Domestic Support Commitments: A Preliminary Evaluation

Changes in the mix of domestic agricultural support policies in WTO member countries between 1986-88 and 1995 suggest that related effects on production and trade may have been reduced. All member countries are meeting their URAA commitments to reduce support from those domestic agricultural policies deemed to have the largest effect on production ("amber policies"), and reductions in most countries greatly exceed their commitments. Domestic support from those policies thought to have the least effect on production ("green box policies") has increased from 1986-88 levels. *[Fred Nelson (fjnelson@econ.ag.gov), Edwin Young (ceyoung@econ.ag.gov), Peter Liapis (pliapis@econ.ag.gov) and Randall Schnepf (rschnepf@econ.ag.gov)]*

Introduction

In an unprecedented act, WTO member countries agreed to discipline some domestic policies, as well as trade policies, as part of the Uruguay Round Agreement on Agriculture (URAA).[1] Other domestic policies were exempt from any disciplines. The "disciplining" of domestic policies is being accomplished by requiring countries to control and gradually reduce expenditures (or support levels) on the targeted, non-exempt policies. At stake is the successful accomplishment of the WTO's long term goals—to reduce support and protection of agriculture and establish a fair and market-oriented agricultural trading system, while having regard for certain non-trade concerns of individual countries.

This article presents preliminary analysis of the structure of domestic agricultural policy that has arisen under the URAA. Changes in measures of support for different policies are evaluated in terms of their potential implications for market orientation and trade.

Countries Agree To Reduce Domestic Support

Some limitations on domestic support were thought to be essential for the successful achievement of WTO's trade goals aimed at establishment of "a fair and market-oriented agricultural trading system…and correcting and preventing restrictions and distortions in world agricultural markets." And yet, individual countries reserve the right and may be obligated by the electorate to use domestic support policies to pursue various national policy objectives.

All domestic policies whose provisions are restricted to agricultural producers and/or landowners are likely to have some effect on production, and, thus, on trade. And domestic policy objectives often are the motivation for many trade policies, since, by directly influencing imports and exports, trade policies can be used to facilitate domestic price and income goals. For a trade agreement to be reached in a world wide context, therefore, individual countries had to be willing to trade off some aspects of domestic policy in favor of facilitating world market goals. In the final URAA, these trade-offs involve the methods of implementing domestic policy, rather than the domestic policy goals themselves.

In discussions leading up to the URAA, domestic policies were segregated into categories to indicate the relative acceptability of the policies (see box: "Domestic Policy Categories in the [URAA]…"). In the final agreement, domestic policies deemed to have the largest effect on production and trade (amber box policies) are to be disciplined by requiring limitations or gradual reductions in related support levels. Policies presumed to have the least effect (no more than "minimal trade-distorting effects") on production and trade (green box policies) are exempt from any disciplines. How to tell whether or not effects of specific policies are more than "minimally trade distorting" is an issue yet to be definitively addressed by WTO guidelines.

In general, the domestic policies considered to have the largest effects on production and trade are those that provide direct economic incentives to producers to increase or decrease current resource use or current production, since such changes affect supplies available for export, and the demand for imports. These incentives are known as "coupled" incentives because of the direct link to current production. Examples are administered price supports, input subsidies, and direct per unit payments. Payments and other incentives not directly linked to inputs or production may, therefore, be termed "decoupled." When support is decoupled, farmers base production decisions on expected market returns, not on expected government support.

The URAA green box includes a direct payments category called "decoupled income support," where eligibility is "determined by clearly-defined criteria such as income, sta-

[1]Trade policies, in this paper, refer to the set of policies designed specifically to affect trade flows and prices through use of import quotas, tariffs, and export subsidies. Domestic policies include all other agricultural policies within a country that aim to influence internal farm and rural incomes, resource use, production, consumption of agricultural products, or environmental impacts of farming.

Domestic Policy Categories in the Uruguay Round Trade Agreement on Agriculture [1]

Amber box policies ($115 billion)	These were the domestic policies presumed to have the largest potential effects on production and trade. The base period level of amber support (1986-88 for most countries) was “bound” for all countries, meaning that this level was established as an initial absolute upper limit for sup port. Twenty-eight countries, including most of the major agricultural producers and/or traders, also agreed to phase down the level of support provided through these amber policies (as mea sured by the AMS) over a specified period of time. Developed countries agreed to a 20 percent reduction in amber support over a 6-year period, relative to the base level of support, while developing countries agreed to a 13-percent reduction over a 10-year period and least developed countries agreed to not increase support beyond the base period level.
Green box policies ($127 billion)	These policies were considered to have the smallest potential effects on production and trade. “Green” means that countries could “go ahead” with these policies, that is, they are exempt from support reduction commitments.
Blue box policies ($35 billion)	For the 1995-2000 notifications, amber box payments related to production limiting programs can be placed in a special, temporary exemption category called the “blue box,” if the amount of payments are based on fixed area and fixed yields, or a fixed number of livestock, or if they are based on no more than 85 percent of the base level of production. Any such payments in the base period are included in the base level of support (AMS). (See Article 6, paragraph 5 of the URAA.)
Special and differential exemptions ($4 billion)	Certain domestic investment and input subsidies of developing and least developed countries are exempt from support reduction commitments (see Valdes and Young article in this report).
De minimis exemptions ($5 billion)	Another category of excludable support is termed “de minimis, and is based on the notion that expenditures below a certain threshold (defined as 5 % of the value of production for developed countries and 10 % for developing countries) are sufficiently benign that they do not have to be included in the AMS calculation.
Total support ($286 billion)	Total value of the above support categories.

[1]Support data shown are for 1995, as reported to the WTO by individual countries. Based on unpublished information from the WTO.

tus as a producer or landowner, factor use or production level in a defined and fixed base period.” “The amount of such [decoupled] payments in a given year shall not be related to, or based on, the type or volume of production (including livestock units) undertaken by the producers in any year after the base period.” Neither shall the amount of such payments be “related to, or based on…prices…[or] …factors of production employed in any year after the base period.” “No production shall be required in order to receive such payments.” (Paragraph 6, Annex 2).

Based on the above URAA definition, coupled support, therefore, might be considered to be support that is related to, or based on production, resource use, or prices in some year after the base period, especially if that year is the current year.

To accommodate the EU and the United States and to bring the negotiations to a conclusion, countries agreed to redefine some amber box “payments under production-limiting programmes” as exempt “blue box” policies if they met specific criteria (see the criteria in the box: “Domestic Policy Categories in the [URAA]… ”). Examples of 1995 blue box policies are the former U.S. deficiency payments and the EU compensatory payments.[2]

[2]EU compensatory payments are payments made to producers for area sown to grains, oilseeds, or protein crops (“arable crops”). These payments were established to compensate producers for the loss of income caused by the reduction of intervention, or support prices after 1992. Payments are based on fixed, historical yield in each region, and the total area eligible to receive compensatory payments is also fixed. Producers with an area planted to arable crops sufficient to produce more than 92 tons of grain must set aside part of their area in order to receive compensatory payments.

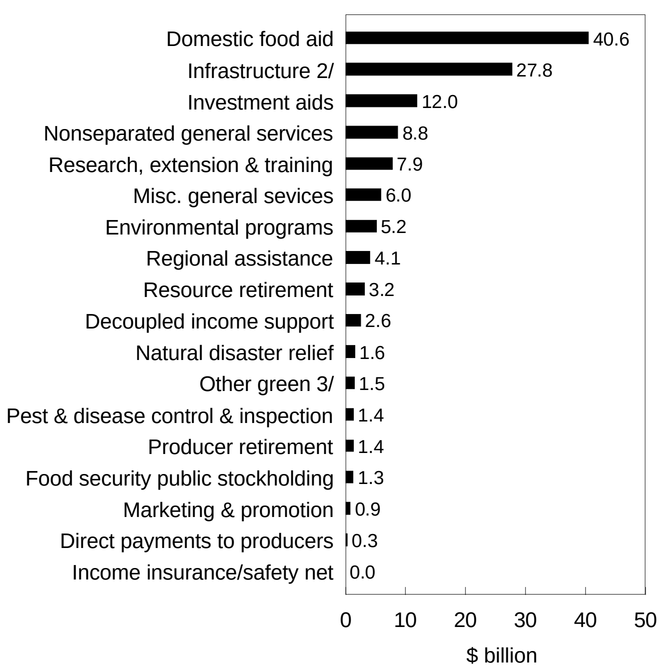
In identifying potentially exempt green box policies, the URAA accommodates the political need for individual countries to be able to use policies related to issues of equity (e.g., food security and aid to the needy), market failure (e.g., environmental programs), and the absence, or inadequacies of risk markets (e.g., insurance and income safety net programs). The Agreement therefore includes a suggestive list of the types of green box programs that may be considered exempt, as long as they meet certain specific criteria, including the one fundamental criteria that they be, at most, minimally trade distorting (figure 4, table 2). The term, minimally trade distorting, however, is not defined in the URAA.

Aggregate measure of support. Support levels from amber box policies are quantified, according to the URAA, by calculating an aggregate measure of support (AMS) for each country.[3] Support reduction commitments were implemented by 28 countries agreeing to keep their annual AMSs from exceeding specified upper limits, or "ceilings" that decline over time relative to their level in the base years 1986-88. Other member countries agreed, in effect, to not increase support above the level in the base year. The final decision about who would actually make support reduction commitments was, itself, worked out during the negotiations. Ratification of the URAA text also implies acceptance of the individual country commitments, as submitted.

In addition to the exemption from disciplines for green and blue box policies, other exemptions were also granted that reduced the level of some countries' AMS. Developing countries received "special and differential" exemptions for certain input and investment subsidies based on the principle that developing countries need to be allowed some flexibility to generate economic development through subsidized agricultural development. Also exempt were individual measures of amber box subsidies that were considered too small to count, resulting in the "*de minimis* exemption" (table 3).

[3]The AMS combines estimated support levels from all non-exempt policies for all commodities into one overall measure. Non-exempt policies in the AMS include commodity-specific market price supports based on administered prices, non-exempt direct government payments to producers, and other commodity-specific transfers, plus non-commodity specific measures of support received by producers, such as capital, input, and insurance price subsidies (see table 2 for U.S. examples). As a domestic measure, the AMS excludes export subsidies and impacts of import restrictions not also tied to domestic administered price programs.

Figure 4
Green Box Expenditures, 1995 1/



1/ Total for 36 countries who notified green expenditures as of May 1998.
2/ One of several expenditure types in the "general services" categories. Incudes various rural capital works projects.
3/ Includes all other expenditures notified as green, where the type was not specified.

Support Reduced from Amber Box (AMS) And Blue Box Policies[4]

Support reduction commitments more than met. All countries reporting their 1995 AMS to the WTO have met their support reduction commitments. Most of these countries have, in fact, exceeded their support reduction commitments by a large margin (table 4, and see text box for amber box policy commitments).

Effects of domestic policies on trade likely reduced. Support from policies with the greatest potential to affect production and trade has decreased significantly since the URAA base period. The total value of the 1995 AMS for the first 24 countries who notified—$115 billion—is equal to only about 57 percent of the AMS level in the 1986-88 base period for these countries. The blue box payments, however, were excluded from the AMS in 1995 (based on Article 6 of the URAA) even though they were included in the base year AMS. Combining the 1995 blue box payments with the reported AMS, for purposes of comparison, increases the 1995 support level to 73 percent of the base.

AMS and blue box policies affect production. Policies included in the current AMS tend to raise production because such benefits are usually "coupled" with production, meaning that increases in production will likely bring about increases in the policy benefits and vice versa. The effect of such a support policy on producers is to encourage

[4]This analysis uses unpublished information from the WTO and data from country notifications to the WTO for 1995. (Data for 1996 are incomplete as of November 1998). Membership in the WTO requires that countries annually provide information on commitments, changes in policies and support, and other matters related to outstanding trade agreements—a process called "notification." In the initial WTO agreement, 26 countries made AMS reduction commitments. Two additional countries made commitments upon accession to the WTO. As of May 1998, 24 countries had notified the WTO for 1995. These 24 countries accounted for 99 percent of total support for the 28 AMS countries in the base period.

Table 2--Classification of U.S. domestic programs for 1995 and 1996 notification to the WTO

Notification category	Selected U.S. program activity
Aggregate measure of support (AMS):	
Market price support	Dairy, peanuts, sugar price support based on administered prices
Non-exempt direct payments	Marketing loans and loan deficiency payments, loan forfeit benefits, user marketing payments
Other non-exempt measures	Storage payments, commodity loan interest subsidies
Non-product specific support	Irrigation and grazing programs, crop insurance and state credit programs
Payments under production limiting programs (blue box payments)	Deficiency payments in 1995 (included as a non-exempt direct payment in the base period)
Exempt, green box support:	
General services--	
Research	Agricultural and economic research, statistics, library services, outlook
Pest and disease control	Animal and plant health and disease control
Training, extension, advisory	Cooperative State extension and cooperative services
Inspection and marketing services	Inspection of grain, imports, and food; market news and grading and standardization
Other general services	Conservation operations and other non-payment environmental activities
Stockholding for food security	Food Security Commodity Reserve
Domestic food aid	Food stamps; women, infants, children nutrition
Decoupled income support	1996 production flexibility contract payments
Income insurance and safety nets	(U.S. revenue insurance included in the AMS)
Relief from natural disasters	Livestock and crop disaster payments (U.S. crop insurance included in the AMS)
Structural adjustment: resource retirement	Conservation Reserve Program
Structural adjustment: investment aids	Farm credit, ownership, operating loans (FmHA)
Environmental payments	Soil conservation and water quality programs
Regional assistance, producer retirement	(None in the United States)

Table 3--Total support and share of support for specified policies for countries notifying for 1995

Country	Total support	Green policies	Amber policies	Blue policies	S&D 1/ exclusion	*De minimis* exclusion
	Mil. dol.			--Percent--		
Australia	822	86	14	0	0	0
Brazil	5,531	88	0	0	6	5
Canada	3,031	51	19	0	0	30
Colombia	508	63	11	0	26	0
Cyprus	214	61	38	0	2	0
Czech Republic	176	75	25	0	0	0
European Union	113,239	21	54	24	0	1
Hungary	271	39	0	0	0	61
Iceland	240	12	78	9	0	0
Japan	69,607	47	52	0	0	1
Korea	8,257	63	33	0	#	4
Mexico	4,021	60	17	0	24	0
Morocco	316	50	4	0	47	0
New Zealand	128	100	0	0	0	0
Norway	3,316	20	47	34	0	0
Poland	691	63	37	0	0	0
Slovak Republic	242	#	99	1	0	0
Slovenia	176	48	52	0	0	0
South Africa	1,380	55	33	0	0	12
Switzerland	5,924	39	61	0	0	0
Thailand	2,202	62	29	0	10	0
Tunisia	122	24	51	0	25	0
United States	60,926	76	10	12	0	3
Venezuela	1,259	43	43	0	14	0
Other countries	3,127	89	0	0	10	1
All countries (mil. dol.)	285,724	126,878	115,453	35,028	3,348	5,018

= less than 0.5 percent.

1/ S&D = "Special and differential" policies exempt from support reduction commitments because of special considerations given to developing economies (see box: "Domestic Policy Categories...").

Source: Unpublished WTO information and data from country domestic support notifications as of May 1998.

them to increase output to maximize profits. Payments for exempt blue box policies compensate producers for foregone income. Blue box payments received in excess of foregone income from program compliance immediately increase producer wealth, lead to expectations of future windfalls, and may encourage expanded production, especially if any production limitations are subsequently relaxed.

Table 4--Actual support (AMS) as a percent of commitment levels, 1995

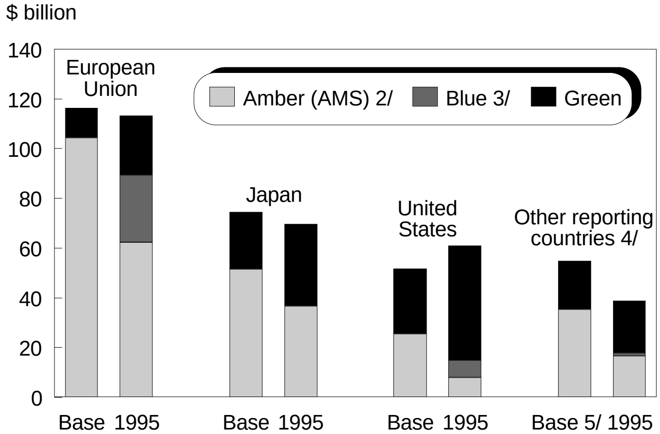
Percent	Countries *
0 to 19	Canada, Colombia, Czech Republic, Hungary, Mexico, Morocco, New Zealand, Poland
20 to 39	Australia, United States
40 to 59	Slovak Republic, Venezuela
60 to 79	Cyprus, European Union, Iceland, Japan, Norway, South Africa, Thailand
80 to 100	Brazil, Korea, Slovenia, Switzerland, Tunisia

* As of June 1998 Costa Rica and Israel had not yet notified. Papua New Guinea and Bulgaria were not required to notify on their 1995 domestic supports, since they joined the WTO after the original Agreement on Agriculture was signed.

Support concentrated in three countries. The European Union, Japan, and the United States are by far the largest providers of amber support in absolute terms, accounting for about 90 percent of the total AMS for the 24 countries that reported an AMS as of June 1998. These results reflect the size of these countries' agricultural sectors, and the rate of subsidization in these countries, both of which are affected by unique circumstances in 1995, such as weather and demand factors (figure 5). The 1995 rate of subsidy, per dollar of output from amber plus blue box policies, was about 30 percent in EU and Japan, and 7 percent in the United States.[5] The blue box payments were relatively large for the EU and United States, while Japan reported no blue box payments (table 3). Although these support indicators are

[5]The subsidy rate is the value of support divided by the value of production at domestic market prices, as reported to the WTO. For Japan, the value of "gross agricultural output" for 1994 was the divisor, based on data from the Statistics of Agricultural Income, Ministry of Agriculture, Forestry, and Fisheries.

Figure 5
Comparison of Support 1/



1/ Unpublished WTO information and 1995 notification data.
2/ Amber in this chart is the AMS combined with values exempt under de minimis and developing country provisions.
3/ Blue box expenditures are included with the amber (AMS) box in the base year.
4/ Includes 21 other countries who reported AMS commitments for 1995.
5/ Missing base year data for some countries with relatively small support levels were included by assuming the values were the same in the base year as in 1995.

not measures of trade distortion, per se, the combination of a high rate of subsidy and a large amount of subsidy for both the EU and Japan emphasizes the potential for these countries to affect world trade.

Policy changes have occurred. Several countries have undertaken policy changes from 1986-88 through 1996, relying less on market price support and more on direct payments and green box policies. For example, reforms of the European Union's Common Agricultural Policy during 1992 to 1995 reduced support prices and increased its reliance on direct payments. The EU total support from AMS-plus-blue box payments in 1995 was 15 percent below the base period level of support. Japan has held its administered prices constant or reduced them since 1986-88, and its AMS decreased 29 percent.

The United States also made important reforms under two major Farm Acts in 1990 and in 1996. The U.S. AMS-plus-blue box payments declined 42 percent from the base period through 1995 and were down again in 1996. However, total support in the United States increased from the base level through 1995, due to increased green box expenditures (largely domestic food assistance programs). Acreage reduction programs were eliminated in 1996. Producers now have 100 percent flexibility to plant for the market. And the blue box deficiency payments, applicable for the last time in 1995, have been replaced by decoupled production flexibility contract payments. These new payments, which are reported in the green box, are the main source of direct payments after 1995, and their inclusion in 1996 caused total green box support to increase from 1995 to 1996.

Increased Support Observed from Green Box And Other Exempt Policies

Support from green box policies, those presumed to have the smallest potential effects on production and trade, increased 54 percent from 1986-88 to 1995, while AMS changes suggest that support from policies thought to have the greatest potential effects on production and trade decreased in many countries. Actual effects of reported green box policies on production and world trade depend on the total amount of subsidy channeled through the particular policies and on the way in which the subsidies are provided by each policy. The URAA provisions establishing criteria for which policies may be considered green box policies focus attention on the way that policies are implemented, but do not explicitly limit the amount of the subsidy.

All WTO-exempt policies provide some sort of subsidy, or assistance to agriculture, otherwise they would not need to be granted exemption status. Most of the expenditures on green box policies, worldwide, went for domestic food aid, infrastructure services, other general government service programs, and investment aids for structurally disadvantaged producers (figure 4). Of 19 countries reporting green box data both in the base and in 1995, 16 notified an increase in green box expenditures in nominal terms since the base. Most of this increase was concentrated in three countries—the United States, EU, and Japan (figure 5). The 1995 value of green box policies ($127 billion) was greater than the total reported for the amber box AMS ($115 billion).

Production effects of green box policies. Green box policies are presumed to have the smallest effects on production and trade, and are, in fact, required to have "no, or at most, minimal" effects on trade and also "shall not have the effect of providing price support to producers." Although these overall requirements for the green box remain vague, the specific criteria for decoupled payments (detailed above) suggest that, at least, these payments would have no direct effect on current production decisions. However, any policy that transfers income to producers could conceivably have some effect on production by increasing wealth and reducing the risk of financial failure. Some specific policies that otherwise meet the URAA green box criteria could have significant positive effects on production if financed with a large enough total amount of government expenditure.

Domestic food aid was the single largest category of green support in 1995, totaling $40 billion, most of which was spent by the United States. U.S. food aid increased $18 billion from the base to 1995 because of increases in the Food Stamp Program.

Other green box expenditures include a variety of different types of programs with unique approaches to providing benefits to producers and the rural economy. Each has its own potential to affect production. Government service programs affecting “infrastructures” ($28 billion) and “other general government service” activities ($25 billion) provide information, inspections, and other kinds of assistance to agriculture in general, but do not directly subsidize producers or specific commodities’ production. The cost of constructing irrigation and electricity distribution facilities, roads, and other production-cost influencing structures in rural areas, however, are reduced because of the infrastructure policies. Investment aids (e.g., farm credit subsidies or grants) to structurally disadvantaged producers ($12 billion) are designed to increase production and income of some producers, but the effect may be minimal if the criteria for the eligibility is sufficiently limited to a small enough share of the total farm sector. The other ten categories of support are not yet very important, quantitatively, averaging about $2 billion each, worldwide (figure 4).

Implications for the WTO

Most countries have been able to reduce their amber support levels much more than required under the URAA, suggesting that it might not be too hard, politically, and/or economically, for some further reductions in the AMS ceiling to be made in future trade negotiations. However, a dozen countries, including Japan and the EU, still have support levels in 1995 equal to at least 60 percent of their commitment ceiling, so the extent of future reductions may be limited. The EU would be particularly affected by much larger reductions in support ceilings if the blue box exemptions were denied in the future. The 1995 AMS for the United States was only 27 percent of its commitment ceiling, and U.S. blue box policies no longer exist, so it might be relatively easy to make significant future reductions in the AMS ceiling level in this country. AMS commitments are on an aggregate basis, however, so if future commitments were commodity specific, it might be more difficult to make significant additional reductions beyond that agreed to already.

Changes in the mix of domestic policies in WTO countries over time, involving moving from reliance on amber policies and toward more reliance on green policies, suggest that related effects on production and trade may also have become smaller. However, complementary reforms in trade policies must also take place to guarantee increased world market orientation. That is, trade policies can increase domestic prices regardless of domestic support levels. So, reducing domestic support alone is not sufficient to guarantee reduced effects on trade.

If green box expenditures continue to increase in importance, the particular green box programs being used need to be evaluated to guarantee that they really meet both the fundamental criteria for the green box as well as the policy-specific criteria. A problem of interpretation arises in implementing the URAA because of the undefined fundamental criteria for the green box that the reported programs be no more than minimally distorting of production and trade. Consequently, some programs reported in the green box could satisfy the policy-specific criteria for being green and yet also could have “significant” production effects with great enough financing and program participation.