

The Pending 2008 U.S. Farm Bill in Perspective

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Abstract

This paper examines the issues facing U.S. farm policy in 2007 and beyond in an historical context. Reforms of the main commodity programs along a cash-out and decoupling path peaked when prices were high in 1995-96. Recent buyouts, driven largely by declining production levels and revenues, have also ended supply-control quota programs for peanuts and tobacco. Then, in a setback to reduced subsidies, countercyclical payments were re-institutionalized for the main commodities in 2002, although farmers retained substantial planting flexibility. The radical option of a broader buyout of the commodity programs is an idea whose time has not arrived. Instead, farm groups sought to retain their traditional programs in 2007, despite another commodity price boom. Under budget pressure, direct payments that represent the most decoupled instrument of support of farm incomes came under scrutiny in the domestic debate but were defended by subsidy recipients. In addition, agriculture now has a new policy tool and strengthened political clout through energy policy, and through this policy avenue substantial new power to influence agricultural prices.

Various new programs may be initiated in 2007 or in future years to avoid a squeeze out of past agricultural spending levels if prices remain high. Some of these programs will stimulate production. Moreover, the parameters of the traditional support programs may be ratcheted up, or prices could fall inducing higher spending levels. The prospect for disciplining these programs through binding international commitments appears modest in the event of these developments, based on an analysis of the U.S. WTO notifications for 2000-2005. This is so even if a Doha agreement along lines being discussed, but not agreed, in 2007 is achieved. This finding does not diminish the value of new subsidy constraints under the WTO, but illustrates the substantial distance still to be crossed to achieve a more liberalized and rules-based global trade system for agriculture.

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1. Introduction

In the middle of its first decade, the environment shaping farm policies of the twenty-first century can fairly be called chaotic. Exchange rates have realigned significantly over the past decade yet they remain skewed globally compared to levels that might be necessary for sustainable balanced trade. There have been four years of disastrous expansion of armed conflict in the Middle East, with collateral effects on world oil prices. No one knows for sure how high short-term oil prices might go or for how long, nor can these effects confidently be disentangle from longer-term supply and demand price determinants. The occurrence of global warming is now broadly recognized even within resistant circles in the United States, but what is to be done about it? The call for greater energy self-sufficiency (now called “security,” of course) is flying high politically but is it a viable economic strategy? Questions have arisen in these circumstances about the traditional assumptions in agricultural policy deliberations that farm prices will often be low and that developed-country subsidies will drive them down further.

In this chaotic environment, the U.S. Congress has sought to write a new farm bill in 2007. The prospect of whether or not there will be a multilateral Doha Round WTO agreement has simmered in the background, but the domestic farm bill debate has paid little attention to multilateral rules or constraints. Bioenergy enthusiasm (and subsidies) have fueled market optimism. Crop prices have been high since 2005, as they were briefly in 1995-96, and projections are for continuation of relatively high prices through the decade. With high prices, even a substantial Doha agreement might not impose severe cuts in traditional support. Yet farm groups have resisted giving up their traditional support instruments. The policy situation overall is highly contingent with lack of a clear reform impetus. Even continuation of the shift toward subsidy payments decoupled from production decisions, as has occurred in fits and starts over the past two decades, faces challenge. The stakes are high in these decisions for U.S. agriculture and for others who are affected, as indicated in part by the difficulties, and also the relevance, of the WTO.

This paper provides a broad examination of issues related to the 2007 farm bill and the future of U.S. farm policy. Given the highly contingent prevailing policy circumstances, it does not offer definitive answers about the instruments and policy parameters that U.S. farm legislation will settle upon. The attempt instead is to shed some light on how to think about the direction of farm policy and to provide a framework in which to learn about its dynamics as the outcomes unfold. If one asks whether farm constituents will be counting their successes at preserving traditional subsidies when the final bill is enacted, or will be staring out blankly wondering what hit them, one has to bet on the former. That has been true in every farm bill for fifty years, yet substantial constructive policy reform has nonetheless occurred.

The paper is organized as follows. The next section reviews several farm policy visioning exercises that preceded the 2007 farm bill debate, finding endorsement of similar long-term themes about a liberalized world trade regime. Sections 3 and 4 bring some historical observations about policy changes to bear on current farm policy issues. Both the ebb and flow of past decisions and alternative paths to liberalizing reform are discussed. Section 5 discusses a radical reform whose time has not yet come—that of ending the main price and income support programs through a one-time buyout. Sections 6 and 7 return to the challenges faced in domestic U.S. farm policy deliberations and the WTO constraints that may impinge on these deliberations and the direction of future policies. In making an assessment, attention is paid to questions that arise about the legal definitions of the multilateral subsidy constraints and about the extent to which various intervention policies raise versus lower world production, demand and prices.

2. Policy “Visioning” Assessments

One point of reference for a long-term vision of the policy regime for agriculture is my book with Robert Paarlberg and Terry Roe, *Policy Reform in American Agriculture: Analysis and Prognosis* (1999). This book envisions a market-oriented agricultural sector with reduced price and income support subsidies. We examine how the reform process around these types of interventions unfolded in the United States as agriculture evolved from a relatively impoverished and populous sector in the 1930s to its modern relative prosperity and limited number of commercial farms. We argue that the reform process that proved politically feasible as this evolution occurred was a slow and imperfect shift toward market-clearing prices complemented with cash payments in lieu of supply controls and supported price levels. The 1996 farm bill, enacted under high commodity prices and with the first Republican Party control of both houses of Congress in forty years, is described as a significant step along this “cash out” path. But as enacted it did not promise an end to farm subsidies, leaving room for the reversion to more substantial subsidy levels on an ad hoc basis when commodity prices declined sharply starting in 1998. The increased subsidies were re-institutionalized in the 2002 farm bill but the increased production flexibility introduced in 1996 was retained. Thus, the 1996 farm bill deepened the slow cash out that had been underway since as early as the 1960s, but it did not put farm policy on a new strategic reform path.

A second visioning assessment of the future of agriculture and agricultural policy comes from the American Farm Bureau Federation’s (AFBF) study-group report *Making American Agriculture Productive and Profitable* (MAAPP Study Group, 2005). Over a two-year period this group of 23 purposefully diverse AFBF members (nominated by state organizations, selected by the AFBF president, and approved by the AFBF Board) held a series of hearings and closed sessions to hammer out their vision of the policy regime for agriculture by 2019, the centennial anniversary of the founding of their organization. Among its recommendations, the MAAPP group envisioned freer world trade achieved through negotiations, but warned that the United States should “resist internal and external calls for unilateral disarmament” to reduce only its own subsidies. Their report called for a variety of policies to assist farmers to achieve environmental goals, but for less environmental regulatory mandates. It called for increased public-goods investments and development of new products including ethanol and other biofuels. The report also called for both continuation of the existing crop insurance programs and a new comprehensive revenue insurance program consistent with international commitments under the

WTO and available across all of agriculture, not just to the traditional subsidy-receiving crops. An insightful question the study group asserted that they asked in their deliberations was “How would we feel if another country implemented the same program?” (p. 137).

Yet a third recent visioning assessment is provided in *Delivering on Doha: Farm Trade and the Poor* (2006) by Kim Elliott, a senior fellow at the Institute for International Economics and the Center for Global Development. This book is in the spirit of the earlier classic *A City-Man's Guide to Farm Policy* that made the sometimes arcane farm policy debates accessible to a broad policy audience. Elliott examines the importance of agriculture among heterogeneous developing countries (for example, food exporters versus importers), then focuses on the subsidy and tariff policies in the U.S. and EU. She makes recommendations for provisions of a substantive Doha agreement that challenged the then-prevailing negotiating positions of each of the major participants: larger cuts in domestic subsidies than the U.S. had put on the table and deeper formula tariff cuts and constraints on exceptions for special or sensitive products than the EU or many developing countries had accepted. Again, the theme of long-term movement toward a freer trade regime and less extensive use of subsidies to agriculture underlies Elliott's policy vision.

Finally, consider the recommendations of the Agricultural Task Force convened by the Chicago Council on Global Affairs, co-chaired by Catherine Bertini, August Schumacher Jr. and Robert L. Thompson and comprised of 27 additional agricultural leaders from the private and public sectors and academia. In the area of commodities, their report *Modernizing America's Food and Farm Policy: Vision for a New Direction* (2006) emphasizes the importance of world markets. As a consequence, the Task Force recommendations called for a shift from existing trade-distorting and product-specific price and income support programs toward forms of support compliant with the WTO green box rules for allowable subsidy programs. Specific recommendations included shifting to direct payments, some type of universal revenue insurance available to all of agriculture at subsidized rates, land stewardship programs that paid farmers for producing environmental goods, farmer saving accounts, and increased investments in public goods that support agricultural competitiveness. These recommendations parallel those of the MAAPP study group, although they differ somewhat in emphasis, with the Agricultural Task Force more inclined than MAAPP toward unilateral reform.

What is apparent from these four visioning statements is that a range of analysts approaching the issues in quite different contexts can share a lot of common ground in their vision of desirable long-term farm policy. But it is about the path and speed by which reform might occur that differences arise and the long-term policy visions are easily set aside. At the same annual meeting as the AFBF Board accepted the MAAPP report, the membership also endorsed continuation of the 2002 farm bill as its immediate policy prescription. Long-run visions of individual academics, or even as diverse a group as the Agricultural Task Force, also remain far from the center of the most immediate farm bill debate.

3. Historical Perspective

American agriculture today scarcely resembles the troubled sector of the Depression-era 1930s that led to farm support programs. The modernization of American agriculture has created a tri-modal farm sector. At one end are the most efficient commercial farms producing the bulk of food and fiber. At the other end are various small farms that account for most of the enumerated units but produce only a small part of output. In the middle are a group of farmers caught in the dynamics of modernization—the mid-sized farms on which there have been substantial investments and on which there remain full-time employment opportunities, but which may lack an adequate resource base to be competitive in face of continuing advances in technology and market integration. American agriculture is also tri-modal in terms of the protection and support it receives from government. A few commodities (sugar, dairy) are highly protected by tariffs and import restrictions. Another group of commodities (wheat, corn and other feed grains, soybeans and other oilseeds, rice, and cotton) receive most of the subsidy payments. A third group of commodities (fruits and vegetables, livestock and poultry) receive little direct support.

Reforms of farm policy have been undertaken as the production and income of farmers have undergone change. The basic direction of policy reform has been the shift in policy instruments from acreage supply controls combined with price supports above market-clearing levels to less supply intervention and more direct income support, at least for crops that are exported. This policy evolution toward direct payments began in the mid 1960s when price support levels were lowered for corn, wheat and cotton to enhance U.S. competitiveness, and farmers were offered direct payments as compensation. Support payments from the government increased from less than six percent of farm income in the 1950s to over 20 percent in the 1960s, but the farm programs also remained dependent on idling land to control supply and boost market prices. A second move toward direct payments came in the mid 1980s, when price supports set too high in anticipation of inflation and a low-valued dollar that did not materialize were reduced, with direct payments once again offered to farmers in lieu of higher prices. Still further steps in the direction of replacing market interventions with direct payments were taken in the 1996 Federal Agriculture Reform and Improvement (FAIR) Act.

Unilateral Farm Policy Reform in the 1996 FAIR Act

The 1996 FAIR Act initiated four unilateral changes in U.S. farm policy compared to previous legislation. First, under the FAIR Act, supported farmers attained flexibility to plant whatever crops they chose (except most fruits and vegetables) on “base acreage.”¹ Second, authority ended for the USDA to require annual acreage idling to limit crop supplies. Third, farmers received fixed income transfers, known as production flexibility contract (PFC) payments, that were based on past production and were independent of current market prices and farmers’ planting decisions. These fixed income transfers replaced earlier “deficiency payments” that had required

¹ The term “base acreage” refers to the acreage on which payment eligibility is determined; “deficiency payments” refer to subsidies provided on most but not all of base acre output when market prices were below a legislated “target price,” and “loan rates” refer to price guarantees for all output of the covered commodities. The 1990 farm bill had provided limited flexibility under which farmers could shift part of their base acreage among crops without that land permanently losing payments eligibility, but eligibility for deficiency payments was suspended on that acreage during years that alternative crops were grown.

continued production of the crop for which payments were received. Fourth, the price guarantees made to crop producers for any amount of output through “loan rates” were capped under the FAIR Act at nominal levels well below market prices prevailing at the time. By 1996, mechanisms had also been put fully in place for most crops that allowed farmers to receive a cash payment (a “marketing gain” or “loan deficiency payment” (LDP)) if market prices were below their loan rate levels.² Farmers received these cash payments instead of forfeiting their crops into government-owned storage. Thus the loan rates continued to support prices for producers, but market prices were freed from the loan rate as a floor level and the government was extricated from cumbersome commodity stockpiling.

The changes to farm policy made in 1996 were further partial reforms along the cash-out line of movement toward direct income transfers instead of land idling or government stock-holding to push prices above free market-clearing levels. Farmers responded to the increased flexibility, or “freedom to farm,” that the FAIR Act allowed with substantial movements away from the crops to which deficiency payments previously had been tied, particularly reducing wheat acreage and expanding planting of soybeans.

Despite its innovations, the extent to which the FAIR Act put farm policy on a less-interventionist or less-costly path was uncertain from the outset. The market-oriented policy innovations in the FAIR Act came at a time of high crop prices in 1995 and 1996. It is unlikely that farm policy would have abandoned annual acreage idling had market prices not surged upward. As prices rose, agricultural proponents in Congress were able to tout the end to acreage set-asides and introduction of fixed payments as deregulation of a large part of agriculture. Freedom to farm had been a rallying point for the Republican Party since the 1950s, the last time before 1995 that Republicans had controlled Congress and been in a position to set the farm policy agenda. Yet even Republican proponents of these agricultural policy changes knew full well that while the FAIR Act gave farmers more cropping flexibility it also increased support expenditures in the short run because deficiency payments under the old farm program were falling as prices increased. Farmers liked the short-run outcomes of the FAIR Act of less regulation of their production and more direct payments. When challenged that the new farm policy nevertheless undermined longer-term support levels, proponent Pat Roberts (R-Kansas), then chairman of the House Agriculture Committee, opined that Congress itself was the long-term safety net. This turned out to be the case.

Re-institutionalizing Higher Farm Support in 2002

After spiking upward in 1995 and 1996, crop prices began to fall in 1997 and remained low through 2001. As prices fell, support expenditures built into the FAIR Act increased automatically because of the price guarantees provided by loan rates. The loan-rate-related expenditures jumped up to \$1.8 billion in calendar year 1998, then \$6.8 billion in 1999, \$7.5 billion in 2000, and \$6.2 billion in 2001.

Once prices fell sharply, the PFC payments and built-in increased expenditures for price guarantees under the FAIR Act provided less support to farmers than would have been available

² Loan rates are determined for each county for wheat, feed grains, and oilseeds and by a common “effective adjusted world price” for rice and upland cotton.

under earlier farm programs. Critics of freedom to farm decried it as “freedom to fail” with low prices, reduced support, and absence of a strong farm safety net. A Congress closely divided on party lines couldn’t resist responding to the criticism. It stepped in with “emergency” legislation and then with supplemental annual appropriations for additional payments, as well as with new disaster relief and crop insurance subsidies. One effect was to essentially double the PFC payments in 1999, 2000 and 2001.

The next farm bill, the Farm Security and Rural Investment Act (FSRIA) of 2002, incorporated three tiers of support for wheat, feedgrains, oilseeds, rice and cotton. First, direct payments were continued at rates similar to those provided by PFC payments under the FAIR Act and were added for soybeans and other oilseeds which had not been included in 1996. Second, loan rates were continued and most were raised compared to the maximum levels under the FAIR Act. Loan rates were added for several additional crops (dry peas, lentils, small chickpeas) and for mohair, wool and honey. The FSRIA also fixed the loan rates in nominal terms, removing discretion of the Secretary of Agriculture to lower the rates based on an average of past market prices. That flexibility was provided in 1985 when the government was still taking the supported crops into storage if market prices fell below loan rate levels. Once LDPs and marketing gains came into effect, so market prices below loan rates no longer resulted in crops going into government storage, the pressure to keep loan rates below market price levels was lessened.³

The third tier of support in the FSRIA re-institutionalized the emergency payments as new counter-cyclical payments (CCPs). The counter-cyclical payments were to be made when the sum of the market price (or loan rate if the market price was lower) plus the direct payment was less than newly legislated target prices. Farmers retain flexibility to plant a range of crops—thus they did not have to produce the crops for which they would receive direct and counter-cyclical payments. Both the direct payments and counter-cyclical payments were set to be made on 85 percent of base acreage for “payment yields” determined under the bill. Each participant was allowed a one-time decision about bases and yields that then determine their payment eligibility for the duration of the FSRIA. The rules for determining base acreage were the same for the direct and counter-cyclical payments, but rules for setting program yields differed.⁴

Setting of payment limits on individual program beneficiaries has long been a political issue in farm policy debate in the United States. Payment limitations have been raised as a matter of the

³ Although the Secretary of Agriculture was authorized to do so, loan rates had not been changed under the FAIR Act. Such formula-based rates would have been lower than the maximums specified in the law after market prices dropped sharply from 1998 through 2001.

⁴ Program payment yields for direct payments were unchanged in FSRIA for those crops previously covered under PFC payments. However, those farmers who update their base acreage, were also given options to update yields for the counter-cyclical payments. This distinction between the two support program in part reflected WTO considerations. The fixed payments had been reported to the WTO by the United States as green-box. By not allowing yield updating, the U.S. reduced the likelihood of a challenge to the classification of these payments, even though updating of the base acreage was allowed. The counter-cyclical payments were also to be made on a fixed acreage and yield and did not require production of specific crops. But the counter-cyclical payments were explicitly linked to market prices and were expected to be reported as WTO amber box. Thus a claim of being exempt from subsidy limit commitments was not being made and yield updating did not pose the threat of a challenge to their classification. Despite these considerations, in the Brazilian dispute case against the U.S. cotton program, the direct payments were found not to qualify for the green box because they were linked to production through precluding recipients from growing fruits and vegetables on the base acreage.

fairness of fiscal policy and to focus the support policies on smaller farm units. They also have had a regional and commodity basis because per-acre payments are higher for cotton and rice than for other crops. The 2002 FSRIA included only modest payment limitations for producers. A “three-entity” rule was retained that allows any individual to receive a full payment for one farm entity and up to a half payment from two additional units. For the payments related to loan rates, the limitations on individual eligibility was undermined by retaining special “commodity certificates” that enable producers who faced payment limits to continue to benefit from repayment rates below the loan rates. Only a weak income-based eligibility cap was imposed, with producers having average adjusted gross income over three years of more than \$2.5 million ineligible for payments unless at least three-fourths of their income came from agriculture.

Passage of the 2002 FSRIA was met with derision by domestic policy critics and a barrage of international condemnation. Nobel laureate Joseph Stiglitz derided the new farm support law as “the worst form of political hypocrisy,” while Malloch Brown, head of the United Nations Development Program, accused U.S. policy of “holding down the prosperity of poor people in Africa and elsewhere for very narrow, selfish interests.” In reply, the U.S. House Agriculture Committee offered a strident defense of U.S. farm policy, arguing it was “important to national security, ensuring a safe, abundant, and affordable domestic food supply.” A document posted on the Committee’s web page, made the claim that “Critics of U.S. farm policy would cede our food production to unstable places like the Third World,” and 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?”

These disparate and sharply-worded views of the U.S. farm bill are indicative of the global conflict that has continued to fester over agricultural trade and support policies. Yet severe critics of the 2002 bill and its staunch defenders both overstated their cases. The 2002 U.S. farm bill took few, if any, constructive unilateral steps toward reduction of subsidies. Nor did it expand the worst subsidy policies as abhorrently as sometimes implied. Congress had already intervened to increase payments to farmers when prices were low. The 2002 bill re-institutionalized these payments, but farmers retained the planting flexibility legislated in 1996, so the new payments were more decoupled from production decisions than in earlier legislation under which deficiency payments required production of specific crops. The FSRIA also included a provision for the Secretary of Agriculture “to the maximum extent practicable, to adjust domestic commodity program expenditures to avoid exceeding allowable” WTO domestic support ceilings.

Buyouts of Peanut Quotas and Tobacco Quotas and Price Supports

The cash-out reforms that have occurred for the main U.S. support programs have served to partially decoupled subsidies from production decisions but have not systematically reduced the level of subsidies provided. A more radical reform is a compensated end to a support program through a buyout. The argument for a buyout is that it provides enhanced transition support initially to farmers, provides consumers and taxpayers with lower market prices or long-term fiscal savings, and can pave the way for more substantial agricultural trade reform.

A number of recent policy reforms around the world have provided buyouts. In the United States, contrasting recent policy outcomes among the historically similar peanut, tobacco, sugar

and dairy support programs provide some evidence about the conditions conducive to a buyout and its costs.⁵ Very briefly, a 2002 restructuring of the peanut program in the FSIRA included a buyout of production quota rights for the domestic market and lower domestic prices together with new direct and counter-cyclical payments. In 2004, a tobacco buyout under separate legislation ended quotas and eliminated the loan rate program without implementing new payment mechanisms. In contrast, there has been a lack of reform of the U.S. support programs for sugar or dairy.

One lesson from the two recent U.S. buyouts is that narrowly defined benefits, specifically production quotas that generate explicit rents, may be easier to buy out than broader support policies. Binding quota rights were bought out both for peanuts and tobacco, whereas sugar marketing allotments that only intermittently have been binding have not been bought out.

The onset of buyout reforms aligns closely with shrinkage of the benefits obtained by participants in the old programs. The pressure from reduced quotas and revenue was most severe for tobacco and the tobacco buyout most complete. Unique dimensions with respect to tobacco also explain the more complete buyout of tobacco support compared to peanuts. Domestic tobacco producers had been less successful than peanuts or sugar producers in securing restrictions on imports to protect their quota rents. The substantial healthcare-related payments made by manufacturers and importers in the tobacco 1998 Master Settlement Agreement were unique to this industry. This set the precedent for financing the tobacco buyout with specific assessments instead of general tax revenue. Had this precedent not existed, the higher cost of the tobacco buyout (\$9.6 billion over 10 years) compared to peanuts (about \$4 billion) might have blocked its enactment.

Consumers have influenced whether buyouts have occurred to the extent that their demand behavior (including health concerns in the case of tobacco) contributes to declining benefits under the production quota program. But the political condition necessary for the buyouts in the United States has been the emergence of substantial support for a reform among producers. Emergence of such opinion is obviously related to the shrinkage of past benefits. Producers excluded from having quotas also tend to favor reforms.⁶

It is also the case that while a buyout may eventually be conducive to liberalization of trade policy, the peanut and tobacco buyouts benefited domestic not foreign producers. The United States was already a net peanut exporter of what were known as “additional” peanuts grown without quotas and sold at world market prices. Imports of peanuts by the U.S. were artificially drawn in because of the high domestic market prices under the quota program and were regulated by tariff-rate quotas (TRQs). Foreign producers who lost this lucrative market when the buyout occurred were not compensated. In the case of tobacco, total U.S. output was projected to rise with the buyout, displacing imports and expanding exports.

⁵ Reform of the EU sugar regime and Australian reform of its dairy quota program also include buyout dimensions. See Bureau et al. (2007) for discussion of the EU sugar reform.

⁶ See “U.S. Farmers Rediscover the Allure of Tobacco” by Lauren Etter, *Wall Street Journal*, September 18, 2007, p. A1.

In terms of compensation, the buyout payments have been quite lucrative, especially given the circumstances of declining benefits to quota owners that triggered the reforms. For peanuts a lump-sum payment of \$0.55/pound made available in the 2002 farm bill was equivalent to the average of annual past rental payments, discounted at a 5 percent rate, for a period of 24 years (Womak 2003, Orden 2006). For tobacco, the payments to quota owners were more than double the private market prices that had prevailed for sales of quota rights before the buyout. They were equivalent to discounted average quota rental payments for 15-20 years for flue-cured and burley tobacco. The buyout payments exceeded these potential future payment streams to the extent that domestic prices or the quantities eligible for the peanut or tobacco quotas under the earlier programs would have declined under their continuation.

The buyouts of peanut quotas and the tobacco quota and price support program have been costly, but they have ended previous government interventions. In contrast there has been a relative lack of reform for sugar and dairy. For sugar, the cost of U.S. protection, with prices often double or triple world levels, is borne by consumers not taxpayers, as it was for peanuts and tobacco. The sugar program remains dependent on binding import restrictions under TRQs. Domestic marketing allotments can also be imposed but these have only constrained domestic production in occasional years.⁷ Domestic sugar producers have not seen their benefits erode dramatically as had peanut and tobacco quota owners, so there has been no impetus for a buyout.

Instead, in 1996, the FAIR Act continued the traditional sugar program. Sugar could be forfeited at loan rates to USDA's Commodity Credit Corporation (CCC) under "non-recourse" loans (for which the commodity collateral is accepted in lieu of repayment). Thus, no basic liberalization of the sugar market was achieved, and the loan rates continued to provide a floor under domestic market prices.

In the 2002 FSRIA, domestic producers succeeded in tightening the provisions of the sugar support policies. The 2002 farm bill reinstated an earlier stipulation that the sugar program be operated to the extent possible at no net cost to the government. The combination of the no-net-cost provision and a new constraint on use of domestic marketing allotments if imports exceeded a level set in the legislation served, in the words of the U.S. producers, to ensure that the USDA and U.S. trade representative stood "shoulder to shoulder" with the domestic industry in opposing loosening of import restrictions. Together these provisions tied the hands of policy administrators: imports above 1,320 thousand metric tons could not be offset by domestic marketing allotments to sustain the supported price, while allowing imports to exceed this level would induce violation of the no-net-cost provision if CCC stockpiling were to result. Thus, under the FSRIA the sugar program had to continue to be administered with tight import restraints, which set the farm bill firmly against sugar trade liberalization.

For dairy products, import restrictions under TRQs remain the primary instrument for sustaining domestic prices above world levels. Related dairy provisions of the domestic farm bill are among the most complex among farm programs. Under the FAIR Act, the dairy price support program was initially scheduled to end on December 31, 1999. Instead, the 2002 FSRIA extended the two main dairy programs, purchases by the CCC to support the price of milk used for various

⁷ There is no established market price for rental or purchase of marketing allotments, as there was for peanut and tobacco quotas before the buyouts of those programs.

processed (manufactured) products and federal milk marketing orders that regulate markets for the fluid milk consumed directly. To provide price support, the CCC was authorized to buy necessary quantities of butter, cheddar cheese, or nonfat dry milk. The Secretary of Agriculture retained the authority to adjust product purchase prices as deemed necessary. Milk marketing orders define the relationship between prices of fluid and manufactured dairy products and maintain a regulated geographic price structure. One modest cash-out innovation under the FSRIA involved a new national dairy counter-cyclical payment program.⁸

Conservation Program Subsidies

Conservation and environmental programs play an important role in agricultural production decisions. Through these programs, producers receive cost-share, rental, and other direct payments in return for using specified farming practices or for setting aside land in conserving uses. The FSRIA continued and, in most cases, expanded various conservation/environmental programs. The programs that retire environmentally sensitive land from crop production were extended, but most new expenditures were targeted for conservation measures for livestock operations and land that stays in production.

Idling of farmland for ten-year periods under the Conservation Reserve Program (CRP) has been the primary conservation and environmental program in effect since 1985. This policy has a supply-repressing effect. The FSRIA increased the land-idling authority of the CRP to 39.2 million acres, compared to 36.4 million under the FAIR Act. An increase in CRP acreage adds to its output-reducing impact.

The Environmental Quality Incentives Program (EQIP), which provides technical assistance, cost sharing, and incentive payments to assist livestock and crop producers with conservation and environmental improvements, was expanded under the FSRIA. Cost sharing (up to 75 percent) or incentive payments were authorized for a wide range of practices, including nutrient management, livestock waste handling, conservation tillage, terraces, and filter strips. EQIP is unique in its relative focus on livestock producers.

Under the FSRIA, a new Conservation Security Program (CSP) was also initiated. The CSP is focused on land-based practices and specifically excludes livestock waste-handling facilities. Producers would develop and submit a conservation plan to USDA that identified the resources and designated land to be conserved. The plan could include conservation practices that fell within one of three tiers provided in the program. Producers entering into first-tier conservation security contracts would receive a base payment for conducting the practices designated in the

⁸ Under the Dairy Market Loss Payments program counter-cyclical payments were to be made to dairy farmer on a monthly basis when there were low market prices of fluid milk. Payments were limited to 2.4 million pounds of milk per year per operation, which corresponded to the production from a relatively small dairy herd of about 135 cows. With this limit, about 50 percent of total national milk production was likely to be eligible for the direct payments, but only about 30 percent of the total production was from the smaller operations that produce less than the 2.4 million pound limit. For these small producers, the counter-cyclical payments created an incentive to expand production at the margin because the per-unit price they receive was supported at the target price level. For the larger farms producing about 70 percent of the milk in the United States, the payments program were essentially decoupled from production—it provided a variable payment on a fixed output that was inversely related to the price of milk. This was similar to the counter-cyclical crop support program in the FSRIA.

conservation plan. Producers might also be eligible for bonus payments for implementing additional (tier two and three) conservation measures.

The new mix of conservation support programs under the FSRIA called attention to the policy discretion involved in U.S. programs regarding acreage idling for environmental purposes. While the U.S. had maintained the CRP and related long-term land-idling since 1985, it was not under any international obligation to do so. Historically, the U.S. has enacted conservation land idling as a supply control measure during times of low prices (the 1930s, the 1960s, and again in 1985) and has let these programs expire when market demand was relatively strong.⁹ Competitors in world markets don't object to land idling in the United States, which reduces U.S. production and gives the foreign producers a competitive advantage, but the CRP has occasionally been criticized for unnecessarily restricting output and pushing world prices for basic grains higher than otherwise. Were the U.S. to shift more fully toward support for use of environmental practices on land that continued in production in the future, along lines of the CSP, output could expand but competitors in world markets would have little basis for objections under the WTO or other trade agreements.

The conservation programs of the FSRIA also brought attention to the affects of domestic environmental regulations on agricultural competitiveness. Should EQIP or CSP payments be considered production subsidies? Once domestic regulations are enacted requiring certain environmental performance, producers are obliged to comply. The EQIP expenditures reduce compliance costs of producers. Under an alternative approach (the polluter pays), these could be viewed as costs that should be borne by producers that might affect agricultural production levels. Thus, the EQIP expenditures can be considered production subsidies, but under WTO rules any subsidies that offset (but do not exceed) environmental costs of measures undertaken by producers are eligible for classification in the green box and are exempt from limit commitments. Likewise, subsidies under the CSP are, in principle, offsetting costs related to maintaining environmental quality, and thus qualify as being in the WTO green box whether or not adoption of the supported practices is required by domestic regulations.

4. Strategic Reform Paths

The preceding section has highlighted some of the proximate circumstances that have driven U.S. farm policy at particular junctures. There also has been a systematic dimension to the evolution of policy. That dimension has been a slow and imperfect shift away from supply controls and supported prices toward direct payments from government and less explicit intervention in markets. The support policies have become increasingly—if still far from perfectly—decoupled from production decisions. In Orden, Paarlberg and Roe (1999), we characterized this strategic reform path as a “cash out” of slowly evolving and compensated partial measures, as noted above.

The cash out reform strategy can be contrasted with three alternatives in terms of speed of reform implementation and whether past program beneficiaries are compensated for the policy change

⁹ The CRP of the 1930s gave way to full-scale production during World War II, but supply abundance in the mid 1950s brought another long-term land conservation program. This second CRP enrolled a peak of 28.5 million acres in 1961 but was allowed to phase out in the 1970s when U.S. agricultural exports boomed.

(see Figure 1). Reading clockwise from the lower right corner, these alternatives reflect outcomes revealing the most to least loss of influence by the farm lobby. A cutout would end farm programs abruptly and without compensation, as might be proposed by conservative fiscal groups or critics of the negative effects of U.S. subsidies on poor countries. Such a draconic

Figure 1. Alternative Reform Strategies

Compensation	Speed of Implementation	
	Slow	Fast
Yes	Cash out	Buyout
No	Squeeze out	Cutout

Source: Orden, Paarlberg and Roe, 1999.

reform has not proven politically feasible in the last seventy years. A slower squeeze out occurs if the farm policy parameters are allowed to erode to the point that effective support is curtailed. A squeeze out has not occurred during past commodity booms, such as when prices rose in the 1970s and inflation could have made the nominal price interventions inoperative (instead, price support parameters were ratcheted up), nor in the mid 1990s (when payments decoupled from prices replaced price-linked deficiency payments). Nor has a squeeze out occurred over the longer transition as the agricultural sector has systemically shifted to being more prosperous than in the past.

5. A Hypothetical Buyout of the Main Farm Support Programs

As described for peanuts and tobacco, a buyout brings a quick termination of a support program made feasible by a significant but temporary compensation payment up front. Given the circumstances under which these two buyouts occurred, it is not surprising that there has not been a credible buyout proposal for the main U.S. commodity programs. Discussion of this option has occurred only at the fringe of the policy debate.¹⁰

A buyout of the 2002 U.S. farm programs could focus on the direct payments, the counter-cyclical payments, and/or the loan rate price guarantees (marketing loan benefits). The direct payments provide a narrowly-defined benefit which increases the feasibility of a buyout. Bringing their eventual elimination would ease concerns about continued subsidization but would accomplish the least economically or institutionally. This is because either the direct payments or a buyout replacement are relatively decoupled and are (arguably) a WTO green box policy.

¹⁰ See Stokes 2007a,b for examples. In the 2007 farm bill debate, the CATO Institute (James and Griswold 2007) proposed a very modest buyout—essentially a cut out delayed by five years. CITIGROUP, which had financed lump-sum payments to tobacco buyout recipients, made an innovative proposal for a voluntary buyout, but it was summarily rejected in Congress.

A buyout of the counter-cyclical payments would accomplish more, since these payments are a particularly contentious form of decoupling likely to have some production stimulating effects. A buyout of counter-cyclical payments would let the United States abandon the WTO blue box, potentially allowing simplification and improved transparency of the WTO rules for agriculture. Marketing loan benefits are the most directly production-linked of the main commodity programs and have an uncertain level of annual expenditures depending on market prices and current production levels. A buyout of these payments would end an amber box policy.

The costs of a full 25-year buyout of the direct payments, countercyclical payments and marketing loan benefits at the level delivered by the 2002 farm bill are summarized in Table 1. Buyout payments shown are assumed to be made in equal nominal installments over 10 years, as was the case for tobacco. Annual expenditures under the 2002 farm bill are shown in the first row, based on actual past expenditures and projections in the president’s fiscal year 2007 budget (December 2006). The annual buyout costs, shown in row 2, are those required to compensate for annual payments made for 25 years at the average level of the 2002 farm bill—this is roughly consistent with the buyout compensation provided for peanuts and tobacco. Using a 5 percent discount rate, the present value of these payments and the value of annual payments for which these costs are equivalent as an infinite annuity are shown in the last two rows.

Table 1. Cost Summary for a Possible Buyout the Main U.S. 2002 Farm Bill Support Programs (Buyout over 10 years of 25 years of future payments at 2002 farm bill levels)

	Fixed Direct Payments	Counter-cyclical Payments	Marketing Loan Benefits	Total
.... billion dollars....				
2002 Farm Bill Annual Payments (FY 2002-FY 2007)	5.256	2.356	2.595	10.207
Buyout:				
Annual Cost	9.593	4.300	4.736	18.629
Present Value	77.775	34.867	38.396	151.038
Infinite Annuity Equivalent	3.704	1.660	1.828	7.192

Note: Author’s calculation of buyout payments assumed to be made in equal installments over 10 years. Present values and infinite annuities are based on a 5 percent discount rate. Costs incurred under the 2002 farm bill are based on actual past expenditures and projections in the president’s fiscal year 2007 budget (December 2006).

The present value of a full buyout provides a measure of the economic values that have been at stake—with or without a buyout—under legislation along lines of the 2002 farm bill. The estimate of the discounted value of payments for 25 years such as the 2002 bill provided is \$151

billion.¹¹ Much of this payment stream is capitalized into present farmland values. The annual cost of a buyout for each of 10 years is around \$18.6 billion. This is high, but not unprecedented, compared to past annual farm support payments. Finally, the value of the buyout as an infinite annuity is nearly \$7.2 billion. One view of the buyout illustrated in Table 1 is that once enacted it is equivalent to securing payments at this level forever, but without the need for subsequent political battles over the future payments.

Overall, buying out farm support payments raises short-term budget costs but reduces expenditures in the long run. Sharper, shorter buyouts than illustrated in Table 1 could be undertaken, with lower present value and annual cost if the number of years for which compensation is paid is reduced. For example, a buyout of 15 years of the 2002 farm bill payments shown in Table 1 has a present value of \$111.234 billion and annual cost for ten years of \$13.720 billion.

Were farm subsidy payments for the main crop programs to be bought out, the issue would arise of whether any buyout could be enforced. The record from the post-1996 increase in support shows new expenditures can easily be enacted under existing farm program legislation. Several steps can be envisioned that would improve the prospects for adherence to a buyout. The first would be to eliminate the permanent legislation for farm support programs. A WTO agreement might provide an enforcement mechanism. Stronger steps could also be taken to ensure the long-run credibility of a buyout of the main commodity payment programs. Buyout legislation could stipulate that the acreage for which the payments were bought out (and the output from that acreage) becomes ineligible for future support legislated by Congress—essentially creating “non-base” as opposed to “base” acreage. To formalize this approach, buyout contracts might be structured similarly to those by which some farmers sell their “development rights” to state and local governments for the different purpose of their land remaining in rural condition or agricultural use. No congress (federal or state) can unambiguously bind the actions of a future congress. But conditions could be defined that would make it much more difficult to reinstate bought out farm programs than it has been to maintain the existing ones.

6. Incremental Policy Challenges in 2007

A large-scale buyout is not on the political agenda for the near term. Instead, the prospect is for incremental reforms along the messy cash-out line or for possible reversion to support programs more coupled to production incentives. At issue are the cost, what will be the policy instruments, and who will be the recipients.

One starting point for consideration of these issues in 2007 was a proposal made by the administration. The Secretary of Agriculture had called regularly for policies that were “equitable, predictable and beyond challenge” throughout the early farm bill discussions. In January 2007, USDA released a farm bill proposal that presumably met these criteria. The administration’s proposal can fairly be described as calling for a set of incremental reforms along the cash out/decoupling path.

¹¹ Orden (2006b) shows this cost as \$174.126 billion based on projections in the president’s fiscal year 2006 budget (December 2005). The decline reflects higher than anticipated subsequent prices, and thus lower expected CCPs and marketing loan benefits under the 2002 bill, which are reflected in the cost estimates for the fiscal year 2007 budget.

There were some substantial reforms in policy instruments proposed by the administration. By finding several cost-saving measures, USDA proposed that it would be feasible to shift nearly \$8 billion over ten years from commodity support to conservation programs. Part of the savings it claimed came from converting counter-cyclical payments from a price-basis to a nationally-calculated revenue basis. This conversion lowered expenditures by taking advantage of the natural price-quantity hedge (when output is low, prices are higher and vice versa which partly stabilizes revenue). A tighter eligibility cap of \$200,000 on adjusted gross income of payment recipients was proposed. For cotton, lower loan rates were recommended, compensated by higher direct payments. The administration also recommended that cultivation of fruits and vegetables be permitted on base acres, which would presumably address any challenge to the direct payments being counted in the WTO green box. More flexibility about U.S. food aid programs was recommended, which would help defuse objections that had been raised about these programs providing export subsidies. Less reform-oriented provisions of the administration's farm bill proposals included expanded ethanol subsidies and maintaining the sugar and dairy price support programs.

In aggregate, the USDA proposal held the line on spending for agricultural programs at the level projected under existing legislation. With the projected high prices, the annual level of expected spending was lower for the next ten years than under the 2002 farm bill. In short, under this proposal there was also to be a squeeze out of the traditional commodity support programs, with marketing loan gains and counter-cyclical payments falling sharply.

The 2007 USDA proposal, even with its reform provisions and squeeze-out dimension, was in many ways less reform-oriented than proposals made by past Republican administrations. In part this reflected anticipation prior to the November 2006 elections that Republicans would continue to control Congress. This would have left the party accountable for the final farm bill, whereas past Republican administrations had known they could make whatever proposals they chose with a Democratic congress eventually liable for the final outcome.

The House of Representatives, under Democratic control, acted next on the 2007 legislation. By July 2007, it had rejected most of the administration's reform recommendations. It passed a bill retaining the three tiers of the existing support programs and raised some loan rates and target prices modestly. A shift from counter-cyclical payments to a new revenue insurance program was not funded. Thus, the commodity title ensured farmers of the traditional support mechanisms in the event that prices fell to lower levels than projected when the farm bill was being written. The loan rate for sugar was increased with its distortionary effects on consumer costs. Existing subsidized crop and revenue insurance, which had become a growing component of total farm support expenditures, was retained with only modest changes. The House bill also offered new indirect forms of support for fruits and vegetables (e.g. increased purchases for federal nutrition programs), but did not modify the direct payments program to allow production of these crops on base acres. The House attained endorsements from many interest groups by offering a variety of other program expansions. This mitigated the squeeze out of farm program spending that high prices were creating, but under projected high prices the House farm bill did not avoid a substantial reduction of anticipated commodity support. The House agricultural committee leadership lamented the tight budget disciplines it faced and angered the administration with

proposals for non-farm tax increases and use of several budget gimmicks to break out of the budget limit.

The Senate, also under Democratic control after the 2006 election, did not complete a farm bill until December 2007.¹² Like the House, the Senate retained the traditional support structure as a guarantee to farmers in the event of lower prices, again with some higher loan rates and target prices. It also added an optional Average Crop Revenue Program (ACRP) in place of the existing loan rates and counter-cyclical payments. For corn, wheat and soybeans in eleven Midwestern states, in particular, this option was estimated to provide similar benefits to the existing programs when prices were relatively low but higher benefits if prices remained high (Zulaf, 2007). Thus, the new ACRP was a step toward avoiding a squeeze out of commodity support. Even so, at anticipated prices the Senate bill implied commodity program spending would fall compared to previous years. The Senate incorporated funding for a permanent disaster relief program through the Finance Committee and for expanded of the conservation security program under a new name.

Overall, the House and Senate bills continued for fiscal years 2008-2012 levels of spending anticipated under continuation of the 2002 farm bill without making drastic changes in aggregate, as illustrated in Table 2. For seven spending categories, the baseline of anticipated expenditures projected by the Congressional Budget Office (CBO) in March 2007 is shown in the first column. The second column shows net additions or reductions under each bill and the final column shows anticipated spending with an average of the House and Senate adjustments. The projected commodity support spending of \$34.2 billion is comprised mostly of the direct payments which the 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. Expenditures for conservation programs under the 2007 farm bills rise in absolute terms. Conservation expenditures rise in relative magnitude to almost three-quarters of the projected commodity support level (compared to just one-quarter of that level during the previous five years). In this sense, in the event of high prices a substantial relative shift toward conservation programs takes place in farm program outlays. But farmers remain well protected if prices turn out lower than projected—through retention, and even strengthening marginally, of the three tiers of commodity support.

Decoupling versus Recoupling

As argued above from the historical experience, farm policy is quite responsive to proximate circumstances as well as exhibiting a long-term path toward less market intervention. One of the ironies of farm policymaking is that low prices make a shift of instruments more feasible in terms of an anticipated baseline of budget expenditures, but make it less attractive to change the status quo. Conversely, higher prices generally spark a search for new ways to spend money on agriculture as price-linked commodity payments decline. Unless there is a squeeze out, budget

¹² At the time of this draft, final passage will also require agreement between the two bodies of Congress in a conference committee and signature on the legislation by the President. Conference committee negotiations were to begin in January.

Table 2. Aggregate Anticipated Expenditures under 2007 Farm Bill

Estimated Outlays, Billion Dollars, FY2008-FY2012			
Category	CBO Baseline	Adjustments (House; Senate)	Average
Commodity Support	36.5	-1.0; -3.5	34.2
Conservation	21.6	2.8; 4.4	25.2
Trade	1.7	0.6; 0.1	2.0
Crop Insurance	25.7	-4.0; -3.7	21.8
Energy	0.0	2.4; 1.0	1.7
Nutrition	192.2	4.2; 5.3	197.0
Other	2.6	0.9; 1.9	4.0
Total	280.3	5.9; 5.5	286.0

Source: Derived from Congressional Research Service summary (Chite, 2007).

discipline has to erode. Early on, more than 90 diverse interest groups expressed their concern that the budget projections based on the 2002 farm bill would not allow enough of an “investment in agriculture,” and they called for additional spending. Much was made of new constituents at the spending table—for one, fruit and vegetable growers who felt threatened by expansion of the production options on base acreage; for another, livestock producers facing higher feed costs. Budget deficits were touted as a constraint on agricultural spending, but the federal budget deficit, while high in nominal terms, is not too high as a percentage of national income. Offsets were sought in other areas to allow expanded farm spending and both the House and Senate increased the available fiscal resources both through these offsets and by gimmicks of budget accounting, but only to a limited extent.

In addition to the question of the overall level of spending, there are questions about the specific instruments of farm policy. The traditionally supported farm groups remained wary of any changes to the existing programs in 2007, despite high prices since 2005 for oil and farm commodities. Their experience with the 1995-96 price spike and 1998-2001 collapse was still fresh, and there were memories of the collapse of an earlier oil-price-related boom in the 1970s and the collapses of commodity prices in the aftermath of wars. Nor was there much budgetary incentive to change policy instruments in 2007. Unlike 1995-96, higher prices were already built into the 2007 baseline budget projections. Thus, there was little opportunity for “capturing” projected expenditures that everyone could see would not really materialize (this is what made the proposal for direct payments decoupled from prices both lucrative and consistent with budget projections in 1996). In 2007, new instruments could only deliver higher spending if their cost was approved by the Congress or mistakenly evaluated in budget scoring.

One dimension of the instrument choice question, and a consequence of the tight budget, was that the direct payments came under scrutiny in the domestic policy debate. These payments were “where the money was” precisely because they were decoupled from prices. Decoupling made this instrument a budgetary target. Proponents of other new spending eyed reducing direct payments as a source of funding for their priorities, while the payments recipients fought to keep the money where it was and largely succeeded.

While direct payments were retained, in other ways the longstanding strategic path of movement toward increasingly decoupled instruments came under more threat in 2007 than has occurred in some time. With this risk, one can ask whether the policies that are adopted pass the MAAPP study-group test of how U.S. agriculture would feel if they were adopted by other countries?

Ethanol

High energy prices were arguably the most influential driver of the 2007 farm bill debate, but this is not the first time that high energy prices have been seen to herald a new era of scarcity and high commodity prices. In the early 1970s, rising oil and farm-gate prices were widely viewed as signaling the end of the era of low food prices. Real oil prices were permanently stepped up in retrospect but not by nearly the degree that short-run nominal prices of the time led some observers to fear. Real farm commodity prices were already declining by the mid 1970s.

The U.S. ethanol fuel tax credit designed to promote corn-based fuel production (although not part of farm bill legislation) is itself a highly coupled policy instrument reinforced by a very high tariff. Initiated in 1978, this set of policies, together with other federal and state incentives, had only been sufficient to induce a modest level of production (less than two billion gallons by 2003) until regulations required more production and oil prices rose. The federal ethanol tax break of \$0.51 per gallon adds as much as \$1.50 or more to what can be paid to convert corn 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 war continued in Iraq, both political parties called for further increased energy independence, or “security,” for the United States. These broadly bipartisan calls resonated in ways that the U.S. has long chastised Japan and other food importing countries for whenever they have called for increased domestic food self-sufficiency. In each case, the argument makes an exemption for “strategic commodities” to which general trade and subsidy rules are not to apply.¹³ New energy legislation in late 2007 (the Energy Independence and Security Act of 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.

With the combination of the 2007 farm and energy policies, the farm sector becomes protected in the event of several contingencies. Were farm prices to fall, the farm bill ensures commodity support expenditures. But agriculture now has a new policy tool and strengthened political clout through energy policy, and through this policy avenue substantial new power to influence agricultural prices. With the environmental benefits from corn-based ethanol limited (because of the energy required to produce the corn) and the self-sufficiency argument fundamentally anti-trade, one can ask from an historical perspective whether this biofuel policy is creating the albatross of an artificially-induced infrastructure that requires (and can demand) subsidies or costly mandates forever, with little economic or environmental benefit? The deepening entrenchment of the domestic ethanol sector during the oil-price boom of the mid 2000s demonstrates just such remarkable continued political strength of the agricultural lobby.

¹³ See Lugar (2006) for just such an argument from a senator who otherwise mostly favors open markets and global integration.

The CRP

From the past experience, one would expect the use of CRP land to come under question if commodity prices remain strong. But in 2007 the administration recommended, and both the House and Senate bills included, continuation of CRP authorization and no provisions for early release of farmers from their contracts. To the extent that CRP acres represent supply control with little environmental benefit, reduction of the CRP would represent movement away from a production-distorting coupled policy (albeit, one of production restraint, not stimulus, that is considered a WTO green box policy). To the extent that CRP acres provide environmental benefits (less environmental detriment or positive environmental goods), the environmental cost of reduced CRP acreage would offset environmental gains that might be claimed from biofuel production, if ethanol is the proximate reason that the CRP declines. In either case, reducing the CRP acreage would partly counter the effects of ethanol subsidies in driving prices up. As policy stands in 2007, these two instruments, both largely outside of WTO disciplines, were both working to drive agricultural prices up and arguably had become the most important elements of U.S. “farm policy.” The boom-related excitement in the agricultural sector arose because demand augmentation through “Food, Fiber and Fuel” trumped environmentally-rationalized supply control as a mechanism keeping farm commodity prices high.

Support and Insurance Programs

The increases in loan rates and target prices contained in the House and Senate farm bills will prove largely innocuous (with the exception of raising the sugar loan rate) if prices remain as high as projected when the bills were written. But these parameter adjustments are another important signal of the strength of the farm lobby. Traditional price and income support levels that are ratcheted up only slightly in 2007 could be raised further in the future. In the 1970s, a cost-price squeeze on farm returns that followed an initial commodity price boom led to such ratcheting up of the nominal levels of loan rates and target prices. The early 1970s oil “supply-shock” kicked off a period of inflation and macroeconomic instability that lasted more than a decade. It is fortunate for agriculture and more broadly that at least so far the oil price spike of the 2000s has not had such detrimental effects. This has helped keep farm support program parameters in check. But depreciation of the dollar in the 2000s is part of the cause of high dollar-denominated commodity prices. Large trade imbalances and potential for further currency realignments are of concern (Ahearne et al. 2007). Further exchange rate movements and high oil and commodity prices might still create difficult macroeconomic policy challenges and pressure could then materialize to raise support parameters.

It may seem trite to point out too that wars are usually associated with high commodity prices and the ends of wars with collapses of prices in commodity markets. This occurred after World War I, World War II and the Korean War. It is not surprising that oil and farm commodity prices are high with the expansion of armed conflict after the U.S. invasion of Iraq. This war is on a much smaller scale than the others but is concentrated in an oil producing region of the world. We do not know whether or when war in the Middle East will be diminished. But commodity price collapses after the end of armed conflicts have been accompanied by intense political debate about what to do to support farmers. This historical experience also serves as a caution about anticipating a long-term squeeze out of farm support payments.

The Democratic Party has generally been more inclined toward market interventions than the Republicans. With the Democrats in control of Congress the effort to raise, not lower, the support program parameters is not surprising. The argument made, and which will be extended if farm price and income circumstances deteriorate from their 2007 boom levels, is that higher energy and other prices (and related production costs) render inadequate the safety net that was good enough, indeed lauded by many farm groups, from 2002 to 2006. Raising loan rates or target prices is a move back toward coupled payments. A constraint on such movement is that many farm groups will be only modestly supportive of raising the support parameters unless it comes at no cost to other subsidies they receive.

Finally, programs for crop and revenue insurance, as well as uninsured disaster assistance, have been expanding in the United States with increased government costs. Some of the new policy instruments touted in 2007 would expand insurance or institutionalize disaster relief. Calls for universal revenue insurance require either diminished benefits for traditional subsidy recipients or expanded expenditure levels. Moreover, while revenue insurance can be designed to minimize its production stimulating effects, in its cruder forms it can be highly coupled. The National Corn Growers Association (NCGA 2006) suggested a design that pays out more than the price-based LDPs and CCPs they proposed to replace when corn prices are anticipated to be more than \$2.25 per bushel. Payouts were tied to local yield levels, so their revenue insurance provides an incentive for corn production in marginal areas by protecting farmers from downside risks.¹⁴ Various schemes were discussed to cascade revenue insurance, with some parts falling under WTO green box criteria, while other parts would count in the amber box. The net effect could be quite a production-distorting full program, even if it had low amber-box cost.

7. Role of the WTO

It is uncertain (although still possible in December 2007) whether there will be a WTO Doha agreement. Nonetheless, one can ask if the U.S. is taking preemptive steps to align its policies more closely with WTO consistency? Doing so seemed to be the stated “beyond challenge” objective of the Secretary of Agriculture, and was endorsed as an explicit strategy by the Agricultural Task Force cited above. Robert Thompson argues as well that the adjustments are not as severe as some farm groups anticipate (even under early 2000s market price levels), that such realigning of policy is desirable for U.S. agriculture in the long term, and that there is room under the green box for various farm programs, including income support subsidies. Moreover, farm groups can be reminded of some tangible benefits from the WTO. Even without a Doha agreement, there are gains from China’s accession, the potential accession of Russia, and from a number of dispute settlements that have gone in the U.S. favor.

Despite these arguments, the historical record is one of very little preemptive movement of U.S. policy in order to be consistent with anticipated WTO constraints. Throughout the Uruguay

¹⁴ A recent analysis at North Dakota State University illustrates this effect if similar revenue insurance were applied to other crops. Spring wheat production is about evenly divided between four regions of the state. But in the marginal western region, the standard deviation of yields is 42 percent of average yields of 28 bushels per acre, whereas in the more productive Red River Valley the standard deviation of yields is only 20 percent of yields averaging 50 bushels (Taylor and Koo 2007). Under a revenue insurance program based on local yield variability, production would be stimulated in the western region as farmers were protected from losses in relatively common low-yield years.

Round, lack of progress in the negotiations became a trigger for creating and maintaining policies such as the Export Enhancement Program. That changed somewhat with the Uruguay Round agreement. The multilateral agreement was not the cause of the 1996 domestic farm policy reforms, but the 2002 farm bill that re-institutionalized counter-cyclical subsidy spending included a WTO circuit breaker authorizing the Secretary to make adjustments if necessary to maintain U.S. compliance. That provision will likely be extended in the 2008 farm bill but there was relatively little other discussion about being WTO compliant. With high prices, there was little appetite for making explicit changes to U.S. policies designed to re-position U.S. programs so that conflict with WTO agreements was minimized.

Table 3 shows a synopsis of the U.S. farm domestic support WTO notifications for 2000 and 2001, which were made belatedly in March 2004, and for 2002-2005, which were made belatedly in October 2007. Several points are evident from the table. First, the United States claims to be compliant with its Uruguay Round subsidy limit. This is shown by the “total counted” product specific AMS (in the amber box) being less in each year than the U.S. commitment limit of \$19.1 billion; and by non-product specific (NPS) support not counted toward the limit because it is less than the *de minimis* 5 percent of the total value of domestic agricultural production. The table also shows substantial expenditures for disaster relief and increasing environmental program expenditures, classified in the green box, and for crop/revenue insurance, classified as NPS support. Overall, the period 2000-2005 was one of relatively costly farm spending of \$20-30 billion annually except for year 2003.

The notification by the U.S. of its domestic support through 2005 sharpens debate over whether the WTO commitments could serve to bind subsidy expenditures.¹⁵ The U.S. notifications can be questioned on the basis of misclassification of subsidies or on the grounds that some subsidies are under reported or not reported. Based on the ruling in the Brazilian case against U.S. cotton subsidies, it might be argued that the direct income support payments are not sufficiently decoupled from production to warrant classification as green box. Counting these subsidies as product specific AMS, along with counter-cyclical payments for the same reason, puts the U.S. over its commitment limit in 2000, 2001, 2004 and 2005 (see “Summations” in the table). Alternatively, counting both of these subsidies as NPS support raises its level above the *de minimis* 5 percent in 2000, 2001 and 2002, while bringing it within \$1 billion of the limit in 2004 and 2005. If the NPS support were to count in the total AMS, that commitment limit would be exceeded in all five of these years.

An obvious solution to such potential violations would be to modify the direct payments legislation to allow production of fruits and vegetables on base acres, as proposed by the administration in 2007. That would come at a political cost that neither the House nor Senate bore in 2007 (and require expanded support for the agenda put forward by the fruit and vegetable growers, which was nonetheless provided). It would restore WTO legitimacy to a program of payments that is at least more decoupled than policies it replaced. That would leave to the domestic political debate the future fate of these direct cash transfers to farmers as a legitimate

¹⁵ See Schnepf and Womak (2006), Sumner (2006) and Blandford and Josling (2007) for additional discussions of potential WTO challenges to the U.S. program.

Table 3. Synopsis of U.S. WTO Domestic Support Notifications (million dollars)

Measure	2000	2001	2002	2003	2004	2005
Green Box (Selected Categories)						
Income Support	5,068	4,100	5,301	5,267	5,260	5,219
Disaster Relief	2,141	1,421	2,121	1,694	1,964	169
Environmental Programs ¹	1,785	1,916	2,505	2,450	3,039	3,400
AMS Commitment Limit	19,103	19,103	19,103	19,103	19,103	19,103
Value of Agricultural Production	189,520	198,502	194,572	216,478	235,688	236,001
5 percent	9,476	9,925	9,729	10,824	11,784	11,800
2.5 percent	4,738	4,962	4,864	5,412	5,892	5,900
Product Specific AMS (PS AMS)						
Total Counted toward Limit	16,804	14,413	9,637	6,950	11,629	12,938
Market Price Support (MPS) (Sugar and Dairy)	5,840	5,826	5,771	5,757	5,866	5,908
Loan Rate Payments and Other Benefits	10,964	8,587	3,866	1,193	5,763	7,030
Exempt by <i>de minimis</i> ²	62	215	1,590	436	680	118
Non-Product Specific (NPS) Support						
Total	7,278	6,828	5,100	2,800	5,778	5,862
Crop and Revenue Insurance	1,396	1,770	2,888	1,862	1,123	756
Countercyclical Payments (CCPs)	5,463	4,640	1,804	544	4,288	4,749
Summations						
Counted PS AMS + Inc. Support + CCPs	27,335	23,153	16,742	12,761	21,177	22,906
Income Support + NPS	12,346	10,928	10,401	8,067	11,038	11,081
Income Support + PS AMS + NPS (excludes PS AMS <i>de minimis</i>)	29,150	25,341	20,038	15,017	22,667	24,019

¹ Includes Conservation Reserve Program (CRP) which was reported as "Structural Adjustment through Resource Retirement Programs" for 2000 and 2001. ² For 2002 includes \$1.1 billion "Livestock Compensation Program."

use of public funds, a debate that was engaged in 2007 with little change in the end to the direct payment levels.

The U.S. subsidy notifications might also be challenged for not including some expenditures that could be ruled should be included. For example, the crop/revenue insurance subsidies reported are the indemnities subsidy (indemnities paid less premiums paid by producer). Additional subsidies are provided for delivery costs and underwriting losses that averaged nearly \$1 billion annually over 2000-2005. Federal income tax breaks available specifically to farmers might also be judged as NPS and potentially there are other measures that could fall into this category. The various other subsidies not counted so far in the non-product specific category would have to be quite large to push expenditures over the 5 percent allowed *de minimis* under the Uruguay Round rules if direct payments are judged as green box.

In terms of product specific support, it might be argued that tax breaks supporting corn-based ethanol be included in the amber box.¹⁶ So might other ethanol investment incentives the farm bill could provide. Including ethanol tax credits in the amber box would force a trade off that does not now exist between traditional AMS spending and the ethanol subsidies—although the effect on farm commodity world price of the tax credits differs from that of the farm support programs. So far, the ethanol policies have evaded most WTO discipline and it is not certain how they would fare under greater scrutiny. Again, under Uruguay Round rules, ethanol subsidies have probably not been high enough by themselves to push the U.S. over its product specific commitment limits in 2000-2005.

In the future, there will be different prices and therefore expenditures for various support programs. There may be different WTO subsidy constraints, such as those being negotiated in the Doha Round. There is room for re-legislating policy instruments to meet WTO classification criteria and also for challenges along the lines above.

Without undertaking a precise forecasting exercise over these market and policy outcomes, a few observations are apparent. The Uruguay Round limits do not look binding for the future under either relatively low or high prices, except as described above. Under a possible Doha agreement, the WTO constraints would be altered. Counter-cyclical payments may be counted in a new blue box limited to 2.5 percent of the total value of agricultural output during a 1995-2000 base period (making the limit about \$4.8 billion). During 2000-2005, this limit was exceeded only in 2000, while in 2004 and 2005 counter-cyclical payments were again quite high and came close to the limit in 2005. Similarly, the product specific and NPS *de minimis* may each be limited to 2.5 percent of total agricultural output value. The U.S. product specific *de minimis* is very low and without the counter-cyclical payments being counted other spending in the non-product specific category didn't exceed the 2.5-percent level in any year of the 2000-2005 period. It would take counting quite a lot from other subsidies to do so. These results illustrate a point. If only the bound AMS constraint and Blue Box are capped in nominal terms, the *de minimis* categories of spending will grow to be the relatively larger opportunity to provide subsidies. That might stimulate a proliferation of subsidy spending.

¹⁶ WTO treatment of biofuels raises many complicated questions. See IPC (2006) and Blandford and Josling (2007) for discussion.

In terms of product specific AMS, under the price levels that prevailed during 2000-2005, the proposals being discussed for amber box limits of \$7-8 billion potentially imply some constraints on existing U.S. policy. That level was exceeded in five of the six years. Facing such a constraint would be a position that the United States has generally not been in from past negotiations—the Uruguay Round proposals, for example, put more pressure on the pre-1992 CAP than they did on the 1990 U.S. farm bill.

In the context of relatively low prices, such as during 2000-2005, an unambitious way to meet the tighter AMS limit would be to reduce sugar or dairy price support, while retaining high tariff protection. This is the mechanism Japan used to reduce its AMS for rice, to the frustration of exporters who rightly saw the move as demonstrating a flaw in the WTO subsidy rules. The 2007 House and Senate farm bills redefine the U.S. dairy price support program to exclude fluid milk, which could allow the U.S. under the WTO rules to claim a reduction of several billion dollars in the Market Price Support (MPS) component of its AMS.¹⁷ Beyond this gimmick which would give the U.S. more AMS latitude, it would be quite remarkable compared to the past experience if U.S. Doha-Round negotiators returned with an international agreement that required additional curtailment of the traditional dairy or sugar price support programs or significant cuts in U.S. loan rates, measures that U.S. farm interests would resist.

Under the higher market prices that prevailed when the 2007 farm bill was written, the potential conflict with a tighter WTO amber box limit of a new Doha agreement is diminished but does not completely disappear. The MPS for sugar and a reduced MPS for dairy still take up half of a limit of \$7-8 billion. Crop-specific subsidy caps could impose more pressure on the U.S. programs. Still, a curious issue arises in a WTO negotiating context from high prices. Are other negotiating parties prepared to accept the U.S. meeting new subsidy reduction commitments not by changing parameters of its programs to reform policy, but simply because of favorable market projections? A convenient WTO compliance along this line seemed to be what the administration had in mind with its 2007 proposal. One can even have loan rates being raised in the U.S. while it accepted new WTO constraints.

If a measure of overall trade-distorting domestic support (OTDS) is imposed and subject to greater percentage cuts than its component amber box, blue box and *de minimis* components, then the OTDS limit could provide an additional binding constraint on subsidy opportunities. For example, if the OTDS is reduced by two-thirds from its 1995-2000 base value, then the U.S. would face an eventual cap around \$16.5 billion. There is substantial latitude for product specific and non-product specific *de minimis* spending when prices are high and the amber box and new blue box counter-cyclical payments are low. But even in this event, both *de minimis* categories probably can't go as high as their separate limits of 2.5 percent of the value of production.¹⁸ And lower prices/higher blue box and AMS spending cut into *de minimis* flexibility. Counting new subsidies as described above could also push the U.S. toward its domestic support limit. Still, in

¹⁷ The sugar MPS will increase in contrast if the sugar loan rate is raised.

¹⁸ As Brink (2007) points out, product specific *de minimis* support is further limited below 2.5 percent of the total value of agricultural production because it can not be applied to those products receiving support above the *de minimis* level.

the years 2000-2005 the sum of U.S. counter-cyclical payments, other NPS support and product specific *de minimis* never exceeded the \$8 billion they would be limited to by a two-thirds OTDS reduction and the amber box near its limit.

8. Summary and Conclusion

This chapter has examined the issues facing U.S. farm policy in 2007 and beyond in an historical context. Long-term visions of lower subsidies and a more open world market for agriculture are often articulated but have mostly been put aside when farm policy is legislated. Some reforms along a cash-out and decoupling path have nonetheless occurred as agriculture production and incomes have been transformed since the 1950s. This movement was initiated in the 1960s and extended in 1985 to facilitate U.S. products being more competitive in export markets. Under fortuitous market conditions, the 1996 farm bill broke new ground in this direction by separating direct payments from prices, and largely from production decisions, and by ending acreage set aside requirements. New price-linked counter-cyclical payments were re-institutionalized in the 2002 farm bill. This was a setback to subsidy reducing reform, but farmers retained the planting flexibility attained in 1996 and annual acreage set asides were not revived. For two specialty crops, peanuts and tobacco, buyouts have ended supply-control quota programs in 2002 and 2004, respectively. These reforms were driven by declining quota production levels and revenues. Proposals for a buyout of the main support programs illustrate the cumulative value of the subsidies at stake but have not been endorsed in the absence of significant pressure on the benefits these programs have delivered.

The 2007 farm bill was written at a time of a commodity price boom and with projections that this one might persist, unlike those of the 1970s and 1995-96 despite similar projections at those times. Despite high prices, and consequently small projected price support or counter-cyclical payment expenditures, farm groups have sought to retain their traditional commodity programs. With anticipated spending down, new avenues of expenditures were also sought. Under budget pressure, the direct payments, those that represent the most decoupled instrument of support of farm incomes, came under scrutiny in the domestic debate because, as a famous outlaw once remarked when asked why he robbed banks, “that is where the money is.”

In the context of high prices in 2007, questions arise about the traditional assumptions in agricultural policy deliberations that farm prices will often be low and that developed-country subsidies will drive them down further. The move toward decoupled payments comes under challenge, but with curious results. With energy security a potent buzzword under high oil prices and a war festering in the Middle East, a combination of regulation and tax-credit subsidies for corn-based ethanol work to keep agricultural prices higher than otherwise. In the attempt to avoid a squeeze out of past spending levels, various new programs may be initiated. Some of these might stimulate production, thus having the traditional effect of pushing prices down. Nor was restrictive land-use policy ever completely abandoned. The CRP has always been a supply-reducing coupled policy. Reducing CRP acreage in light of high prices, as has occurred historically, would again put downward pressure on prices.

In the event of these developments, could WTO commitments limit U.S. subsidies? Based on the notifications for 2000-2005 the prospect for binding limits appears to be modest. Once again, the

direct payments, those once anticipated to reduce tensions about farm support programs because they have relatively limited trade-distorting effects, are at the center of the debate. If the direct payments program is eventually revised modestly to qualify unambiguously for the green box, then WTO constraints on the U.S. policies are minimal. This is so even if a Doha agreement along lines being discussed, but not agreed, in 2007 is achieved, unless prices are quite low. If direct payments are off the table, without further challenges to the notification decisions of the U.S., there is substantial room for subsidy spending, at least with no more reform-oriented change of policy than altering the dairy price support programs to lessen the amber box calculation while retaining high tariffs.

These considerations do not diminish the value of potential new subsidy constraints under the WTO, but simply illustrate the substantial distance still to be crossed to achieve a more liberalized and rules-based global trade system for agriculture. Tighter amber box spending limits would be a valuable check to have in place in the event that traditional U.S. subsidy programs are ratcheted up or agricultural prices return to the trend downward path that has characterized the past half century. Particularly germane to a focus on the green box is that if U.S. policy inches toward recoupled instruments with insurance or environmental dimensions, scrutiny along green box lines will be an essential bulwark against new forms of production and trade distortions.

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