Determinants of Farm Policies in the United States, 1996-2008

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Abstract

This paper focuses on the political economy of U.S. farm policy since the Uruguay Round trade negotiations concluded in 1994 and established the WTO. The continued ability of the powerful farm lobby in the United States to elicit support in the political arena is evident from this analysis. Yet there have been some substantial changes in policy that have reduced their distortionary effects, as well as some setbacks to liberalizing reform. New Doha Round commitments could put further constraints on subsidies provided by some U.S. policy instruments. And despite the ability of the farm lobby to retain its support programs through 2012, there are several political uncertainties about the alignments that have allowed U.S. farm support to endure.

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This chapter focuses on the political economy of U.S. farm policy since the Uruguay Round trade negotiations concluded in 1994 and established the World Trade Organization (WTO). The significance of this point of reference is that it introduced a new element into the consideration of farm programs by setting out, in the Agreement on Agriculture (URAA), a multilateral framework for government policies in the areas of domestic support, market access and export competition. Though few would have expected the U.S. to make substantial commitments with an immediate impact on its domestic programs, changes might have been anticipated over time in the formulation of U.S. farm policy as a result of its incorporation into an international treaty. Yet the broad thrust of agricultural policies in the United States since the URAA has exhibited a remarkable consistency with earlier decades. Old instruments have been adapted and new ones developed but the policy mix serves essentially the same purposes, and benefits the same groups, as in the mid-1980s. This resilience of U.S. policy in the context of a potentially increasingly assertive set of multilateral trade rules is a core theme of the chapter.

As an exporter of its primary agricultural products, the U.S. has maintained a relatively open market. Tariffs on agricultural imports are generally low and have been stable, with limited cuts to bound rates to meet Uruguay Round commitments (Blandford, Laborde and Martin 2008). The policy story is more fluid in the domestic support arena where there have been substantial changes in policy instruments during the fourteen-year period since the URAA came into effect. Annual acreage idling, a cornerstone of farm programs since the 1950s, was abandoned in 1996 and was not resurrected during the subsequent period of low commodity prices. Deficiency payments that had been tied to prices and the production of specific crops were also replaced in 1996 by fixed direct payments that were largely decoupled from production decisions. Public stockholding and the use of export subsidies to dispose of government-held

surpluses have almost disappeared, and binding production quotas for peanuts and the entire tobacco price-support program have been eliminated.

There have also been steps back toward subsidies tied to prices or production. Deficiency payments linked to market prices (but less closely than before to planted acreage) were reintroduced in 2002. Biofuel mandates and subsidies have emerged as an influential aspect of U.S. policy under the security responses to the September 11, 2001 terrorist attacks and higher oil prices beginning in 2003. With agriculture's new battle cry of providing "food, fiber and fuel", the demand-augmenting and price-stimulating effects of biofuel policies have turned upside down the debate about U.S. subsidies depressing world market prices. When agricultural commodity prices rose sharply in the first half of 2008, this even revived pressure not felt since the 1970s on a policy of idling millions of acres of land for supply control and environmental purposes under the long-term Conservation Reserve Program (CRP).

What explains U.S. farm policy innovations and do they display over time any systematic movement toward less distortion of agricultural incentives? What dictates the levels of observed relative protection and the instruments used for support? We assess the driving factors behind three farm bills: two enacted under relatively high international commodity prices, in 1996 and 2008, and one enacted under low prices, in 2002. With agriculture a small but relatively prosperous and concentrated sector of the national economy, it is plausible to maintain that U.S. farm policy outcomes are an equilibrium result of interest-group lobbying. In this context, we examine the influence on policy instrument choices of commodity price movements, the interests among agricultural groups, and log-rolling to attain majority congressional coalitions. We place these considerations in the broader context of party control of Congress, macroeconomic circumstances, and the concurrent state of WTO negotiations and dispute resolution.

The continued ability of the powerful farm lobby in the United States to elicit support in the political arena is evident from this analysis. Under the 2008 farm bill, farmers retained a stream of direct payments through to 2012 despite back-to-back years of record farm incomes from strong commodity markets. Direct payments are perhaps the least trade-distorting among support policy instruments, and the international disciplines on farm subsidies leave the determination of their level to domestic debate. But this is not all the farm lobby retained in 2008. Price support and countercyclical income support programs were extended, and the new farm bill included an Average Crop Revenue Election (ACRE) program under which payments

could ratchet up substantially in an era of high prices. Agriculture also has strengthened political clout to influence agricultural prices through energy policy. Thus, the farm sector is well-positioned to be supported in the event of a wide range of contingencies. This is a sobering result for those examining farm policies internationally and hoping to find evidence that a wealthy country such as the United States, with its significant agricultural comparative advantage, has reached the point where subsidies that distort agricultural incentives would subside.

Outcomes of the three post-Uruguay Round Farm Bills

The twentieth-century transformation of American agriculture and the circumstances and associated outcomes of farm policy are well described by Gardner (2009). World agricultural markets became depressed in the 1920s, but this did not evoke substantive intervention until wider economic collapse and Democratic election victories in the 1930s brought a fundamental policy change that altered the government's role in the economy. Once farm programs were established, powerful constituencies formed to defend them, and they secured high wartime price supports in the 1940s. In the 1950s, post-war policy was dominated by supply control measures designed to keep up farm commodity prices in the face of downward pressure from rapid increases in productivity. By the 1960s, payments made directly by the government emerged as an instrument to compensate farmers for the relaxation of intervention to control supply. A commodity market boom in the early 1970s briefly eliminated government interventions altogether in several markets, but farm support programs proved impossible to terminate in the inflationary era that followed. In the 1980s, a farm crisis arose, in part from inflation miscalculations, and commodity prices and land values fell under a regime of tight monetary policy and U.S. dollar appreciation. Supply controls were restored, implemented through annual and long-term acreage idling, and record payments were made to compensate farmers for lower prices. The URAA subsequently brought modest commitments to reduce border protection and to cap export subsidies and trade-distorting domestic support for agriculture. Yet the commitments made at the end of the Uruguay Round did little to force fundamental reform in the United States.

Market-oriented reforms in 1996

Reforms adopted in the 1996 Federal Agriculture Improvement and Reform (FAIR) Act included an unexpected decoupling of payments on eligible base acres from market prices and planting decisions, an end to annual supply-control acreage reduction programs (ARPs), and capping of price-support loan rates at low levels (Orden, Paarlberg and Roe 1999). Two key factors stimulated these reforms. The first was the capture of control of Congress in November 1994 by the Republican Party for the first time in forty years. The Republican-controlled 104th Congress was more inclined than earlier Democratic congresses towards unencumbered agricultural production. Consistent with the economic deregulation being promoted under their party's ideological orientation, the Republican agricultural leadership set as a key objective the elimination of ARPs, which their farm constituents found onerous and their agribusiness constituents had always opposed.

The second key factor that drove the FAIR Act reforms was a sharp rise in commodity prices in late 1995. Decoupling of payments from prices and production was not considered seriously by Congress when it rewrote farm policy in 1990, and remained off the table when the 1995 farm bill debate began. Early efforts by the Republican agricultural leadership to sell the radical idea of fully decoupled payments were unsuccessful. But by November market prices were well above the target prices that triggered subsidy payments under the 1990 farm bill. This turned a previously unacceptable option into a plausible choice.

Beyond the agricultural producer groups, a broader coalition has historically been formed to move farm program legislation through Congress. Commodity-based agricultural issues are salient only to a small fraction of the members of Congress, well short of a minimum winning floor coalition. To be enacted, farm bills must be acceptable to a mix of other constituencies. The various environmental and recreational benefits associated with idling land under the CRP, and several related wetland, grassland and other programs, had attracted a strong constituency among conservationists and sportsmen, as well as among the landowners and farmers who receive

nearly $2 billion annually in land retirement payments. The CRP was retained in the FAIR Act, idling over 30 million acres under long-term contracts. The Republican congressional leadership then appealed for support for the new farm bill to the conservative Congress and made enough concessions to other interests (among them agribusiness, food consumers, and advocates for the rural and urban poor) to secure its passage with the new planting flexibility and lucrative commodity title.

Other factors were at play in determining the outcome of the FAIR Act, though they did not have a dominant role. The URAA itself had a minimal impact on U.S. farm policy in 1996. The international agreement required few policy changes and no support level reductions beyond those already undertaken in the 1985 and 1990 farm bills. In WTO terms, the policy shift in the FAIR Act was from one non-limited category of farm support to another—from the blue box, which exempted U.S. (and European) deficiency payments made on partial base acreage and tied to ARP authority, to the WTO green box that included fixed direct payments deemed not to be trade distorting (Josling, Tangermann and Warley 1996).

Nor was federal budget discipline a major factor in shaping key reforms in the FAIR Act. Instead it was the arcane budget rules used by Congress rather than the deficit that were influential for the reforms adopted. If there had not been a pay-as-you-go rule (which put a high budget cost on ARP elimination assuming traditional deficiency payments), and if there had not been an outdated Congressional Budget Office (CBO) baseline budget projection (making it possible to capture higher spending with decoupled payments once market prices started to rise), the move toward decoupling in 1995 would have been less compelling.

Several features of the 1995-96 farm bill debate also suggest that new ideas reflecting an ideological shift about the role of government in agricultural policy were not being embraced. The support programs for dairy, sugar and peanuts were renewed and the permanent farm programs from the 1940s were left in place as an incentive for Congress to enact future replacement legislation. As long as the farm lobby remained powerful, and the agricultural committees in Congress retained control of the policy process, there were ready venues under the FAIR Act either for traditional program defense or for the design of new support policies.

Re-institutionalized support in 2002

Both short-term and structural factors were cited in 1995-96 as evidence that agricultural prices would remain high through the decade, but these projections proved erroneous. As prices fell sharply from forecast levels, continuation of the traditional deficiency payment programs would have increased fiscal outlays by 1997 had it not been for the FAIR Act decoupling. Falling prices also would have undermined arguments to abandon ARPs. The most important reforms in the FAIR Act simply would not have been enacted had the 1996 farm bill been delayed.

Party-based farm policy differences were also evident as Congress weighed its options in response to falling market prices. Congressional Democrats called for a virtual rewriting of farm policy in 1998 to restore the traditional safety net. An election year bidding war ensued between Democrats and Republicans over granting new benefits to farmers. With Republicans still in the majority, the key structural reforms of the FAIR Act were retained: planting flexibility continued, ARPs were not re-imposed, loan rates were not raised, and the "emergency" payments that were appropriated remained nominally decoupled from market prices. But the budget discipline of fixed payments touted by Republican leaders as a virtue under the FAIR Act collapsed by 1998 as nearly $7 billion of aid was granted and similar additional aid was appropriated annually as prices remained low over the next three years.

In these circumstances, the farm lobby promoted a new farm bill a year before the FAIR Act was scheduled to expire. It secured congressional commitments for $73 billion in additional spending over ten years, increasing by three-fourths the FAIR-Act baseline of projected commodity spending (Orden 2002, Moyer and Josling 2003). The Farm Security and Rural Investment (FSRI) Act, signed into law in May 2002, continued direct payments and extended them to soybeans and other oilseeds. The emergency payments that Congress had authorized annually were turned into new mandatory countercyclical payments (CCPs) tied to market prices and historical, but not current, production. In addition, loan rates were raised slightly and new price supports were added for several minor commodities. Farmers retained planting flexibility

with the new CCPs, although the decoupling of support from production decisions was partly undermining by a one-time option to update the acreage bases determining their direct payments and the base acreage and fixed yields determining their countercyclical payments. Thus, the bill offered substantial new support guarantees and familiar policy instruments to farm constituents. Most of the newly-available money (nearly $50 billion) went to anticipated commodity support.

The mix of conservation and environmental programs included in the FSRI Act highlights the discretion involved in U.S. programs toward long-term acreage idling. The authority for the CRP was increased from 36.4 million acres to 39.2 million acres, but most new environmental expenditures went to measures to assist livestock operations (expanding an existing Environmental Quality Incentives Program (EQIP) program) and for conservation measures on land that remained in production (a new Conservation Security Program (CSP)). Long-term land idling historically has been enacted as a supply control and conservation measure during times of low prices (the 1930s, the 1960s, and again in 1985) and has expired when market demand strengthened (during World War II and in the 1970s). The expenditure on the CRP falls in the WTO green box and competitors in world markets naturally do not complain about the reduction of U.S. production it causes. The CRP had occasionally been criticized for unnecessarily restricting output and keeping world prices higher than otherwise, but this was not a policy issue with the low market prices in 2002.

Passage of the 2002 FSRI Act was met with derision by domestic and international critics of U.S. policy. In reply, the House Agriculture Committee offered a strident defense of the farm bill. A document posted on the Committee's web page asserted that "Critics of U.S. farm policy would cede our food production to unstable places like the Third World," then asked "but in these times does any American want to depend on the Third World for a safe and abundant supply of food and fiber?" Such sharply-worded views of the 2002 farm bill are indicative of the conflict that festers over U.S. agricultural support programs. Yet severe critics of the 2002 FSRI Act and its staunch defenders both overstated their case. The 2002 U.S. farm bill took few constructive unilateral steps toward reduction of subsidies. But nor did it expand the least desirable subsidy policies as is sometimes implied.

The 2002 FSRI Act included only modest individual payment limitations and a weak income-based eligibility cap, with producers having average adjusted gross income of more than $2.5 million ineligible for payments unless at least three-fourths of their income came from

farming. Imposing limits on the level of payments to individual beneficiaries is controversial in U.S. farm policy, and such measures have a critical regional and commodity dimension because per-acre payments are higher for cotton and rice than for other crops.

Low prices from 1997 onward provided the main political dynamic underlying passage of the 2002 FSRI Act. With low prices, the effort to turn the emergency payments legislated annually from 1998 to 2001 into permanent support entitlements was endorsed by farm groups and marshaled aggressively by the House Agriculture Committee, still under Republican control but chaired by a dissenting southern opponent of decoupling. Under Democratic leadership, the Senate sought to go further to reverse the FAIR Act policies. Farm groups sought additional support but nearly unanimously favored continuing the planting flexibility provided by the FAIR Act. With substantial new money to allocate, the agriculture committees had a relatively easy task to orchestrate support for a new bill.

During early deliberations on the farm bill in 2001 the administration had argued for fiscal restraint, but its voice was muted. The administration had made implicit commitments to future agricultural spending during its push to secure votes for broad ten-year legislation to lower taxes. The president also sought backing from agriculture for new international trade negotiating authority. This further weakened any administration resolve to limit farm spending, even if higher spending posed a threat to progress in future trade negotiations. Advocates of fiscal discipline hoped the tax cuts and a weakening economy would result in reassessment of the large budget allocated to agricultural subsidies, but that failed to happen after the September 11 terrorist attacks that occurred in New York and Virginia. The House floor debate on the farm bill was scheduled to begin September 12. It was put off just 21 days, and the House passed its version of an expensive new farm bill with strong bipartisan backing.

The U.S. commitments under the URAA also proved too lax to limit farm spending levels effectively as prices fell after 1997. The U.S. Aggregate Measurement of Support (AMS) for subsidies tied to production was well below its WTO cap of $19.1 billion when the FAIR Act was passed (Josling 2007). When support provided to farmers began to rise automatically, and Congress added emergency subsidies as market prices fell, the U.S. avoided exceeding the WTO discipline by reporting the supplemental payments as non-product-specific support, which remained well below the *de minimis* limit of 5 percent of the total value of agricultural production. The WTO negotiations on agriculture launched in 2000 were incorporated into the

full Doha Development Agenda (Doha Round) in 2001. But Congress largely ignored the WTO in drafting the FSRI Act.

Reforms to the main U.S. support programs initiated in 1996 partially decoupled subsidies from production but did not succeed in reducing support levels. A more radical reform option that is sometimes suggested is a compensated end to a support program through a buyout. A buyout of peanut production quota rights was included in the FSRI Act, but the bill also included new direct and countercyclical payments to peanut producers. In 2004, a tobacco buyout ended domestic production quotas and completely eliminated the price-support program. Adoption of the peanut quota and tobacco program buyouts drew substantial support among producers of these crops because their benefits were declining as quota acreages and prices fell. The losses of quota revenue were most severe for tobacco, and the tobacco buyout was the most complete.

Payments associated with the peanut and tobacco buyouts were quite generous. For peanuts a lump-sum quota buyout payment of $0.55 per pound was equivalent to the average of annual past quota rental payments, discounted at a 5-percent rate, for a period of 24 years (Womak 2003, Orden 2007). Payments to quota owners were equivalent to discounted average rental payments for 15-20 years for flue-cured and burley tobacco, with additional buyout payments made to the tobacco producers (Brown, Rucker and Thurman 2007).

While the peanut and tobacco buyouts were costly, they have ended government interventions in these markets dating back to the 1930s. In contrast there has been little reform for sugar, where the cost of U.S. protection and support is borne by consumers rather than taxpayers. Domestic sugar producers have not seen their benefits erode dramatically so there has been little impetus to seek a buyout. Instead, the FSRI Act strengthened the sugar support program by requiring that it operate at no net cost to the government and by stipulating that restrictive domestic marketing allotments could only be imposed to sustain the supported price when low-tariff imports were below 1.32 million metric tons. Under these conditions, the sugar program had to be administered with tight import restraints, which set the farm bill firmly counter to sugar trade liberalization.

Continued support under the 2008 Farm Bill

There was a high level of interest in a new farm bill by 2006, with an array of listening sessions and hearings held by the administration, Congress and farm organizations. Coalitions of groups arguing for reform were active and gained some traction in 2007, with widespread criticisms of farm policy appearing in major urban newspapers (Arha et al. 2007). However, the broader political agenda for both parties was keeping the support of voters and special interests in the swing states of the Midwest, and reform of farm programs carried political risks.

As the legislation made its way through Congress, the strategy of farm groups was to keep the structure and budget allocated to the commodity programs intact while seeking additional funding for nutrition and conservation as well as for specialty crops and other new farm-sector constituents, to build a coalition for congressional voting majorities. With both houses of Congress under Democratic majorities after the elections in November 2006, the prospect of increased funding for food stamps and other food assistance to the poor was as important as the future of commodity programs. If this additional funding was forthcoming, then the farm coalition would have been successful in expanding the scope of the farm bill without any sacrifice from commodity support. The safety-net would be preserved. By 2006, commodity prices had strengthened from the low levels of the early 2000s, and they were projected to remain high enough to reduce price-linked payments sharply (see Table 1). A new farm bill was anticipated in 2007 but the debate spilled over into 2008, forcing Congress to pass five short-term extensions of the FSRI Act.

Whereas the Democratic administration in 1995-96 and Republican administration in 2001-02 had been relatively passive in formulating farm bill proposals, throughout initial discussions of the 2007 bill the Secretary of Agriculture called for policies that were “equitable, predictable and beyond challenge.” In January 2007, despite the loss of control of Congress to the Democrats, the administration released a detailed proposal to meet its criteria through a set of incremental reforms along the decoupling path (USDA 2007).

Several of the administration's key recommendations related primarily to domestic aspects of farm policy. The administration endorsed direct payments but proposed that over ten years nearly $8 billion be shifted from commodity support to conservation programs through changes in policy design. Part of the claimed savings came from converting countercyclical payments from a price basis to a nationally-calculated revenue basis. This was asserted to lower expenditures by taking advantage of the natural price-quantity hedge (when output is low, prices are higher and vice versa) which partly stabilizes revenue. The administration also proposed a strict means test with a $200,000 adjusted gross income limit for support eligibility. In aggregate, the administration's proposal held spending for agricultural commodity programs within the level projected under a continuation of the FSRI Act. Spending was expected to be much lower than during 2002-2007 because of the projected higher prices. In short, under the administration proposal there was to be a squeeze down of traditional commodity subsidies, with countercyclical payments and loan rate-based price support falling sharply.

Additional administration proposals related to improving U.S. compliance with WTO rules. For cotton, lower loan rates were recommended, compensated by higher direct payments. This potentially addressed the call for particularly strong reforms under the special cotton initiative within the WTO negotiations. The administration recommended that cultivation of fruits and vegetables be permitted on base acres. This would address the issue of whether U.S. direct payments could be counted in the WTO green box raised by the Brazilian challenge to the cotton program (see discussion below). Greater flexibility in U.S. food aid programs was recommended, which would provide reform that the EU was demanding in the Doha Round and defuse objections that U.S. food aid programs were implicitly subsidizing exports.

The House of Representatives acted next on new farm legislation. By July 2007, it had rejected most of the administration's reform recommendations and drawn objections from the administration through proposals for tax increases and the use of timing and other gimmicks to mask spending increases. The House bill retained the direct, countercyclical and loan-rate tiers of existing support, assuring farmers the traditional programs would be in place in the event prices fell to lower levels than being projected. The loan rate for sugar was increased, and the dairy support program modified to establish price supports directly for processed products rather than fluid milk, potentially reducing substantially the dairy support that would be reported in WTO notifications while having no real market effects. The House bill offered new demand-

augmenting support for fruits and vegetables but did not allow production of these crops on base acres which was opposed by domestic growers.[1] Overall, the House bill partly mitigated the squeeze out of farm sector spending that higher prices were creating, but did not avoid the substantial reduction anticipated for commodity support.

The Senate did not complete a farm bill until December 2007 as various groups squabbled over specific programs and how to fund them under the limited CBO budget baseline. The Senate bill also retained the three-tiered support structure as an assurance to farmers in the event of lower prices. It added an optional crop revenue program in place of the existing loan rates and countercyclical payments. The Senate proposal differed substantially from the revenue-based program suggested by the administration because it linked the new revenue guarantees to a moving average of actual market prices and crop yields rather than to fixed target prices and fixed base-acreage production levels. The Senate revenue insurance program was estimated to provide similar benefits to the existing programs for corn, wheat and soybeans when prices were relatively low, but higher benefits if prices remained high (Zulaf 2007). This was another step toward avoiding a squeeze out of commodity support. Even so, at anticipated prices the Senate bill was expected to lead to a decline in projected commodity program spending.

It took another six months for Congress to finalize the Food, Conservation and Energy (FCE) Act of 2008. Calls intensified for farm program reform and reduced commodity expenditures as prices of crude oil and agricultural commodities shot upward early in the year. Congress faced both continued internal disunity about specific provisions of the legislation and its funding, and the threat of a veto by the administration. The veto threat required Congress to either reach a compromise acceptable to the administration or pass a bill with veto-proof majorities. The administration reiterated its earlier proposals and criticized the congressional bills for failing to enact reforms and disguising higher levels of likely expenditures. When the administration showed little inclination to negotiate, Congress passed a bill with enough support to be enacted into law over a presidential veto that the administration made almost no effort to sustain.

[1] Domestic growers of fruits and vegetables were concerned about expanded supplies and lower prices and objected to having to compete with farmers receiving subsidies on base acres. The domestic growers' objections parallel the challenges being raised within the WTO to the notification of direct payments in the green box as allegedly decoupled. In the WTO challenge, however, the objection is to the adverse effect on prices of the subsidized crops from planting restrictions that limit movement into fruits and vegetables.

Assessment of the 2008 FCE Act

In aggregate terms, the FCE Act distributes expected mandatory expenditures for fiscal years 2008-2012 in a similar way to levels anticipated under extension of the FSRI Act, as shown in Table 2. An increase of total expected outlays of $5 billion, and significant shifts in spending among categories at the margin, reflect the effort to attract a broad coalition of congressional backers through increased expenditures for nutrition, conservation, energy and a host of other programs targeted at specific constituencies. For the out-years 2013-2017 (not shown in the table), there is a further substantial increase in anticipated nutrition expenditures and the FCE Act only remained within the CBO ten-year baseline budget projection by including nearly $10 billion of new revenues.

The projected commodity program spending of $41.6 billion under the FCE Act, which reflects $1.1 billion of estimated five-year savings simply from postponed timing of anticipated payments for 2012, is comprised mostly of direct payments that traditional subsidy recipients defended against reductions. In contrast, commodity support had been $59.3 billion during the previous five fiscal years and had been projected to be $78 billion during those years when the 2002 farm bill was written (Chite 2007). Authority for the CRP was reduced to 32 million acres by the FCE Act, but expected expenditures for conservation programs increased by $2.7 billion to $24.1 billion, reaching almost 60 percent of the projected commodity support compared to just one-quarter during the previous five years. In this sense, in the event of projected high prices, a substantial relative shift toward conservation will take place in farm program outlays. But farmers remain well-protected if prices turn out lower than projected—through retention, and even a marginal strengthening, of the loan-rate and countercyclical tiers of commodity support. The FCE Act included only a small pilot program to allow production on base acreage of certain fruits and vegetables (for processing on 60,000 acres in seven Midwestern states), with any such acreage planted ineligible for support payments during that year. The FCE Act also extended support through dairy market loss payments, and it created new payments to processors of domestic or imported cotton to replace the “Step 2” payments to processors of domestic cotton that had been ruled in violation of WTO rules in the case brought by Brazil (WTO 2005).

Various other titles of the farm bill expanded and added programs for biofuels, horticultural crops and disaster assistance.

The FAIR and FSRI acts demonstrate the responsiveness of U.S. farm policy to proximate market circumstances as well as movement toward somewhat less market intervention. Throughout the 2007-08 debate most farm groups remained wary of any changes to existing programs, despite the rising prices for oil and farm commodities in 2006-07 and the boom that caused commodities to hit record price levels early in 2008. Nor was there much of a budgetary incentive to change policy instruments. Relatively high prices were built into the 2007 CBO baseline budget projection. Therefore, there was little opportunity, unlike in 1995-96, to capture projected expenditures that would not materialize because of high prices. New instruments could deliver higher spending in the FCE Act only if their fiscal cost was approved by the Congress or misjudged in budget analysis, while holding on to the existing loan rate and countercyclical programs bore little political cost to the farm lobby.

One of the proximate causes of the 2007-08 boom in commodity markets was the U.S. ethanol fuel tax credit and ethanol use mandates designed to promote corn-based fuel production. These are highly product-specific policy instruments, and were reinforced by a high import duty. Initiated in 1978, the tax credit, together with other federal and state incentives, had only induced a modest level of ethanol output (less than two billion gallons in 2005) until oil prices rose and new blending mandates were enacted. The federal ethanol tax credit of $0.51 per gallon added more than $1.50 to the break-even price that could be paid for corn converted into ethanol (Tyner 2007). The subsidy exceeded $3 billion by 2007, and the Energy Policy Act of 2005 mandated that production reach 7.5 billion gallons by 2012. As oil prices rose and armed conflicts dragged on in Iraq and Afghanistan, both political parties called for increased energy security for the United States. The Energy Independence and Security (EIS) Act of December 2007 expanded the mandate for ethanol production to 36 billion gallons by 2022, of which 15 billion gallons were to come from corn-based production. Model-based estimates of the effect on corn market prices ranged from an increase of 25 percent ($0.74 per bushel) in 2006 due to the tax credit assuming the mandate was not binding (de Gorter and Just 2007), to 12-14 percent (by then also around $0.70) in 2008-09 (Babcock 2008) or averaged for 2011-2017 (FAPRI 2008) due to the mandates, tax credits and import duties. With record oil prices stimulating ethanol production in

the first half of 2008, the new farm bill reduced the ethanol tax credit to $0.46 per gallon but extended the ethanol import duty through 2012.

With increasing farm commodity prices in 2008, direct payments came under intense scrutiny in the domestic policy debate. Decoupling is encouraged by WTO rules as a way of providing an attractive non-trade-distorting support option. But with the direct payments making up so large a share of the commodity support anticipated under the FCE Act, proponents of alternative spending eyed a reduction in direct payments to fund other priorities. The direct payments were retained only after a rancorous domestic confrontation, particularly in terms of income eligibility limits for recipients. Payment eligibility criteria were tightened modestly (to caps on nonfarm income of $500,000 for all three commodity support programs and farm income of $750,000 for direct payments only). Payments were also reduced by 2 percent by limiting the base acreage on which they were made from 85 percent to 83.3 percent through 2011, then restoring the initial level in 2012 to retain a larger budget baseline for future payment projections.

In one respect the sharp rise in prices in 2008 shifted policy toward a new instrument, as occurred in 1995-96. In this case, however, the shift was toward a program more closely tied to market prices. The FCE adopted a modified version of the optional Senate revenue guarantee as an optional new Average Crop Revenue Election (ACRE) program, which is likely to be considered product-specific trade-distorting support in the WTO. Starting with the 2009 crop, farmers electing ACRE for all covered commodities for the duration of the FCE Act incur a 20-percent cut in direct payments and a 30-percent cut in their loan rates. In exchange, if crop revenue for the state (yield per planted acre times the national price) is below a guaranteed level, and enrolled producers incur a loss of revenue for the crop on their farm, then they are assured of payments of up to 25 percent of the revenue guarantee. The guarantee is 90 percent of the revenue derived from the two-year national average of lagged prices times the five-year Olympic average of state average yields (Committee on Agriculture 2008). This guarantee covers 83.3 percent of the acreage planted (or considered to be planted) by a farmer to the covered commodities; thus it is based on current production. Once the initial guarantee is established for a farmer entering the program, it cannot vary by more than 10 percent from the previous year’s guarantee, moderating any sharp revenue downturn.

In assessing the cost of the farm bill, the CBO concluded that only a relatively small fraction of farmers would enroll in the ACRE program and that its cost would be modest. But with prices at historically high levels in the first half of 2008, the administration argued that initiating ACRE on the basis of the moving average of prices prevailing in 2007-08 ran the risk of inducing subsidy payments at much higher price levels than under the target prices of the countercyclical payments program. As an example, the administration assumed that 90 percent of farmers opted for the ACRE program and found that payments for corn alone would be nearly $4 billion in 2009 at prices as high as $4.00 per bushel, compared to no CCP payments at prices above the corn target of $2.63 per bushel (USDA 2008b). Although the ACRE payments decline once prices stabilize, this example illustrates that ACRE ratchets up the price level at which subsidy payments would occur during a transition period from higher to lower prices. The ACRE program opened the most substantial opportunity within the FCE Act to avoid a squeeze down of subsidy payments due to high prices, as acknowledged by its proponents (Brasher 2008). Subsequently, Blandford and Josling (2008) concluded that ACRE program payments would in some years exceed commodity-specific caps under negotiation in the Doha Round if prices of corn, wheat and soybeans during 2007-2012 followed a pattern similar to the 1970s, 1980s or 1990s.

Other than the ACRE program, which provides an optional new revenue guarantee, the traditional crop and revenue insurance programs had expanded at increased government costs in the early 2000s. The FCE Act stipulated that total premiums be adjusted slightly to equal total indemnities payments over time (resulting in an expected loss ratio equal to one) and reduced the administrative costs of delivering crop and revenue insurance programs by lowering payments made to the insurance agents. Larger claimed savings (almost $2.8 billion of the savings shown in Table 2) were again achieved simply by postponing the timing of some payments.

Congress had also appropriated annual disaster relief to agriculture that averaged about $2.5 billion annually during 2000-2005. The FCE Act created mandatory funding for five disaster relief programs by amending the Trade Act of 1974 to establish a mandatory program (of nearly $4 billion over five years) financed from import duties. Again this was a step toward avoiding a squeeze down of support to agriculture by ensuring at least partial availability of funds for disaster relief without requiring annual congressional appropriations.

Slight increases in loan rates and target prices contained in the FCE Act strengthen policy instruments coupled to production. This will prove innocuous (with the exception of raising the sugar loan rate) if prices remain well above loan-rate levels as projected.[2] But these parameter adjustments are another signal of the strength of the farm lobby. With the Democrats in control of Congress, the effort to increase rather than lower price support parameters is not surprising. The argument made (and which will be extended if farm price and income circumstances deteriorate from their 2008 levels) is that higher energy prices and related production costs render inadequate the safety net that was good enough, indeed lauded by many farm groups, from 2002 to 2006. Traditional price and income support levels that were raised only slightly in 2008 could be increased further in the future.

Despite all of these considerations, the high world prices that in early 2008 were straining the global food system and prompting defensive policy reactions among exporters and importers worldwide had only modest effects on the commodity support provisions of the U.S. farm bill. There was no significant shift toward decoupled policy instruments, as had occurred when prices rose sharply in 1995-96, nor calls for an end to the permanent support legislation, as had been articulated in the earlier debate. Still, the farm lobby did not avoid, at least for the time being, a projected squeeze down of anticipated subsidy payments under the price-linked support programs. Passing a bill proved difficult with high prices prevailing, as it had with high prices in 1995-96. In the end, the veto-proof majorities assembled in Congress demonstrated the ability of the farm lobby to secure a continuation of support programs that largely serve the same purposes and benefit the same interest groups as did earlier legislation.

Possible WTO disciplines

[2] The loan rate for raw cane sugar rises from $0.18 per pound to $0.1875 by 2012. The Secretary of Agriculture is required to set domestic marketing allotments at no less that 85 percent of estimated quantities for domestic human consumption and to purchase sugar to produce biofuels if necessary to avoid forfeitures of sugar to the CCC, thus insulating domestic producers from pressure of increased imports under trade agreements.

Steps to align U.S. policies with WTO disciplines underlay the "beyond challenge" objective articulated by the Secretary of Agriculture in the 2007-08 farm bill debate. This goal was advanced also by the Agricultural Task Force of the Chicago Council on Global Affairs (2006). Task force co-chairman Robert Thompson argued that the required adjustments were not as severe as some farm groups anticipated (even under early 2000s market price levels). Moreover, farm groups could be reminded of some tangible benefits from the WTO. Even without a Doha agreement, there were gains from China's accession, the potential accession of Russia, and from a number of dispute settlement rulings in favor of the U.S.

Despite these arguments, the historical record demonstrates very little preemptive movement of U.S. policy to be consistent with WTO disciplines. Under low prices, the 2002 FSRI Act simply included a clause authorizing the Secretary of Agriculture to make adjustments to payments if necessary to maintain U.S. compliance. Whether this authority would be adequate to make significant changes to farm policy to comply with WTO payment limits has never been tested. The challenge launched by Brazil in 2003 against the U.S. cotton program under the WTO dispute settlement process led to slight changes in policy. The United States eliminated the "Step 2" payments made to processors of domestic cotton and modified or eliminated some export credit guarantee programs prohibited by the WTO, but it did not change the basic cotton support programs found to cause serious prejudice to Brazil's interests. There has been little appetite in Congress for making explicit changes designed to re-position U.S. programs so that conflict with WTO agreements is minimized. In the 2008 FCE Act, only a few modest steps were taken: the dairy support program was redefined to reduce notified support with no real effects on dairy markets as described above, the payments compliance adjustment authority was extended, and authority was repealed for the GSM-103 export credit program, for the 1-percent fee cap on the GSM-102 program and for the inactive Export Enhancement Program (EEP).

Dispute cases brought by Canada and Brazil in 2007 raise the broad question of whether the U.S. violated its Total AMS commitment under the URAA during certain years (WTO 2007 a, b). A primary issue is whether fixed direct payments to farmers have been correctly notified as meeting the criteria of the green box or should be included in the AMS because they are paid for base acreage on which production of fruits and vegetables is prohibited. A second issue is whether U.S. countercyclical payments under the 2002 farm bill (and the prior crop market loss assistance payments) should be classified as non-product-specific (NPS) AMS, as notified by the

United States. Some consider that they should be considered product-specific payments, because they are inherently linked to specific commodity prices and because they also rest on the fruit and vegetable production exclusion. The outcomes of these dispute settlement cases will have implications both for the United States and for other countries in terms of the manner in which certain policies are notified, whether domestic support is judged consistent with WTO obligations, and which policy reforms might be undertaken in the future.[3]

New Doha Round commitments might also constrain U.S. farm programs in terms of instrument choices or subsidy levels. In a series of papers, Blandford and co-authors have examined this possibility. Taking into account the provisions of the 2008 FCE Act (excluding possible ACRE payments), USDA's January 2008 projections of prices through 2014 (USDA 2008a,b) and the most ambitious modalities included in the May 2008 draft negotiating document from the WTO, Blandford, Laborde and Martin (2008) conclude that, if relatively high prices continued, the United States would be able to adapt to the new WTO constraints with little change in its policies, with the possible exception of binding commodity-specific constraints for cotton and sugar. The strengthened disciplines would squeeze down the leeway the U.S. would have for providing support reported to the WTO as trade-distorting but would still provide substantial flexibility. This outcome is illustrated in Figure 1. It shows projected blue box, AMS, and product-specific and non-product-specific *de minimis* expenditures projected for 2014 based on the updated projections for production and prices and the proposed modalities (WTO 2008) at the time of the suspension of Doha Round negotiations in July (Blandford and Orden 2008). The sum is compared to the potential limit of $14.5 billion under a WTO constraint on Overall Trade Distorting Support (OTDS) by showing a projected residual category of unused spending within the constraint. Projected blue box expenditures (countercyclical payments) are only $0.5 billion, well under the modalities cap of $4.8 billion. Likewise, Total AMS (excluding *de minimis*) is projected at $3.4 billion, well under the proposed cap of $7.6 billion. Product-specific *de minimis* is negligible and non-product-specific *de minimis* is projected at $4.8 billion, largely due to subsidized crop and revenue insurance. These projections and caps leave room for various additional OTDS expenditures of $5.4 billion. The latitude available partly reflects the redesign

[3] Were direct and countercyclical payments and their antecedents included in product-specific support notified in the U.S. Current Total AMS, the U.S. would have exceeded its AMS commitment in 1999, 2000, 2001, 2004 and 2005.

of the dairy support program in the FCE Act, which reduced the dairy AMS that might be reported by as much as $3.6 billion.

The apparent ease of complying with new WTO constraints under relatively high commodity prices made it possible for the Bush administration to pursued a Doha Round agreement in mid-2008. Yet past experience with farm support legislation shows that any required adjustments would not be easy to make politically. The stringent proposed modalities for cotton could pose a challenge, particularly in terms of meeting blue box commitments.

Moreover, the proposed large reductions in the allowed OTDS and Total AMS constrain the contingent room for maneuver for support that is most closely linked to prices. The optimistic price environment of USDA's 2008 projections was for higher prices than in the early 2000s but not at the very high levels seen in the first half of 2008. This scenario may not materialize through 2014. In that case, unless price-linked support programs were modified or some other alternative to current support policies were adopted, the limit on the Total AMS and additional product-specific AMS caps could be exceeded. This would be even more likely if many farmers were to opt for the ACRE program.

There is also the increasingly germane issue of how ethanol subsidies will be notified in the future. Some ethanol production subsidies were notified by the U.S. in 2007 for the period 2002-2005, and these will increase under the FCE Act. More significant, the forgone revenue from the federal ethanol tax credit to blenders and additional state tax provisions could reach $7-8 billion or more on corn-based ethanol. If these amounts were to be counted, the level of the AMS would be substantially higher.[4]

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[4] The federal ethanol fuel blenders' tax credit is currently notified to the WTO by the U.S. as an industrial subsidy. However, ethanol itself is considered an agricultural product. Because ethanol policies affect corn prices, they could also be judged to be a "measure directed at processors" that provides "benefit to the producers of the basic agricultural product" and thus subject to inclusion in the AMS under Annex 3, number 7 "to the extent that such measures benefit producers of the basic agricultural product." This would correspond to the way the U.S. formerly notified Step 2 processor payments for cotton. It will be interesting to observe how the U.S. decides to report the new subsidies to processors of both domestic and imported cotton created in the FCE Act, to see whether an analogy between cotton processor subsidies and ethanol processor tax credits can continue to be drawn. Of course, if ethanol policies are justified on environmental grounds or as related to national security, they could be exempted from the AMS subsidy disciplines, provided they meet the relevant criteria of the green box or GATT articles. The use of mandates versus tax credits raises an issue of which policy is judged a "measure" subject to possible disciplines. As shown by de Gorter and Just (2007), when there is no binding mandate, the tax credit adds substantially to the level of production of ethanol, its price, and the price and output of corn. When there is a binding mandate, the effects of the tax preference are minimal. Since a binding blending or consumption mandate affects ethanol and corn production and prices, it would be the policy instrument to which WTO agricultural disciplines might apply.

Future prospects

What emerges from our analysis of post-Uruguay Round U.S. farm policy is the continued persistent ability of a powerful farm lobby to extract support in the political arena. Yet there have been some substantial changes in policy. A review of the three post-Uruguay Round farm bills suggests tentative answers to questions that arise about whether the skilful use of political support will continue to preserve the main farm programs; whether high prices, if they persist, will change the nature of support; or whether trade agreements will impose changes on the U.S. despite the apparent unwillingness of Congress to be constrained by the international rules regarding the domestic farm policies it enacts.

Both the FAIR Act in 1996 and the FCE Act in 2008 were framed under favorable market prices. In a number of respects, ending farm subsidies should have been easier in 2008 than in 1996. Supply-control annual acreage set asides and high price supports had waned as an intervention strategy and farmers had benefited from planting flexibility through enhanced ability to shift acreage among crops in response to market opportunities. Buyouts of restrictive production quotas had occurred for two specialty crops. Net farm income was at record levels. Yet with the possibly significant exception of the ACRE program, which reverts to coupling potential payments to market prices and planting decisions, the structure of farm support policies was essentially unchanged by Congress in the 2008 farm bill.

The absence of reform to existing commodity programs in 2008 compared to 1996 rests in part on party political differences. Instead of the overarching call for deregulation and scaling back of social welfare programs by the 1995-96 House Republican majority, the Democrats in 2008 were championing new government help for constituents in financial trouble and the inclusion of more funds for food stamps and other nutrition programs as the economy slowed and inflation picked up. In that political environment, certainly among Democrats and even among many Republicans in Congress, there were few calls for eliminating the farm safety net.

There was also less need for changes in farm policy in 2008 than in 1996 because the increased flexibility achieved through the earlier reforms had been retained for large segments of

agriculture. There was little opportunity for budget "capture" compared to 1996, and little political cost to the farm lobby of retaining the existing support structure. More radical buyouts that had occurred for peanuts and tobacco were hardly illustrative of broader reform options, as these policy outcomes had a narrow sectoral basis among the specialty crops. The rapidly declining rents from peanut and tobacco quotas had made them conducive to buyouts, but this had less relevance for the main commodity programs.

There was also a difference in macroeconomic circumstances between 1996 and 2008. The short-lived farm commodity boom in 1995-96 occurred during a time when the U.S. dollar had been quite stable for the preceding eight years. Oil prices were also stable in this period, and there was little concern at the time about either excessive inflation or an economic downturn and recession. The circumstances were quite different during the later period of high prices. The terrorist attacks in September 2001 created both security fears and economic uncertainty. In such an environment, and with low farm commodity prices after 1997, the farm lobby had little trouble securing renewed support in 2002. The macroeconomic uncertainty in 2008 had its origins partly in these earlier events. With the substantial depreciation of the dollar that ensued after 2001 and oil prices starting to rise in 2003, concerns arose about the possibility of a repeat of the stagflation of the 1970s. This gave the farm commodity boom in 2007 and 2008 a precarious dimension—a premonition of the financial crisis and global recession that ensued later in 2008. The farm lobby could not forecast this new crisis at the time it marshaled votes for the 2008 FCE Act. But it knew from past experience that retaining price-linked support programs, even with few anticipated payouts, provided a structure of support whose nominal parameters could be ratcheted up if the sector were to fall on hard times through rising costs or declining revenues.

Despite the ability of the farm lobby to retain its support programs through 2012, there are several uncertainties about the alignments that have allowed U.S. farm subsidies to endure. The nutrition title has come to dominate total expenditures in farm bills, and is projected to increase its share further. Likewise, at least when prices are relatively high, conservation spending becomes a substantial part of total expenditures on the production side of agriculture. Further realignment could occur if future Democratic majorities put together the coalitions needed for congressional passage of farm bills. Nutrition and conservation interests might at some stage decide that their interests could be better served outside the context of the farm bill.

At a minimum, the traditional farm lobby could find itself no longer the dominant partner in the broader coalition that has secured the enactment of farm bills, but instead in a supporting position within a coalition dominated by other interests. Yet there are few hints of any related decline in the influence of the farm lobby in the protracted debate over the 2008 FCE Act.

That fixed direct payments became a critical focus of domestic controversy in a high price environment is also indicative that there may be a limit to the power of the farm lobby, though again that limit proved largely ineffective in 2008. The international disciplines that allow unrestricted decoupled payments in the WTO green box provide room for this domestic debate, but acrimony over the direct payments in the U.S. makes them unattractive to farm groups and their representatives who seek to minimize controversy over the support provided. This outcome may make direct payments less useful than intended for fostering international coordination to reduce trade-distorting subsidies.

We have argued that WTO disciplines have had little influence on post-Uruguay Round U.S. farm policy decisions. Under high prices, the U.S. will likely be able to stay within the tighter limits on support if there is eventually a Doha Round agreement. These considerations do not diminish the value of potential new subsidy constraints through the WTO. But the latitude allowed by the Doha Round disciplines proposed in 2008 illustrates the substantial distance still to be crossed to achieve a more liberalized rules-based global trade system for agriculture. Some combination of lower world prices, adverse WTO dispute settlement rulings on the notification of support in the green box, a reclassification of ethanol subsidies from industrial to agricultural, and a Doha Round agreement that reduced the Total AMS ceiling and bound the OTDS for the first time could lead to WTO domestic support compliance problems for the U.S. In that case, the next farm bill could be framed under a very different set of circumstances.

The deepening entrenchment of the domestic ethanol sector during the oil-price boom that peaked in mid-2008 both demonstrates the continued political strength of the agricultural lobby and constitutes a substantial new intervention coupled to production. In addition, the restrictive land-use policy was never completely abandoned—the CRP has always been a supply-reducing as well as a conservation policy instrument. If biofuel demand persists under ethanol mandates and subsidies, conservation spending may decline as farmers voluntarily abandon the CRP. This would shift the political balance within farm bill deliberations back towards the

commodity lobby, but it could also provoke a break in the political alliance that forged the 2008 farm bill.[5]

A Doha Round that agreed on a reduction in allowed OTDS, tighter Total AMS commitment, and product-specific AMS and blue box limits would be a valuable check in the event that traditional U.S. programs are ratcheted up or agricultural prices return to the downward trend that has characterized most of the past half century. In such circumstances, an option for U.S. policymakers would be to expand green box support for farmers under the environmental category, disaster relief, or direct payments that are modified if necessary to meet any WTO challenges. If U.S. policy inches toward re-coupled instruments with greater emphasis on energy crops, disaster assistance, crop and revenue insurance, and environmental programs on working lands, scrutiny for consistency with the green box will be an essential bulwark against new forms of production- and trade-distorting programs. But as policy stood in mid-2008, it is unlikely that the WTO will affect ethanol tax credits and mandates or long-term land idling under the CRP. These instruments, largely outside WTO disciplines, work to drive agricultural prices up and arguably have become, along with other environmental payments and crop and revenue insurance subsidies, the most important elements of U.S. farm policy. The boom-related optimism in the agricultural sector arose in 2008 in part because demand augmentation through "food, fiber and fuel" reinforced environmentally-rationalized supply control as a mechanism for keeping farm commodity prices higher than otherwise. The WTO has little ability to limit these distortions.

In his review of U.S. and Canadian agricultural policies, Gardner (2009) offered his views on the prospects for future reforms that would lessen market distortions. He concluded that the best prospects for reform pressure would arise from the WTO Doha Round negotiations, from a combination of environmental/taxpayer interests that would shift agricultural support spending toward public-good provision, or from the resurrection of a general predisposition to economic liberalism. Our assessment of the three post-Uruguay Round farm bills implies each of these pressures is a weak reed upon which to rest prospects for reform.

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[5] With sharply rising prices in the first half of 2008 the Secretary of Agriculture used his authority to allow haying and grazing on some CRP land, which was opposed by the National Wildlife Federation and other environmentalists who sought a court injunction to overturn the decision. He also considered but decided against authorizing an early release of CRP acreage without payment penalties. There are CRP contracts for over 5 million acres scheduled to expire during 2008 or 2009 that had not been renewed by July 2008 and could be returned to production (Harris et al. 2008). Subsequently, as commodity prices fell, there was less political pressure on the CRP.

Were the reform pressures nonetheless to progress in a substantial way, Gardner argued that there could be a politically salient case for one-time buyout payments. He noted that the direct payments in the 1996 farm bill were a step in that direction, but the buyout did not subsequently materialize, as we have described. A broad buyout of the main commodity programs received slight attention in the 2007-08 farm bill debate (Stokes 2007, James and Griswold 2007). But any such proposals were summarily rejected in Congress, and the buyout idea remained far from the center of the farm bill debate. One conclusion that may be drawn from the experience of the U.S. farm policies since 1995 is that a rather generous buyout would be needed to convince the recipients of farm program benefits to relinquish their entitlements. Yet despite Gardner's hope, based on our assessment of the three farm bills since the advent of the WTO we do not see this happening in the foreseeable future.

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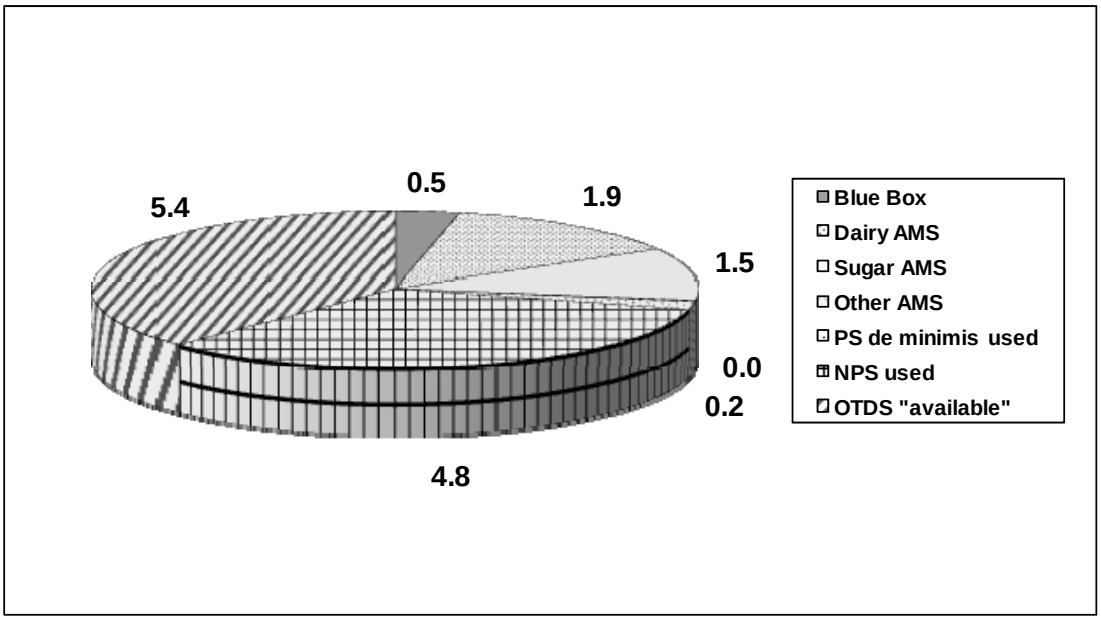
Figure 1: Projected composition of notified support and “Available” OTDS support (excluding ACRE payments), United States, 2014

(US$ billion)



Source: Blandford and Orden 2008.

Table 1: Costs of major farm subsidies, United States, 1996 to 2012

(US$ billion)

	Commodity programs			Other subsidies		
Year	Direct[a] (fixed)	Price-Linked Countercyclical[b]	Price-Linked Price support[c]	Conservation[d]	Ad hoc and disaster[e]	Crop and revenue insurance[f]
Actual						
1996	5.19	0.00	0.00	2.01	0.16	0.64
1997	6.29	0.00	0.58	1.96	0.16	0.12
1998	5.66	2.81	4.11	1.95	2.32	0.75
1999	5.47	5.47	9.71	1.76	2.34	1.51
2000	5.07	5.46	9.04	1.79	3.67	1.39
2001	4.10	4.63	8.43	1.91	1.43	1.77
2002	5.30	1.80	3.52	2.51	3.58	2.89
2003	5.27	0.54	1.14	2.45	1.74	1.86
2004	5.26	4.29	5.55	3.04	2.10	1.12
2005	5.22	4.75	6.62	3.40	0.30	0.76
2006	5.58	3.16	1.40	3.43	0.27	1.60
Estimated/Projected						
2007	5.44	1.03	0.91	3.46	0.06	0.87
2008	5.36	0.35	0.03	3.75	0.76	5.04
2009	4.56	0.10	0.08	4.19	0.76	4.39
2010	4.53	0.23	0.11	4.41	0.76	4.38
2011	4.53	0.40	0.11	4.52	0.76	4.39
2012	4.56	0.54	0.09	4.82	0.76	4.42

Sources: U.S. notifications to the WTO for all columns through 2005; Blandford-Josling WTO notifications simulator for Commodity Programs 2006-2012; and Congressional Budget Office (2008b) for Conservation and Crop and Revenue Insurance 2006-2012.

[a] Includes production flexibility contract and direct and peanut, excludes peanut and tobacco buyout payments.

[b] 1996-2005 includes crop market loss assistance payments and countercyclical payments, excludes dairy market loss payments.

[c] Includes four loan-rate-related programs (loan deficiency payments, marketing loan gains/payments, certificate exchange gains and commodity loan forfeit); 1996-2005 also includes dairy market loss payments, oilseed payments, cotton user marketing payments, and miscellaneous smaller payments, 2007-2012 includes only dairy market loss payments (from CBO score of FCE Act).

[d] 1996-2005 includes resource retirement and environmental payments notified in the green box; 2006-2012 includes all CCC conservation programs (interpolated for 2006).

[e] Includes disaster relief reported in the green box, emergency payments reported in Total AMS (before *de minimis*) and various disaster assistance programs reported as non product-specific *de minimis* support; 2006 estimate from USDA, 2007 from CBO; 2008-2012 equal division of FCE new mandatory permanent disaster relief projected outlays.

[f] Net indemnities calculated as indemnities minus premiums paid by producers.

Table 2: Aggregate projected outlays under the 2008 FCE Act, United States, FY2008-FY2012

(US$ billion)

Category	CBO projected baseline under 2002 FSRI	Proposed adjustments (House; Senate versions of the new farm bill)	Final FCE Act
Commodity support	43.3	-1.0; -3.5	41.6
Conservation	21.4	2.8; 4.4	24.1
Crop insurance	25.7	-4.0; -3.7	21.8
Energy	0.0	2.4; 1.0	0.6
Nutrition	186.0	4.2; 5.3	188.9
Other	7.9	1.5; 2.0	12.0
Total	**284.0**	**5.9; 5.5**	**289.0**

Source: Congressional Budget Office (2008a), Chite (2007) and Johnson (2008).