U.S. Farm Policy and the World Trade Organization: How Do They Match Up?

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Abstract

The debate over a new farm bill has focused on how to spend an additional $73.5 billion in funding for the agricultural budget over 10 years. The House of Representatives, the Senate agriculture committee, and Senators Cochran and Roberts (supported by the Bush administration) have each proposed a structure for the next farm bill. A critical question becomes whether these proposals conflict with U.S. commitments to limit subsidies under the World Trade Organization (WTO) agreement. This paper explores this issue and concludes with a discussion of the future direction of U.S. farm subsidies and new WTO agreements.

Key words: agricultural policy, domestic support, trade commitments, WTO.

U.S. FARM POLICY AND THE WORLD TRADE ORGANIZATION: HOW DO THEY MATCH UP?

Introduction

The debate over a new farm bill began in earnest last year with hearings in both the Senate and House agriculture committees. The stakes of the debate were raised when Congress set aside an additional $73.5 billion in funding for the agricultural budget over 10 years. The House passed its version of the farm bill (H.R. 2646) in the fall. The Senate agriculture committee passed a farm bill (S. 1731), but the full Senate has not yet agreed on the direction it wants to take farm policy, other than that it wants to spend the full $73.5 billion. Farm lobbyists and farm-state legislators have convinced the Bush administration of the need to spend the additional $73.5 billion. The administration has come out in support of a farm bill proposal created by Senators Cochran and Roberts—a plan that was rejected by the Senate in December.

With each new farm bill, the array of federal agricultural programs is modified. New programs are added while some existing programs are changed or eliminated. Individual programs are designed to address a given issue in agriculture. The federal crop insurance program provides producers with subsidized insurance for their crop yields and/or revenues. Marketing loan programs guarantee farmers a minimum price for their products. The Production Flexibility Contract (PFC) payments provide income support to the agricultural sector.

The emergency agricultural support packages of the last four years have led many to conclude that the current farm program does not provide adequate support to farmers and that federal agricultural expenditures are too low. Thus, many are looking to change the existing policy. The proposed changes range from modifications of existing programs to creation of new ones.

Much of the discussion so far has focused on the countercyclical nature (or lack thereof) of farm programs. Within the current programs, the marketing loan and crop

insurance programs are countercyclical because expenditures increase in response to a decline in either price or yield. Marketing loan payments increase with lower prices. Crop insurance indemnities accrue when yield and/or revenue fall below set levels. PFC payments are not countercyclical because they are fixed throughout the life of the program.

While the outcome of the farm bill debate is in doubt, there seems to be no doubt that additional subsidies will be given to agriculture over the next 10 years. A critical question becomes whether these subsidies conflict with our commitments to limit subsidies under the World Trade Organization (WTO) agreement. We will explore this issue in detail by first summarizing the three leading proposals. Each builds on the existing structure of the current farm bill while adding additional programs to provide support to agricultural producers. We will present the terms of the U.S. commitments to the WTO. We will then estimate compliance of the three proposals with WTO rules and discuss the likelihood that farm subsidies could exceed our commitments. We will conclude with comments about the future direction of U.S. farm subsidies and new WTO agreements.

Alternative Farm Bill Proposals

The House farm bill continues fixed decoupled payments (like the PFC payments), maintains the marketing loan program, elevates soybeans and minor oilseeds to program crop status, and creates a new countercyclical program. The fixed decoupled payments are based on a combination of payment yields, acreage, and payment rates. The payment yields for the new payments are the same as those used in the current PFC payments, with the exception of soybeans, which uses yields based on average yields over the 1981–1985 period (the same period over which the other program crops established their program yields). The payment acreage is set at either the farm's current payment acreage for PFC payments or the 1998–2001 average planted acreage for all program crops on the farm. The House farm bill also follows the PFC program convention of payment on only 85 percent of eligible acres. The payment rates are set slightly higher than PFC payment rates for 2002 and are locked in for the entire life of the bill. For the marketing loan program, the major changes are in the loan rate settings. The soybean loan rate is lowered to $4.92 per bushel, the barley loan rate is capped at $1.65 per bushel, the oat loan rate has a maximum level of $1.21 per bushel, and the sorghum loan rate is raised to $1.89 per

bushel. Soybeans and minor oilseeds would be eligible for both the fixed decoupled and countercyclical payments under the bill. However, producers must choose to update program acreage to enroll soybean and minor oilseed acreage. The countercyclical program pays producers when prices fall below a set level. Target prices are established for each of the program crops. Under the House bill, the effective market price is calculated as the sum of the maximum of the crop's loan rate or 12-month national average farm price and the payment rate for the fixed decoupled payments (U.S. House of Representatives 2001). When the effective market price is less than the target price, producers receive a payment with the rate equal to the difference between the target price and the effective market price. The payment yields and acreage from the fixed decoupled payments are also used in the countercyclical program. Thus, the House countercyclical program uses a fixed payment base but a variable payment rate that is responsive to current prices. The variable payment rate is maximized when the 12-month national average farm price is below the loan rate. The House farm bill covers the 2002–2011 crop years.

The Senate agriculture committee farm bill follows the basic structure of the House farm bill (U.S. Senate 2001). It continues fixed decoupled payments, maintains the marketing loan program, elevates soybeans and minor oilseeds to program crop status, and creates a new countercyclical program. It is in the details of the two programs where the differences arise. In the Senate version, the fixed decoupled payments have different payment rates and allow for updating on both payment acreage and yield. Payment acreage may be based on either current PFC acreage or 1998–2001 average planted acreage. Payment yield may be based on either current PFC yields or 1998–2001 average yields (after some adjustments). The payments are based on 100 percent of eligible production, as opposed to 85 percent for both current law and the House farm bill. Also, soybean and minor oilseed acreage can be enrolled in the program without updating payment acreage on other crops. The fixed payment rates are set near the 2002 PFC rates in the beginning. In 2004, the fixed payment rates are reduced by 50 percent. The exception to this is for sorghum where the fixed payment rate is set at $0.31 per bushel in 2002 and $0.135 per bushel in 2004. Another 50 percent reduction in rates is scheduled

for 2006. Marketing loan rates are raised for all eligible crops except soybeans where the loan rate is lowered to $5.20 per bushel.

The countercyclical program has a structure quite similar to the House proposal. It pays producers when prices fall below a set level. Income protection prices are established for each of the program crops. Under the Senate agriculture committee bill, the effective market price is calculated as the sum of the maximum of the crop's loan rate or five-month national average farm price (the first five months of the marketing year) and the payment rate for the fixed decoupled payments. When the effective market price is less than the income protection price, producers receive a payment with the rate equal to the difference between the income protection price and the effective market price. The payment yields and acreage from the fixed decoupled payments are also used in the countercyclical program. Thus, the Senate agriculture committee countercyclical program uses a fixed payment base but a variable payment rate that is responsive to current prices. The variable payment rate is maximized when the five-month national average farm price is below the loan rate. Also, given the initial settings of the loan rates, income protection prices, and fixed decoupled payment rates, the countercyclical program under the Senate agriculture committee proposal cannot make any payments until 2004. The Senate agriculture committee farm bill covers the 2002–2006 crop years.

The Cochran-Roberts farm bill also continues fixed decoupled payments, maintains the marketing loan program, elevates soybeans and minor oilseeds to program crop status, and creates a new countercyclical program. The payment acreage for the fixed decoupled payments is established at either the current PFC base for the farm, the current PFC base for the farm plus 1998-2001 average planted acreage to soybeans and minor oilseeds, or the 1998–2001 average planted acreage to all program crops. Payment yields are set at the current PFC payment yields, except for soybeans and minor oilseeds, which are paid on yields calculated by the product of the farm's 1998–2001 average oilseed yield and the ratio of national average oilseed yields for 1981–1985 and 1998–2001. Payment rates are significantly higher than the 2002 PFC payment rates. And as with the House fixed decoupled payments and PFC payments, only 85 percent of eligible production receives a payment. The marketing loan provisions follow those in the House bill. The new countercyclical program is a farm savings account program. The program is

structured to compensate for declines in gross revenue. Adjusted gross revenue is calculated as the sum of gross receipts from all agricultural enterprises (except tobacco), insurance indemnities, and government payments, less the costs of items purchased for resale (such as feeder cattle). Targets are established at the five-year average of adjusted gross revenue. For producers to qualify for the farm savings account program, they must have a five-year average adjusted gross revenue of at least $20,000 (with exceptions for limited resource and beginning producers). The accounts are funded by producer contributions and government matching funds. The accounts have a maximum limit of 150 percent of the five-year average adjusted gross revenue on the farm, and the government matching funds are limited to a maximum of $10,000 per account per year. Total matching funds are limited to $800 million in 2002. This limit increases by $100 million each year until 2006. The accounts are allowed to earn interest at commercial rates. Producers can withdraw money from the accounts either when realized adjusted gross revenue is less than 90 percent of the their five-year average adjusted gross revenue or when the producer retires. The Cochran-Roberts bill covers the 2002-2006 crop years.

To provide a quick summary of the main differences among the proposals, we list the various program loan rates, fixed payment rates, and target/income protection prices in Tables 1-3. Where applicable, we also have included figures from the current farm bill. All of these programs would fall under the provisions of the WTO. The United States is a member of the WTO and has committed to limiting the kind of industry support that affects the trade of goods and services. The WTO is the successor organization of the General Agreement on Tariffs and Trade (GATT). The GATT was established after World War II, along with agreements to form other international organizations, such as The World Bank and the International Monetary Fund.

GATT provided rules on employment, restrictive government and business practices, investment, and world trade affairs. The Uruguay Round of Multinational Trade Negotiations replaced the GATT institutional framework with an official organization (the WTO) to oversee international trade issues.

There are sector-level trade agreements within the WTO. Agriculture is one of the sectors with such an agreement (often referred to as URAA for Uruguay Round Agreement on Agriculture) (WTO 1994). Under the URAA, countries agreed to reduce agricultural

TABLE 1. Marketing loan rates ($/yield unit)

Crop	2001 Actual	House	Senate Ag. Comm.	Cochran-Roberts
Barley	1.65	1.65	2.00	1.65
Corn	1.89	1.89	2.08	1.89
Cotton	0.5192	0.5192	0.5500	0.5192
Oats	1.21	1.21	1.50	1.21
Rice	6.50	6.50	6.85	6.50
Sorghum	1.71	1.89	2.08	1.89
Soybeans	5.26	4.92	5.20	4.92
Wheat	2.58	2.58	3.00	2.58

TABLE 2. Fixed payment rates ($/yield unit)

			Cochran-	Senate Ag. Comm.		
Crop	2002 PFC	House	Roberts	2002-03	2004-05	2006
Barley	0.20	0.25	0.3440	0.20	0.10	0.05
Corn	0.26	0.30	0.4128	0.27	0.135	0.068
Cotton	0.0556	0.0667	0.1418	0.13	0.065	0.0325
Oats	0.021	0.025	0.0344	0.05	0.025	0.013
Rice	2.04	2.35	3.23	2.45	1.225	0.6125
Sorghum	0.31	0.36	0.4953	0.31	0.135	0.068
Soybeans	0.00	0.42	0.5779	0.55	0.275	0.138
Wheat	0.46	0.53	0.7292	0.45	0.225	0.113

TABLE 3. Target or income protection prices ($/yield unit)

Crop	House	Senate Ag. Comm.
Barley	2.39	2.20
Corn	2.78	2.35
Cotton	0.7360	0.6800
Oats	1.47	1.55
Rice	10.82	9.30
Sorghum	2.64	2.35
Soybeans	5.86	5.75
Wheat	4.04	3.45

protection and support by opening domestic markets to import competition and by reducing domestic support and export subsidies. The market access provisions prohibit new non-tariff import barriers, convert existing non-tariff barriers into tariffs, and specify a reduction in tariff levels. The export subsidy provisions prohibit new export subsidies and reduce both the level of export subsidies and the quantities exported under them. The domestic support provisions target reductions in trade-distorting domestic government policies.

Many cite the WTO commitments made by the United States as being an important constraint on the design of future U.S. farm programs. Indeed, much of the debate on the three proposals has centered on the "WTO compliance" of each. But many are confused about the U.S. commitments and their future importance. The objective of this paper is to fill this gap in understanding by providing a detailed explanation of the WTO agreement and estimates of whether the United States has fully complied with its WTO commitments in recent years. In addition, we project the degree of compliance through the 2002 marketing year. After this projection, we examine how each of three proposed farm bills would affect U.S. compliance.

We find that the United States has met its WTO obligations in recent years. Furthermore, given no changes in the current policy mix, we project that the U.S. will continue to meets its commitments. However, some new policy proposals could jeopardize WTO compliance, particularly if WTO members adopt the recent U.S. proposal for more strict limits on agricultural support. The Proposal for Comprehensive Long-Term Agricultural Trade Reform, submitted to the WTO by the United States, outlines additional reductions in trade-distorting practices above existing guidelines (Office of the U.S. Trade Representative 2000).

Domestic Support Commitments within the World Trade Organization

In the URAA, domestic support programs and policies are classified by their trade-distorting effects and their exemption status. The classifications are often described in terms of colored boxes: "green" for the least trade-distorting programs, "amber" for more trade-distorting programs, and "blue" for specific programs outlined in the agreement. Green and blue box programs are exempt from WTO commitments. Amber box programs may be exempt or may be limited under WTO commitments. Therefore, the analogy of a traffic stoplight adequately describes the range of domestic support programs under the URAA. Countries can continue ("Go") all green and blue box programs at any level of funding. Countries may continue to use amber box policies as long as the expenditures on them do not exceed set levels ("Proceed with caution").

The amber box expenditure limit is based on the country's agricultural support over a base period. For the United States, the base period covers the years 1986–1988. The

value of domestic support in the amber box is called the aggregate measure of support (AMS). The countries that signed the URAA agreed to limit amber box spending to a level at or below their AMS from their base period. Developed countries and confederations, such as the United States and the European Union, agreed to 20 percent reductions in their AMS limits by 1999. The United States' base period AMS is $23.9 billion. The current U.S. AMS limit is $19.1 billion. Within the amber box, programs can be exempted from the limits if their AMS amounts are considered too small to count. These exemptions are referred to as *de minimis* exemptions.

The rules governing the placement of a domestic support program in the boxes are specific. Blue box policies are production-limiting policies that base payments on fixed yields and acreage. Payments must be limited to 85 percent of the base level of production. The old U.S. target price-deficiency payment program that existed before 1996 was a blue box program. Green box policies are policies that have minimal trade impacts. Payments from green box policies cannot be linked to current production and/or prices. The URAA lists several types of green box policies and the guidelines that they must follow. The following program types can qualify for the green box:

1. general services
2. public stockholding for food security purposes
3. domestic food aid
4. direct payments to producers
5. decoupled income support
6. government financial participation in income insurance and income safety-net programs
7. payments for relief from natural disasters
8. structural adjustment assistance provided through producer or resource retirement programs
9. structural adjustment assistance provided through investment aids
10. payments under environmental programs
11. payments under regional assistance programs

Each of these program types has guidelines that define the eligibility of the program for the green box. Any direct payments to producers provided by means of a government

program cannot involve transfers from consumers (only taxpayers). Thus, green box programs cannot support prices. The guidelines for decoupled income support are as follows:

1. Eligibility for the program must be based on clearly defined criteria over a fixed base period.
2. Payment amounts cannot be related to production, prices or input usage after the base period.
3. No production can be required to receive payments.

For government-provided income insurance or safety net programs to be green box, the requirements are as follows:

1. Income and income loss can only be from agricultural sources.
2. Loss must exceed 30 percent of average gross income (or an equivalent amount of net income) where average income is determined by a three-year average income (from the previous three years) or a five-year "olympic" average income (removing the high and low years before averaging).
3. If payments are provided by this program and a natural disaster relief program, the total amount of payments cannot exceed 100 percent of the producer's total loss.

The requirements for natural disaster relief are as follows:

1. Eligibility is determined by a formal disaster announcement from the government with at least a 30 percent production loss based on average production (the previous three-year average or the five-year "olympic" average).
2. Payments may be made only on losses due to the disaster.
3. Payments cannot be for more than the amount of loss and requirements on future production.
4. If payments are provided by this program and a natural disaster relief program, the total amount of payments cannot exceed 100 percent of the producer's total loss.

Producer retirement programs qualify for exemption if eligibility for the program is clearly defined on criteria to transition the producer out of agricultural production, and the payments are conditional on complete retirement from agricultural production. Resource retirement programs qualify under the following stipulations:

1. Payments are conditional on the resource staying out of agricultural production for at least three years.

2. Requirements cannot be placed on alternative use of the resource or other resources employed in agricultural production.
3. Payments cannot be related to any remaining agricultural production in which the producer is involved.

Environmental program payments qualify for the green box exemption if eligibility requirements are clearly defined and dependent on specific conditions, possibly involving production inputs or practices, and if the payment is limited to the extra cost or income loss the producer faces to be in compliance. Programs that fit these general types, but fail to meet the exemption conditions, and all other domestic support programs would fall into the amber box and would possibly be limited under the URAA.

Amber box policies still can be exempted from the AMS counted against a country's limit if the policy is termed *de minimis*. For developed countries, a 5 percent rule is used. For commodity-specific support, a policy can be declared *de minimis* if the expenditures under the policy are less than 5 percent of the value of production for the commodity. For non-commodity-specific support, all such policies can be declared *de minimis* if total expenditures under all of the policies are less than 5 percent of the total value of agricultural production in the country.

The World Trade Organization and the Current Farm Bill

The WTO agreements have had and will continue to have effects on U.S. farm policy. The 1996 farm bill and any future farm bills fall under the requirement of the URAA and any successor agreements. To see how current U.S. farm programs fare under the URAA, we examine the classification of U.S. farm programs and why the programs are classified as they are. Countries typically submit reports on overall domestic support two to three years after the fact. The United States has submitted reports for the 1995-1998 marketing years. For current policies that were in place at that time, we can place them in the WTO boxes based on these submissions. For current policies created after 1998, we will place the policies based on our interpretation of the URAA. Other interpretations are possible.

Current green box domestic support comes from several of the program types discussed in the previous section. General services programs include the Agricultural Research Service;

the Tennessee Valley Authority; the Cooperative State Research, Extension, and Education Service; the Rural Business and Cooperative Development Service; the Animal and Plant Health Inspection Service; the Grain Inspection, Packers, and Stockyard Administration; the Food Safety Inspection Service; the Agricultural Marketing Service; the Economic Research Service; the National Agricultural Statistics Service; and the National Resources Conservation Service. These programs combined for roughly $7 billion in domestic support annually. Domestic food aid accounted for over $30 billion annually, with most of this total being in the food stamp and child nutrition programs.

PFC payments also are green box as they are classified as decoupled income support. The construction of the PFC program follows the guidelines of a decoupled income support program that qualifies for exemption. Payment eligibility and amounts are based on historical production over a base period. Current production decisions (even the decision not to produce at all) cannot affect the payment. Given that there is no link between current production and PFC payments, these payments should have a very limited to nonexistent effect on future production and therefore are not considered trade distorting.

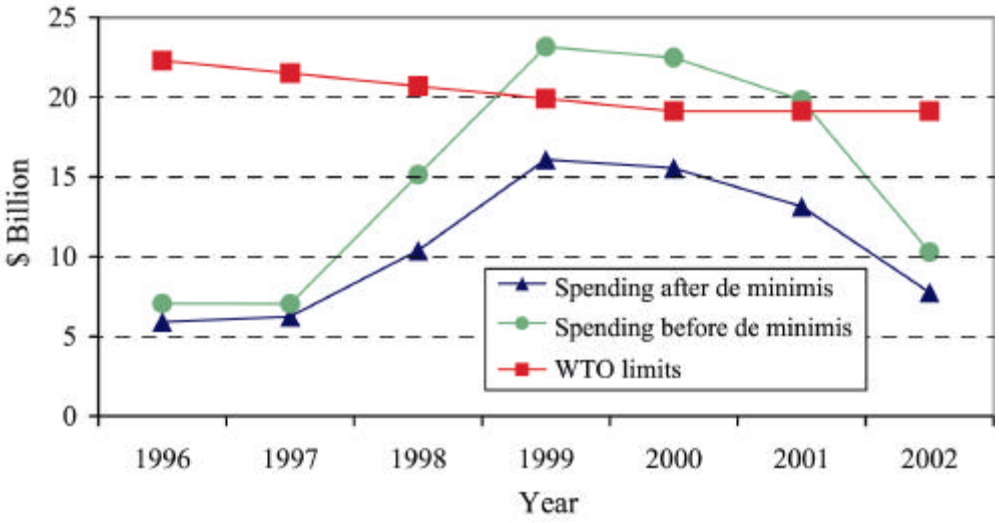
Green box natural disaster relief programs include the Non-insured Crop Disaster Assistance Program, the Livestock Indemnity Program, and emergency feed and forage programs. The Conservation Reserve Program qualifies as a resource retirement program. Programs that facilitate structural adjustment through investment aids include the Farm Credit Program and State Mediation Grants. Environmental programs that qualify for exemption include the Agricultural and Emergency Conservation Programs, the Great Plains Conservation Program, the Water Bank Program, the Wetland Reserve Program, and the Environmental Quality Incentives Program.

The United States has increased its green box spending by a large amount over the past several years. Over the period 1986–1988, programs that would have qualified for the green box had total expenditures of, on average, just over $26 billion. From 1996 to 1998, green box spending had increased to an average of $50 billion. Because the green box spending is exempt from WTO limits, the United States can continue to add to this total.

It is in amber box spending that the United States could run afoul of the WTO and the URAA. Amber box spending is limited under the URAA, and the United States, as a developed country, has agreed to reduce such spending by 20 percent from its 1986–1988

average. This implies that the United States can spend up to $19.1 billion on amber box programs. Figure 1 shows the AMS limits, actual AMS amounts for 1996–1998, and our projections for AMS amounts for 1999 to 2002 (Office of the U.S. Trade Representative 1997, 1998, 1999, 2001). Our projections are based on U.S. Department of Agriculture (USDA) figures on various program expenditures for 1998–2001, where possible, and USDA and Food and Agricultural Policy Research Institute (FAPRI) projections for 2002 figures or when actual data could not be obtained.

AMS is separated into commodity-specific and non-commodity-specific categories for the calculation of *de minimis* exemptions. For 1996–1998, the United States reported the following program payments or costs as commodity-specific domestic support: the dairy, sugar, and peanut price support/quota programs; marketing loan gains; loan deficiency payments; commodity loan forfeiture costs; cotton user marketing payments; dairy indemnities; mohair and wool support payments; rice marketing certificate payments; tobacco price-related payments; commodity storage payments; and commodity loan interest subsidies. Over the same time, the United States reported these non-commodity-specific domestic support payments: estimated water subsidies from several Bureau of Reclamation projects, net federal outlays for livestock grazing on federal land, net crop insurance indemnities (insurance payments less producer-paid premiums) for



Note: Actual numbers are reported for 1996-98. Projections are made for 1999 and beyond.

FIGURE 1. Total amber box spending, payment caps, and *de minimis* exclusions

both yield and revenue insurance policies, multi-year crop disaster payments, market loss assistance (MLA) payments, and state credit programs.

Marketing loan gains, loan deficiency payments, commodity storage payments, and commodity loan interest subsidies arise from the marketing loan programs. The price support and marketing loan program expenditures are classified as amber box because payments depend on current production and prices. Given this link, the programs can influence future production decisions and have trade-distorting effects. Net crop insurance indemnities are also in the amber box because they do not meet the green box requirements. The yield and revenue insurance policies are not income insurance policies: coverage above 70 percent is allowed, and the government does not have to declare a disaster for payments to begin. Thus, these policies cannot qualify as green box either as an income safety net program or as a natural disaster relief program.

Over the last four years, the federal government has augmented agricultural spending with emergency assistance packages. These packages included MLA and crop loss assistance payments for several commodities. The crop loss assistance payments were constructed to follow the guidelines for a natural disaster relief program and are exempt from WTO limits (i.e., they are green box with the exception of the multi-year program). The MLA payments follow the same payment formula as the PFC payments (which are green box), but the justification for the MLA payments was the low market prices we have seen over the last few years. Therefore, the MLA payments were placed in the amber box because the payments were triggered by (then) current market prices. The payment structure of the MLA programs is not commodity specific because current production has no impact on the payments.

Table 4 displays the actual and projected values of production used in this analysis. The overall value of agricultural production has fallen since 1996. By 1999, the value of agricultural production had dropped to $183 billion, nearly $23 billion less than the 1996 value. The projections indicate that production values have increased and will continue to do so. By 2002, agricultural production will be valued at $197 billion. These production values affect the U.S. WTO standing as they are used to evaluate U.S. domestic support versus the AMS limit. The *de minimis* exemptions are determined by comparing domestic support against 5 percent of the production value.

TABLE 4. Value of production

Commodity	1996	1997	1998	1999	2000	2001	2002
				($ million)			
Barley	1,091	862	687	597	632	557	760
Beef and veal	22,259	24,893	24,153	26,051	28,388	30,453	30,732
Corn	25,312	22,352	18,922	17,104	18,621	19,489	20,895
Cottonseed	915	835	687	559	677	703	676
Cotton	6,408	5,976	4,120	3,810	4,781	5,338	4,872
Dairy	23,057	21,191	24,332	23,400	20,786	21,351	20,551
Hogs/pork	12,013	12,552	8,674	7,766	10,791	9,403	8,233
Honey	180	148	147	126	132	163	163
Canola	62	88	160	107	135	129	134
Flaxseed	10	14	34	30	35	36	37
Mustard	2	9	11	5	4	4	4
Rapeseed	0	0	1	0	1	0	0
Safflower	76	60	58	55	30	24	25
Sunflower	418	427	537	340	241	227	234
Mohair	15	15	13	10	11	7	7
Oats	319	273	200	170	165	131	156
Peanuts	1,030	1,003	1,126	972	838	1,132	1,028
Rice	1,687	1,756	1,687	1,230	1,073	1,340	1,339
Rye	33	30	30	25	21	19	22
Sorghum	2,004	1,409	905	937	823	947	1,060
Soybeans	17,455	17,373	13,494	12,205	13,073	13,094	13,543
Sugar	2,044	2,050	2,126	2,145	2,179	2,204	2,120
Tobacco	2,852	3,217	2,701	2,356	1,955	1,892	1,920
Wheat	9,815	8,287	6,781	5,594	5,970	5,638	6,609
Wool	40	45	29	18	15	15	15
Potatoes	2,423	2,623	2,635	2,746	2,591	2,604	2,604
Apples	1,641	1,575	1,316	1,553	1,554	1,306	1,306
Cranberries	308	350	199	112	107	184	184
Lamb	435	490	354	349	357	357	357
All other commodities	71,793	73,981	74,767	72,706	73,914	76,628	78,102
Total	205,701	203,884	190,886	183,079	189,903	195,374	197,690

Table 5 shows all of the amber box expenditures before the *de minimis* exemptions are taken. These figures represent all possible expenditures that could count against the WTO limits. In 1996 and 1997, over $7 billion was spent on amber box programs. As prices deteriorated, marketing loan expenditures (loan deficiency payments, marketing loan gains, and commodity loan interest subsidies) grew. MLA payments were also appropriated. Thus, in 1998, amber box spending rose to $15 billion. In 1999 and 2000, spending rose to over $22 billion. Total amber box outlays are expected to fall to under $20 billion in 2001. By 2002, changes in the dairy programs are scheduled to take effect and reinforce the decline in spending. Outlays are projected to fall to $10 billion in 2002.

Table 6 shows the expenditures that count against the U.S. AMS limit. The *de minimis* exemptions offset a sizable portion of the increase in amber box spending. In 1996 and 1997, the U.S. AMS is roughly $6 billion, with most of this support going to dairy producers. Only three products receive enough support in 1996 to exceed the *de minimis* exemption level. By 1999, 18 products have support exceeding the *de minimis* exemption level and the AMS has risen to over $16 billion. This amounts to 81 percent of the U.S. AMS limit. For 2002, because prices are projected to rise, so, too, will production values and *de minimis* exemption limits. This means that more spending could qualify for exemption. But increasing prices imply smaller marketing loan outlays and reduced amber box spending. By 2002, the U.S. AMS falls to nearly $7 billion.

The World Trade Organization and the Proposed Programs

We have estimated 2002 marketing-year expenditures under each of the three main farm bill proposals to see where they fit within the URAA and their impact on the U.S. AMS. For the Senate agricultural committee proposal, we have looked at two scenarios, the policy structures in 2002 and 2004, because the proposal makes explicit changes in how producer payments are delivered. Table 7 shows the levels of fixed payments and amber box spending (both before and after *de minimis*) for the current farm bill and the various proposals.

All of the proposals keep the existing marketing loan, crop insurance, and fixed decoupled payment programs in place. Also, all of the proposals reinstate the dairy price support program. This implies that any additional expenditures from these proposals add to

TABLE 5. Aggregate measures of support (before *de minimis* exemptions)

Commodity	1996	1997	1998	1999	2000	2001	2002
				($ million)			
Barley	1	4	84	42	71	15	43
Beef and veal	0	0	0	0	0	0	0
Corn	28	150	1,534	2,599	2,772	1,092	155
Cottonseed	0	0	0	79	100	85	0
Cotton	3	466	935	2,108	846	2,027	2,067
Dairy	4,691	4,456	4,560	4,308	4,949	4,318	1
Hogs/pork	0	0	123	74	0	0	0
Honey	0	0	0	0	31	0	0
Canola	0	0	8	39	78	27	27
Flaxseed	0	0	2	12	24	12	14
Mustard	0	0	0	1	0	0	0
Rapeseed	0	0	0	0	0	0	0
Safflower	0	0	0	2	1	1	0
Sunflower	0	0	21	142	145	60	61
Mohair	0	0	0	0	6	10	0
Oats	0	0	20	29	45	2	7
Peanuts	299	306	340	323	331	320	267
Rice	6	6	21	439	631	486	676
Rye	0	0	0	0	0	0	0
Sorghum	1	2	63	156	85	5	30
Soybeans	14	45	1,275	2,905	3,141	3,439	3,574
Sugar	908	1,011	1,055	1,531	1,063	1,022	1,042
Tobacco	-21	-8	-7	322	335	125	-4
Wheat	8	36	516	1,034	889	196	171
Wool	0	0	0	0	5	10	0
Potatoes	0	0	0	0	10	0	0
Apples	0	0	0	0	0	100	0
Cranberries	0	0	0	0	0	20	0
Lamb	0	0	0	20	10	0	0
Non-commodity specific	1,115	568	4,584	6,990	6,912	6,445	2,175
Total	7,052	7,043	15,134	23,155	22,481	19,818	10,305

TABLE 6. Aggregate measures of support (after *de minimis* exemptions)

Commodity	1996	1997	1998	1999	2000	2001	2002
				($ million)			
Barley	0	0	84	42	71	0	43
Beef and veal	0	0	0	0	0	0	0
Corn	0	0	1,534	2,599	2,772	1,092	0
Cottonseed	0	0	0	79	100	85	0
Cotton	0	466	935	2,108	846	2,027	2,067
Dairy	4,691	4,456	4,560	4,308	4,949	4,318	0
Hogs/pork	0	0	0	0	0	0	0
Honey	0	0	0	0	31	0	0
Canola	0	0	8	39	78	27	27
Flaxseed	0	0	2	12	24	12	14
Mustard	0	0	0	1	0	0	0
Rapeseed	0	0	0	0	0	0	0
Safflower	0	0	0	0	0	0	0
Sunflower	0	0	0	142	145	60	61
Mohair	0	0	0	0	6	10	0
Oats	0	0	20	29	45	0	0
Peanuts	299	306	340	323	331	320	267
Rice	0	0	0	439	631	486	676
Rye	0	0	0	0	0	0	0
Sorghum	0	0	63	156	85	0	0
Soybeans	0	0	1,275	2,905	3,141	3,439	3,574
Sugar	908	1,011	1,055	1,531	1,063	1,022	1,042
Tobacco	0	0	0	322	335	125	0
Wheat	0	0	516	1,034	889	0	0
Wool	0	0	0	0	5	10	0
Potatoes	0	0	0	0	0	0	0
Apples	0	0	0	0	0	100	0
Cranberries	0	0	0	0	0	20	0
Lamb	0	0	0	20	0	0	0
Non-commodity specific	0	0	0	0	0	0	0
Total	5,898	6,238	10,392	16,089	15,546	13,154	7,771

TABLE 7. Aggregate measures of support and total fixed decoupled payments

	Current Farm Bill	House	Senate Ag. Comm. 2002	Senate Ag. Comm. 2004	Cochran-Roberts
			($ million)		
Fixed payments	4,008	5,242	8,425	4,233	8,069
Before *de minimis*					
Commodity specific	8,130	11,758	15,791	15,791	11,758
Non-commodity specific	2,175	8,132	2,175	5,069	2,975
Total	10,305	19,890	17,966	20,860	14,733
After *de minimis*					
Commodity specific	7,771	11,138	15,791	15,791	11,138
Non-commodity specific	0	0	0	0	0
Total	7,771	11,138	15,791	15,791	11,138

the U.S. amber box spending and possibly to the U.S. AMS (barring *de minimis* exemptions). Therefore, the probability that the United States will exceed its WTO domestic support limit would increase under these proposals. Our analysis shows that amber box spending that counts against the AMS limit is higher under all of the proposals when compared to the current farm bill. However, all of the proposals keep spending below the AMS limit, given projected price and production levels. The House and Cochran-Roberts proposals are projected to have $11 billion in expenditures that count against the limit. The Senate agricultural committee proposal is projected to spend $16 billion.

But just concentrating on projected expenditures after *de minimis* ignores part of the story. The various proposals also affect the United States' standing under the URAA by the categorization of the additional payments. The current farm bill is projected to have $14 billion in combined spending on fixed payments and amber box spending (before *de minimis*). All of the proposals spend at least $22 billion. The House bill increases fixed payments by $1.2 billion, commodity-specific support by $3.6 billion, and non-commodity-specific support by $5.9 billion. All of the increase in commodity-specific spending comes from the dairy support program. The increase in non-commodity-specific support is due to the new countercyclical program in the House proposal. We classify this

as non-commodity specific because producers receive these payments whether they grow the payment crop or not. The Cochran-Roberts bill increases fixed payments by $4 billion, commodity-specific support by $3.6 billion, and non-commodity-specific support by $0.8 billion. The dairy program accounts for the commodity-specific increase, while government matching funds for the farm savings accounts make up the non-commodity-specific support increase. Thus, while the House and Cochran-Roberts proposals are projected to have the same amount count against the AMS limit, the Cochran-Roberts bill directs most of its increase in spending to green box payments (which are exempt from WTO limits) and the House bill concentrates payments in the non-commodity-specific amber box. This means that the House proposal has a higher probability of exceeding the WTO limit. If an additional $2 billion is spent on non-commodity-specific support (either through higher crop insurance indemnities or countercyclical payments) under the House proposal, then the entire amount of non-commodity-specific support would count against the limit and the United States would exceed the limit.

With the 2002 policy structure under the Senate agricultural committee proposal, fixed payments increase by $4.4 billion, and commodity-specific support increases by $7.6 billion. With the 2004 policy structure under the Senate agricultural committee proposal, fixed payments increase by $0.2 billion, commodity-specific support increases by $7.6 billion, and non-commodity-specific support increases by $2.9 billion. The commodity-specific-support increase is due to the dairy program and the increases in marketing loan rates. The 2002 policy structure does not have any increase in non-commodity-specific support, but the 2004 policy structure does. This is because the new countercyclical program in the Senate proposal is in effect not under the 2002 structure but under the 2004 structure; fixed payments are lowered and the countercyclical program is projected to have expenditures. Thus, the Senate agricultural committee proposal trades green box support for non-commodity-specific amber box support as time progresses.

Concluding Comments

At the WTO ministerial meetings in Doha, Qatar, member countries agreed to an agenda for agriculture that would work toward elimination of trade-distorting subsidies.

This goal is consistent with the proposal made by the United States in 2000 for an extension to the URAA that would simplify the policy classifications to exempt and non-exempt policies. AMS levels would again be reduced, with the final level being determined by a fixed percentage of the country's total value of agricultural production in a fixed-base period. The percentage would be the same for all participating countries. Exemption requirements would be rewritten to emphasize the limitation of trade-distorting practices. Criteria for the exemption of programs essential to food security and development in developing countries would be added.

The reasoning behind this proposal is that it is both in our national and global interest to expand agricultural trade. By removing trade-distorting domestic support policies, countries are allowing agricultural producers to base production decisions on market and environmental signals. This will expand economic opportunity for the agricultural sector, while addressing food security and environmental concerns. Consumers also will benefit through more competitive prices and a wider array of products.

This official stance of U.S. negotiators clearly is not shared by U.S. domestic concerns, as they propose to significantly expand U.S. support for agriculture. Much of the proposed support would count against the WTO commitments made by the United States. Of the three proposals, the Cochran-Roberts bill has the lowest likelihood of exceeding the AMS limit. The House and Senate agricultural committee proposals have higher likelihoods. This is due to additional non-commodity-specific support under the House proposal and additional commodity-specific support under the Senate agricultural committee proposal.

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