete commitments made to increase market access, reduce export subsidies, and discipline domestic agricultural support have actually led to little progress in reducing agricultural trade protection.

Section 4 describes the current negotiating positions of four principal parties and coalitions in the negotiations: the United States, the Cairns Group of net agricultural exporters (which often sides with the United States), the European Union, and developing countries. It identifies areas of agreement and disagreement and speculates about where in the current round the most controversy lies.

Section 5 concludes the paper with a sketch of a number of forces that will influence whether and how countries will ultimately agree on agricultural trade reform. It considers whether the outcome most consistent with the divergent demands of domestic politics in the United States and the European Union and the increasing clout of developing countries in the multilateral trading system may be to increase agricultural trade protection rather than liberalize it.

Agricultural Trade and Protection

Agricultural trade remains one of the mostly highly protected areas of international commerce. Although average tariffs on industrial goods fell from 40% to 4% from 1945 to 1995, agricultural tariffs still average 62%.²

Since the early post–World War II era, the large industrialized countries that dominate the world trading scene have granted agriculture a particular immunity from liberalization efforts. Immediately after the war, the reasons for such treatment were obvious. Facing reconstruction, Europe was plagued with severe food insecurity. In the United States, the Depression of the 1930s and wartime supply policies prompted a range of agricultural supports. Many developing countries were still in colonial relationships with European powers.

Strong pressure to protect domestic agriculture from international competition persisted beyond the immediate aftermath of the war. It was aided by powerful cultural norms in the United States and Europe about the desirability of farming and rural society, as well as security concerns that pushed countries to seek some level of food self-sufficiency. Support policies also lent stability to a market subject to the vagaries of weather and foreign supplies, and in which production requires considerable up-front investment and foresight. Support policies created strong political constituencies willing to work hard to make sure those policies stayed in place.

Students of agricultural politics have long recognized that the staying power of agricultural trade protection and farm subsidy programs derives from their distribution of costs and benefits. The costs are borne by a broad and diffuse population of taxpayers and consumers who see little individual payoff from organizing to pursue policy reform. The benefits go to a concentrated set of farming interests who are all too ready to exert political pressure to obtain direct and indirect government support for domestic agriculture through subsidies, price supports, import tariffs, and a variety of other means. The Organisation for Economic Co-operation and Development (OECD) estimates that U.S. farm receipts are 30% higher than they would be at world prices, and receipts in the European Union are 60% higher than they would be

at world prices.³ Agricultural support from 1998 to 2000 translated into \$16,028 per farmer per year in Europe and \$20,803 per farmer per year in the United States.⁴ Actual distribution of support, however, is much more skewed—with large producers receiving the lion's share of support and poor and family farms receiving very little.⁵

The concentrated benefits and diffuse costs of farm programs contribute to a political dynamic in which policy reforms aimed at introducing more market competition run into strong barriers from agricultural lobbies and sympathetic lawmakers. Indeed, it is domestic political realities that sketch the often narrow boundaries of what countries can agree to in international trade negotiations. Political scientists refer to this phenomenon as a two-level game, in which negotiations on the domestic policy front shape the possible outcomes for international negotiations.⁶

Developed countries' resistance to reforming agricultural trade policies and farm programs has been particularly harmful for the economies of developing countries. Agriculture accounts for a much larger share of economic output in developing countries than in developed countries and is a key to overall economic growth. In 1997, agriculture composed only 3% of gross domestic product (GDP) for developed countries but 26% of GDP for developing countries and more than 50% of GDP for the poorest of the poor countries.⁷

Agriculture accounts for a similarly large share of developing countries' exports and foreign exchange revenues. Agricultural exports average around 27% of total merchandise exports for developing countries. For countries like Burundi, Sudan, Ethiopia, Uganda, and Paraguay, agriculture constitutes more than 80% of exports.⁸ By comparison, the share of export income derived from agriculture in the United States and the European Union was around 4% in 1999.

Agriculture is the major source of livelihood in most developing countries as well. It provides a living for more than 50% of developing countries' population, on average. In developed countries, only around 9% of the population lives off agriculture.⁹ Because there are often few alternative sources of rural employment in developing countries, agriculture is crucial to reducing poverty and limiting urban migration.

Many developing countries have been driven to liberalize their markets unilaterally under structural adjustment programs from multilateral lending institutions. As these countries opened their domestic markets to competition, their farmers faced a flood of cheap, subsidized imports from developed countries. Meanwhile, important exports for these developing countries, such as fruits and vegetables, cocoa, and sugar, still face the highest tariffs in OECD nations.¹⁰

Reducing Protection: GATT and the WTO

The first multilateral agreement to seriously address protection in agricultural trade came in 1994, at the end of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which had begun in 1986. Countries signed the Uruguay Round Agreement on Agriculture, marking the first legally binding disciplines on agricultural trade protection since the GATT process began in 1947. The URAA's main achievements receive more attention in later sections of this paper but are summarized here:

- “tariffication,” by which nontariff agricultural import barriers were converted to tariffs, and countries committed to tariff reductions;
- definition and discipline of export subsidies;
- categorization and discipline of domestic support; and
- specification of policies for “special and differential treatment” to address the particular needs of developing countries.

The common commitments agreed to in the URAA were made specific through “schedules” submitted by each country to the WTO, and most commitments are monitored through yearly notifications.

The URAA called for a six-year implementation period (ten years for developing countries) with a new round of talks on further liberalization beginning in 2000. Those negotiations began with a series of quarterly special sessions of the WTO Committee on Agriculture. From March 2000 to March 2001, 126 countries submitted 45 negotiating proposals, and the WTO conducted a series of technical analyses.¹¹ In March 2001, WTO members decided to continue with another year of technical discussions following an agreed-on agenda. At least some countries (the United States among them) hoped these discussions would turn toward actual reform mechanisms. By the time of the ministerial meetings in Doha, however, the talks had produced little further progress on specific reforms, and the ministerial agreement largely formalized the negotiating topics that were already on the table.

Negotiations are taking place in an atmosphere much altered from that which produced the URAA in 1994. When the GATT was established, the original 23 parties to the agreement could be characterized mainly as a rich men’s club of developed northern countries.¹² Even through the Uruguay Round, it was broadly acknowledged that most of the power lay with four players known as the Quad: the United States, Canada, Europe, and Japan.

Following the Uruguay Round, the GATT became the World Trade Organization. At Doha, there were 142 members, more than 80% of which were developing countries. With a one-country, one-vote system, the rich men's club now looks more like the United Nations, and the greater participation of developing countries can already be seen. For example, 23% of all negotiating proposals on agriculture came exclusively and independently from African countries. To maintain the WTO's legitimacy, and to make progress on multilateral trade generally, the international trading system has to offer developing countries benefits from participating.¹³ As former U.S. agricultural trade negotiator Greg Frazier has said, "Done are the days when the Quad could preordain the outcome of future agricultural trade negotiations."¹⁴

Major Negotiating Parties

Three broad negotiating parties or coalitions dominate the agriculture talks. The first is the United States. As the largest agricultural exporting country in the world (with exports totaling \$50 billion to \$60 billion annually), the United States has come out strongly for market liberalization. Although U.S. negotiators focus on reducing tariffs abroad, the realities of domestic farm politics make it very difficult to reform U.S. agricultural programs at home.

In its zeal for increased market access worldwide, the United States is often joined by the Cairns Group of net agricultural exporters. The Cairns Group is a mix of 3 developed and 15 developing countries traditionally led by Australia and also including Canada (a member of the Quad). The coalescing of the Cairns Group pressured countries toward agricultural liberalization in the Uruguay Round, and it is playing a similar role now. The positions of the United States and the Cairns Group are similar enough on many issues to regard them as a loose coalition, but they operate independently and don't agree on all issues. For example, the Cairns Group has taken a more pro-developing country stance on some issues.

The second coalition is headed by the European Union, which is decidedly tepid on further liberalization. The European Union has emerged as the strongest supporter of what has come to be called the multifunctionality of agriculture, which emphasizes the role of agricultural support policies in preserving rural communities, supporting sustainable agriculture, and promoting a host of other social goals. The European Union is joined by Japan, Switzerland, Norway, and Korea in a group often referred to as the friends of multifunctionality.

The third coalition is that of developing countries, although they really can't be regarded as a coalition. Developing countries have historically failed to organize and coordinate effectively in agricultural trade talks, partly because there are so many competing interests. Some

countries that are net exporters of agricultural products have joined the Cairns Group to push for greater liberalization. Recognizing that liberalization will likely raise world food price, net importers, however, are much less enthusiastic about it. Countries that enjoy preferential trade agreements under the current system fear that liberalization will dismantle such arrangements. Because developing countries are increasingly exporting to each other, they can't necessarily even coalesce around strategies to maintain their own tariffs.¹⁵

Despite their differences, particular developing countries and groups of developing countries are cooperating and leading the way in the talks. India has been very influential, as has the Southeast Asian coalition, ASEAN, followed by a mix of Latin American, African, and South Asian developing countries, collectively known as the Like-Minded Group.¹⁶ These countries have found common cause in shared concerns about food security and the importance of agriculture in overall economic development. It is very significant that 133 developing countries (misleadingly named the Group of 77) overcame their differences and released a lengthy set of joint demands just prior to the Doha Ministerial, calling for, among other things, fundamental reforms to agricultural subsidy programs in developed countries.¹⁷ Although many developing countries still lack adequate capacity in Geneva to effectively represent themselves, their ability to speak in relative unison is an important change in the multilateral trading system.

2. Trade Protection, Economic Growth, and Food Security

This section provides background for the important issues of economic growth and food security raised by trade and agriculture talks. It begins with a brief description of the economics of trade and describes the results of some trade liberalization models. It goes on to describe the “three pillars” of trade policies covered by the URAA: market access, export support, and domestic support. The section closes with a discussion of the relationship between agricultural trade and food security. Readers familiar with these topics can skip Section 2 without sacrificing comprehension of the following sections.

The Economics of Trade

The economics of trade begins with the proposition that different countries are better at producing different things. Endowments of natural resources, geography, climate, population, human capital, technology, and a host of other assets give countries comparative advantage in producing certain goods. Switzerland, for example, produces watches well and coconuts poorly. To satisfy the wants of its citizens, a nontrading country has to produce things it is excellent at making as well as things that it is terrible at making. In doing so, it wastes some of its limited resources producing goods for which it is ill-suited and takes resources away from producing goods in which it has comparative advantage.

In the traditional economic view, trade leads to a better allocation of domestic resources. As countries buy from abroad what they are bad at making at home, they free up resources for their more efficient industries. Even if a country doesn't have an absolute advantage over other countries in producing any particular product, it will still benefit from producing those products that make best use of its endowments of land, labor, and capital. Proceeds from exporting greater amounts of their own most efficiently made products more than make up for expenditures on imports made more efficiently abroad. The country as a whole, as well as its trading partners, is better off (although not every person in each country is better off—think of Swiss coconut farmers).

This undistorted world trading economy is the ideal from which the economic analysis of trade barriers proceeds. Barriers, whether tariffs, quotas, or subsidies, alter prices in ways that give producers incentives to produce more or less than they would in a world where every country does what it does best and consumers to buy more or less than they would otherwise prefer.

Take a tariff on wheat, for example, and for simplicity, think in terms of a country too small to affect world prices. Imagine that wheat on a competitive world market normally goes for \$10 a bushel. Each imported bushel is suddenly assessed a 50% ad valorem tariff, or \$5. Now domestic producers of wheat who would otherwise get only \$10 per bushel can be competitive by charging \$15. At that new higher price, farmers want to produce more wheat, so they switch from corn and other crops, plant more acres, or use more fertilizer. The overall supply of domestically produced wheat increases. At the same time, some consumers balk at paying \$5 more for wheat and stop buying it. Eventually, prices settle out at a new equilibrium above \$10—say \$13. Compared with the ideal, the country is producing too much wheat and consuming too little, all because domestic prices are different from competitive world prices. Worse, the country is earning less (and therefore consuming less) than it would if it shifted some of its resources from wheat production back into more efficient industries, sold these other products, and bought wheat on world markets for \$10 a bushel.

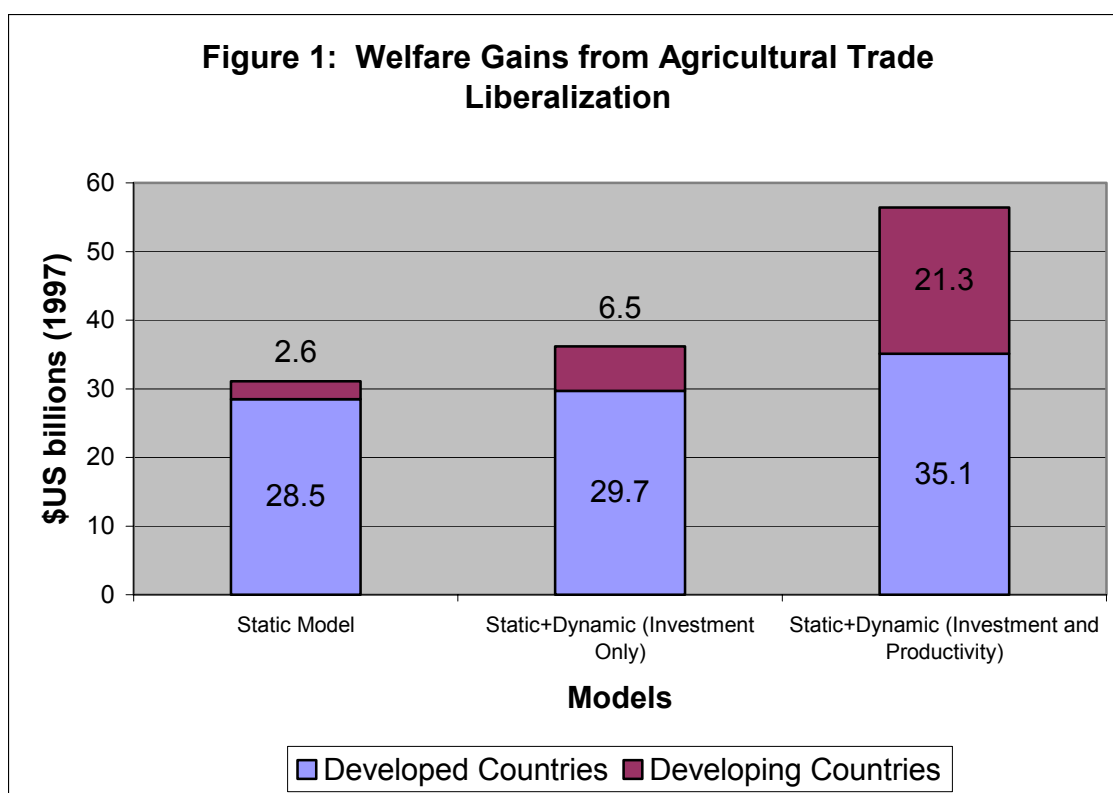
To make matters slightly more complicated, imagine that the country with the tariff is actually a large one—a big enough producer and consumer to affect world prices through its fluctuations in exports and imports—such as the United States. The increase in wheat production and the drop in wheat consumption domestically mean that the country exports more wheat or imports less. Either way, supplies of wheat on the world market rise and world prices fall. Without any changes to their own policies, exporters of wheat in other countries now find that they get less for their product. For large trading countries, the effects of protection are transmitted worldwide.

Quantitative economic analyses of trade distortions use computable general equilibrium (CGE) models to assess how much trade distortions such as these cost the world economy. They can calculate what kinds of benefits would arise from liberalization, and who gains and loses from the change. A recent analysis by the U.S. Department of Agriculture (USDA) provides a sense of the magnitude and distribution of economic gains from liberalization.¹⁸

USDA calculates that protectionist policies in developed countries are responsible for around 80% of global agricultural price distortions, with the European Union contributing 38% and the United States around 16%. These policies raise commodity prices domestically but depress them on world markets by about 12% on average.

USDA's simplest model is "static," reflecting a snapshot of the global economy at a particular point in time. It reports the net change in income for consumers and producers as prices adjust from the elimination of tariffs and subsidies (without factoring in dynamic changes

to the industry from increases in investment or from productivity gains). In this simple, static model, complete removal of agricultural trade protection by all countries and the subsequent rise in world prices increases net global GDP by \$31 billion per year, or around 11% of the value of world agricultural exports (see Figure 1). The net gains come from increases in income as countries reallocate their resources to the production of commodities in which they have a comparative advantage. Although the overall result is higher global GDP, some sectors gain from liberalization and some lose. How these gains and losses are distributed reveals much about the economics of trade protection.



Source: USDA, "The Road Ahead."

In the static model, \$28.5 billion, or 92% of the total, goes to developed countries. Developed countries' economies are large, so absolute gains from liberalization are inevitably going to be large as well. More importantly, developed countries have some of the largest domestic price distortions, and their removal lowers prices for their consumers. A large part of the \$28.5 billion welfare gain comes from the ability of rich countries' consumers to buy

commodities more cheaply. Of course, some of that gain comes at the expense of farmers who would no longer benefit from government subsidies and tariff-protected prices.

After gains for developed countries are accounted for, developing countries are left with gains of \$2.6 billion, a quite modest 2% of annual developing country agricultural exports. Here the gains fall more to producers than to consumers. Producers benefit because the prices they can get in the world market are now higher, and they can shift the mix of what they produce more to their comparative advantage. USDA estimates that if developed countries eliminated all of their agricultural support policies, the value of developing countries' agricultural exports would increase by around 24%.¹⁹ The outcomes for developing countries' consumers are mixed. On the one hand, they benefit from lower domestic prices as their own country's tariffs are reduced. On the other hand, they may pay more for imported food not previously facing tariff barriers.

More sophisticated models, which incorporate shifts in investment and productivity resulting from trade liberalization over a 15-year time horizon, increase the predicted absolute and relative gains for developing countries considerably. As the export market improves, more attractive returns from agriculture attract more investment. Accounting for investment growth raises the estimate of developing countries' welfare gains in the USDA model to \$6.5 billion annually. With increased investment—particularly in training and technology—farmers can expect to increase their productivity. Adding productivity to the model increases developing countries' benefits to \$21.3 billion, or about 18% of their annual agricultural exports.

Whereas gains in the simple, static model are much in favor of the developed countries, the incorporation of investment and productivity gains into the model does much to balance the relative gains. Adding investment and productivity increases expected gains by a factor of 8 for developing countries but only about 1.2 for developed countries because it is in the former that so much opportunity for improvement exists.

There is nothing sacred about the numbers from the USDA modeling effort. Other models show even greater absolute gains from liberalization, although they all demonstrate a roughly similar distribution of benefits (to developed country consumers and developing country producers) and costs (to developed country producers and, in some cases, developing country consumers). An analysis by the Australian Bureau of Agricultural and Resource Economics estimates that a 50% cut in agricultural support around the world would lead to a \$53 billion yearly increase in global GDP by 2010 with a \$14 billion increase annually in GDP for developing countries.²⁰ This analysis does not account for dynamic gains from greater competition or productivity. A World Bank study concludes that full liberalization of all

merchandise trade (including agriculture) by 2005 would generate \$254 billion in global gains, without factoring in dynamic gains from investment.²¹ Fully \$165 billion of the total would come from agricultural liberalization, and \$42.6 billion of that would go to developing countries. Three-quarters of the gains for developing countries would come from reducing their own tariffs, thereby lowering the price consumers have to pay for imports.

The Three Pillars of Trade Protection and a Classification of Countries

To begin to garner the kinds of gains identified in economic models of trade liberalization, the URAA focuses on reducing the three most common categories of agricultural trade protection policies: market access, export support, and domestic support.

The most well known *market access* policy is the tariff, which adds a price premium to imported goods to protect domestic producers. As in the wheat example above, the direct effect of tariffs is a rise in the prices paid by consumers for the imported good, which allows domestic producers to raise their prices as well. By raising prices, tariffs encourage domestic production and reduce domestic consumption. For large countries, the indirect effect is to depress world prices, as surplus product lands in world markets. Tariffs are considered one of the most distorting trade policies because they affect both producers and consumers directly and have indirect effects on world prices. They are, however, a highly appealing approach to protection because they raise government revenue while also protecting domestic farmers. As a result, they are the form of protection most utilized by developing countries, and high tariffs still characterize trade around the world.²² The USDA estimates that tariffs account for 52% of world agricultural price distortions.²³

The most well known *export support* policy is the export subsidy, which pays farmers a premium above world prices on their exports. Export subsidies encourage farmers to overproduce for foreign markets, and they depress world prices. By encouraging farmers to export products rather than supply domestic markets, export subsidies also indirectly keep domestic prices high (like a tariff), thereby reducing domestic consumption. Supporters of free trade particularly revile export subsidies because they are countercyclical. That is, export subsidies are higher when world prices are low. When farmers should be responding to low prices by cutting production, subsidies kick in and farmers continue to produce at normal levels, sending world prices even lower. USDA estimates that export subsidies make up 13% of world price distortions; most coming from the European Union, which accounts for 90% of world export subsidies.²⁴

Domestic support policies come in myriad types, all of which provide payments to domestic farmers directly. Some are trade distorting, and some not. The archetype of trade-distorting domestic support is the price support, which guarantees farmers a fixed price regardless of actual market prices. When market prices are low, price supports encourage farmers to overproduce, which for large economies means greater exports and lower world prices. Like export subsidies, they are often countercyclical. The USDA estimates that price supports and other domestic subsidies account for 31% of world price distortions.²⁵

Market access policies, export supports, and domestic support are treated separately in the URAA, but they are in fact related and dependent on each other. For example, when domestic price supports cause farmers to produce more than markets require, export subsidies are used to compensate farmers for disposing of their surpluses on world markets. In fact, export subsidies grew significantly in the mid 1980s when levels of domestic support substantially increased.²⁶

The URAA specifies different types of legal rights and obligations concerning market access, export subsidies, and domestic support according to different categories of countries. The principal classifications are *developed* countries and *developing* countries, with the latter receiving “special and differential treatment.” There is no explicit definition of developed or developing countries, and a country’s categorization can differ from one WTO legal text to another. The system works by self-identification and subsequent negotiation over the terms of accession.

Within the category of developing countries are two additional categories, both of which are identified in the preamble to the URAA as possibly being negatively affected by agricultural liberalization.²⁷ First are *least developed countries* (LDCs), which are defined by the U.N. General Assembly based on country characteristics, such as GDP per capita, the share of manufacturing in GDP, adult literacy, and the like. There are 48 LDCs, 29 of which are members of WTO.

The second subcategory of developing countries mentioned in the URAA comprises *net food importing countries* (NFICs), which are defined by the WTO Committee on Agriculture based on trade profile data and negotiation among members. There are 19 NFICs. According to the World Bank’s classification, 4 are upper-middle-income countries, 9 are lower-middle-income countries, and 6 are low-income countries. Some countries are not just net food importers because of underdeveloped agriculture; they may well be recognizing their comparative advantage elsewhere, as in tourism (Barbados) or oil exports (Venezuela).

Agricultural Trade and Food Security in Developing Countries

Global agricultural trade bears an important relationship to people's ability to feed themselves around the world. Developing countries, in particular, have worked hard to bring food security issues to center stage in agricultural trade talks.

The Food and Agriculture Organization (FAO) estimates that in the late 1990s, there were 820 million undernourished people in the world, 790 million of them in developing countries. In the world's least developed countries—most of them rural, agricultural economies—38% of the population is undernourished.²⁸ At the World Food Summit in 1996, developed and developing countries alike committed to halving world hunger by 2015.²⁹

The FAO declares that “food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.”³⁰ Amartya Sen elucidates the concept of “access” to include one's own *production* of food, *exchange* for food, and the *transfer* of food from family, community, civil society, or state. A failure of one of these modes of access threatens food security, and a failure in all three leads to “complete deprivation of food.”³¹ International trade relates directly to the exchange aspect of Sen's typology, although there are indirect impacts on production and transfer as well.

Even in the slimmed-down version of the world embodied in economic CGE models, agricultural trade liberalization has ambiguous effects on food security. On the positive side, liberalization increases world prices for commodities and opens up new export opportunities for developing country farmers. Agricultural production expands accordingly, attracting investment that drives productivity growth, leading to overall economic growth. Rising incomes (if appropriately distributed) give people greater ability to purchase food, including imports purchased with increased supplies of foreign exchange. As developing countries reduce their tariffs at home, domestic prices for food should fall, allowing consumers to buy more of it.

But according to the CGE models, liberalization may have negative impacts on food security as well. Foremost among these are rising world food prices. Countries that rely on imports to feed their population will see an increased share of their foreign exchange going to buy food. And because low prices and farm support policies in the United States and elsewhere generate surplus production, reductions in price supports and other forms of trade liberalization may dry up food aid supplies.

Whether the competing effects of liberalization—simply in the narrow economic sense of rising world prices—will lead to a net gain or a net loss in food security for a country depends to a large extent on its export and import profile. Countries producing much for export and importing little will probably improve their food security situation as a result of liberalization. Countries that import a lot but grow and export little (such as NFICs) may face increased food insecurity. The CGE models predict that more countries will be better off than worse off, however. USDA, for example, estimates that the food aid needs of low-income countries will decline by 6% as gains from domestic food production overtake losses on the consumption side.³²

The issue of food security is, however, much more complex than the CGE models can predict based on import and export profiles of a country. Researchers at the International Food Policy Research Institute recently analyzed the food security profiles of parties to WTO using five indicators to measure food security.³³ Only one of the indicators—the ratio of total exports to food imports—related directly to a country's import and export profile. The remaining four indicators measured domestic food production and utilization: food production per capita, calories per capita, protein per capita, and the percentage share of the nonagricultural population. Interestingly, an analysis of countries based on these indicators showed that the category of NFICs—those whose trade profile suggests they are most vulnerable—was actually a poor predictor of food insecurity. A much better predictor of food insecurity was the LDC classification—countries that are the poorest of the poor.

The International Food Policy Research Institute study concludes that food-insecure countries are vulnerable for different reasons. Some countries are vulnerable because of large urban populations and little domestic production, while others are vulnerable because of large rural subsistence populations. Different types of vulnerabilities mean that liberalization would affect food security in ways not easily predicted by CGE model results.

Yet even that analysis of countries' food insecurity, with its layers of complexity, is too coarse to capture many of the food security concerns that leave 820 million people undernourished. Since the World Food Conference of 1974, attention has increasingly focused on regional, household, and individual food insecurity.³⁴ The shift in focus recognizes that food insecurity can occur in countries that are not, as a whole, food insecure.

Whether their country is deemed food insecure or not, many of the world's poor are engaged in subsistence agriculture and are largely unconnected to world markets. They practice an unorganized, low-productivity, family-based activity with few inputs other than labor. They

have limited ability to shift crops, cropping patterns, or the location of crops in response to market signals. They have little access to credit, financial markets to hedge risk, or even the transportation infrastructure necessary for getting their products beyond local markets. Rural subsistence farmers will be largely untouched by the investment and productivity gains that drive the most dramatic economic benefits from liberalized agricultural trade. Instead, trade liberalization will likely favor producers with access to infrastructure and larger markets who can take advantage of new opportunities. Although agricultural trade liberalization may benefit a country overall, the distribution of benefits may exacerbate food insecurity for some and make others food insecure when they were not before.

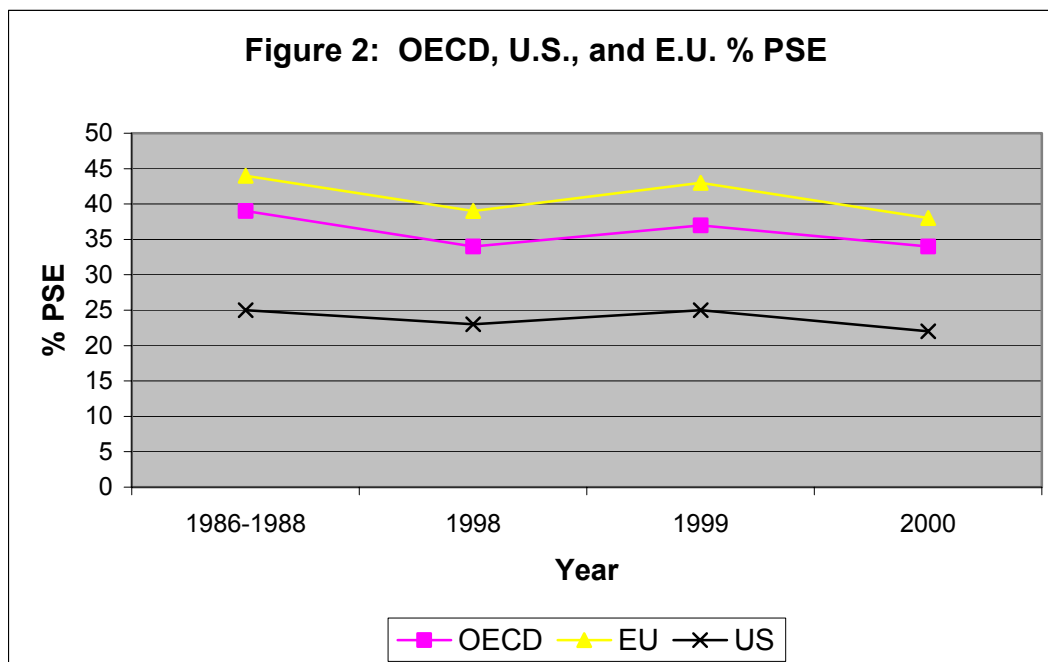
Food aid plays a role in protecting the poor from the adverse effects of liberalization and dealing with subnational food insecurity, but long-term progress on food security takes effort on the domestic front. However, domestic policy choices on issues such as food stock holding, rural development, and appropriate levels of food self-sufficiency are influenced and constrained by international obligations set out in trade agreements. To deal with food insecurity, developing countries are demanding additional flexibility under WTO rules. The crucial question in the current talks is the extent to which these domestic policies are allowed to be trade distorting under WTO obligations and therefore require special exemptions.

Added to developing countries' demands for domestic flexibility related to food security are issues about how past agreements have been implemented. For countries that may be adversely affected by liberalization, the Uruguay Round produced a separate "decision" on food security, called the Marrakesh Ministerial Decision on Measures Concerning the Possible Negative Effects of the Reform Program on Least-Developed and Net-Food Importing Countries. Principally, the agreement sought to head off food insecurity caused by trade liberalization by ensuring a continued flow of financial aid, food aid, and technical assistance. Many developing countries have charged that the Marrakesh decision has not been sufficiently implemented and are calling for new mechanisms for doing so in the current round of talks.

3. Implementation of the Uruguay Round Agreement on Agriculture

As countries tackle new negotiations on agricultural trade, the talks are framed in terms of what was gained, or not, from the URAA. Many analysts hoped that it would unleash the comparative advantage of developing countries. But although the agreement was successful in bringing agriculture under the same kind of disciplines that apply to other forms of trade, it was not very successful in actually liberalizing members' trade policies. Overall levels of protection, as a percentage of agricultural output, have remained relatively constant, even while countries have met their new obligations. This lack of liberalization joins a host of other economic issues in explaining why most studies of post-Uruguay Round agricultural trade have shown little change in the volume of exports, little diversification of export products, and little change in the destination of exports.³⁵

The most widely used aggregate measure of agricultural protection is the producer support estimate (PSE) calculated by the OECD. The PSE aggregates tariffs, export subsidies, domestic support, and other means of protection into a single value. As shown in Figure 2, the levels of PSE as a percentage of total agricultural output in the United States, the European Union, and for the OECD as a whole have not decreased appreciably in the 15 years since the beginning of the Uruguay Round.³⁶



Source: OECD, "Agricultural Policies in OECD Countries," 2001.

Levels of PSE support have not diminished largely because the reduction commitments agreed to in the URAA were set so high as not to constrain members' behavior, particularly those members powerful enough to largely dictate the terms of the agreement. Through elevated baselines, various accounting rules, outright chicanery, and a variety of other methods detailed below, the United States and the European Union, in particular, have been able to meet their reduction commitments on market access, export support, and domestic support without actually reforming their agricultural policies.

Market Access

One of the main accomplishments of the URAA was to convert a wide variety of market access barriers—such as quotas, variable import levies, voluntary export restraints, and others—into tariffs, a process known as “tariffication.” Tariffs are more transparent than other forms of protection and, if assessed in ad valorem terms, do a better job of transmitting signals from world price fluctuations to farmers. The new tariffs were to be set at levels no more protective than the trade barriers they replaced. The URAA “bound” the new tariffs as maximums and set reduction targets for most countries. (Bound rates are legally binding ceilings, and, in practice, are often higher than the applied rates actually assessed on imports.)

Complete tariffication, however, was not realized because many of the newly calculated tariffs would effectively prevent all imports of particular products. A compromise emerged in the form of tariff-rate quotas (TRQs). TRQs established fixed quantities (quotas) of imports to be charged lower tariff rates. The low rates were set to maintain pretariffication levels of trade or to ensure at least a minimum level of access for imports. When export volumes exceed the TRQ threshold, imports are charged a higher tariff rate. Not surprisingly, TRQs tended to be established for the most domestically sensitive products, because it was these for which very high tariffs replaced formidable nontrade barriers.

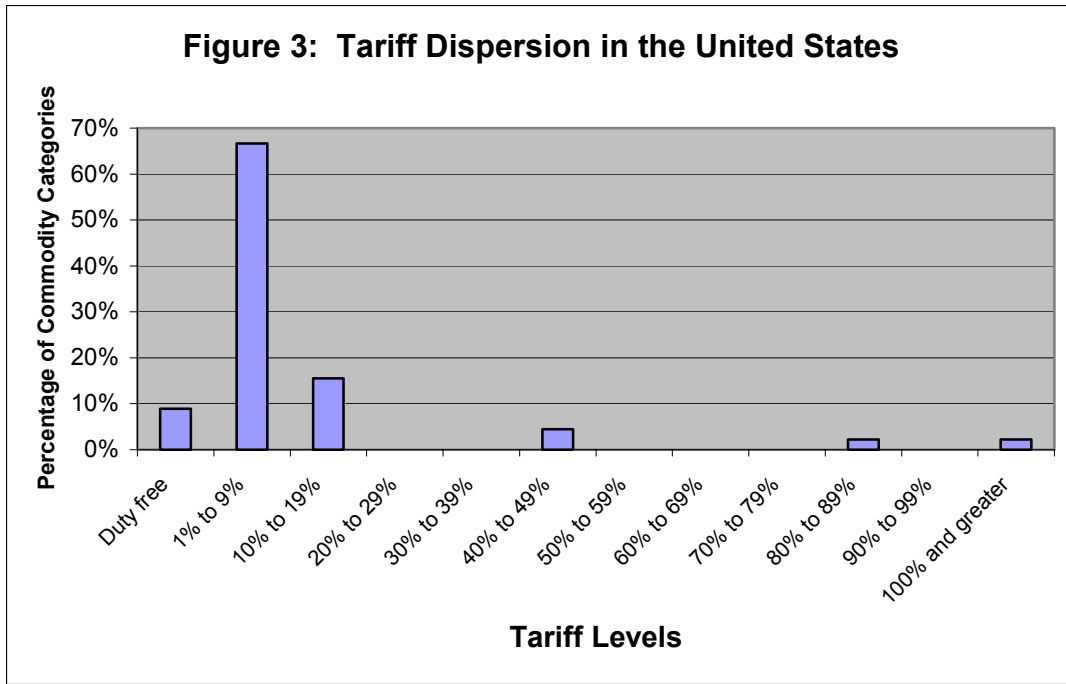
Currently, 37 WTO members have a combined total of 1,371 tariff quotas in place.³⁷ Although the United States and the European Union account for relatively few TRQs, they are among the top 4 members with TRQs in which the quotas are actually routinely filled, and therefore constrain additional imports.³⁸ In the European Union and the United States, average bound out-of-quota tariffs are 463% and 190% higher, respectively, than average in-quota rates.³⁹ Both the United States and the European Union use their TRQs as a way of establishing preferential trade arrangements with particular countries.⁴⁰

To reduce market access barriers, the URAA set tariff reduction targets for member countries. Developed countries were to cut average unweighted tariff levels by 36% over six years, and developing countries were to cut average unweighted tariff levels by 24% over ten years.⁴¹ The minimum tariff cut for any single product was to be 15% for developed countries and 10% for developing countries. LDCs were required to bind their tariffs but were not required to reduce them. For TRQs, over-quota tariff rates were to be reduced by 15% for developed countries and 10% for developing countries. There were no commitments to lower in-quota rates.⁴²

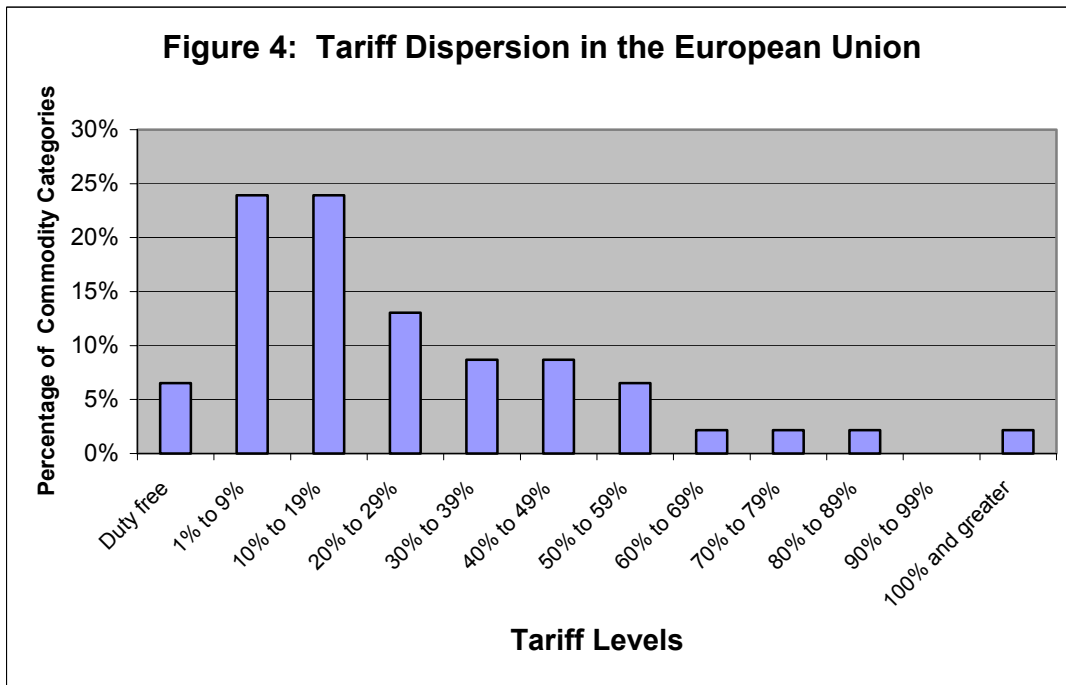
Tracking average percentage reductions in tariffs is a difficult task because many tariffs are not expressed as a simple percentage duty added to a world price (as ad valorem tariffs are). To accommodate the complexity, countries agreed to submit schedules to the WTO specifying what their final bound tariffs would be on particular products at the end of the implementation period.⁴³ It is in these schedules that members worked out the specifics of how they would meet their overall reduction goals as well as the minimum cuts on particular products. The United States and the European Union have complied with their schedules.⁴⁴

Recent analytical work converting complex tariffs into ad valorem equivalents provides a snapshot of current average bound tariff rates around the world.⁴⁵ These illustrate the relative magnitude of tariffs among countries at the end of the implementation period. At 12%, the U.S. average bound tariff rate is among the lowest in the world. The average bound tariff for the European Union is 30%. The highest average bound tariffs are actually in the developing world. As regions, South Asia, the Caribbean Islands, sub-Saharan Africa, and North Africa all have average tariffs above the global average of 62%.

What average tariff rates obscure, however, is the variation of tariff levels across products—a phenomenon known as tariff dispersion. Figures 3 and 4 illustrate tariff dispersion for the United States and the European Union using average tariffs for 46 commodity categories.⁴⁶ The large majority of bound tariffs are relatively low. However, both the United States and the European Union retain very high bound tariffs, known as tariff peaks, or “megatariffs,” on particular commodities and commodity groups. The highest tariff peak on individual commodities for the United States is 350%, and for the European Union it is more than 500%.⁴⁷ Tariff peaks in the United States and the European Union generally apply to temperate zone imports that compete most with domestic producers. The European Union applies well-known tariff peaks to grains, sugar, and dairy products. The United States applies them to sugar, peanuts, and dairy products.⁴⁸



Source: Gibson et al., “Profiles of Tariffs in Global Markets.”



Source: Gibson et al., “Profiles of Tariffs in Global Markets.”

Tariff dispersion tends to penalize processed foods over raw foods, a phenomenon known as tariff escalation. This discourages developing countries from adding value to agricultural exports, with the attendant technological and economic development potential. For example, in the European Union in 1997, tariffs on primary food products averaged 15.7%, tariffs on semiprocessed products averaged 17.6%, and tariffs on fully processed products averaged 24%.⁴⁹

A variety of factors have allowed developed countries to maintain the dispersion of tariffs responsible for tariff peaks and tariff escalation while also meeting their WTO obligations. First is the tariffication process itself, which gave countries very high baseline tariff rates on which to make reductions. The base years on which new tariffs were calculated were abnormally high years of protection to begin with. But to make things worse, countries exaggerated the distortionary effects of nontariff barriers, thereby allowing them to set very high equivalent tariff levels. Through what has come to be called “dirty tariffication,” some newly established tariffs ended up being much more protective than the nontariff barriers they replaced.⁵⁰

Second, because tariff reductions are calculated as unweighted averages, members have been able to shield high rates on some products by lowering rates on less sensitive products. Big percentage cuts in low-tariff, low-volume goods allowed small percentage cuts in high-tariff, high-volume goods. An analysis by USDA showed that over the URAA’s implementation period, already-high tariffs generally received much smaller percentage reductions than already-low tariffs.⁵¹

Third, reduction commitments applied to “bound” rates, the legally binding ceilings agreed to in the URAA, rather than “applied” rates. Applied rates are what countries actually charge on imports. Many countries’ applied rates are much lower than their bound rates, making reduction commitments on the bound rates largely irrelevant. The ample differential also allows countries to adjust their rates according to market conditions while staying within commitments, just the kind of variability the URAA was supposed to eliminate.⁵²

Finally, market access in developed countries is defended by a safety valve incorporated into the URAA. The Special Agricultural Safeguard allows countries to protect designated products from floods of imported goods by raising tariff levels on an emergency basis. The safeguard is triggered when imports fall below a certain price or rise above a particular quantity. Of the 38 WTO members that have reserved the right to use the safeguard, the United States and the European Union are the most heavy users. During the implementation period, the United States accounted for 50% of all price-based safeguard actions, and the European Union accounted for 57% of all value-based actions.⁵³ In absolute terms, however, WTO members

(including the United States and the European Union) have been far more restrained in using the Special Agricultural Safeguard than many analysts had predicted at the time of the Uruguay Round.

TRQs are subject to the same problems of tariff peaks and tariff escalation as standard tariffs, and they have generated some of their own controversies as well. The primary issue raised by members is quota “underfill.” From 1995 to 1998, only about half of the TRQ quantitative limits were nearly or completely filled; around a quarter were less than 20% filled.⁵⁴ And fill rates have been declining over time.⁵⁵

Some take this underfill as a sign that in-quota rates are still too high. The average in-quota tariff rate worldwide is around 63%, more or less the same as average worldwide tariffs as a whole.⁵⁶ Recall that these in-quota rates were meant to ensure some minimum and continued access following tariffication; out-of-quota rates are much higher, averaging 128%.

Others attribute the problem of quota underfill to hidden protectionism in TRQ administration. Quota licenses allow holders to import at a lower rate and therefore earn economics rents.⁵⁷ In implementing TRQs, countries use a variety of quota allocation schemes that reduce transparency and add complexity to the process. Different allocation schemes distribute the rents differently, and the potential for favoritism, protectionism, and corruption is high.

Table 1 summarizes the URAA achievements regarding market access and the factors limiting its ability to force members to reform their policies. Overall, the URAA has been largely ineffective in reducing tariff barriers to trade. Tariff peaks, tariff escalation, and unfilled quotas remain because of dirty tariffication, reduction commitments that are too flexible to compel policy change, problems with TRQ administration, and other factors.

Table 1: Market Access: URAA Commitments and Factors Limiting Their Effectiveness

Main URAA commitments	<ul style="list-style-type: none"> • Converted nontariff barriers into tariffs (“tariffication”). • Restricted tariffs from exceeding “bound” levels. • Established TRQs to ensure minimum and continued access for imports. • Required developed countries to reduce unweighted average bound tariffs by 36% over 6 years, with a minimum cut per product line of 15%; required that over-quota TRQ tariffs be reduced by 15% over same period. • Required developing countries to reduce unweighted average bound tariffs by 24% over 10 years, with a minimum cut per product line of 10%; required that over-quota TRQ tariffs be reduced by 10% over same period. • Required LDCs to bind tariffs but not to reduce them.
Factors limiting commitments’ effectiveness	<ul style="list-style-type: none"> • Historically high protection in tariffication base years led to high equivalent tariffs. • “Dirty tariffication” resulted in tariffs more protective than what they replaced. • Tariff reductions expressed as unweighted averages allowed members to retain high tariffs on some product lines. • Reduction commitments are for bound rather than applied rates, often resulting in no constraint on tariffs actually charged. • The Special Agricultural Safeguard allows countries to raise tariffs to protect sensitive products. • TRQs are “underfilled” because of high in-quota tariffs and problems with quota administration.

Export Support

Export support policies are routinely regarded as the most trade-distorting agricultural policy because they directly affect world commodity prices and operate countercyclically. The most obvious form of export support is the export subsidy, and agriculture is the only area of WTO rules where such subsidies are even allowed. Other policies or programs that put agricultural products into world markets at below-market rates, such as export credits and food aid, also fall under the heading of export support.

Although export subsidies come in many varieties, they typically consist of payments that make up the difference between world prices and some guaranteed price for domestic farmers. Such subsidies proliferated in the 1980s as countries sought to dispose of surpluses on world markets and undercut one another’s prices. For example, the United States and the European Union engaged in a subsidy war on wheat in the 1980s, each using increasing amounts from their treasuries to make their wheat cheaper on the world market.⁵⁸ The European Union largely won the battle, reducing U.S. market share and raising the ire of countries such as Argentina,

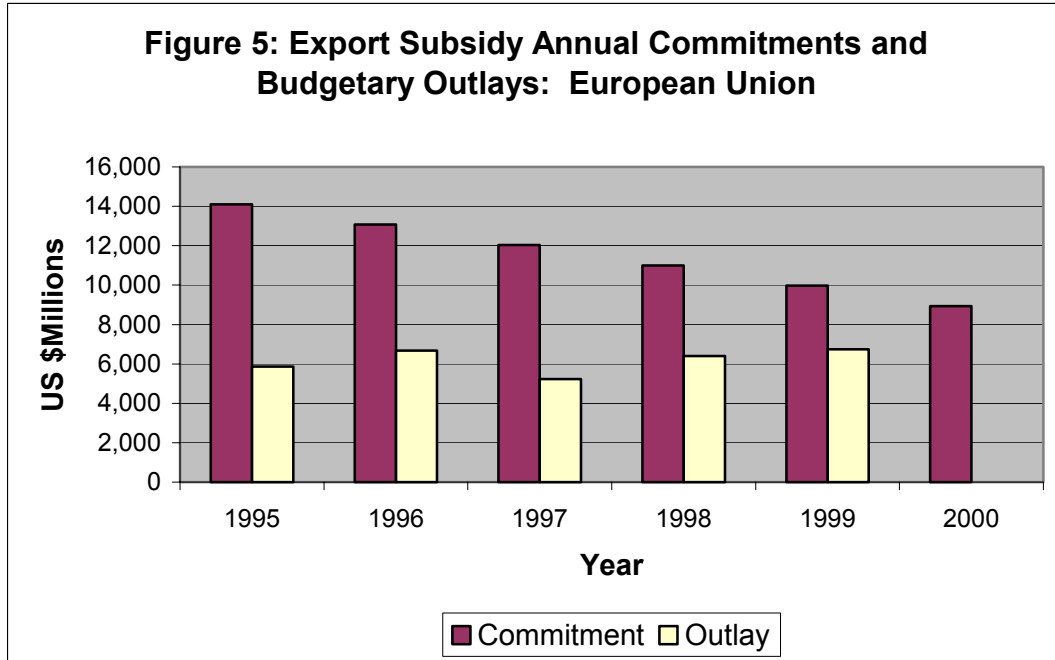
Australia, and Canada, which argued that export subsidies had pushed them completely out of some markets.

URAA disciplines on export subsidies are regarded as the most important accomplishment of the agriculture negotiations and were expected to have the most immediate impact on trade policy.⁵⁹ Only 25 members—most of them developed—are allowed to subsidize exports under the URAA.⁶⁰ The European Union is the largest user of export subsidies, accounting for more than 90% of global expenditures.⁶¹ The United States uses export subsidies as well, mainly for dairy products.⁶²

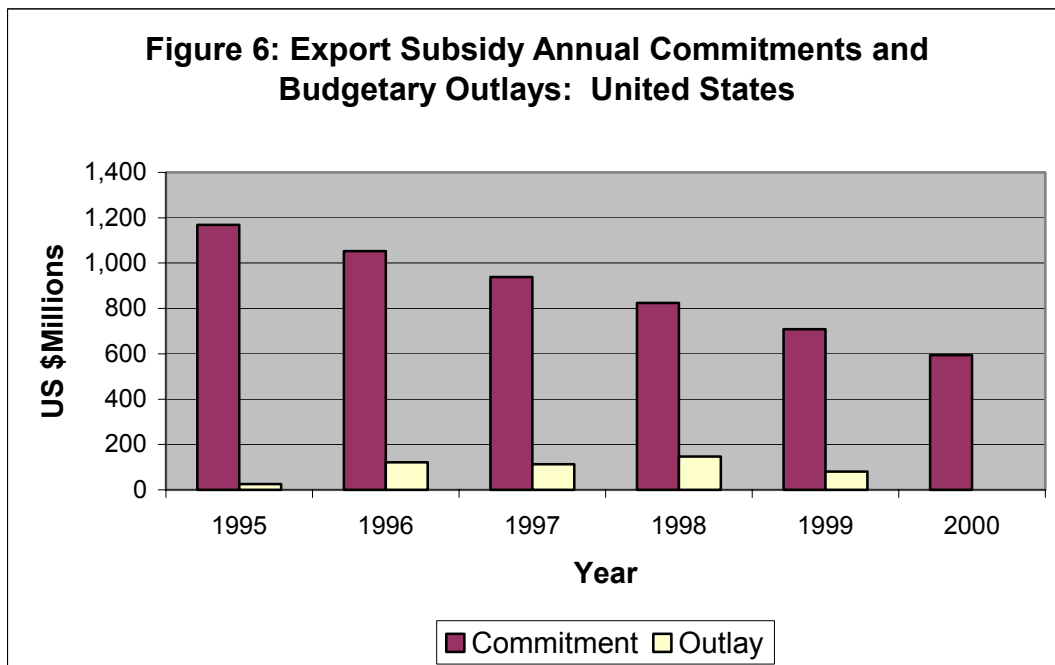
The URAA essentially grandfathered existing export subsidy programs, and those countries that did not already have them were not allowed to institute new ones. Most developing countries didn't have export subsidy programs when the URAA was negotiated, and they are therefore now restricted from putting them in place, with exemptions for subsidized marketing and transportation.⁶³ But even for these exemptions, the expense is often prohibitive. In its negotiating proposal, the Cairns Group—many of whose members are developing countries—writes, “Export subsidies force [developing country farmers] to compete with the richest treasuries, contributing to increased rural poverty, the swelling of overcrowded cities and the promotion of social unrest.”⁶⁴

Members allowed to continue subsidizing exports had to commit to reduction targets based on a 1986 to 1990 baseline. Developed countries were to cut outlays for export subsidies by 36% and quantities of subsidized exports by 21% over six years. Developing countries were to cut export subsidy outlays by 24% and quantities of subsidized exports by 14% over ten years. All cuts were to be made on a commodity-specific basis.⁶⁵ As with tariffs, LDCs were not required to reduce export subsidies or quantities of subsidized goods.

For the most part, the European Union and the United States have been meeting their export subsidy reduction commitments. In 1998, for example, the European Union spent more than \$6 billion on export subsidies, using up 58% of its budgetary outlay limit (see Figure 5) and 79% of its volume limit.⁶⁶ The United States spent much less, \$147 million, and used up 18% of its budgetary outlay commitment (see Figure 6) and 20% of its volume commitment. (Both countries were more within commitment levels for outlays than for volumes because world prices for important commodities were high during the implementation period and it cost less per ton of exports to make up shortfalls.⁶⁷)



Source: E.U. notifications to WTO; outlay data not available for 2000; conversion uses exchange rate of \$1.20 = 1 Euro.



Source: U.S. notifications to WTO; outlay data not available for 2000.

Even though the United States and the European Union are within their commitment levels, the OECD believes that the export subsidy commitments constrain members' behavior more than any other aspect of the URAA. Limits on export subsidies have been reached on some products, creating some incentive for reductions.⁶⁸ However, there has been little substantial policy reform on export subsidies in either the European Union or the United States since the beginning of the implementation period in 1995.⁶⁹ Neither party has needed to make policy changes because of a combination of factors incorporated into the URAA.

The 1980s were a peak time for export subsidization. Both the volume of and the outlays for export subsidies in the base period years of 1986 to 1990 were high, creating a historically high baseline for reductions.⁷⁰ The European Union benefited greatly from the agreement to use a 1986–1990 baseline because it received credit for substantial cuts in export subsidies following 1992 reforms of the Common Agricultural Policy (CAP)—before the URAA was finalized.⁷¹

Members were allowed to carry over unused export support opportunities from one year to the next as long as total volume and budget commitments over the whole implementation period were met. Both the United States and the European Union have utilized this provision to make up for exceeding their volume ceilings for particular products in certain years.⁷² Other tactics, such as the creative use of aggregated and disaggregated product definitions, have allowed countries to get around export subsidy limits.⁷³

Although export subsidies were the main concern of the URAA, a number of related issues have emerged on the export support agenda as well. Most important are export credit programs and food aid.

While the European Union has been the primary focus of efforts to lower export subsidies, the United States has come under scrutiny for its export credit programs. Administered by USDA, export credit programs guarantee U.S. commercial banks that they will be repaid (by the U.S. government if necessary) for credit they extend to approved foreign banks for the purpose of financing purchases of qualifying U.S. agricultural products. These programs generally allow foreign buyers of U.S. products to obtain credit from their domestic banks at lower interest rates (because of lower risk of nonpayment), with reduced fees, and with longer payment terms. Such credits are the main form of U.S. agricultural export assistance, and the United States accounts for 46% of the dollar amount of credit guarantees for all OECD countries.⁷⁴

In the Uruguay Round talks, many countries argued that export credit programs should be disciplined along with export subsidies. Like export subsidies, they argued, export credit

programs allow governments to affect the price and quantities of exports.⁷⁵ The United States was able to keep export credits out of the URAA and instead committed to negotiations at the OECD. In spring 2001, however, these negotiations broke down with no resolution in sight. The European Union, sensitive about U.S. challenges to its export subsidy programs, has raised the issue again in the current round of agricultural trade talks.

Another export support issue with particular relevance to the United States is food aid. The United States commonly uses surplus food as food aid. For example, more than half of U.S. wheat exports in 1999 and 2000 went to food aid.⁷⁶ Although food aid is an important tool for ensuring food security for the poorest of the developing countries, it is also criticized as a disguised export subsidy because it provides food on world markets for free. It is often difficult to tell whether shipments of food aid are motivated by real need or simply constitute the dumping of surplus commodities. The URAA does not distinguish between the two—it exempts all food aid from export subsidy disciplines, although it does require countries to comport with guidelines established by the United Nations Food and Agriculture Organization (FAO).

In a current negotiating proposal, the European Union—likely taking aim at the United States—notes the perverse tendency of food aid to increase when food prices are already low and supplies are high but to fall when prices are high, supplies low, and the need for food aid is greatest.⁷⁷ The traditional response from the United States is that the FAO, not the WTO, is the appropriate place to discuss food aid.

Table 2 summarizes URAA commitments regarding export support and the factors limiting their ability to force members to reform their policies. Although more influential on the behavior of some countries than disciplines on tariffs, disciplines on export subsidies have not spurred much policy reform in either the United States or the European Union. Outlays and volumes of export subsidies have remained roughly constant over the URAA implementation period, and other sources of export support—export credits, the abuse of food aid, and monopolistic practices by state trading enterprises (organizations that manage external trade in particular commodities)—remain undisciplined by the agreement.

Table 2: Export Support: URAA Commitments and Factors Limiting Their Effectiveness

Main URAA commitments	<ul style="list-style-type: none"> • Required developed countries to reduce outlays by 36% and quantities of subsidized exports by 21% over 6 years, on product-specific basis. • Required developing countries to reduce outlays by 24% and quantities of subsidized exports by 14% over 10 years, on product-specific basis. • Didn't require reductions by LDCs. • Restricted new export support programs for all members. • Exempted some special and differential treatment measures for developing countries.
Factors limiting commitments' effectiveness	<ul style="list-style-type: none"> • Historically high export subsidies in base years resulted in high baseline for reductions. • Credit was given for cuts made prior to URAA implementation period, decreasing pressure for further reforms. • Carryover provisions allowed countries to exceed yearly commitments by crediting unused export support obligations to subsequent years. • "Creative" aggregation and disaggregation of product lines allowed countries to exceed some reduction commitments. • Absence of disciplines on export credits, food aid, and state trading enterprises, are controversial omissions in disciplines on export support.

Domestic Support

Domestic support policies provide direct payments to farmers, whether their crops are exported or consumed domestically. They have become increasingly visible in the trade debate because certain kinds of domestic subsidies encourage overproduction and are often accompanied by export subsidies and tariffs that help keep domestic prices high.

Domestic support of any type is largely a developed country phenomenon. The European Union, Japan, and the United States account for 90% of what is reported to the WTO.⁷⁸ Developing countries have not traditionally provided domestic support, tending instead to tax farmers or use revenue-enhancing tariffs.⁷⁹

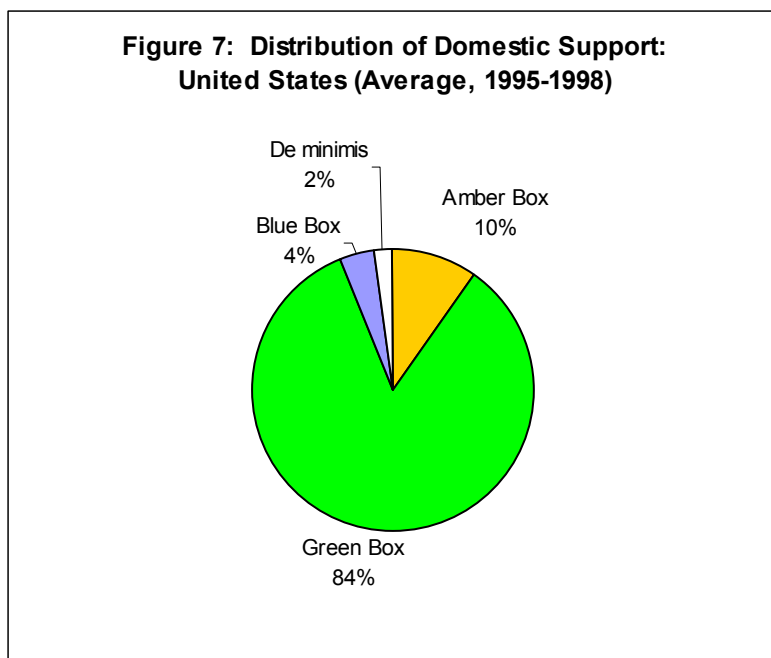
Not all domestic support is treated alike in trade talks because different kinds of policies have different degrees of distortionary effects. The most distortionary policies are those that directly influence commodity prices or quantities produced. Less distortionary are "decoupled" policies that provide funds or other support regardless of farmers' production decisions. One of the major aims of agricultural trade talks is to encourage countries to switch from highly distortionary policies to decoupled payments, which pay farmers directly to stay on the land, enhance environmental quality, and the like.

To classify and discipline domestic support policies, the URAA divided them into three “boxes.” *Amber box* programs are regarded as the most trade distorting and are the only form of domestic support subject to URAA reduction commitments. Amber box policies are those whose payments to farmers are directly linked to prices or quantities, such as market price supports, input subsidies, and direct per-unit payments.

Green box programs are regarded as minimally trade distorting and are not disciplined under the URAA. Green box policies involve two main categories. First are programs that provide decoupled payments to farmers. Second are programs that pursue a variety of policy goals laid out in the URAA, such as environmental protection, research, and disaster relief. To qualify for the green box, these programs must be publicly funded and must be “non- or minimally trade distorting,” although the agreement does not define this term.⁸⁰

Blue box policies, like green box policies, are exempt from disciplines but are acknowledged as trade distorting. Like the amber box, this box includes support policies linked to prices and quantities, but here they are accompanied by offsetting policies that limit production. The creation of the blue box was a last-minute compromise in the Uruguay Round that allowed the European Union to continue compensatory payments under the 1992 CAP reforms. It also allowed the United States to exempt deficiency payments, a type of domestic subsidy aimed at supporting farm incomes utilized until 1996.⁸¹

The United States and the European Union support programs in all three boxes, but to different degrees. The United States’ annual domestic support of around \$60 billion goes mainly to green box payments, primarily domestic food aid, such as food stamps (Figure 7); these expenditures nearly doubled in the early 1990s.⁸² Only about 10% of U.S. domestic support falls in the amber box, most spent on dairy, peanuts, and sugar programs. Trade-distorting support for other commodities falls under a *de minimis* provision, which accounts for 2% of support. In 1995, deficiency payments reported by the United States fell into the blue box.⁸³ Such payments were eliminated in the 1996 FAIR Act, but they appear in Figure 7 as 4% of domestic support expenditures because of the 1995 to 1998 averaging period.

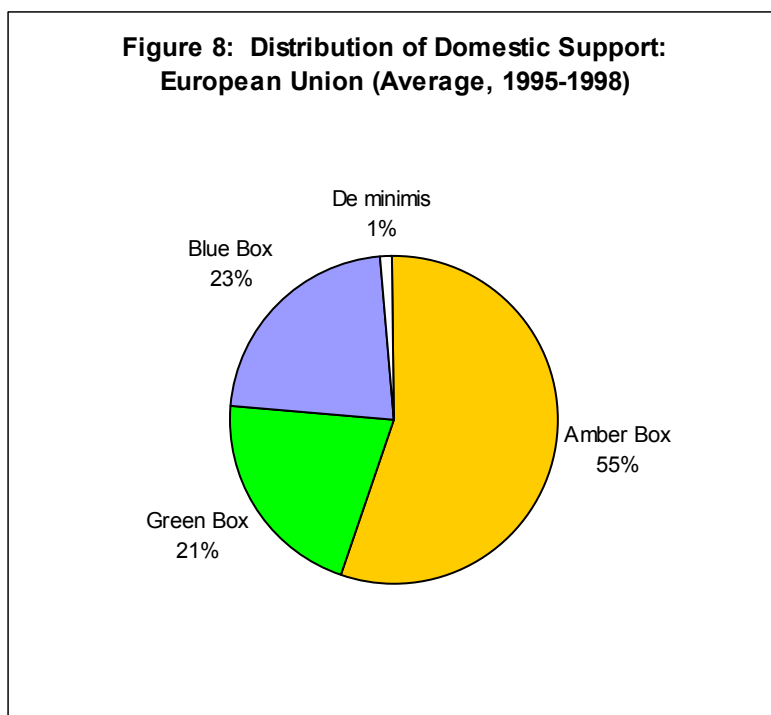


Source: OECD, "The Uruguay Round Agreement on Agriculture," p. 55.

The European Union spends considerably more of its \$100 billion to \$120 billion in domestic support on trade-distorting policies. Fifty-six percent of spending goes to the amber box (including *de minimis* expenditures) and 23% to the blue box (see Figure 8). Green box payments account for only 21% of E.U. domestic support outlays.

Having categorized types of domestic support, the URAA specified reduction commitments for the amber box. Such support is calculated using what is called the aggregate measure of support (AMS), which derives from OECD's calculation of the PSE. However, various exemptions and calculation rules make it more of an administrative construct for monitoring domestic support commitments than a stand-alone measure rooted in the economics of trade.⁸⁴

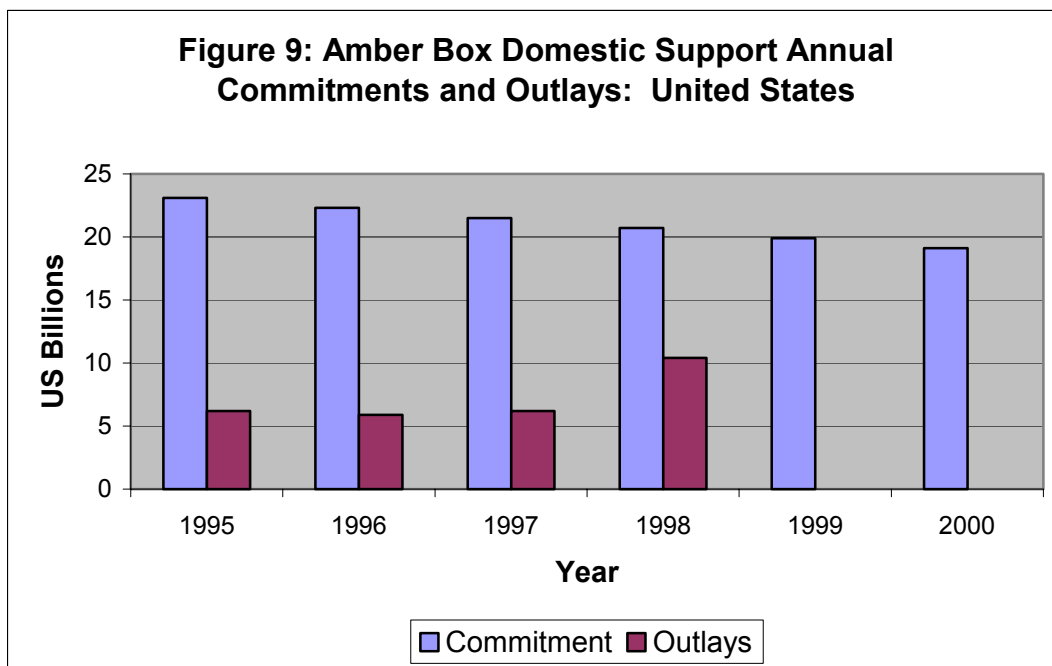
Developed countries committed to cut amber box spending by 20% over six years from a 1986–1988 baseline.⁸⁵ Developing countries agreed to cut amber box spending by 13.3% over ten years. LDCs were not required to reduce amber box domestic support. Cuts were to be made in total spending, not on a product-by-product basis. As a result, sensitive products could still receive increased support; for example, Iceland's amber box expenditures declined 27% between the base period and 1997, but support for milk increased by 240%.⁸⁶



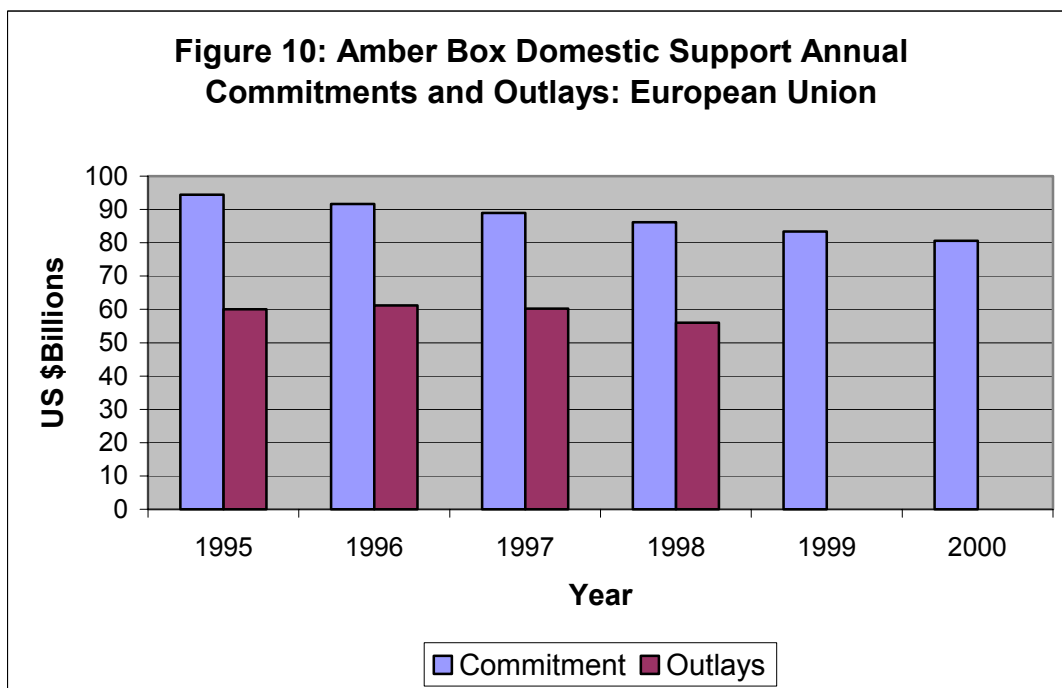
Source: OECD, *The Uruguay Round Agreement on Agriculture: An Evaluation of Its Implementation in OECD Countries*, p. 55.

As mentioned, the URAA also established a *de minimis* exemption. Under the exemption, amber box domestic support going to a particular commodity that totals less than 5% (10% for developing countries) of the value of that commodity's total value of production is not included in the AMS calculation. Noncommodity-specific amber box domestic support falling below 5% of the value of all agricultural production qualifies for the *de minimis* exemption as well.⁸⁷ Developing countries were granted some further exemptions for certain types of input and investment subsidies under provisions for special and differential treatment.⁸⁸

Thirty members—again, mostly developed countries—committed to reduce amber box spending, and the rest committed to remain below their *de minimis* thresholds. With expenditures between \$6 billion and \$11 billion, compared with commitment ceilings of \$19 billion to \$23 billion, the United States is well within its commitments (Figure 9). The European Union has used considerably more of its share of amber box commitments than the United States but is also meeting reduction targets (Figure 10).



Source: OECD, “The Uruguay Round Agreement on Agriculture,” p. 64; outlay data not available for 1999 and 2000.

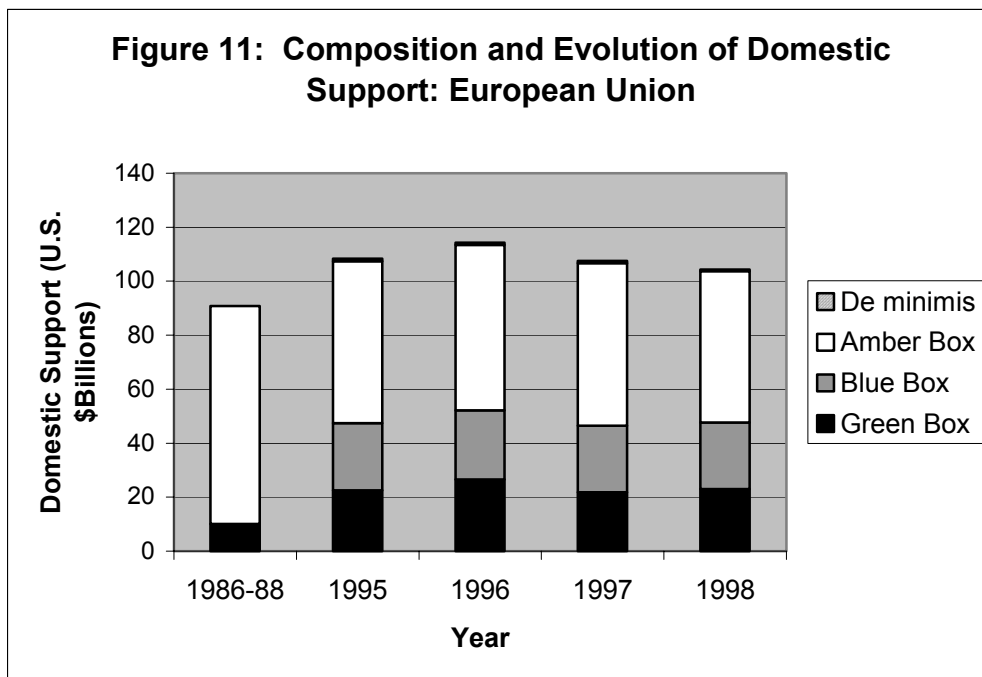


Source: E.U. annual notifications to WTO, using exchange rate of \$1.20 = 1 Euro; outlay data not available for 1999 and 2000.

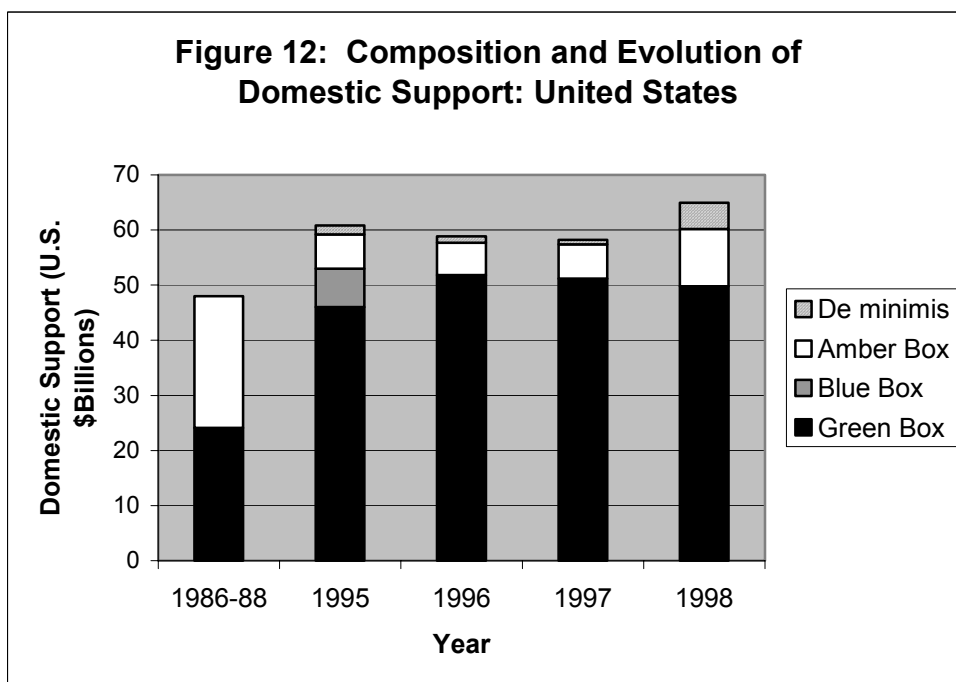
The United States and the European Union have undertaken some policy reforms in the past 15 years to reduce their trade-distorting domestic support expenditures. However, three aspects of the URAA ensured that the amber box baseline would be set quite high, allowing the United States and European Union to maintain amber box support payments at proportionally much higher levels than many other WTO members. First, as with tariffs and export subsidies, the 1986–1988 base period was a time of historically high levels of trade-distorting domestic support (programs that would constitute the amber and blue boxes). Second, choosing a 1986–1988 base period gave retroactive credit for policy reforms undertaken between 1986 and 1995, before the URAA took effect. Third, certain types of payments (those that would constitute the blue box) were used to calculate the base period levels of amber box AMS—and therefore the annual reduction commitment levels—but then were exempted from the annual AMS calculations of amber box outlays.

The major piece of domestic support reform for the European Union came before the URAA was signed, when in 1992, CAP reforms turned amber box price supports into less distorting blue box payments (see change in composition from 1986–1988 to 1995 in Figure 11). Not only did the European Union receive retroactive credit for the reform, but the exemption of blue box payments from annual amber box outlay calculations—although not their removal from the amber box baseline—gave the European Union considerable ability to meet its commitments from 1995 on. If blue box payments were removed from the amber box baseline, the European Union would now be spending roughly 90% of its domestic support allowance.

Like the European Union, the United States also undertook some policy reforms to reduce amber box payments (Figure 12). Between 1985 and 1995, reforms reduced outlays for deficiency payments and commodity loans as well as began the phaseout of support payments for dairy, wool, and mohair.⁸⁹ The negotiated agreement to use a 1986–1988 baseline gave the United States credit for these reforms even though they occurred before 1995. Additional reforms came during the implementation period with the 1996 Fair Act. The United States turned blue box deficiency payments (totaling \$7 billion in 1995) into green box decoupled payments (see change from 1995 to 1996 in Figure 12). Other FAIR Act reforms, such as the reduction or phaseout of some price supports, also limited amber box liabilities from 1996 on.



Sources: 1986–1988 baseline data from OECD, “The Uruguay Round Agreement on Agriculture,” pp. 64, 151; 1995–1998 data from E.U. annual notifications to WTO, using exchange rate of \$1.20 = 1 Euro.



Source: OECD, The Uruguay Round Agreement on Agriculture,” pp. 64, 151.

Like Europe, however, the United States benefited from some peculiarities of URAA accounting. The AMS calculation that established the United States' amber box baseline contained around \$10 billion in deficiency payments that were subsequently exempted as blue box payments. Once the implementation period began, this put the United States farther ahead on its amber box commitments than did any actual policy reforms.

The United States also benefits a great deal from the *de minimis* exemption. On the tail of the 1996 FAIR Act reductions in producer support, commodity prices dropped and farm income shriveled. Congress responded in 1998 with \$2.9 billion in "emergency" market loss assistance payments, boosting it to \$5.5 billion each year thereafter. USDA recently notified WTO that it would consider these emergency payments as amber box support. However, USDA designated them as nonproduct-specific amber box support, and thus they fell below the *de minimis* amount of 5% of total production (which came to \$9.5 billion in 1998). The emergency payments, then, did not count against the amber box baseline.

The effect of the *de minimis* provision and the blue box exemption for the United States is large. Without the *de minimis* exemption, the United States would have used up 73% of its amber box commitment in 1998. If blue box payments were subtracted from the baseline as well, the United States would have been around \$5 billion over its commitment.

Developing countries have taken note of the ability of the United States and the European Union to meet amber box commitments without corresponding levels of reform. But they have leveled most criticism at another phenomenon: although amber box spending has stayed within commitment levels, overall spending on domestic support—encompassing the amber, green, and blue boxes together—has actually increased from pre-Uruguay Round levels (see Figures 11 and 12). Developing countries question the fairness of maintaining the admittedly distortionary blue box for the benefit of Europe alone and the broad and vague criteria for categorizing policies in the ever-growing green box, so important to the United States. Indeed, the Like-Minded Group has accused the United States of simply recategorizing amber box payments as green box policies.⁹⁰

Developing countries' concern with the green box is the sheer volume of payments that some members provide under its auspices. Even if individual programs are only "minimally trade distorting," they argue, a large cumulative distortionary effect may result. And there is some question whether these programs are indeed minimally trade distorting. According to the OECD, "it is virtually impossible for domestic support measures to be fully delinked from production

and trade” and therefore nondistortionary.⁹¹ Moreover, many green box policies do not conform with OECD advice on how to design policies that are delinked from production decisions.⁹²

Developing countries have also argued that domestic support provisions enshrine a large disparity between developed and developing countries. Even if developing countries want and are able to provide amber box types of support, the URAA keeps them from doing so above the *de minimis* level. By contrast, the United States can spend more than three times its *de minimis* levels before reaching amber box commitment ceilings,⁹³ and the European Union can spend more than seven times its *de minimis* amount.⁹⁴

Developing countries—or any country for that matter—have been restricted from using WTO rules to challenge other nations’ domestic support programs. A “peace clause” negotiated in the URAA said that, unless domestic support program outlays exceed 1992 levels, they cannot be challenged under general WTO prohibitions on nontariff barriers to trade until 2003.⁹⁵

Table 3 summarizes URAA commitments regarding domestic support and the factors limiting their ability to force members to reform their policies. As with market access and export subsidies, details of the domestic support commitments have allowed the United States and the European Union to continue, and even increase, trade-distorting amber box domestic support programs without much threat of violating WTO rules. The exempt blue and green boxes have also allowed overall amounts of domestic support to rise in the URAA implementation period.

Table 3: Domestic Support: URAA Commitments and Factors Limiting Their Effectiveness

Main URAA commitments	<ul style="list-style-type: none"> • Categorized different kinds of domestic support into amber, blue, and green boxes. • Required developed countries to reduce amber box outlays by 20% over 6 years. • Required developing countries to reduce amber box outlays by 13.3% over 10 years. • Established <i>de minimis</i> exemptions from amber box commitments at 5% of domestic agricultural production for developed countries and 10% for developing countries. • Required countries without reduction commitments (including LDCs) to stay below <i>de minimis</i> amber box support levels. • Granted some special and differential treatment exemptions for amber box expenditures by developing countries.
Factors limiting commitments' effectiveness	<ul style="list-style-type: none"> • Amber box reduction commitments were not product-specific, allowing increased support for certain products. • Domestic support was historically high in base years, creating a high baseline for reduction. • Credit was given for cuts prior to implementation period, decreasing pressure for further reforms. • Blue box outlays were included in the amber box baseline (and therefore annual commitments) but not in yearly outlay notifications. • <i>De minimis</i> expenditures can be large relative to commitment levels. • Blue box created controversial exemptions. • Scope of green box allowed controversial rise in overall domestic support. • Peace clause restricts WTO challenges to subsidy programs.

Special and Differential Treatment

The URAA contains various provisions intended to give developing countries greater flexibility in meeting commitments. Called “special and differential treatment,” these targeted policies arose because of fears that liberalization, at least in the short term, may threaten developing countries’ economic well-being and food security.⁹⁶ Many of the special and differential treatment provisions cut across the three pillars of market access, export support, and domestic support. As detailed above, developing countries were given different timetables, different target reduction rates, and different exemptions. Least developed countries were largely exempt from reduction commitments, although they were required to “bind” their tariffs and domestic support and not exceed those amounts.

Many of the special and differential treatment policies are intended to encourage economic development and diversification from illicit narcotic crops. Certain input and

investment subsidies for low-income or resource-poor producers are exempted from amber box disciplines. Developing countries are allowed to provide export support for reducing marketing costs and to provide subsidies for internal and external transportation of exports. Developed countries are encouraged to open access to tropical products.

Other special and differential treatment provisions relate to food security. Developing countries are allowed to maintain tariffs on certain products of particular importance for food security. Food security stocks are exempted from domestic support provisions, as are subsidies for selling foodstuffs to the rural and urban poor.

Developing countries have, however, pointed out the high degree of specificity and limited applicability of the special and differential treatment provisions, particularly in terms of domestic support.⁹⁷ They compare the somewhat limited developing country exemptions with the amount of protection allowed, mainly for the benefit of the European Union, by the blue box and the broad and vaguely defined green box from which the United States benefits most.

Summary of Implementation

The primary successes of the URAA were to define trade-distorting policies, establish which policies would be allowed, and specify reduction commitments. In doing so it brought agriculture under the kind of disciplines that apply to other traded products for the first time in the history of the GATT-WTO process. The URAA has not been very successful, however, in actually liberalizing trade. For a variety of reasons, reduction commitments have not been stringent enough to constrain behavior and promote changes in members' domestic policies. According to OECD, "the empirical evidence...indicates that the immediate quantitative effects on trade and protection levels have been moderate....Overall, reductions in support and protection were limited largely because of weaknesses of many of the specific features of the URAA."⁹⁸

In short, URAA signatories have met the letter of the agreement but not its spirit. Rich countries have been allowed to continue supporting their farmers and protecting sensitive products, while developing countries have not seen their export markets open up. The URAA's shortcomings are now issues in the current negotiations, largely framing the demands of developing and developed countries alike.

4. Negotiating Positions and Likely Outcomes in Current Negotiations

After six years of experience with the URAA and two years of prenegotiations on how to approach agricultural liberalization in the future, the scope of ongoing talks at the WTO is described by a single, painstakingly worded sentence from the declaration signed at the Doha Ministerial:

Building on the work carried out to date and without prejudging the outcome of the negotiations we commit ourselves to comprehensive negotiations aimed at: substantial improvements in market access; reductions of, with a view to phasing out, all forms of export subsidies; and substantial reductions in trade-distorting domestic support.⁹⁹

The text also reaffirms a commitment to special and differential treatment for developing countries to “take account of their development needs, including food security and rural development” and asserts that nontrade concerns, such as the environment, “will be taken into account.” It calls on parties to establish “modalities for the further commitments” no later than March 31, 2003, and to submit draft schedules of commitments by the ministerial conference in 2005.

The sparse text of the ministerial declaration and the ambitious schedule for finding agreement mask the extreme contentiousness of some of the issues and the large gulf between countries’ preferred approaches for addressing them. All coalitions have identified areas where they would like to see greater liberalization. The United States wants to reduce developing countries’ tariffs and the European Union’s export subsidies. The European Union has taken aim at U.S. export credits and food aid policies. Developing countries want unfettered access to U.S. and E.U. markets and the opportunity to compete on a playing field undistorted by subsidies. But as countries all seek to reduce protection elsewhere, they seek to keep much of it at home.

The following sections outline how four parties and coalitions—the United States, the Cairns Group of net agricultural exporting countries (including Australia, Canada, New Zealand and 15 developing countries), the European Union, and (non-Cairns) developing countries—have aligned themselves in the ongoing negotiations. The chapter is organized by subsections on market access, export subsidies, domestic support, and special and differential treatment. In each case it presents the various positions and predictions about where progress is likely to be made and disagreements are likely to arise. Table 4 summarizes the parties’ positions on the most prominent issues in the talks.

Table 4: Summary of Negotiating Positions on Prominent Issues

	Market Access	Export Support	Domestic Support	Special and Differential Treatment
United States	<ul style="list-style-type: none"> • Reduce applied rather than bound tariffs. • Eliminate special agricultural safeguard. • TRQ reform. 	<ul style="list-style-type: none"> • Reduce and eventually phase out export subsidies. • No new WTO disciplines on export credits or food aid. 	<ul style="list-style-type: none"> • Reduce amber box support to fixed percentage of total agricultural output. • Reduce and eliminate blue box. • Retain green box. 	<ul style="list-style-type: none"> • Different targets, timetables and exemptions consistently applied to developing countries, as in URAA.
Cairns Group	<ul style="list-style-type: none"> • “Deep cuts” in tariffs, tariff peaks, and all other market access barriers with large immediate “down payment.” • Eliminate special agricultural safeguard. • TRQ reform. 	<ul style="list-style-type: none"> • Reduce export subsidies by 50% immediately and phase out in three years. • Retain state trading enterprises. 	<ul style="list-style-type: none"> • Reduce and eliminate amber box payments. • Reduce and eliminate blue box. 	<ul style="list-style-type: none"> • Different targets, timetables and exemptions consistently applied to developing countries, as in URAA.
European Union	<ul style="list-style-type: none"> • Percentage reductions in unweighted average, bound tariffs from specified baseline, as in URAA. • Retain special agricultural safeguard. • TRQ reform. 	<ul style="list-style-type: none"> • Reduce export subsidies if other forms of export support are disciplined (e.g., export credits, food aid, and state trading enterprises). 	<ul style="list-style-type: none"> • Reduce amber box payments as percentage of baseline, as in URAA. • Support for amber box reductions conditioned on continuation of blue box. • Retain green box. 	<ul style="list-style-type: none"> • Different targets, timetables and exemptions consistently applied to developing countries, as in URAA.
Developing Countries	<ul style="list-style-type: none"> • Large reductions in developed country tariffs, disaggregated by product (to target tariff peaks and tariff escalation). • Eliminate special agricultural safeguard. • Some countries with preferential arrangements oppose TRQ reform. 	<ul style="list-style-type: none"> • Eliminate developed country export subsidies. 	<ul style="list-style-type: none"> • Reduce and eliminate developed countries’ amber box payments, preferably on product-by-product basis. • Reduce and eliminate blue box. • Cap or reduce green box. 	<ul style="list-style-type: none"> • “Development” or “food security” box allowing developing countries more country-by-country tailoring, such as retaining high tariffs on some products, creating new special safeguard, and exempting some trade-distorting subsidies.

Market Access

The “substantial improvement in market access” referred to in the ministerial declaration largely means further tariff reductions and reforms to the system of tariff-rate quotas. Countries have also taken positions on other market access issues, such as reducing tariff escalation, eliminating the transitional special agricultural safeguard, and simplifying tariffs.

All members agree that further commitments on tariff reductions are needed, although they differ on how much to reduce them and how reductions should be calculated. The most aggressive proposals for tariff reduction come from the United States and the Cairns Group. As large agricultural exporters with relatively low tariffs on most products at home, they stand to gain much from increased market access worldwide. The Cairns Group has called for “deep cuts” in tariffs, tariff peaks, and all other market access barriers with a large and immediate “down payment.”¹⁰⁰ The United States has proposed a significant change in the URAA approach by calling for cuts in applied rather than bound tariffs.¹⁰¹ Disciplines on applied rates would eliminate the comfortable headroom that many countries (especially developing countries) enjoy between their commitment ceilings and the tariffs they actually charge. Tariff reduction commitments would immediately constrain policy.

Developing countries have called for large reductions in developed countries’ tariffs—particularly on goods that developing countries export. They would like to see reductions made on a disaggregated product-by-product basis to target the tariff peaks shielded by the URAA averaging provision.¹⁰² Although developing countries are strongly enthusiastic about cutting the tariffs their exports face, India and the Like-Minded Group have also argued for retaining developing countries’ relatively high bound tariffs for purposes of economic development and food security.¹⁰³

Most tepid about tariff reduction is the European Union, which favors further reductions following the URAA approach of reductions in unweighted average levels of bound tariffs.¹⁰⁴ The European Union’s proposal would do little to address tariff peaks or tariff escalation, areas that the United States, the Cairns Group, and developing countries have all targeted for reform.

Details on how tariff reductions are to be made will be very important. Considerable wrangling is likely to emerge over whether reductions will be based on bound rates or applied rates, whether they are to be made product-by-product or averaged across products, and whether the formula for cuts specifically targets tariff peaks and tariff escalation.

Another potentially contentious arena is the fate of the Special Agricultural Safeguard, intended as a transitional measure allowing countries to impose tariffs on an emergency basis to prevent floods of imports. The United States, joined by the Cairns Group, has proposed to eliminate the safeguard, but the European Union proposes to retain it.¹⁰⁵ Complicating the issue are proposals from India and the Like-Minded Group, which oppose the safeguard for developed countries while arguing for a new safeguard provision for developing countries.¹⁰⁶

Less controversial are proposals to reform TRQ administration and increase quota fill rates. Some developing countries have proposed that TRQs be eliminated altogether, but this is an unlikely outcome given the importance of TRQs to the United States and the European Union. More likely are reforms proposed by the United States and supported by the European Union and the Cairns Group. These reforms involve more transparent administration, annual increases in quota volumes, reductions of in-quota tariff rates based on historic fill rates, and an automatic trigger to reduce in-quota tariffs when fill rates are low.¹⁰⁷ The Like-Minded Group of developing countries has proposed TRQ reforms as well, calling for them to be disaggregated into specific commodities, requiring the reform of allocation procedures that allow countries to apply above-quota tariffs before quotas are filled, and instituting a common base period for calculating minimum access commitments.¹⁰⁸ The only real opponents to TRQ reforms are those developing countries that benefit from preferential trade access, and they are unlikely to have much influence with developed countries or even other developing countries.

Members have proposed several other issues related to market access, some of which have garnered agreement. For example, most countries agree on the need to convert remaining complex tariffs into ad valorem tariffs.

Other proposals, although tangential to the traditional market access focus on tariffs, may emerge as important factors in debates. For example, the United States has brought its dispute with the European Union over genetically modified food into the negotiations by calling for disciplines to ensure that policies covering new technologies are “transparent, predictable, and timely.”¹⁰⁹ The United States has also raised the ire of some developing countries by calling for the elimination of variable export taxes, which some developing countries impose on raw materials to boost domestic value-added production.¹¹⁰ The European Union has sought controversial provisions for what it calls “food specificity,” to allow labeling and other disciplines on products whose quality, the European Union argues, derives from its geography.¹¹¹

Export Support

The United States, the Cairns Group, and developing countries have all lined up against the European Union with strong proposals to reduce and eventually eliminate export subsidies. Indeed, what most threatened the ministerial negotiations on agriculture at Doha was the European Union's strident (but ultimately overcome) opposition to the use of the term "phasing out" in the ministerial text on export subsidies.¹¹²

The Cairns Group's proposal on export subsidies is the most ambitious. It calls for a 50% cut as a down payment, followed by the elimination of all export subsidies over three years.¹¹³ Some developing countries' proposals, such as that by ASEAN, propose scrapping all developed countries' export subsidies while allowing developing countries to subsidize for specific purposes, such as marketing.¹¹⁴

The European Union has understandably taken a defensive stance on export subsidies. Its proposal says the European Union will commit to reducing export subsidies only if WTO strengthens rules governing related forms of export support, such as export credit programs, state trading enterprises, and food aid.¹¹⁵ The European Union surely sees to its advantage the final ministerial text's reference to phasing out "all forms" of export subsidies.

Disciplines on export credits and food aid both implicate the United States, which is very averse to new disciplines. In its comprehensive negotiating proposal, the United States proposes continuing export credit negotiations at the OECD.¹¹⁶ However, those lengthy talks broke down in spring 2001 after little progress. The U.S. proposal also deflects E.U. criticism that the United States uses food aid for surplus disposal and as a market penetration tool by saying that the appropriate forum for discussing food aid is the Food and Agriculture Organization, not the WTO.¹¹⁷

The conflict between the European Union's export subsidies on the one hand and the United States' export credits and food aid programs on the other is likely to spark one of the biggest fights in the negotiations. There may be some small glimmers of progress, however. The European Union's appetite for export subsidies may be diminishing. OECD economic models predict that the European Union is likely to exceed export subsidy commitments for several products, a situation that would be exacerbated by the accession by eastern European countries.¹¹⁸ The fear of overloading the European Union budget, as well as violating WTO commitments, has already exerted some pressure to reduce export subsidies via Agenda 2000 CAP reforms in Europe.¹¹⁹ The United States is feeling renewed pressure as well to deal with export credits in WTO negotiations. The European Union, the Cairns Group, and developing

countries have all increased pressure on the United States to bring export credit talks under the WTO umbrella after they broke down at the OECD.¹²⁰ Some farm groups in the United States would like to see limits on export credits as well.¹²¹

The other significant export support issue to come up in the talks has to do with state trading enterprises, which are single entities that manage external trade in particular commodities. They are criticized for engaging in various price-distorting practices, such as cross-subsidization, price-pooling, and monopoly pricing. Neither the European Union nor the United States makes use of state trading enterprises, and both have called for strengthening disciplines on them.¹²² The United States and the European Union are pitted against some members of the otherwise proliberalization Cairns Group—namely Canada, Australia, and New Zealand—which do use state trading enterprises. These countries argue that large multinationals, many based in the United States and European Union, can have the same monopolistic role imputed to state trading enterprises.¹²³ It was Canada's insistence on keeping disciplines on state trading enterprises out of export credit negotiations at the OECD that helped end those talks without agreement.¹²⁴

Domestic Support

In the ministerial declaration at Doha, members agreed to “substantial reductions in trade-distorting domestic support,” but they continue to disagree on how substantial the reductions should be and what should be considered trade distorting. Developing countries are joined by the Cairns Group in support of sharp reductions in, and ideally the complete elimination of, amber box support in developed countries.¹²⁵ India, for example, proposes that developed countries bring amber box support—together with all other domestic support—below *de minimis* levels within three years.¹²⁶ Developing countries generally prefer that reductions be disaggregated to the product-by-product level so as not to allow shifting within categories to protect certain products.

The United States has proposed that countries reduce their amber box support to a fixed percentage of total agricultural output—a variant on the existing *de minimis* provisions and a departure from the URAA approach of annual reductions from a baseline.¹²⁷ An analysis by the USDA showed that the United States would both export more and import more if every country met a target of 30% of the value of production than if countries committed to a further 20% reduction in their current baselines.¹²⁸

The European Union supports continuing the URAA approach of reducing amber box support according to a fixed baseline (although accompanied by reductions in *de minimis* levels).¹²⁹ The European Union explicitly conditions its support for reductions in amber box support on the continued existence of the blue box, which it considers critical to the multifunctional role of agriculture in enhancing the environment, rural development, food safety, food security, and animal welfare. The United States, the Cairns Group, and developing countries, however, have all called for subjecting the blue box to reduction commitments and ultimately eliminating such support.¹³⁰

Where the United States and the European Union agree is in continued support for the green box. They see its swelling size as a sign of positive policy reform as programs shift to being less trade distorting. Developing countries, however, have come out against what they see as the excesses of the green box. Few have the money to use it, and they consider it one of the leading reasons that OECD domestic support levels have risen. They have raised suspicions that the sheer magnitude of green box support must be distorting trade, and therefore it would fall under the ministerial commitment to reduce all trade-distorting domestic support.¹³¹ ASEAN proposes a cap on green box payments.¹³² India has proposed collapsing all amber, blue, and green box subsidies into one category and subjecting them all to reductions.¹³³

Any efforts led by the Cairns Group and developing countries to eliminate the blue box or tighten restrictions on the green box will be met with strong opposition from the European Union and the United States, respectively. These boxes are the escape hatches both countries use to continue politically popular domestic support for farmers while also meeting international trade obligations. The European Union's reliance on the blue box may be weakening somewhat, however. As with export subsidies, E.U. expansion threatens to put increasing strain on agricultural support budgets. At least one observer group suggests that support for the blue box may be under increasing strain and that subjecting it to reduction commitments may be "an opportunity...to make a virtue of necessity."¹³⁴

The United States and the European Union do agree on the need to clarify what policies go into the green box and to study their true distortionary effects. Indeed, the United States has already called for the establishment of a technical working group on green box policy distortions.¹³⁵ The quid pro quo for the continuing existence of the green box and its expansion to accommodate new types of policies may well be greater disciplines on just what "least trade distorting" means.

Special and Differential Treatment

As in the Uruguay Round, all parties continue to acknowledge the need for special and differential treatment of developing countries, and the ministerial text specifically mentions rural development and food security. The real discussion and debate will be over what policy instruments will be used to implement it.

Two broad views have emerged. The first sees the current URAA structure as adequate to deal with the special and differential needs of developing countries. The United States, the Cairns Group (including its developing country members), and to some extent the European Union fall into this camp, acknowledging the continued need to provide different timetables, targets, and exemptions on market access, export subsidization, and domestic support for developing countries. All are willing to make green box categories more responsive to developing countries' needs, while still requiring that green box policies be "least trade distorting."¹³⁶

The second view, proposed by developing countries, calls for new structures within the agreement to accommodate the special needs of developing countries. India and the Like-Minded Group have led the way with proposals for an entirely new "food security box" and "development box," respectively.¹³⁷ The proposals differ somewhat, but the objectives of both are to promote food security and rural employment by enhancing the production of staple foods, increasing agricultural capacity and competitiveness, and protecting rural farmers from world price fluctuations.

The instruments to pursue the goals of the food security and development boxes go beyond current special and differential provisions and beyond a mere expansion of the green box. They include the ability to maintain high tariffs on some products and to introduce more trade-distorting domestic subsidies (by raising amber box *de minimis* levels, for example). The proposals outline a more tailored approach than that provided under the current agreement, giving developing countries greater flexibility to institute policies that respond to their individual needs. Flexibility would come, for example, through extending special safeguard provisions to all developing countries or creating a developing country "peace clause." The Like-Minded Group has proposed a "positive list" approach that would allow developing countries to choose which products would be subject to URAA disciplines and which would not.¹³⁸

The fate of the development box and the food security box proposals remains to be seen, but opposition centers on their departure from the rules-based approach favored in the WTO.¹³⁹ Significantly, the Decision on Implementation-Related Issues and Concerns that accompanied

the Doha Ministerial declaration “urges members to exercise restraint in challenging measures notified under the green box by developing countries to promote rural development and adequately address food security concerns.”¹⁴⁰ Although it appears to be a concession to developing countries, it also commits members to the approach preferred by rich countries rather than the more tailored approaches proposed by India and the Like-Minded Group.

Developing countries may be able to wring some concessions in the form of new funding mechanisms. A group of net food importing developing countries has proposed a “food security fund” that would create a \$1.2 billion food financing facility to counter the negative effects of agricultural reform, such as rising commodity prices.¹⁴¹ The fund would provide short-term financing for countries needing basic foodstuffs and would be managed by the WTO, World Bank, IMF, and perhaps others. The United States, European Union, and some Cairns Group members oppose linking such a plan to the trade talks because it is largely outside the WTO mandate.

Summary of the State of Negotiations

After nearly two years of negotiations, a wide gulf still exists between the principal negotiating parties and coalitions. Ultimately, progress in agricultural negotiations will have to involve some trading among the three pillars (if not outside agriculture altogether), pitting sacred cow against sacred cow. For example, the European Union is tying its reduction in export subsidies not only to reforms of U.S. export credit programs and food aid policies but also to reductions in some U.S. domestic support programs.¹⁴² Developing countries have tied their agreement on tariff reductions to reductions in export support and domestic subsidies by the European Union and the United States¹⁴³

Divining possible outcomes from members’ negotiating proposals alone, however, is inadequate. Members’ negotiators have to contend with the realities of politics at home as well. It is largely on the domestic front that the range of possibilities for trade negotiations is shaped as those who stand to lose from trade liberalization square off against those who would benefit. The United States will ultimately be constrained in its trade commitments by policies outlined in the 2002 Farm Bill, over which Congress—not the executive branch—has the majority of control. The European Union has signaled that it will not make any aggressive moves on agriculture reform until after the French and German elections in 2002.¹⁴⁴ Prior to Doha, developing countries were far from convinced that even starting a new round of trade talks was worth the

domestic turmoil involved while so many issues about implementing the Uruguay Round agreement remained unresolved.

5. Conclusion: What Does the Future Hold?

Supporters of the multilateral system governing world trade breathed a collective sigh of relief when negotiators signed the ministerial declaration in Doha. Many believed that the WTO couldn't weather another failure like Seattle. A host of regional trade agreements wait in the wings, ready to fill the void if multilateral efforts falter.¹⁴⁵ Even with negotiations moving forward, however, the stakes continue to be very high.

More than ever, the key to the success and legitimacy of the rules-based system governing world trade will be its responsiveness to the demands of developing countries. The membership structure of the WTO means that progress will come only if developing countries reap some of the benefits of globalization. Nowhere are the stakes higher than agriculture, both in terms of poor countries' economic development and in terms of feeding the world's hungry.

Developing countries are already demonstrating far more involvement and cooperation among themselves than in previous trade rounds. Their hands will be greatly strengthened if China, new to the WTO, becomes an ally. It is unclear, however, whether China will align itself with developing countries. Indeed, its entry requirements are a compromise between developed and developing country status. But if China throws in its lot with other large developing countries, such as India, this bloc will be much harder to ignore. Just prior to the Doha Ministerial, China may have signaled its allegiance by joining the developing country "Group of 77" in issuing a set of demands for the upcoming negotiations, including reforms of developed countries' agricultural subsidy programs.¹⁴⁶

Pressure on developed countries to come to some sort of agreement on agriculture goes beyond an interest in maintaining the legitimacy of the WTO. They fear the expiration, in 2003, of the peace clause, which has protected the United States and the European Union, in particular, from many challenges to their large domestic support policies. The Cairns Group has said it will not agree to extend the peace clause without firm commitments from other members to reform, and they see it as an important tool for wringing concessions from the United States and the European Union.¹⁴⁷

Fiscal policy may also pressure the United States and the European Union to make concessions on agriculture. Historically, the principal domestic policy pressures for agricultural liberalization have come from tight fiscal budgets when countries simply can't, or won't, support the high costs of farm subsidies and other programs.¹⁴⁸ An economic downturn, increased military domestic security spending, and the Bush administration's tax cuts may reduce U.S.

agricultural expenditures. In the European Union, the accession of additional countries is already creating pressure to cut agricultural outlays.

Agricultural trade liberalization may get a boost from agricultural markets as well. Trade reform is typically easier when commodity prices are high, because support programs play less of a role in farm incomes.¹⁴⁹ The OECD predicts a steady recovery of world agricultural prices through 2006 after several years of historically low prices.¹⁵⁰

It is important that countries agreed to a “single undertaking” in Doha, in which more than agriculture is on the table. Neither the United States nor the European Union is likely to agree to greater agricultural liberalization without being able to claim victories elsewhere, such as manufacturing, services, or investment. One observer has suggested a “grand bargain” in which the United States (and presumably the European Union) gains new rules for intellectual property, labor standards, and environmental protection while the developing world gets liberalization of rich countries’ agricultural markets.¹⁵¹

A number of factors, however, jeopardize further liberalization. Both the United States and the European Union face low public opinion about trade liberalization and globalization generally. Protests at the Seattle Ministerial, meetings of the IMF and the World Bank, meetings of the Free Trade Area of the Americas, the G8 summit, and elsewhere all signal a growing social backlash against globalization. Food safety scares involving mad cow disease, foot-and-mouth disease, and genetically modified organisms have cast a pall over the wisdom of unrestricted agricultural flows across borders. If countries remain in recession, the perception that liberalization sends jobs overseas will only grow stronger. Substantial liberalization by the United States and the European Union would take some preparation of domestic constituencies on these issues.

Receiving far more public support than trade liberalization are environmental and other social programs that the European Union and others use as arguments against further liberalization. There is broad support in Europe for agriculture policy as a vehicle for promoting multifunctionality in a wide range of areas. Similar support can be seen in the United States, at least in terms of environmental programs.

Those issues will play out as negotiations progress, and the ultimate agreement is likely to be as complex as that reached in the Uruguay Round. However, two simple scenarios illustrate the different directions the trade talks could take, with dramatically different results.

First is the liberalization scenario, in which countries agree to stringent reductions in tariffs, export subsidies, and domestic support. Such an agreement would gradually eliminate

trade distortions and make world agricultural markets more competitive. A simple reading of the Doha Ministerial text would suggest that all countries agree to the inevitability of this scenario.

Second, and opposite, is a deliberalization scenario—one that might be labeled “the big green box.” To accommodate E.U. demands for multifunctionality and the United States’ domestic commitment to continued farm payments, countries may simply agree to expand the green box to exempt a much broader range of trade-distorting and nontrade-distorting domestic policies. In exchange for forgoing their demands for more open export markets, developing countries would get much more liberal use of the green box as well, or perhaps their own “development” and “food security” boxes. They might also get a new economic development and food security funding mechanism. The package could be accompanied by symbolic but nonconstraining reductions in tariffs, export subsidies, and amber box payments.

If history is any guide, it is at least as likely that negotiations will head toward the “big green box” scenario as toward the liberalization scenario. There appears to be very little appetite for reducing farm support programs in the United States or the European Union, and developing countries are understandably reluctant to risk their own economic development and food security by leading the way. The URAA—with its extensive commitments that didn’t actually compel policy change—is in fact a very appropriate model for creating the illusion of trade liberalization without actual reform.

End Notes

* For helpful comments on this paper, the author would like to thank Greg Frazier, Peter Lacy, Mary Burfisher, and Eugenio Diaz-Bonilla as well as Resources for the Future colleagues Mike Taylor, Tom Freedman, Michael Margolis, Pierre Crosson, and Sandy Hoffman. This research was supported by Resources for the Future.

¹ Eugenio Diaz-Bonilla, Sherman Robinson, Marcelle Thomas, and Yukitsugu Yanoma, “WTO, Agriculture, and Developing Countries.” Draft issues paper prepared for the Advisory Group March 26 to March 30, WTO Negotiations and Changes in National Agricultural and Trade Policies: Consequences for Developing Countries, March 22, 2001, p. 13.

² Data on manufacturing tariffs from U.S. Department of Agriculture (USDA). “Agriculture in the WTO.” Report No. WRS-98-4. Washington, DC: Economic Research Service, U.S. Department of Agriculture, December 1998, pp. 6. Data on agricultural tariffs from Paul Gibson, John Wainio, Daniel Whitley, and Mary Bohman. “Profiles of Tariffs in Global Agricultural Markets.” Agriculture Economic Report No. 796. Washington, DC: Economic Research Service, U.S. Department of Agriculture, January 2001, p. 9. Averages are not weighted by trade volumes.

³ Organisation for Economic Co-operation and Development (OECD), “Agricultural Policies in OECD Countries: Monitoring and Evaluation, Highlights.” Paris: Organisation for Economic Co-operation and Development, 2001, p. 22.

⁴ OECD, “Agricultural Policies in OECD Countries,” p. 18.

⁵ Ironically, trade protection is a very inefficient way to support rich-country farmers. The OECD estimates that only 25% of farm support actually goes to the farmer; the rest is capitalized into assets (especially land) or is channeled up and down the food chain to input suppliers, processors, and distributors. Very little goes to support poor and family farms, although this is one of the most popular rhetorical devices for encouraging protection. In OECD countries as a whole, the largest 25% of farms get 50%–90% of support. Farmers receiving the highest level of support have, on average, higher incomes and net worth than the average taxpayer. Trade protection ends up being highly regressive; it pays a price premium to large, well-off farms by increasing food prices that hit hardest on those with low incomes, who pay a high percentage of their income for food. (Organisation for Economic Co-operation and Development. June 2000. "Agricultural Policy Reform: Developments and Prospects." Policy Brief. Paris: Organisation for Economic Co-operation and Development, p. 2.)

⁶ Robert D. Putnam, "Diplomacy and Domestic Politics: The Logic of Two-Level Games." *International Organization* 42(3), Summer 1988.

⁷ Food and Agriculture Organization of the United Nations (FAO), "Issues at Stake Relating to Agricultural Development, Trade and Food Security." FAO Symposium on Agriculture, Trade and Food Security: Issues and Options in the Forthcoming WTO Negotiations from the Perspective of Developing Countries, Geneva, Switzerland, September 23–24 1999, pp. 12–15.

⁸ FAO, "Issues at Stake Relating to Agricultural Development, Trade and Food Security," pp. 12–14.

⁹ FAO, "Issues at Stake Relating to Agricultural Development, Trade and Food Security," pp. 12–14.

¹⁰ Diaz Bonilla et al., "WTO, Agriculture, and Developing Countries," pp. 7, 22.

¹¹ World Trade Organization, "WTO Agriculture Negotiations: The Issues, and Where We Are Now." WTO Secretariat, October 4, 2001.

¹² Bernard Hoekman and Michel Kosteci, *The Political Economy of the World Trading System: From GATT & WTO*. Oxford: Oxford University Press, 1995, p. 14.

¹³ David E. Sanger, "A Grand Trade Bargain." *Foreign Affairs* January/February 2001.

¹⁴ Greg Frazier, "A U.S. Perspective on Approaches to Market Access." Speech given at Agricultural Outlook Forum, 2001, U.S. Department of Agriculture, Washington, DC, February 22, 2001.

¹⁵ Over the past several years, developing country exports to other developing countries have grown faster than exports to developed countries (WTO, "Agricultural Trade Performance by Developing Countries 1990–99," p. 6). Developing countries face average tariffs 20% higher from other developing countries than from OECD countries (Merlinda D. Ingco, "Leveraging Trade, Global Market Integration, and the WTO for Rural Development," World Bank, Rural Development Department, p. 3).

¹⁶ The group includes Cuba, Dominican Republic, El Salvador, Haiti, Honduras, Kenya, Nigeria, Pakistan, Sri Lanka, Uganda, and Zimbabwe; it is often joined by India.

¹⁷ *Inside U.S. Trade*, "Group of 77 Pushes Concession in Agriculture, Open to Investment Talks." Washington, DC: Inside Washington, October 26, 2001.

¹⁸ U.S. Department of Agriculture (USDA), "The Road Ahead: Agricultural Policy Reform in the WTO, Summary Report." Agriculture Economic Report No. 797, Washington, DC: Economic Research Service, U.S. Department of Agriculture, January 2001, pp. 5–8.

¹⁹ USDA, "The Road Ahead," p. 21.

²⁰ Australian Bureau of Agricultural and Resource Economics, "Developing Countries: Impact of Agricultural Trade Liberalization." *ABARE Current Issues*, July 2000, p. 1.

-
- ²¹ Kym Anderson, Joe Francois, Tom Hertel, Bernard Hoekman, and Will Martin, "Potential Gains from Trade in the New Millennium." Paper for the Third Annual Conference on Global Economic Analysis, Monash University, Mt. Eliza, June 27–30, 2000, pp. 6–7.
- ²² Paul Gibson, John Wainio, Daniel Whitley, and Mary Bohman, "Profiles of Tariffs in Global Agricultural Markets." Agriculture Economic Report No. 796. Washington, DC: Economic Research Service, U.S. Department of Agriculture, January 2001.
- ²³ USDA, "The Road Ahead," p. 7.
- ²⁴ USDA, "The Road Ahead," p. 8.
- ²⁵ USDA, "The Road Ahead," p. 8.
- ²⁶ Organisation for Economic Co-operation and Development (OECD), "The Uruguay Round Agreement on Agriculture: An Evaluation of Its Implementation in OECD Countries." Paris: Organisation for Economic Co-operation and Development, April 1, 2001, p. 75.
- ²⁷ World Trade Organization, Agreement on Agriculture.
- ²⁸ Food and Agriculture Organization of the United Nations (FAO), "Agricultural Trade and Food Security." *Trade Issues: FAO Fact Sheets*. Third WTO Ministerial Conference, Seattle, November 28–December 3, 1999, p. 2.
- ²⁹ Michael R. Taylor and Jody S. Tick, "Fulfilling the Promise: A Governance Analysis of the U.S. Response to the World Food Summit Goal of Cutting Hunger in Half by 2015." Washington, DC: Resources for the Future, September 2001.
- ³⁰ FAO, *Report of the World Food Summit, 13–17 November 1996, Part One*. Rome: Food and Agriculture Organization of the United Nations, 1997, p. 87.
- ³¹ Amartya Sen, *Hunger and Entitlements*. Helsinki: World Institute for Development Economics Research (WIDER), United Nations University, 1987.
- ³² USDA, "The Road Ahead," p. 22.
- ³³ Eugenio Diaz-Bonilla, Marcelle Thomas, Sherman Robinson, and Andrea Cattaneo, "Food Security and Trade Negotiations in the World Trade Organization: A Cluster Analysis of Country Groups." TMD Discussion Paper No. 59. Washington, DC: Trade and Macroeconomics Division, International Food Policy Research Institute, December 2000.
- ³⁴ Diaz-Bonilla et al., "Food Security and Trade Negotiations in the World Trade Organization."
- ³⁵ Food and Agriculture Organization (FAO), "Symposium on Agriculture, Trade and Food Security: Issues and Options in the Forthcoming WTO Negotiations from the Perspective of Developing Countries, Paper No 3: Synthesis of Country Case Studies." Geneva: Food and Agriculture Organization, September 23–24, 1999.
- ³⁶ OECD, "Agricultural Policies in OECD Countries," pp. 26–27.
- ³⁷ World Trade Organization (WTO), "Agriculture Negotiations: Background." Geneva: World Trade Organization, December 18, 2000.
- ³⁸ USDA, "The Road Ahead," p. 12.
- ³⁹ OECD, "The Uruguay Round Agreement on Agriculture," p. 34.
- ⁴⁰ OECD, "The Uruguay Round Agreement on Agriculture," p. 34.
- ⁴¹ WTO, "Agriculture Negotiations: Background."

⁴² OECD, "The Uruguay Round Agreement on Agriculture," p. 33.

⁴³ WTO members are not required to provide annual notifications of their progress in meeting average tariff reduction targets, as they are for their commitments for export subsidies and domestic support. Indeed, it is difficult to even calculate average tariffs for the United States and the European Union because around 40% of their tariffs are specified in non-ad valorem terms. Non-ad valorem tariffs include specific tariffs (charging per unit, by weight, etc.), tariffs based on technical formulations (e.g., alcohol content), compound or complex tariffs (a combination of two or more types of tariffs), and others. Countries' scheduled tariffs rates can be found at AMAD.org. (Personal communication with Paul Gibson, USDA Economic Research Service.)

⁴⁴ OECD, "Agricultural Policies in OECD Countries," p. 22.

⁴⁵ Gibson et al., "Profiles of Tariffs in Global Agricultural Markets," p. 24.

⁴⁶ Data on 46 categories come from Gibson et al., "Profiles of Tariffs in Global Agricultural Markets," p. 25, Table 7.

⁴⁷ Gibson et al., "Profiles of Tariffs in Global Agricultural Markets," p. 24.

⁴⁸ USDA, "The Road Ahead," p. viii.

⁴⁹ OECD, "The Uruguay Round Agreement on Agriculture," p. 30.

⁵⁰ USDA, "Agriculture in the WTO," p. 8.

⁵¹ USDA, "Agriculture in the WTO," p. 9.

⁵² Gibson et al., "Profiles of Tariffs in Global Agricultural Markets," p. 21.

⁵³ OECD, "The Uruguay Round Agreement on Agriculture," pp. 30–31.

⁵⁴ OECD, "The Uruguay Round Agreement on Agriculture," p. 36.

⁵⁵ OECD, "The Uruguay Round Agreement on Agriculture," p. 35.

⁵⁶ Gibson et al., "Profiles of Tariffs in Global Agricultural Markets," p. 16.

⁵⁷ USDA, "The Road Ahead," p. 14.

⁵⁸ USDA, "Agriculture in the WTO," p. 21.

⁵⁹ OECD, "The Uruguay Round Agreement on Agriculture," p. 73.

⁶⁰ WTO, "Agriculture Negotiations: Background." "

⁶¹ USDA, "The Road Ahead," p. 5.

⁶² OECD, "The Uruguay Round Agreement on Agriculture," p. 159.

⁶³ WTO, "Agriculture Negotiations: Background." "

⁶⁴ World Trade Organization, "WTO Negotiations on Agriculture, Cairns Group Negotiating Proposal, Export Competition." G/AG/NG/W/11, June 16, 2000, p. 1.

⁶⁵ OECD, "The Uruguay Round Agreement on Agriculture," p. 74.

⁶⁶ Chart data for Figures 5 and 6 come from country notifications to the WTO. Data for Figure 5 use a dollar-ECU exchange rate of 1.2.

⁶⁷ OECD, "The Uruguay Round Agreement on Agriculture," p. 79.

⁶⁸ OECD, "The Uruguay Round Agreement on Agriculture," p. 99.

⁶⁹ OECD, "The Uruguay Round Agreement on Agriculture," p. 14.

⁷⁰ To allow even greater inflation of the base rate, countries could choose to use average export subsidy rates for 1991–92 as a baseline if they were higher than the 1986–1990 rates (OECD, "The Uruguay Round Agreement on Agriculture," p. 74).

⁷¹ E.U. spending on export subsidies has fallen from 55% of the value of exports in 1992, prior to CAP reforms, to 9.4% in 1998 (*Economist*, June 9, 2001, p. 72)

⁷² OECD, "The Uruguay Round Agreement on Agriculture," p. 79.

⁷³ For example, in 1998, the European Union was exporting processed cheese as amalgams of butter, skim milk powder, and natural cheese. They counted the export subsidies not as processed cheese but on the components in order to subsidize more processed cheese than allowed in URAA commitments (USDA, "Agriculture in the WTO," p. 24).

⁷⁴ OECD, "The Uruguay Round Agreement on Agriculture," p. 85. In 2000, \$5.4 billion of U.S. agricultural sales, around 10% of U.S. farm exports, used export credit guarantees (*Economist*, June 9, 2001, p. 72).

⁷⁵ OECD, "The Uruguay Round Agreement on Agriculture," p. 85.

⁷⁶ *Inside U.S. Trade*, "E.U. Urges U.S. to Stop 'Abuse' of Food Aid That Disrupts Markets." May 18 2001, p. 17.

⁷⁷ World Trade Organization, "EC Comprehensive Negotiating Proposal." G/AG/NG/W/90, December 14, 2000.

⁷⁸ OECD, "The Uruguay Round Agreement on Agriculture," p. 53.

⁷⁹ USDA, "Agriculture in the WTO," p. 50.

⁸⁰ OECD, "The Uruguay Round Agreement on Agriculture," p. 57.

⁸¹ USDA, "Agriculture in the WTO," p. 15.

⁸² Fred Nelson, "U.S. Ag Policy—Well Below WTO Ceilings on Domestic Support." *Agricultural Outlook*, Washington, DC: Economic Research Service, U.S. Department of Agriculture, October 1997.

⁸³ Such payments correspond to the blue box because they were provided under "production-limiting programs...based on fixed area and yields" and "made on 85% or less of the base level of production." Nelson, "U.S. Ag Policy—Well Below WTO Ceilings on Domestic Support"; World Trade Organization, "Domestic Support: Background Paper by the Secretariat," G/AG/NG/S/1, April 13, 2000.

⁸⁴ Frederick J. Nelson, "How the Producer Subsidy Equivalent Was Used to Implement the Uruguay Round of GATT." Economic Research Service, U.S. Department of Agriculture, November 1997.

⁸⁵ OECD, "The Uruguay Round Agreement on Agriculture," pp. 51–52.

⁸⁶ OECD, "The Uruguay Round Agreement on Agriculture," p. 62.

⁸⁷ OECD, "The Uruguay Round Agreement on Agriculture," p. 51.

⁸⁸ USDA, "Agriculture in the WTO," p. 16.

⁸⁹ Fred Nelson, "U.S. Ag. Policy—Well Below WTO Ceilings on Domestic Support."

⁹⁰ World Trade Organization, "Agreement on Agriculture: Green Box/Annex 2 Subsidies, Proposal to the June 2000 Special Session of the Committee on Agriculture by Cuba, Dominican Republic, Honduras, Pakistan, Haiti, Nicaragua, Kenya, Uganda, Zimbabwe, Sri Lanka and El Salvador." G/AG/NG/W/14, June 23, 2000, p. 3.

⁹¹ OECD, "The Uruguay Round Agreement on Agriculture," p. 64.

⁹² OECD, "The Uruguay Round Agreement on Agriculture," pp. 63–64.

⁹³ In its notification to the WTO, the United States reports \$191 billion in agricultural production for 1998, 5% of which comes to \$9.05 billion (G/AG/N/USA/36, June 26, 2001). The commitment ceiling on amber box payments in 1998 was \$20.7 billion. After exempting the first \$9.05 billion of nonproduct-specific domestic support, the United States could still spend twice that amount before reaching its commitment levels. It could actually spend more if additional spending fell under exempt product-specific support.

⁹⁴ In its notification to the WTO, the European Union reports 217.8 billion Euros in agricultural production for 1998, 5% of which comes to 10.9 billion Euros (G/AG/N/EEC/30, March 22, 2001). The commitment ceiling on amber box payments in 1998 was 71.8 billion Euros. After exempting the first 10.9 billion Euros of nonproduct-specific domestic support, the European Union could still spend around 6.6 times that amount before reaching its commitment levels. It could actually spend more if additional spending fell under exempt product-specific support.

⁹⁵ OECD, "The Uruguay Round Agreement on Agriculture," p. 52.

⁹⁶ USDA, "Agriculture in the WTO," p. 48.

⁹⁷ WTO, "Agreement on Agriculture: Special and Differential Treatment and a Development Box, Proposal to the June 2000 Special Session of the Committee on Agriculture by Cuba, Dominican Republic, Honduras, Pakistan, Haiti, Nicaragua, Kenya, Uganda, Zimbabwe, Sri Lanka and El Salvador." G/AG/NG/W/13, June 23, 2000, p. 2.

⁹⁸ OECD, "The Uruguay Round Agreement on Agriculture," p. 99.

⁹⁹ World Trade Organization, "Ministerial Declaration." WTO 4th Ministerial Conference, Doha, Qatar, November 9–14, 2001, p. 3.

¹⁰⁰ World Trade Organization, "WTO Negotiations on Agriculture, Cairns Group Negotiating Proposal, Market Access." G/AG/NG/W/54, November 10, 2000, p. 2

¹⁰¹ World Trade Organization, "Proposal for Comprehensive Long-Term Agricultural Trade Reform, Submission from the United States." G/AG/NG/W/15, June 23, 2000, p. 2.

¹⁰² World Trade Organization, "Market Access Submission by Cuba, Dominican Republic, El Salvador, Honduras, Kenya, India, Nigeria, Pakistan, Sri Lanka, Uganda, Zimbabwe." G/AG/NG/W/37, September 28, 2000, p. 7.

¹⁰³ World Trade Organization, "Agreement on Agriculture: Special and Differential Treatment and a Development Box, Proposal to the June 2000 Special Session of the Committee on Agriculture by Cuba, Dominican Republic, Honduras, Pakistan, Haiti, Nicaragua, Kenya, Uganda, Zimbabwe, Sri Lanka and El Salvador." G/AG/NG/W/13, June 23, 2000, p. 4; and World Trade Organization, "Negotiations on WTO Agreement on Agriculture, Proposals by India in the areas of: (i) Food Security, (ii) Market Access, (iii) Domestic Support, and (iv) Export Competition." G/AG/NG/W/102, January 15, 2001, p. 5.

¹⁰⁴ World Trade Organization, "EC Comprehensive Negotiating Proposal." G/AG/NG/W/90, December 4, 2000, p. 2.

¹⁰⁵ For the U.S. position, see G/AG/NG/W/15, p. 2; for the Cairns position, see G/AG/NG/W/54, p. 2; and for the E.U. position, see G/AG/NG/W/90, p. 2.

¹⁰⁶ For India's position, see G/AG/NG/W/102, p. 5; for the Like-Minded Group's position, see G/AG/NG/W/13, p. 5.

¹⁰⁷ World Trade Organization, "Proposal for Tariff Rate Quota Reform, Submission from the United States." G/AG/NG/W/58, November 14, 2000.

¹⁰⁸ See G/AG/NG/W/37, p. 7

¹⁰⁹ See G/AG/NG/W/15, p. 3.

¹¹⁰ See G/AG/NG/W/15, p. 3. The United States has argued that eliminating tariff escalation is a better way to ensure more value-added production (“Cairns Group Sets Timetable for Export Subsidies Elimination,” *Inside U.S. Trade* 19(31), August 3, 2001, p. 25).

¹¹¹ World Trade Organization, “European Communities Proposal, Food Quality—Improvement of Market Access Opportunities.” G/AG/NG/W/18, June 28, 2000, pp. 1–2.

¹¹² Paul Blustein, “Accord on Trade Talks Still Uncertain.” *The Washington Post*, November 14, 2001, p. A29.

¹¹³ World Trade Organization, “WTO Negotiation on Agriculture, Cairns Group Negotiating Proposal, Export Competition.” G/AG/NG/W/11, June 16, 2000, p. 2. The timetable of three years is discussed in “Cairns Group Sets Timetable for Export Subsidies Elimination” (*Inside U.S. Trade* 19(31), August 3 2001, p. 25). Developing countries would get seven years.

¹¹⁴ World Trade Organization, “Special and Differential Treatment for Developing Countries in World Agricultural Trade, Submission by ASEAN.” G/AG/NG/W/55, November 10, 2000, p.1.

¹¹⁵ World Trade Organization, “European Communities Proposal, Export Competition.” G/AG/NG/W/34, September 18, 2000, p. 1.

¹¹⁶ See G/AG/NG/W/15, p. 4.

¹¹⁷ “E.U. Urges U.S. to Stop ‘Abuse’ of Food Aid That Disrupts Markets.” *Inside U.S. Trade* 19(20), May 18, 2001, pp. 17–18.

¹¹⁸ OECD, “The Uruguay Round Agreement on Agriculture,” p. 83.

¹¹⁹ USDA, “Agriculture in the WTO,” p. 24.

¹²⁰ “U.S.-Canada Fight Prevents Agriculture Export Credit Deal.” *Inside U.S. Trade* 19(16), April 20, 2001, p. 3.

¹²¹ Greg Frazier, personal communication, February 25, 2002.

¹²² For the U.S. position, see G/AG/NG/W/13, p. 3; for the E.U. position, see G/AG/NG/W/34, p. 5

¹²³ “Cairns Group Sets Timetable for Export Subsidies Elimination.” *Inside U.S. Trade* 19(31), August 3, 2001, p. 24.

¹²⁴ “U.S.-Canada Fight Prevents Agriculture Export Credit Deal.” *Inside U.S. Trade* 19(16), April 20, 2001, p. 3.

¹²⁵ For the ASEAN position, see G/AG/NG/W/55, p. 2; for the Cairns Group position, see G/AG/NG/W/35, p. 2.

¹²⁶ See G/AG/NG/W/102, pp. 13–14.

¹²⁷ World Trade Organization, “Note on Domestic Support Reform, Negotiations on Agriculture, Submission from the United States.” G/AG/NG/W/16, June 23, 2000, p. 1.

¹²⁸ USDA, “The Road Ahead,” pp. 16–18

¹²⁹ See G/AG/NG/W/90, p. 3

¹³⁰ For the U.S. position, see G/AG/NG/W/15, p. 4; for the Cairns Group position, see G/AG/NG/W/35, p. 2; for an example of developing countries’ positions, see ASEAN proposal, G/AG/NG/W/55, p. 2.

¹³¹ See, for example, the Like-Minded Group position, G/AG/NG/W/14, p. 3.

-
- ¹³² See G/AG/NG/W/55, p. 3.
- ¹³³ See G/AG/NG/W/102, pp. 13–14.
- ¹³⁴ Andrew Crosby and Andrew Baldwin, "Agriculture Negotiations at the WTO: Context Setting and Intelligence Report." Geneva: International Centre for Trade and Sustainable Development, February 2001, p. 27.
- ¹³⁵ Crosby and Baldwin, "Agriculture Negotiations at the WTO," p. 22.
- ¹³⁶ For the U.S. position, see G/AG/NG/W/15, p. 5; for the Cairns Group position, see G/AG/NG/W/35, p. 2; for the E.U. position, see G/AG/NG/W/90, p. 5.
- ¹³⁷ For India's food security box proposal, see G/AG/NG/W/102, pp. 4–5; for the Like-Minded Group's development box proposal, see G/AG/NG/W/13, pp. 4–5.
- ¹³⁸ See G/AG/NG/W/13, p. 4.
- ¹³⁹ Crosby and Baldwin, "Agriculture Negotiations at the WTO," pp. 24–25.
- ¹⁴⁰ World Trade Organization, "Decision on Implementation-Related Issues and Concerns." WT/MIN(01)/W/10, November 14, 2001, p. 2
- ¹⁴¹ International Centre for Trade and Sustainable Development (ICTSD), "WTO Net Food Importers Call for Food Aid Fund." *Bridges Weekly Trade News Digest* 5(25), July 3, 2001.
- ¹⁴² "U.S. Rejects E.U. Proposal Targeting U.S. Domestic Farm Support." *Inside U.S. Trade* 19(22), June 1, 2001, p. 9.
- ¹⁴³ "House Farm Bill Likely to Keep Subsidies Controversial to E.U." *Inside US Trade* 19(21), May 25, 2001, pp. 14–15.
- ¹⁴⁴ "Fischler Says New WTO Ag Talks Cannot Focus Solely on E.U. Policies." *Inside U.S. Trade* 19(22), June 1, 2001, p. 16.
- ¹⁴⁵ C. Fred Bergsten, "America's Two-Front Economic Conflict." *Foreign Affairs*, March/April 2001.
- ¹⁴⁶ "Group of 77 Pushes Concession in Agriculture, Open to Investment Talks." *Inside U.S. Trade* 19(1), October 26, 2001, p. 17
- ¹⁴⁷ Crosby and Baldwin, "Agriculture Negotiations at the WTO," p. 4.
- ¹⁴⁸ William Avery, ed., *World Agriculture and the GATT*. Boulder, CO: Lynne Rienner Publishers, 1993..
- ¹⁴⁹ H.W. Moyer and T.E. Josling, *Agricultural Policy Reform: Politics and Process in the EC and USA*. Hemel Hempstead: Harvester Wheatsheaf, 1990, p. 197.
- ¹⁵⁰ Organisation for Economic Co-operation and Development. *OECD Agricultural Outlook: 2001-2006, 2001 Edition* Paris: Organisation for Economic Co-operation and Development.
- ¹⁵¹ David E. Sanger, "A Grand Trade Bargain." *Foreign Affairs* January–February 2001.