



Potential Deficit Reduction Efforts and WTO Cotton Ruling Adding to Policy Uncertainty

Hal Harris and Joe Outlaw

2005 is shaping up to be an interesting year for agricultural policy in the United States. Here we are, three years into a six-year farm bill, and commodity organizations and other agricultural interest groups are starting to get itchy. Most agricultural policy observers would agree that any changes made to existing agricultural policies during 2005 will result in less support for agriculture rather than more. In recent years, when a cut or offset was needed, conservation programs were looked to first. But is that what would happen now?

Several forces are converging that are likely to create policy and therefore financial uncertainty for U.S. farmers and ranchers. Persistent rumors of impending Congressional efforts to curtail the budget deficit via budget reconciliation have many interested parties asking: “How much will the cut be, and how are they going to do it?” Obviously, the people who know the answer to these questions aren’t volunteering any information. Budget reconciliation may not even happen. But at this point, there have been many comments suggesting that it is a very real possibility. Otherwise, why would several of the major commodity organizations consider hiring a former House Agricultural Committee Chair to help them try to “hold the line” on future budget cuts? Whether the threat of budget reconciliation is real or not—at this point, perception is reality.

The second force causing heartburn is the WTO ruling on the Brazilian cotton case against the United States. There are some who thought (and still think, for that matter) that the 2002 farm bill is fully compliant with U.S. WTO obligations. There are at least a few members of Congress who take exception to being forced into changing U.S. commodity programs by foreign governments. Although the cotton ruling has drawn a lot of attention from the media, it was not the slam-dunk win that initial

Articles in this Theme:

- The Agricultural Policy Outlook: Looking Back Focuses the Road Ahead 27**
- The WTO and US Agricultural Policy: Intersections and Consequences 31**
- History and Outlook for Farm Bill Conservation Programs 37**
- Implications of Budget Reconciliation for Commodity Programs 43**

reports indicated. There are some who think that the U.S. appeal will be successful, but others point to the fact that there are several examples of countries losing cases that have continued programs found to be in violation of WTO rules. Whether in the court of the WTO or of international public opinion, it will be difficult for the United States to completely ignore a loss of the appeal. And the bottom line is pretty clear—the U.S. cotton program does have an impact on world cotton prices.

The collection of papers in this edition of *Choices* is intended to cover four of the big issues in agricultural policy today. The article by Flinchbaugh and Knutson sets the stage for the Agricultural Policy Outlook for 2005 theme by reminding us how we got to this point in agricultural policy and where we are likely to go in the future.

The article by Mercier provides an excellent summary of the WTO, the U.S. role in the WTO, and reflections on the Brazilian cotton case as it may or may not influence U.S. agricultural policy in the coming years.

The third article, by Cain and Lovejoy, provides a historical perspective on U.S. conservation programs and

thoughts on the increased importance of conservation programs in the future.

In the final article, Richardson and Outlaw discuss the issues associated with cutting commodity payments to farmers. The reality is that it is not as easy as one would think,

and equity issues will almost certainly arise.

As we continue the process toward a new farm bill, *Choices* encourages readers to share ideas contributing to the interesting debate that lies ahead.

Hal Harris is professor emeritus in the Department of Applied Economics & Statistics at Clemson University. Joe Outlaw, Choices co-editor, is an associate professor and Extension economist in the Department of Agricultural Economics at Texas A&M University.



The Agricultural Policy Outlook: Looking Back Focuses the Road Ahead

Barry Flinchbaugh and Ron Knutson

The talk on the street, in the coffee shops, and certainly among academic economists is that conventional farm programs are in big trouble. They cite:

- election results and the loss of farm program advocates (such as Congressman Stenholm and Senator Daschle) resulting in a more urban-oriented Congress;
- the WTO decision cutting down US cotton subsidies and the related Doha Round trade negotiations (see the Mercier article in this issue); and
- a renewal of restraints on farm program spending, which has not been a major factor in farm program deliberations for the past two decades (see the Richardson and Outlaw article in this issue).

Without question, these factors represent challenges to farm bill interest groups, which include more than just farmers. Adjustments in strategies, new concerted efforts, and perhaps even new programs will be required. But it is naive to consider farm programs dead or dying. This article explains why. It will do so by updating the history of farm programs, evaluating the goals of farm policy, and analyzing the politics of farm programs.

Some Farm Program History

It is often pointed out by the less than well informed that today's farm programs have their origin in the depression days of the 1930s; this gives the impression that they have not changed much since. The fact is that farm policies have evolved through three distinct periods, as follows:

Price Support Era (1930s–1960s). Farm policy began with the government overtly supporting farm prices. When market prices fell to the support level, the government purchased and stored commodities. The monuments to this policy era are the concrete grain storage silos—many of which now stand empty—across the Corn Belt and the Great Plains. In fact, government stocks became so large that

prices were generally at the support level, and production controls ranging from quotas to land retirement programs were prevalent. Because support prices were too high to be competitive in export markets, the international Food for Peace program and domestic food distribution programs were developed.

Income Support Era (1970s–1995). In the 1970s it was realized that US farmers were missing an opportunity to sell US farm products for dollars in international markets. Doing this, however, required a watershed change in farm policy from supporting farm prices to supporting farm income. The government storage bins were emptied, resulting in sharp declines and gyrations in market prices. The mechanism for supporting income involved the government setting a politically acceptable target price or loan rate and agreeing to pay the difference when the market price fell below the target price (or loan rate). During this era, farmers relied on the government-guaranteed target price (or loan rate) as a major element in their production decisions. Yet from time to time the government stepped in to control production, importantly as a means of reducing government costs. Also during this era, commodity distribution programs converted to food assistance and mushroomed to about half of the USDA's budget. In the absence of commodities in government hands and with the development of convenience foods, nutrition programs developed into predominately food stamps and cash subsidies to schools.

Market-Oriented Era (1996–present). Although the political rhetoric of the income-support era frequently made reference to more market-oriented policies, it was not until the 1996 Farm Bill that farmers were free to make decisions on what to produce based on market prices as opposed to government-determined payments. This was accom-

plished through the establishment of a system of government-determined direct payments that were not tied to either production or price. These payments were referred to as *decoupled payments* to reflect the fact that they were not tied to either price or production. Yet the system was not purely decoupled from price, because the marketing loan remained in effect, and the Congress added supplemental payments when price fell during the late 1990s. The 2002 Farm Bill amounted to a further reversion from decoupling by adding payments that were tied to price but not to production, which raised serious questions as to how committed US policy makers were to decoupled farm policies. This is one of the central decisions policy makers face in the next farm bill. That decision will be made in an international political environment that frowns on high US farm program payments that enhance farm output and reduce world market prices (see the Mercier article in this issue). However, until 1996 farmers were restrained in their ability to receive payments on crops for which they had no production history. Likewise, during this era production controls were largely eliminated, with the exception of the politically-sensitive sugar program and environmentally-sensitive Conservation Reserve Program lands. This period also introduced the concept of the government buying out the capitalized value of farm program benefits in return for making the peanut and tobacco programs more market oriented. While food assistance programs continued to grow, conservation programs were rejuvenated with a green payment environmental orientation.

Evolution of the Goals of Farm Policy

Logically, farm policy would be developed based on a specific set of goals. A review of the preambles to farm bills, where goals might be expected to be specified, suggests that this logic is seldom realized. Yet the changing substance of farm bills over time suggests a substantial evolution of policy goals, as indicated by the following:

- The social goal of saving the family farm has evolved into an economic goal of providing tools by which farm businesses can reduce risk. Implied in this change is that the government cannot save farms that do not have the scale of operation, the technology, and the level of specialization that allows them to be efficient in production and effective in marketing and management. However, limits on government payments to large farm operations can be expected to continue to be a contentious policy issue.
- The goal of adjusting production to market needs has evolved into the goal of expanding demand, remaining competitive, and achieving open markets internationally. This goal is supported by US initiatives in expanding trade agreements and negotiating for increased market access in the World Trade Organization.
- The goal of soil conservation has evolved into a goal of sustainable production in the utilization of land, air, and water. The meaning of stewardship is expanding beyond soil conservation to maintain clean air, clean water, and humane animal production systems. From a regulatory perspective, agriculture is being treated increasingly as other

industries are, but government will be there to help farmers with the transition if farm organizations are wise and flexible enough to seize upon the opportunity.

- The goal of food reserves has evolved into a goal of food security, food safety, and homeland security. New looks are being taken at how to protect the integrity of the food supply chain from farm to table in an era of globalization. The impacts of increased emphasis on food safety and security will be greatest at the farm level, domestically and internationally. This is the case because while processors and marketers are adjusting rapidly to this new goal, farmers have resisted adjustment.
- The goal of domestic demand expansion has evolved to eating wisely and in moderation. Obesity has become a major policy issue that cannot be ignored in the context of an omnibus farm policy. The potential impacts extend beyond food assistance (roughly half of the USDA's budget) and nutrition education to farm production.
- The goal of expanding the use of agriculture's production capacity for energy production needs to be officially recognized. Continued expansion of public support for industrial uses of agricultural products are a consequence of high oil prices, the need for energy security, the ability to reduce pollution from animal agriculture by capturing energy from animal waste, and new technologies for production of bio-energy.

Politics and the 2007 Farm Bill

The results of the election put agriculture in a favorable political position. The six Plains states, where farm incomes and land values are most affected by farm programs, voted decisively for the President. The political and economic importance of agriculture is understood by Secretary Johanns and the elected members of the Congress in this rural-oriented region.

Satisfying the goals of the 2007 Farm Bill does not mean less government. It does mean a different type of government and a continuing evolu-

tion of farm, food, and resource policy. Likewise, it does not necessarily mean less government payments for farmers, but a reorientation of payments to forms that facilitate adjustment to make agriculture more environmentally friendly and humane, more specialized on the commodities for which we can be competitive internationally, and more responsive to markets with less distorting effects.

Making the transition to this new policy orientation will not be easy, as was indicated by the 2002 Farm Bill and subsequent developments. If farm organizations continue to live in

the past, where they are more comfortable, their influence will decline. However, if they recognize their minority status and develop a common policy position that considers the goals and realities of the time, farm program benefits will continue to be an important feature of farm survival.

Barry Flinchbaugh is a professor in the Department of Agricultural Economics at Kansas State University, Manhattan, Kansas. Ron Knutson is professor emeritus at Texas A&M University, College Station, Texas.



The WTO and US Agricultural Policy: Intersections and Consequences

Stephanie Mercier

Introduction

Except during the Korean War and in 1959, US agriculture has recorded a positive trade balance on a fiscal year basis since the second year of World War II. Largely as a result of agricultural productivity growth during the 20th century, US agricultural production consistently exceeds the domestic demand for food, feed, and fiber, resulting in an increasing reliance by US agriculture on foreign markets for sales of US products. The US policy approach looks toward multilateral reform of agricultural policy under the auspices of the World Trade Organization (WTO) as a prime opportunity to achieve gains in market share.

On the other hand, US agriculture also has been the beneficiary of federal farm spending over approximately the same period, intended to support prices and/or income of American farmers, with the stated objective of maintaining a healthy rural economy. Periodically, Congress re-examines legislation that authorizes such programs, commonly known as farm bills. The current farm bill is due to expire in 2007.

Several key features of the US farm programs are regarded by trade analysts as highly distorting of trade and production due to their direct linkage to movements in commodity price and the volume of production or exports. The agricultural reform efforts in the Uruguay Round focused on reducing these types of policies. Both that round and the current negotiations to reform agricultural trade rules under the WTO have been focused on three main areas: (a) improving export competition by ending subsidization of exports, (b) improving market access by reducing tariff rates and eliminating non-tariff barriers, and (c) reducing use of the most trade-distorting forms of domestic support.¹

Consequently, US support for trade reform within the WTO, if successful, implies changes in US farm pro-

grams—a process that should come to a head in the next few years.

Background

In 1994, 125 countries signed the Final Act of the Uruguay Round in Marrakech, Morocco establishing the WTO and subsuming the General Agreement on Tariffs and Trade (GATT). The various agreements were built on GATT rules, most notably creating a legally binding dispute settlement mechanism and including agricultural trade, trade in services, and trade-related intellectual property rights issues as areas subject to multilateral reforms for the first time.

As of October 2004, there were 148 signatories to the WTO, with 25 more countries in negotiations to accede to the organization. Member countries are currently engaged in a new round of multilateral negotiations formally known as the Doha Development Agenda (DDA), with the stated objective of strengthening existing rules and continuing to reform trade policy and improve market access across the entire spectrum of trade in goods and services.

A so-called framework agreement, reached in July 2004, set consensus boundaries on how negotiations in all key areas will be undertaken, but much work and bargaining will be necessary before a final agreement can be reached. Disputes with respect to issues in agricultural trade have impeded overall progress in the round. In particular, a significant rift has opened up between developed and developing countries as to how much reform they are

-
1. *Member countries are committed to cap and reduce the most trade-distorting domestic farm support programs under the Uruguay Round. These are known as amber box programs.*

willing to undertake in the three key areas of export competition, market access, and domestic support. Developing countries, under the loose coordination of the G-20 group led by Brazil, India, Argentina, and South Africa, have increasingly asserted themselves in negotiations, a role they first adopted at the failed Ministerial meetings in Cancun, Mexico in September 2003. They are seeking to force developed countries to firmly commit to significant reforms before they will agree to even consider their own reforms.

US Role in WTO Trade Negotiations

The United States was one of 23 original contracting parties to the GATT, which went into force in 1948. Eight rounds of negotiations intended to liberalize trade were initiated under the auspices of the GATT; the last round, known as the Uruguay Round (URAA) after its launch in 1986 in Punta del Este, Uruguay, culminated in the establishment of the WTO. Two of the rounds were named after officials of the US government—Douglas Dillon, Undersecretary of State in the Eisenhower Administration (and later Secretary of Treasury between 1961 and 1965), and President John F. Kennedy—indicating the prominent role taken by the United States in pushing the liberalization process over the years.

Initially, most GATT members, including the US government, insisted on keeping their agricultural sectors out of the jurisdiction of the GATT. These exemptions or exceptions were embodied in Article XVI of the original GATT agreement (amended in 1955), exempting primary products (including agriculture) from prohibitions against use of export subsidies, and Article XI,

which excepted agriculture from restrictions against use of export or import restrictions under certain conditions.

The United States did propose to include tariffs on agricultural products among reductions to be negotiated in the Dillon and Kennedy Rounds in the 1960s, but those proposals were blocked by members of the European Union (then known as the European Economic Community [EEC]), which had formed in 1957. Early in its history, the EEC was focused on developing a Common Agricultural Policy (CAP), which was intended to help European farmers produce enough food to feed all of Europe without having to rely on imports. The major policies adopted to reach this goal were high support prices, export subsidies, and correspondingly high tariffs or variable levies to prevent imported commodities from competing with domestic production. These policies, regarded as highly trade-distorting by most analysts, were in place through the 1990s, but the support price component of the CAP for most commodities is being phased out in favor of direct payments, which are increasingly decoupled from production decisions. These changes are being made to achieve greater predictability in budget costs as well from a desire to position the CAP for further WTO reforms.

In both the Uruguay Round and the Doha Round, the US government submitted initial proposals in the agricultural negotiations that were among the most far-reaching offered. Both proposals were supported by the majority of US agricultural groups as well as many members of Congress from farm states.² Under the trade promotion authority provided to the President in the Trade Act of 2002, Congress

limits itself to an up-or-down decision on legislation implementing trade agreements without being able to offer amendments; Congress does not vote on the trade agreements themselves.

Agricultural Trade Negotiations in the Doha Round

Article XX of the URAA specifically committed countries to resume agricultural negotiations one year before the end of the implementation period, in January 2000. A number of countries, including the United States, submitted proposals during the summer of 2000 intended to establish the scope of the reform that would be undertaken. A WTO Ministerial meeting held in Doha, Qatar in November 2001 affirmed countries' commitments to the overall process and established vaguely-worded objectives for agricultural reform and a timeline for completion by January 2005.

Utilizing concepts contained in the various proposals submitted by member countries in 2000 and resubmitted with minor changes in 2002, the chair of the agricultural negotiations, Stuart Harbinson, released a document for consideration in March 2003. This draft text, outlining proposed modalities or methods for proceeding to reform export competition, market access, and domestic support, was intended to forge a compromise between the more far-reaching types of reforms proposed by the United States, Aus-

2. *Groups such as the National Farmers Union and American Corn Growers did express disappointment with the US proposals to reform agriculture under the WTO in the Doha Round.*

Table 1. Key features of initial US and EU agricultural proposals in the Doha Round.

	US proposal	EU proposal
Export competition	<ul style="list-style-type: none"> •Eliminate export subsidies over a fixed period •End single-desk trading by State trading entities •Prohibit use of export taxes by state trading entities 	<ul style="list-style-type: none"> •Reduce export subsidies by 45% on outlays •Discipline use of export credits and food aid •Discipline unfair practices
Market access	<ul style="list-style-type: none"> •Harmonize tariff levels among countries, with no tariff greater than 25% •Reduce tariffs from applied rates •Increase TRQs for sensitive products •End use of special safeguard 	<ul style="list-style-type: none"> •Reduce tariffs an average of 36%, with 15% minimum •Provide duty-free, quota-free access to agricultural products from LDCs •Discipline TRQs •Keep special safeguard
Domestic support	<ul style="list-style-type: none"> •Combine amber and blue box supports,^a limit to 5% of total value 	<ul style="list-style-type: none"> •Reduce amber box AMS (aggregate measure of support) by 55% of agricultural products •Eliminate use of amber box de minimis by developed countries

Note: Summarized from proposals submitted to WTO during fall of 2002.

^aBlue box programs are deemed to be trade-distorting but mitigated by use of offsetting production-limiting mechanisms. Spending on blue box programs is not capped under the Uruguay Round.

tralia, and others, and the more modest reforms proposed by the EU and separately by Japan (Table 1). The Harbinson text was widely rejected.

During 2004, WTO member countries renewed their efforts to move agricultural trade negotiations forward and ultimately agreed in July 2004 on a framework document containing several commitments. They are summarized as follows:

- In export competition, eliminate export subsidies over an unspecified period and impose disciplines on use of export credits, food aid, and state trade enterprises.
- In domestic support, reduce spending on “amber box” programs on a tiered basis, so that member countries with the highest level of support deemed as significantly trade-distorting would reduce spending in this category the most.
- In domestic support, cap support under the “blue box” category of spending (programs deemed to be partially decoupled) to 5% of total agricultural receipts while providing for the possibility that the blue box definition would be expanded to include US counter-cyclical payments.

- In market access, reduce bound tariffs on a tiered basis, so that countries with the highest tariffs would have to cut them the most. However, countries would be given flexibility to protect their most sensitive products.

This framework document is extremely sparse on specific numbers representing concrete commitments as to the pace and extent of reform. However, if the final agreement includes significant reform of trade-distorting domestic support programs, the United States would be agreeing to modify and/or reduce its spending on price/income support programs that are currently reported to the WTO as amber box programs in order to meet its obligations. These programs include the marketing assistance loan program for crops such as wheat, feed grains, rice, cotton, and oilseeds, dairy price supports, and the sugar program. If the Doha Round is completed in the next few years, changes to these programs are likely to be incorporated in the 2007 farm bill.

However, such a deal is not a foregone conclusion, as member countries have taken very strong positions about how much they are willing to concede in this round,

especially in the agricultural talks. In a November 2004 conference in Athens, GA, American Farm Bureau Federation President Bob Stallman, leader of the country’s largest farm group, said, “If the world wants us to decrease our domestic supports, we must be met in-kind with increased market access for all farm goods. Tariffs and other barriers to trade must also be targets in the crosshairs.”

It is not clear that a final deal on agriculture that would fulfill terms such as those enunciated by Mr. Stallman can be struck based on the July 2004 framework agreement. Although the main user of export subsidies, the EU, has conceded its willingness to eliminate them over an unspecified period, developing countries in particular have balked at making significant concessions on market access. Although US farm groups do not hold veto authority over trade deals negotiated by the US government, they have direct access to the lead US negotiators as members of Congressionally-authorized advisory committees. They have also demonstrated considerable influence in the past in convincing members of Congress to vote for trade agreements they favor. Because the most recent legislation which granted the

President the authority to negotiate such agreements passed by only one vote in the House of Representatives in 2002, even modest shifts in sentiment on trade issues can have a significant impact, whether it occurs among agricultural interest groups or other groups with political influence.

WTO Dispute Resolution

Out of the new or strengthened components of the WTO as compared to the GATT, the US government was particularly pleased with the provisions of Annex 2 of the Final Act, which established a new legally binding dispute settlement understanding procedure. Previous US efforts to pursue complaints under the GATT were frustrated by the ability of either party to reject the findings of the dispute settlement panel and prevent them from taking effect. For example, in agriculture, successful cases under the GATT against the EU banana trade regime and the EU ban on hormone-treated beef were rendered moot by the lack of an effective enforcement mechanism.

Within a few years after the WTO agreements took effect, the US and other member countries filed new cases against these two EU policies and won the support of dispute settlement panels. However, it took four years for the EU to come up with a new banana regime that satisfied the other parties, and after more than seven years, the EU has yet to take action in the beef hormone case that satisfies the US and Canada, which was the other complaining party. Unlike with cases filed under the GATT, winning parties under the WTO process are permitted to retaliate against parties that fail to come into compliance with panel findings through imposition of additional tar-

iffs on selected export products sourced from that country.

Through October 2004, there have been 317 separate cases pursued under the WTO dispute settlement procedure, although not all have been followed through to establish panels. During that period, the United States filed 69 complaints under the dispute settlement process, 21 of them dealing with trade in food or agricultural products. The United States has also been the respondent in 80 other cases, 11 of these cases addressing trade in food or agricultural products. From the viewpoint of US agricultural policy, the case filed by the government of Brazil against the US cotton support programs in September 2002 was the first to call US commodity programs directly into question.

Brazil Cotton Case

Brazil's case challenged aspects of both the US domestic support system and the export programs. The core of Brazil's case with respect to US domestic support programs consisted of two main arguments. First, the level of support provided to US cotton producers between 1999 and 2002 under the 1996 and 2002 farm bills exceeded the level that guaranteed these programs immunity from challenge as illegal subsidies under previously existing trade rules. Second, if the panel agreed with the claim that US programs should be denied such protection under the so-called Peace Clause (Article XIII) of the URAA, the government of Brazil asserted that the cumulative effect of the programs caused harm to Brazil's cotton producers, which constituted a violation of the Subsidies and Countervailing Measures Agreement of the WTO, which restricts use of

subsidies that cause harm to producers in other countries.

Other key arguments of Brazil's case dealt with the US export credit guarantee program and a separate program (the Step 2 program) that provides a subsidy to cover the difference between domestic cotton prices and the world cotton price for either export transactions or sales to domestic millers. Brazil argued that both programs were operated as export subsidies; because the US government failed to report them as export subsidies in the Uruguay Round and has not limited program expenditures consistent with US reduction commitments on export subsidies, these programs should be deemed as prohibited export subsidies by the WTO dispute settlement panel. If the panel agreed with that claim, then it should require that the cotton Step 2 program be terminated by the US government, and the export credit guarantee program should be ended for those commodities not covered under the US export subsidy commitment. The portion of the case addressing export credit guarantees addressed all commodities covered by the program, not just cotton.

In a ruling released publicly in September 2004, the initial dispute panel found in favor of Brazil on most points (Table 2). The United States filed a formal appeal the following month. The Appellate Body's decision is expected in March 2005. The text of the panel's ruling on the Brazil cotton case provides little guidance as to what steps the US government should take to reform domestic support programs, if it decides to comply with the ruling by modifying the programs rather than provide compensation. It is important to note that the panel declined to support Brazil's claim that the programs included in the 2002 farm bill threat-

Table 2. Key findings of dispute settlement panel on Brazil cotton case.

Brazil's claim	Panel's finding
Peace Clause violated.	Peace clause violated because domestic support in 1999-2002 exceeded 1994 levels. This determination occurred in part because the panel deemed that fruit and vegetable planting restrictions on PFC and direct payments made them ineligible for green box status.
All US domestic support programs caused serious harm to Brazil's cotton producers in 1999-2002.	US price-related programs (marketing loan, countercyclical payments, market loss assistance, Step 2) caused serious harm to Brazil's cotton producers in 1999-2002.
Cotton Step 2 program for exporters is an export subsidy.	Cotton Step 2 program is an export subsidy.
Cotton Step 2 program for domestic millers is an illegal import substitution subsidy.	Cotton Step 2 program for domestic millers is an illegal import substitution subsidy.
Export credit guarantees are export subsidies for all commodities, not just cotton.	Export credit guarantees cannot be used for commodities not scheduled under US export subsidy commitment.
US domestic support programs threaten serious harm to Brazil's cotton producers for remainder of 2002 farm bill.	Did not support Brazil's claim, because finding involved effect of price-related programs and cotton Step 2 and export credit programs, and the latter two programs are supposed to be terminated.

ened to cause serious harm to Brazil's cotton producers in the remaining years of the legislation. The panel noted that their finding of past serious harm hinged on the combined effect of price-related supports and the cotton Step 2 and export credit guarantee programs, and thus they were unwilling to find that the serious harm would persist once the latter two programs are terminated as would be required under the panel's ruling. The government of Brazil has appealed this aspect of the case.

In addition, the panel's ruling would require the US government to eliminate the cotton Step 2 program and modify the export credit program. The panel ruled that export credit guarantees could no longer be used to assist in the export of commodities such as cotton, corn, or soybeans that were not listed by the US government as being subject to reductions under US export subsidy commitments in the Uruguay Round.³ Under the WTO rules governing prohibited subsidies, these actions would have to be taken by July 1, 2005.

US Government Response

Except when programs are found to be prohibited export subsidies, the rules under which WTO dispute set-

tlement panels operate do not normally specify how long countries are allowed to take to modify their programs or policies to come into compliance with adverse rulings. Past cases suggest that the more complex the issues involved, the longer the matter will take to resolve, especially if the country or countries filing the case are not satisfied that the programs or policies found to be WTO-incompatible have been properly fixed.

For example, although the EU ban on hormone-treated beef was judged to be improper under WTO rules in 1997, the EU has not yet removed that ban, and there is no

3. *Under the initial panel ruling, only the following products would be eligible for the export credit guarantee programs: wheat, wheat flour, barley, vegetable oil, butter, skim milk powder, cheese, beef, pork, poultry, eggs, live dairy cattle, and rice. However, the use of program for rice is likely to be restricted, because the current level of rice exports using export credit exceeds the level permitted under US export subsidy commitments made in the Uruguay Round.*

authority available under the WTO to force such an action. Instead, the EU has sought to bolster the scientific basis under which the ban was promulgated, believing such an action would allow them to maintain the ban while complying with the WTO ruling. This matter recently entered a new stage, as the EU filed for a WTO dispute settlement panel in November 2004, seeking to force the United States and Canada to drop their sanctions, since the EU asserts their regulations are now science-based and thus in compliance with the 1997 ruling.

Because the Brazil cotton case covers entirely new ground in international trade disputes, and the initial panel's report does not prescribe how compliance should be achieved, it seems conceivable that resolving this dispute could take several years, if we assume that the Appellate Body does not overturn the original ruling. One factor that will govern the length of time to reach resolution depends on how soon the government of Brazil presses the WTO to establish a deadline for action and subsequently asks for permission to impose retaliatory tariffs on US products if the US government does not meet that deadline. A second complicating factor that could extend the

length of time is if the government of Brazil is not satisfied with the actions taken by the United States to modify its programs and seeks a second case in order to test the WTO compatibility of the modified programs.

Although the Brazil case was entirely focused on support for US cotton producers (except on the export credit issues), it potentially has much broader implications for US agricultural policy. The panel's finding that US domestic support programs for cotton producers were not entitled to the protection of the Peace Clause was partly based on a determination that direct payments (and Production Flexibility Payments under the 1996 farm bill) should not be classified as decoupled (or "green box") programs because of the restrictions imposed on farmers using program base acres to grow most types of fruits and vegetables. Some WTO member countries could decide to use this finding as a basis for a new dispute settlement case, which asserts that the United States has improperly reported these payments in the green box category and

thus has violated the US commitment to maintain annual amber box program spending at \$19.1 billion or less. Brazil's success in the cotton case could also lead Brazil or other countries to file additional cases against US domestic support programs, focusing on programs benefiting producers of commodities other than cotton.⁴ Such actions are far more likely to occur if agricultural negotiations in the Doha Round over the next several months are perceived to stall or fail.

Conclusions

In the next several years, the House and Senate Agriculture Committees could face the following matters:

- a possible agreement in the Doha Round of the WTO;

4. *The Peace Clause (Article XIII) has expired, so countries would not have to prove that support for a given commodity had increased since 1994, only that it caused serious harm to producers in other countries.*

- a possible direction to modify certain domestic programs to come into compliance with the appellate ruling on the Brazil cotton case;
- annual budget deficits projected in excess of \$400 billion over the next several years, if one assumes that expiring tax breaks are extended and significant numbers of US troops continue to serve in Afghanistan and Iraq; and
- expiration of the current farm bill in 2007.

The perfect storm of the combination of these legislative responsibilities and likely pressures to reduce the federal budget deficit could lead US agricultural policy in new directions. In the past, federal farm policymaking has been largely evolutionary rather than revolutionary, but in this environment, evolution could speed up dramatically.

Stephanie Mercier is an economist with the Committee on Agriculture, Nutrition and Forestry, United States Senate.



History and Outlook for Farm Bill Conservation Programs

Zachary Cain and Stephen Lovejoy

Over the last 70 years, the United States Congress has taken on the task of determining how federal dollars will be invested in agriculture through farm bills.¹ The focus of this paper is to determine how conservation programs have arisen and evolved and to speculate about future direction. Conservation programs have taken a variety of forms since 1933, usually as vehicles for rural investment, income support, and supply control. It was not until the mid-1980s that conservation programs were truly rooted in protecting natural resources. Several important environmental gains have been made over the last 70 years, and the future of conservation programs looks even more promising.

1930s—Depression

The Great Depression of 1929 ushered in hard times for all Americans, especially farmers. One out of four Americans resided on farms at the time; today that figure is less than one out of 50. Between 1929 and 1932 gross farm income dropped 52%. In 1933 rural incomes were 40% of urban incomes, and there was 30% unemployment in urban areas (Doering, 1997). When FDR was elected in 1933, he promised “definite efforts to raise the values of agricultural products” (Hurt, 2002). His administration, under the leadership of Secretary of Agriculture Henry A. Wallace, produced the first farm bill: the 1933 **Agricultural Adjustment Act** (PL 73-10). Wallace understood the financial crisis that faced rural Americans; the best way to get cash to rural, predominantly agricultural focused areas was via farm programs. Direct payments were not an option at this point in history; governments giving money directly to individuals would have been seen as socialistic.

1. “Farm bill” is used throughout this manuscript as a common method for referring to Acts of Congress pertaining to agricultural programs.

The Agricultural Adjustment Act began a time-honored tradition in American agriculture: the notion that it is necessary to control supply in order for farmers to receive a fair price for their goods. The act attempted to do this by setting price supports, or parity prices, to guarantee that prices did not fall below a set level. This price support was available to producers who participated in voluntary production reduction programs, such as acreage set aside. In reality, the program was hardly voluntary—those who did not participate were subject to the uncertainty of low prices on the open market. The program was financed by levying a processing tax on the commodities. This tax was often passed straight to the consumer, who ended up paying more for food and fiber products. In 1936 this tax was declared unconstitutional on the grounds that Congress had passed a tax that was beneficial to one segment of the nation—the farmer—while causing detriment to everyone else.

This setback ultimately led to the first conservation initiatives. Congress needed to infuse cash into rural areas while controlling supply to achieve higher commodity prices, ultimately in hope of reducing the dependency of the American farmer on government subsidies. **The Soil Conservation Act** of 1935 (PL 74-46) established the Soil Conservation Service and made funding available for farmers who established soil conservation practices. This mode of bringing cash to farmers had not been challenged in court, so it became the basis of economic relief in the next farm bill: the 1936 **Soil Conservation and Domestic Allotment Act** (PL 74-461). Congress entitled the bill “an Act to provide for the protection of land resources against soil erosion and for other purposes.” These other purposes were to raise the purchasing power of the American farmer. Soil conservation was a justifiable public expenditure; Americans had seen how the Dust Bowl had driven farmers out of the Great Plains. Economic and social pol-

icy analysts saw that conservation was in the public interest, and therefore the public should contribute to the farmer's costs (Helms, 2003). Soil conservation had also gained a formidable ally in "Big" Hugh Bennett, the first director of the Soil Conservation Service. Bennett used his supreme showmanship and scientific knowledge to rally Congress and the American public to the need for soil conservation.

Financial assistance for conservation in the 1936 Act was called the Agricultural Conservation Program (ACP). The ACP sought to reduce commodity surplus by paying farmers to replace seven soil-depleting crops with soil-conserving crops. The seven soil-depleting crops included corn, cotton, wheat, and other commercial crops the USDA believed to be in surplus. By planting a grass, legume, or cover crop in place of one of these soil-depleting crops, the government would pay the farmer for participating in soil-conserving practices out of the general revenue fund instead of assessing a special tax.

Although this program provided a constitutional way to get cash to farmers, it failed to reduce surpluses—surpluses actually grew. This can be attributed to farmers enrolling their poorest ground into conservation programs while using their guaranteed income via government payments to increase yields with fertilizers, machinery, and other technology on their best ground. The 1938 Agricultural Adjustment Act sought to decrease these surpluses by using acreage allotments and the development of the ever normal granary to handle excess supply, to no avail. The act did continue to build on conservation policy by increasing payments to participants and setting rules for how those payments should be divided between landowners and

producers (tenants and sharecroppers). The 1938 Act also laid the groundwork for soil conservation districts at the county level.

By providing rural Americans with conservation funding in the late 1930s, the administration was able to increase the quality of life and economic security that was shattered by the Great Depression. Table 1 provides a comparison between conservation expenditures in 1937 and 1999 in 2000 constant dollars.

1940s—Wartime

World War II brought a hungry world market to American producers. High demand led to higher prices, and the government developed great surpluses to ensure national security. Conservation was put on the back burner as producers scrambled to cash in on high prices. This was a period of turf wars, where the Soil Conservation Service, land-grant colleges, Farm Bureau, extension, the Department of the Interior, and others attempted to shape their roles in conservation programs. There developed under Bennett a sense that SCS, as the keeper of the conservation flame, had the mandate and mission to plan and execute a national program of soil and water conservation. Conservation was defined as what the SCS decided to do. After World War II, the SCS was project oriented, conducting activities like the Small Watershed Program and Great Plains Conservation Program. These were seen as public works programs that usually were funded to benefit the home district of some congressional representative (Doering, 1997).

1950s—Dealing with Surpluses

The war ended, demand shrank, and surpluses grew. Farm bills in 1949 and 1954 did little to control sur-

Table 1. Conservation expenditures.

Year	1937	1999
Financial assistance	\$5,041,700,000	\$231,383,000
Technical assistance	\$261,863,000	\$799,578,000
Land reserve	\$17,655,000	\$1,711,163,000
Total	\$5,321,218,000	\$2,742,124,000

Note. Adapted from Doering (2000).

pluses and less for conservation. The **Agricultural Act** of 1956 (PL 70-540) created the Soil Bank, which took 29 million acres out of production. By transferring these acres into conserving practices, the government could decrease surplus supply as well as deal with (as stated in the act) "the stifling effects of erosion that threatened the welfare of every American and disrupted markets and commerce on the whole." These acres were to be diverted into soil, water, forest, and wildlife conservation programs in exchange for government rental payments for 10 years.

The Soil Bank was made up of two specific programs: the acreage reserve and conservation reserve. The acreage reserve program made farmers refrain from planting surplus commodities (corn, wheat, cotton, rice, peanuts, and several varieties of tobacco) or plow down the crops they had already planted. The conservation reserve program called for a three-year contract wherein the government would pay for land improvements that increased soil, water, forestry, and wildlife quality if the farmer would agree not to harvest or graze contracted land. This act also stated that newly irrigated or drained farmland could not be used to produce these surplus commodities, as well as providing matching funds to the state for reforestation of private lands. Land retirement programs had several objectives: reduc-

ing erosion, supporting farm incomes, and reducing commodity price support payments by reducing the supply and thereby raising market prices (Helms, 2003). This period started a trend that would be followed until the early 1980s—the idea that the biggest problem with soil loss was lost productivity. Several important lessons would be learned about land retirement programs by the failures of the Soil Bank, such as limiting retirement on a per-county basis so as not to devastate local economies and the importance of a bid system rather than fixed payments. The acreage reserve ended in 1958 under criticism of its high cost and failure to reduce production (Bowers, Rasmussen, & Baker, 1984).

1960s—Targeting Surplus Commodities

Surpluses were still the norm in the 1960s, and the government continued the fight for supply control. Conservation payments through the ACP were being used for lime and drainage, which improved soil quality and increased yields. In 1962, 38% of funds were spent on fertilizer and lime. These major outlays were starting to be questioned as a driving force behind producing further surpluses. Farm productivity grew by 49% between 1950 and 1970. The **Emergency Feed Grain Act** of 1961 (PL 87-5) attempted to take additional corn and grain sorghum out of production by paying farmers to replace production acreage with conservation areas. Designed only for 1961, this program continued for several years. Subsequent acts of the 1960s redefined the set-aside acreage program, changing contract lengths and program capacities. The 1965 Act established a cropland adjust-

ment program, giving the Secretary of Agriculture authority to make 5- to 10-year contracts with producers who agreed to convert cropland into uses that would conserve water, soil, wildlife, or forest resources, establish or protect open spaces, natural beauty, or wildlife or recreational resources, or prevent air or water pollution. Payments could not exceed 40% of the value of the crop that would have been planted on that land.

1970s—Fence Row to Fence Row

The Russians were running out of food and the Secretary of Agriculture told farmers to “plant fence row to fence row” in order to produce enough crops to meet world demand. The Russian grain purchases ensured that prices and demand were high. American farmers were more than willing to answer the call to produce more. In retrospect, this attitude was very detrimental to the gains that conservation programs had made during the previous 40 years. Farmers tilled up their conservation acreage and went back to their old ways. A 1977 Congressional study found that 26% of farmers in the Great Plains Conservation Program had plowed up their newly established grasslands for wheat production after their contracts had expired (Doering, 1997). This emphasizes the difficulty of maintaining long-term conservation practices, especially in land retirement programs.

The **Agricultural Act** of 1970 (PL 91-524) offered further payments to farmers who were willing to let fishermen, hunters, and trappers onto their conservation acreage. The Water Bank of 1970 was established to protect the breeding grounds of migratory waterfowl. The **Agriculture and Consumer Protection Act**

of 1973 (PL 93-86) authorized long-term contracts (up to 25 years) for the Rural Environment Conservation Program and Water Bank Program. There was a push in conservation to increase the “natural beauty” of rural America. The language used in the **Food and Agriculture Act** of 1977 (PL 95-113) shows the USDA was starting to take a harder look at sources and solutions for point and nonpoint farm pollution, including animal wastes. The administration began looking not only at water pollution from sediment runoff but also the overall quality of water supplies in rural America. This also led to increased targeting, putting money where it was deemed most beneficial for water quality instead of in the hands of any and all farmers.

1980s—Conservation Policy that has Conservation Implications

The farm policy of the 1980s shows a change in environmental concern. Until this time, two major themes had dominated the conservation debate: first, reducing high levels of erosion; second, providing water to agriculture in quantities and qualities that enhanced production (Zinn, 2001). Increased public awareness about the deleterious effects farming had on not only soil quality, but also water, air, and wildlife, came to life. Conservation programs started to focus on conservation, not supply control or rural development. This swing in motives can be attributed to the demands of the environmental lobby, who found it was easier to make environmental changes in agriculture through farm bills than through environmental legislation (Doering, 1999). The 1985 Farm Bill was the first to have a specific title devoted to conservation. The true breakthrough of the 1985 Bill can be

found in the change in the language it uses to describe the importance of soil conservation for reasons other than productivity gains. It added new programs: Sodbuster, Swampbuster, Conservation Compliance, and the Conservation Reserve Program (CRP).

Conservation compliance set high penalties, such as loss of price-support programs, government crop insurance, FHA loans, CCC storage loans, and CRP payments, for owners of highly erodible land (HEL) that did not develop and implement a farm conservation plan before 1995. Sodbuster required complete implementation of a conservation plan before new HEL could be cultivated for the first time. Failure to comply led to loss of all farm program benefits until conservation plans were fully implemented. Swampbuster prevented conversion of wetland areas into production (Napier, 1990). These programs were actually enforced early on, causing a political uproar and turning neighbors and SCS employees into “soil cops.” The majority of funding went to putting 36.4 million acres into the CRP. The CRP was intended to conserve not only highly erosive lands (like soil banks had done in the past) but also conservation of other biologically sensitive and important areas. In essence, the public rented the land from the farmers to ensure it was taken out of production. This land was chosen using a scoring system, which was unknown to most producers. The system ranked the environmental improvements that could be made if the land were taken out of production. Congress targeted enrollment eligibility to highly erodible land and other lands that posed an off-farm environmental threat. The USDA estimates that the average erosion rate on enrolled acres was

reduced from 21 to less than 2 tons per acre per year. Even though the new CRP program was rooted in resource conservation, it was still more of the same—supply control and income support. The programs implemented by this farm bill had the potential to make great impacts in conservation, but it would take the SCS a few years to put the actual infrastructure together to make these programs a reality.

1990s—Keep Conservation Rolling

Farm bills passed during the 1990s continued the advancements in conservation that were made in 1985. 1990 witnessed the establishment of the Wetland Reserve Program (1 million acres) and the Ag Water Quality Protection Program (10 million acres). The **Food, Agriculture, Conservation, and Trade Act** of 1990 (PL 101-624) addressed ground water pollution, water quality, and sustainable agriculture, and allowed for the use of easements, as well as amending existing programs. This period also highlighted the importance of natural systems larger than individual farms: landscapes, watersheds, and ecosystems (Zinn, 2001).

The 1996 program extended CRP sign-ups and formed a new structural, vegetative, and land management conservation program EQIP (Environmental Quality Incentives Program). EQIP started with \$200 million in annual funding, half of which went to livestock producers for technical and cost-share assistance in addressing environmental improvements on their operations. The other half went into programs that EQIP consolidated: ACP, Great Plains Conservation Program, Water Quality Incentives Program, and Colorado River Basin Salinity Control Pro-

gram. The ACP, which was once the dominant conservation program, was cash starved out of existence. A new program, Wildlife Habitat Incentives Program (WHIP), was established to help induce wildlife habitat reclamation from production acreage. Conservation compliance lost its teeth through the farm lobby process; many farmers deemed it too intrusive on their activities. In 1994, the Soil Conservation Service was renamed Natural Resources Conservation Service (NRCS).

The language of the 1996 Bill began to reflect a change from “targeting the ACP program to specific practices in all counties” to targeting EQIP to “maximize environmental benefits per dollar expended” with less regard to making certain all counties participated. Programs were targeted to special “conservation priority areas,” which functioned to restrict the flow of conservation dollars away from the general farming public into areas deemed environmentally critical. This began an applicant process known as “bid down,” because landowners usually had to accept a lower-than-maximum cost-share rate to be accepted into the program in order to satisfy the program’s environmental objectives (Helms, 2003). Although focusing upon maximizing environmental benefits was an ambitious step forward, the 1996 Farm Bill was only marginally successful in altering the distribution of resources, and there was still substantial targeting of funds for reasons other than environmental efficacy.

2000s—Going Green

The 2002 **Farm Security and Rural Investment Act** (PL 107-171) continued to emphasize conservation by increasing EQIP funding from less

than \$200 million to \$1.3 billion over several years and establishing a new Conservation Security Program (CSP). Environmental enhancement now took priority over other benefits, such as productivity and supply control. The 2002 Bill also removed restrictions that limited the ability of the USDA to assist larger farmers (Lovejoy & Doering, 2002). The CSP pays producers to adopt or maintain practices that address resources of concern, such as soil, water, and wildlife. This “green payment” program openly recognized that farmers who had strived for conservation and environmental enhancement also deserved some financial assistance. The CSP is a three-tier system; higher tiers require greater conservation effort and offer greater payments. However, to date, the program is still significantly underfunded. This can be blamed partially on the funding pipeline, which is connected to the CCC instead of the general congressional funding. Lobbyists believed that by funding the CSP through the CCC, the program would not be prone to the pitfalls of budgetary reductions. However, the weather dictated otherwise, as the CCC funding quickly vanished in the form of disaster payments to producers after a string of flooding in the early part of the decade. In 2004, a total of 2,188 CSP contracts were approved (all farms that applied were accepted) covering 1,885,400 acres in 18 watersheds at a cost of \$35 million. Of the 27,300 farms in the 18 watersheds, only 8% of farms applied and received contracts, comprising 14% of the 14 million eligible acres. The NRCS has announced plans to increase from 18 to 202 watersheds in 2005, which includes about 208,000 eligible farms and ranches and more than 83 million acres of

farmland. These 202 watersheds are located in portions of all 50 states and Caribbean territories, thus greatly broadening the scope (and presumably the cost) of the CSP program.

Land retirement programs expanded by this legislation placed a particular emphasis on wetlands. CRP acreage was increased from 36.4 to 39.2 million acres, and an additional 1.2 million acres were added to the WRP. The 2002 Bill also created a Grassland Reserve Program (GRP) to assist landowners in restoring and conserving grasslands. WHIP received a tenfold funding increase over the 1996 Bill. The Farmland Protection Program, which provides funds to state, tribal, or local governments and nonprofit organizations to help purchase easements against the development of productive farmland, also received increased funding.

The Farm Security and Rural Investment Act increased funding for environmental programs by 8 times over the 1996 Farm Bill, but recent increases in defense and homeland security spending have made getting money to these programs difficult. The 2002 Bill sought to reduce targeting funds by developing a regional equity provision. This provision gives priority conservation program funding to any approved application in any state that has not received at least \$12 million in funding for the fiscal year. The “bid down” process was also removed, and least cost was no longer used in selecting from applications with similar environmental benefits. The 2002 Bill shows a fundamental change in the process of environmental spending. Congress and the USDA would no longer attempt to simply maximize the number of acres in conserving uses, but rather maximize the environmental benefits for the expended funds in

all of the conservation titles, (e.g., the maximum environmental bang for the buck; Lovejoy & Doering, 2002).

Future of Farm Bill Conservation Programs

What will conservation programs of future farm bills look like? Let's get out the crystal ball. The average forecasted outlays of the Commodity Credit Corporation, \$16.5 billion, represents about one third of total annual net cash farm income. This only signifies the importance of farm program payments to the near future of agriculture. Since we likely will not abandon farm subsidies anytime soon, we need to examine where that funding might go. Green payments, such as the CSP program, hold real potential for environmental benefit while retaining producer income support. The upside to such a policy would be increased environmental protection and reaching compliance in the World Trade Organization. The WTO does not view conservation payments (unlike other subsidies) as distorting international trade, as long as they are used to make conservation gains. The downside to such programs is the cost associated with them. In a green payment system such as the CSP, almost every producer would be entitled to payments, not just those growing specific crops. Moving to such payments could decrease productivity, essentially driving up food prices. They require more planning and input from agencies like the NRCS, costing more money and further intruding on the farmers' independence. It will be interesting to see where the tradeoffs will be made among Americans' desire for a healthy environment, low taxes, cheap food, a profitable agricultural sector, and a dynamic rural economy. In an age of

big budget deficits, it is probably safe to assume that we might not see a switch to solely green payments in the next farm bill, but rather a fight to keep the conservation payments we currently have. It is more likely that we will see a reform in the way direct payments are made to producers with continued countercyclical-type payments to buffer against the bad years. If the best indicator of future behavior is past behavior, we should not expect revolutionary changes in Congress's handling of the next farm bill, but rather continued evolutionary change of conservation policy and continued support for some level of commodity payments and disaster relief. A recent initiative by some agricultural lobbying groups suggests declining support for acreage retirement programs and increasing support for full production. The balance between the desires of these groups and the environmental concerns of other groups remains to be seen.

Conclusions

During the Great Depression the federal government began a system that invested in the rural agricultural economy to help farmers face tough times. Before this time, the USDA provided research, marketing, and extension services. Now they were attempting to provide income and crop price support to the impoverished American farmer. The mode of this funding ended up being conservation programs, and the government spent greatly, as indicated in Table 1. This program continued to evolve over the decades, changing

from a vehicle of income, price, and supply control into an environmental resource management program that only occasionally manipulates income, price, and supply. Early farm bills sought to help the producer control erosion and increase productivity of the land; later acts attempted to control the overall supply of commodities to boost prices. Since 1985, great strides have been made in conservation titles of our nation's farm bills, bringing into focus the true importance of the balance of natural ecosystems and production agriculture. We are far from finished with this task; there are still many problems of production agriculture that need to be reconciled. This will be the duty of future farm bills—to continue to provide farmers the opportunity to become better stewards of the land. The future of green payments will likely be a function of time, available dollars and congressional will.

For More Information

Bowers, D.E., Rasmussen, W.D., & Baker, G.L. (1984). *History of agricultural price-support and adjustment programs, 1933-84* (Agricultural Information Bulletin 485). Washington, DC: USDA ERS.

Doering, O.C. (2000, May). *Technology and structural changes in agriculture since 1900*. Presentation to Sec. of Agriculture Glickman, USDA Conference Visions for the Millennium: Structural Changes Facing Livestock and Grain Markets in the 21st Century, Kansas City, MO.

Doering, O.C. (1999). *Farming's future*. Forum for Applied Research and Public Policy.

Doering, O.C. (1997, Feb.). An overview of conservation and agricultural policy: Questions from the past and observations about the present. *Agriculture and Conservation Policies, A Workshop in Honor of Norman A. Berg*.

Helms, J.D. (2003, Dec.). The evolution of conservation payments to farmers. *Compensating Landowners for Conserving Agricultural Land*. Davis, CA: U.C. Davis Community Studies Extension Conference.

Hurt, R.D. (2002). *Problems of plenty: The American farmer in the twentieth century*. Chicago: Ivan R. Dee.

Lovejoy, S. & Doering, O.C. (2002). *Conservation and environmental enhancement in the 2002 farm bill* (publication CES-344). Purdue University Cooperative Extension Service.

Napier, T.L. (Ed.). (1990). *Implementing the conservation title of the food security act of 1985*. Soil and Water Conservation Society.

Zinn, J.A. (2001). *CRS report: IB96030: Soil and water conservation issues*.

Zachary Cain is a graduate research assistant and Stephen Lovejoy is a professor in the Department of Agricultural Economics, Purdue University, West Lafayette, Indiana. This research was funded, in part, by a cooperative agreement from the Conservation Effects Assessment Program, Agricultural Research Service, USDA.



Implications of Budget Reconciliation for Commodity Programs

James Richardson and Joe Outlaw

There appears to be a renewed emphasis in Washington on reducing the federal budget deficit. Although the US economy is improving, it appears that the only way to make real progress in reducing the deficit is to reduce government expenditures. The desire to reduce the deficit, coupled with the President's agenda that includes several controversial and potentially costly items, has many in Washington discussing the possibility of budget reconciliation for fiscal year 2005/06 after a budget resolution is passed in 2005.

The details and intricacies of budget reconciliation are far beyond the scope of this paper. In general, however, if budget reconciliation happens, the budget committees will send instructions to authorizing committees indicating the amount of the required spending reductions relative to baseline spending. It will then be up to the authorizing committees (the agriculture committees in the case of most agricultural programs) to decide what programs are cut and by how much—as long as the required overall reduction is achieved. At this point, there is only speculation about what programs would be cut, but the agriculture committees would have a wide range of programs to choose from, including nutrition, export assistance, conservation, and commodity programs, to name a few.

Producers and their groups are having a hard time accepting the prospects of cuts in program benefits. They cite the fact that commodity program spending has been less than projected by the Congressional Budget Office (CBO) over the past few years due to higher actual prices than were projected. In their mind, this results in savings to the federal government, and they shouldn't be asked to take cuts. Unfortunately for producers, in the world of budget scoring, lower payments due to higher commodity prices do not represent budget savings.

The purpose of this paper is to discuss a few of the alternatives available to the agriculture committees for

achieving budget reductions from commodity programs. The three primary mechanisms used to provide support to covered crops produced by US farmers are the counter-cyclical payment program (CCP), the marketing loan/loan deficiency payment program (ML/LDP), and direct payments (DP). The fact that these programs are interrelated has the potential to create additional issues that should be addressed prior to implementing changes to avoid unintended consequences (Table 1).

A hypothetical example is provided assuming that a 10% reduction in March 2004 CBO baseline spending levels is required over the 2005–2014 period. To project budget savings, a stochastic simulation model was developed to imitate the CBO budget scoring process and the results of achieving savings by implementing reductions in target prices, loan rates, direct payment rates, and the payment fraction. CCPs and ML/LDPs are received when the market price is less than the program's respective trigger level. As a result, a deterministic model, which uses mean prices, fails to score reductions in target prices and loan rates as a budget saving. A stochastic model, on the other hand, simulates the full distribution of prices, so any decreases in target prices and loan rates result in budget savings. It should be noted that changes could also be made to payment limits to achieve budget savings (although this paper does not consider payment limits).

The example will discuss the consequences of (a) reducing target prices that would reduce CCPs; (b) reduc-

Table 1. Impact of a decrease in current farm policy instruments on CCPs, DPs, and ML/LDPs.

Policy tool	CCP	DP	ML/LDP
Reducing target price	Decrease	No change	No change
Reducing loan rate	Increase	No change	Decrease
Reducing direct payment rate	Increase	Decrease	No change
Reducing payment fraction	Decrease	Decrease	No change

ing the direct payment rate that would reduce DPs; (c) reducing loan rates that would reduce ML/LDPs; and (d) reducing the 0.85 payment fraction used in the calculation of DPs and CCPs—essentially lowering both of these payments.

2004 CBO Baseline

The CBO develops baseline budget projections to give Congress a baseline to measure the effects of proposed changes in law against (CBO, 2002). For agriculture, CBO projects government expenditures, by program and crop, assuming a continuation of the current farm bill for 10 years. As a point of reference, the 2004 CBO baseline, projected CCP, DP, and ML/LDP payments for the nine major program crops is about \$120.5 billion over the 2005–2014 period. Total DPs for nine crops (corn, wheat, cotton, grain sorghum, barley, oats, rice, soybeans, and peanuts) is estimated at \$49.7 billion, whereas CCPs and ML/LDPs are \$36.7 billion and \$29.1 billion, respectively. It should be pointed out that current projections of market prices over the next few years are significantly lower than were projected in the example baseline (2004 CBO March baseline). This means that the 2005 CBO baseline that will be used for measuring savings will likely have significantly greater projected CCP and ML/LDP expenditures.

For this paper, the stochastic budget scoring model was optimized using optimal control theory to estimate the decreases in target prices, loan rates, direct payment rates, or payment fraction to achieve a 10% budget savings. The model was optimized once with an across-the-board percentage change in a policy variable (e.g., target price) to achieve the budget savings. Next, the model was

optimized once for each commodity to find the percentage decrease in a policy variable (e.g., target price) to achieve a 10% budget savings for each crop.

Target Prices

Cutting target prices will reduce CCPs. Countercyclical payments are a safety-net payment triggered when season average price falls below the target price minus the direct payment rate. The CCP is paid on a historical yield (created in the 2002 Farm Bill) and base acreage, which is then reduced by the 0.85 payment fraction.

Using the 2004 CBO Agriculture baseline, it is estimated that a 4.5% cut in target prices would result in a 10% savings in government payments for the nine program crops over the 2005–2014 period. The problem with an across-the-board cut of target price is that it may not be an equitable way to achieve a budget reconciliation spending cut. The 2004 CBO baseline indicates that corn, wheat, and rice receive 30–33% of their payments from the CCP. In comparison, soybeans receive only 14% of total payments from CCPs, while peanuts and cotton receive more than half of their payments from CCPs. An across-the-board cut in target prices to achieve budget reconciliation instructions to cut spending would negatively impact soybeans, wheat, rice, and corn relatively more than cotton and peanuts. In other words, an across-the-board cut reduces the expenditures for some commodities more than others. Is this equitable?

Direct Payment Rate

Cuts to the direct payment rate would reduce DPs but increase CCPs. As the direct payment rate decreases, the CCP rate increases (in

the absence of a change in the target price). Recall that the CCP rate equals target price less the direct payment rate minus the greater of the season average price and the loan rate. As a result, cutting the direct payment rate offers only limited benefits to meeting a budget reconciliation target, because rising CCPs offset DP cuts. Based on the 2004 CBO baseline for 2005–2014, it is estimated that a 50% cut in direct payment rate only saves 3% of spending to nine program crops, and cutting direct payment rates to zero only reduces federal spending for program crops by 5% because of increases in CCPs.

Additionally, the DP is a certain payment, whereas CCPs are risky. Therefore, cutting the direct payment rate to zero to achieve a 5% budget savings reduces producers' utility. Producers would lose \$49.7 billion of certain DPs to gain access to uncertain CCPs. Another concern about cutting direct payment rates is that the DP is a decoupled payment, which was not included in the WTO cotton case brought against the United States by Brazil (see Mercier paper, in this issue).

Loan Rate

Reducing the loan rate will reduce ML/LDPs and increase CCPs (in the absence of other changes). To the extent that loan rates exceed producers' expected prices, loan rates encourage increases in supply. So, a reduction in loan rates can be expected to reduce the production over which ML/LDPs are paid. However, as the loan rate falls, the maximum CCP rate increases. Using the 2004 CBO baseline, it is estimated that a 17% cut in loan rates for the nine major program crops would reduce government payments to these crops 5%. (Note that this calcu-

lation ignores the supply response of lower loan rates.) With 17% lower loan rates, CCPs would rise about \$10 billion—more than offsetting the \$4.7 billion decline in ML/LDPs. This leads to the conclusion that cuts in loan rates are not a feasible option for reducing spending on the nine program crops.

Equity issues would also occur with cuts in the loan rate. In the 2004 CBO baseline, cotton receives only 2% of its government payments from ML/LDPs, whereas soybeans receive 53% of their payments from LDPs. Corn, wheat, and rice receive about 20% of their payments from ML/LDPs. Therefore, an across-the-board percentage cut in loan rates to meet budget reconciliation instructions to cut spending would mean soybeans would be footing most of the required budget savings for other crops (corn, wheat, rice, and cotton).

Payment Fractions

A payment fraction of 0.85 is used to reduce the DP and CCP by 15% in the 2002 Farm Bill. Cutting the payment rate fraction is a simple way to reduce government payments. Reducing the payment rate fraction from 0.85 to 0.74 would yield an estimated 10% reduction in government payments for the nine program crops over the 2005–2014 period. Producers would probably dislike this approach, because it reduces the certain DPs, and it makes some crops pay less than their share of the budget cuts. Cotton and peanuts receive about 97% and 89%, respectively, of

their government payments in the form of DPs and CCPs, whereas soybeans receive only 47% of their payments from DPs and CCPs. Rice, corn, and wheat receive roughly 80% of their government payments from DPs and CCPs, so they would not prefer cuts in the payment fraction rate. Soybean producers, however, may prefer this method of achieving a budget reconciliation reduction, because they receive a relatively smaller portion of their government payments from CCPs and DPs.

Summary

Under the 2004 CBO baseline, the projected CCP, DP, and ML/LDP program payments for the nine major crops is \$120.5 billion over the 2005–2014 period. It is anticipated that Congress will pass a budget reconciliation bill in 2005 requiring the House and Senate Agriculture Committees to comply with the budget reconciliation guidelines. The provisions of the 2002 Farm Bill make it difficult for the agriculture committees to cut payments by simply cutting target prices, loan rates, or direct payment rates.

A cut in the direct payment rate or cut in the loan rate increases CCPs. Cutting the payment fraction is the easiest tool to use, but it reduces both DPs and CCPs, making farmers worse off than simply cutting target prices and reducing an uncertain government payment.

Across-the-board cuts are easier to manage but raise significant equity

issues. Cuts in loan rates put the burden of budget savings for the whole farm bill disproportionately on commodities that benefit more from LDPs. Similarly, cuts in target prices put a greater burden on a different group of commodities. To reduce the impacts of equity issues, the agriculture committees may need to consider reducing policy variables differently for each of the commodities.

A common ground that all program commodity producers share is a preference for DPs over CCPs and LDPs. Expected utility theory suggests that decision makers prefer a certain income over a similar but uncertain income. Any policy change that reduces DPs so farmers have to rely more on LDPs and CCPs will be met with disfavor.

For More Information

Congressional Budget Office. (2002) *The Congressional Budget Office: Who We Are and What We Do*. The Congress of the United States, Congressional Budget Office, Washington D.C.

James Richardson is a regents professor and TAES faculty fellow in the Department of Agricultural Economics at Texas A&M University, College Station, Texas. Choices co-editor Joe Outlaw is an associate professor and extension economist in the Department of Agricultural Economics at Texas A&M University.

