

**U.S. Agricultural Policy Reform in 2007 and Beyond**  
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## Introduction

As U.S. agricultural policy is revisited in the 2007 Farm Bill debate, the occasion is ripe to reconsider whether our commodity programs and related legislation best serve agriculture and the economy, and what policies might do better. The studies in this working paper series demonstrate that the current programs serve neither the national interest nor the interests of rural people or agriculture as an industry. Congress and the President would do the country an economic favor by substantially reforming these policies.

We recommend a shift to a much reduced government role in markets now influenced by agricultural programs, along with an end to the substantial transfers to producers and other resource owners associated with the supported commodities. This is a less radical reform than it may appear to be. A large fraction of U.S. agriculture already operates in an approximately free market environment. Drawing upon a series of papers on particular policy issues commissioned by the American Enterprise Institute (AEI) in 2006, we provide evidence that the programs now in place have costs far in excess of the benefits they can reasonably be argued to provide, and that U.S. agriculture would prosper no less than at present, and with better long-term prospects for both farmers and the public generally, in the absence of these programs. Before developing ideas for policy change, we outline some of the purposes that advocates have proposed for farm subsidy programs and provide some factual context about modern agriculture in the United States.

### Purposes of Agricultural Policy<sup>1</sup>

Agricultural policy can serve two broad objectives: the efficiency and prosperity of agriculture as an industry, and the well-being of farm and rural people. These purposes are closely related but distinct, in that agriculture as an industry is important to the nation as a whole: to consumers of food, to earners of income from industries related to agriculture, and to taxpayers, in addition to farmers themselves. The well-being of farm households is related to agriculture as an industry, but is broader in that farm households receive a large fraction of their incomes from sources other than farming, and farming is even less important to rural welfare more broadly (see Kilkeny and Johnson 2007).

Broad national aspects of agriculture as an industry that have been advocated as giving purpose to agricultural policy are food security, food affordability, nutrition, competitiveness in international trade, and agriculture as a contributor to prosperity and income growth in rural areas. For American agriculture to contribute to these purposes, farms must be economically viable, farmland must generate returns sufficient to keep it from conversion to other uses, returns to investment must be sufficient to keep the capital stock in agriculture at the technological frontiers, and investment in new technologies and the skills to implement them must be maintained. At the same time, with relatively open borders and competing uses for rural land and other resources, these broader purposes are not served by maintaining farms in particular commodity markets or in particular regions when market forces would otherwise signal a shift.

Federal commodity programs fit into these purposes through their contribution to the economic viability of farms balanced against their costs to consumers, taxpayers, the broader

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<sup>1</sup> For a fuller discussion and analysis of the purposes of agricultural policy, see Sumner (2007a).

agricultural and non-farm economy, and other national objectives, such as the provision of rural environmental quality. The threats to farm viability that have made such programs attractive are low market prices of farm products, and variable prices and farm income because of weather shocks and market fluctuations. But if these prices and returns reflect market realities, what is the justification for commodity programs sending different signals to producers?

Answers given are market failures in the form of imperfect competition among the corporate buyers of farm products and sellers of inputs to them, as well as the actions of foreign governments that restrict the market access of U.S. products or subsidize their own production of competing products. Other market failures, which lie behind excessive soil degradation and environmental damages associated with unregulated agricultural production, are also seen as a defects that can be remedied with commodity programs (for example, by requiring conservation practices by recipients of commodity support) or by conservation programs per se (for example, by idling environmentally sensitive acreage or subsidizing environmentally friendly practices) (see Heimlich 2007; Kuminoff 2007).

Poverty in rural America was a major force behind the original establishment of commodity programs in the 1930s. Rural poverty remains a blight in the American economy to this day, and the idea that higher commodity prices could reduce that poverty attracts support to these programs. Evaluating farm policies therefore must be considered in light of their effects on farm and rural incomes, and especially on the effectiveness at dealing with rural poverty compared to other approaches to this concern.

Among the central questions addressed in the AEI studies are whether current U.S. agricultural commodity programs constitute good policy for achieving any of these purposes. To be good policy, a commodity program must, at least, generate benefits to U.S. society that exceed the costs incurred to pursue these goals.

For a fuller treatment of modern agricultural policy, it is important to go beyond the standard commodity programs to consider crop and revenue insurance, international trade, conservation and environmental concerns, bioenergy, and rural development. In each of these policy areas, the AEI studies ask whether the benefits of current policies and alternatives to them generate benefits that exceed the costs.

### **The Economic Situation in Agriculture Today<sup>2</sup>**

It is important to distinguish the economic situation of households that have some farming activities (classified in the data as farm households) and the economic situation of farming as an industry. These are quite different issues, although the answer in both cases is that they are doing quite well in general, and that pockets of concern are not those that can be remedied with commodity programs.

For most of the twentieth century, farm household incomes averaged far below the incomes of non-farm households. Post-World War II prosperity spilled over to the farm economy and farm incomes rose significantly from the Depression-era lows, even relative to non-farm household incomes. Nonetheless the average farm household income was still less than 60 percent of the average of all U.S. households from 1945 to 1960, according to historical comparisons compiled by the U.S. Department of Agriculture (USDA) (see figure 1). In the 1960s farm incomes, relative to non-farm incomes, began a trend increase that

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<sup>2</sup> For further details and discussion of the economic situation in U.S. agriculture, see Gardner (2007).

continues to the present. By 1990 farm incomes had gained equality with non-farm incomes, and in recent years farm incomes have been about 20 percent higher (Covey and others 2005). Given the variability of farm prices, this income picture has had its ups and downs, with a spike up in the early 1970s and a dip below trend in the early 1980s. An additional trend is the increasing importance of income from off the farm for farm households. In recent years 80 to 90 percent of farm household income has come from non-farm sources (Covey and others 2005). Indeed for most farm households, that is the income that matters most.<sup>3</sup>

<<insert figure 1 near here>>

Small farms make up the bulk of all farms, but a much smaller percentage of farm output. Farm with gross revenue of less than \$25,000 per year comprise 70 percent of all farms but contribute only about 3.5 percent of U.S. farm output and report a negative net income from farming, according to the 2002 Census of Agriculture (USDA 2004, table 56).<sup>4</sup> Yet the average income of the households operating these farms was well above the average of non-farm household income because of off-farm earnings—although about 3 percent of farms, classified by USDA as limited resource farms, report very low average household incomes: a median of \$10,300 in 2004 (Covey and others 2005).

Family farms classified by USDA as commercial scale operations (those that have \$250,000 or more in sales) earned an average of \$145,300 net income from farming in 2004, plus \$46,038 from off-farm sources, for a total of \$191,338: higher than almost all non-farm households—notwithstanding that given farm price and yield variability, 10 to 20 percent of the farms in this sales category have negative incomes each year (see USDA 2005, p. 26; USDA 2004, table 56). These farms produced three-fourths of U.S. farm output, according to the 2002 Census of Agriculture.

Net wealth data reinforce the income picture. Farmers tend to have low debt to asset ratios (an average of 13 percent debt to assets in 2005) and the smaller farms most often carry no debt (Covey and others 2005). Farm household wealth in all sales groups is much above the wealth of other American households (Hoppe and Banker 2006).

To consider the economic health of agriculture as an industry, one must focus on the sources of agricultural revenue, which are dominated by the 300,000 farms that produce almost all the farm output in the United States. In that context, is there any evidence that agriculture is a troubled industry with fundamental economic problems that need government intervention? As noted, the farms that produce the great bulk of U.S. farm output are on average profitable, with net income of more than \$145,000 per commercial farm. In addition, farmland prices continue to increase, reflecting wealth growth for owners. This growth in farmland prices has occurred in all regions, including those with little or no influence from non-farm land uses. Therefore the growth in land prices reflects continued confidence in the future profitability of farming.

Farm output in the United States continues to expand, even as farm prices continue a secular decline relative to prices in the economy as a whole. The index of agricultural output has grown at 2 percent per year over the past 50 years (CEA 2007, table B-99). This growth of output continues despite gradual reductions in the amount of cropland and agricultural

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<sup>3</sup> A farm is defined as an operation that produces or would normally produce \$1,000 worth of agricultural output, so clearly very small operations are included in the distribution.

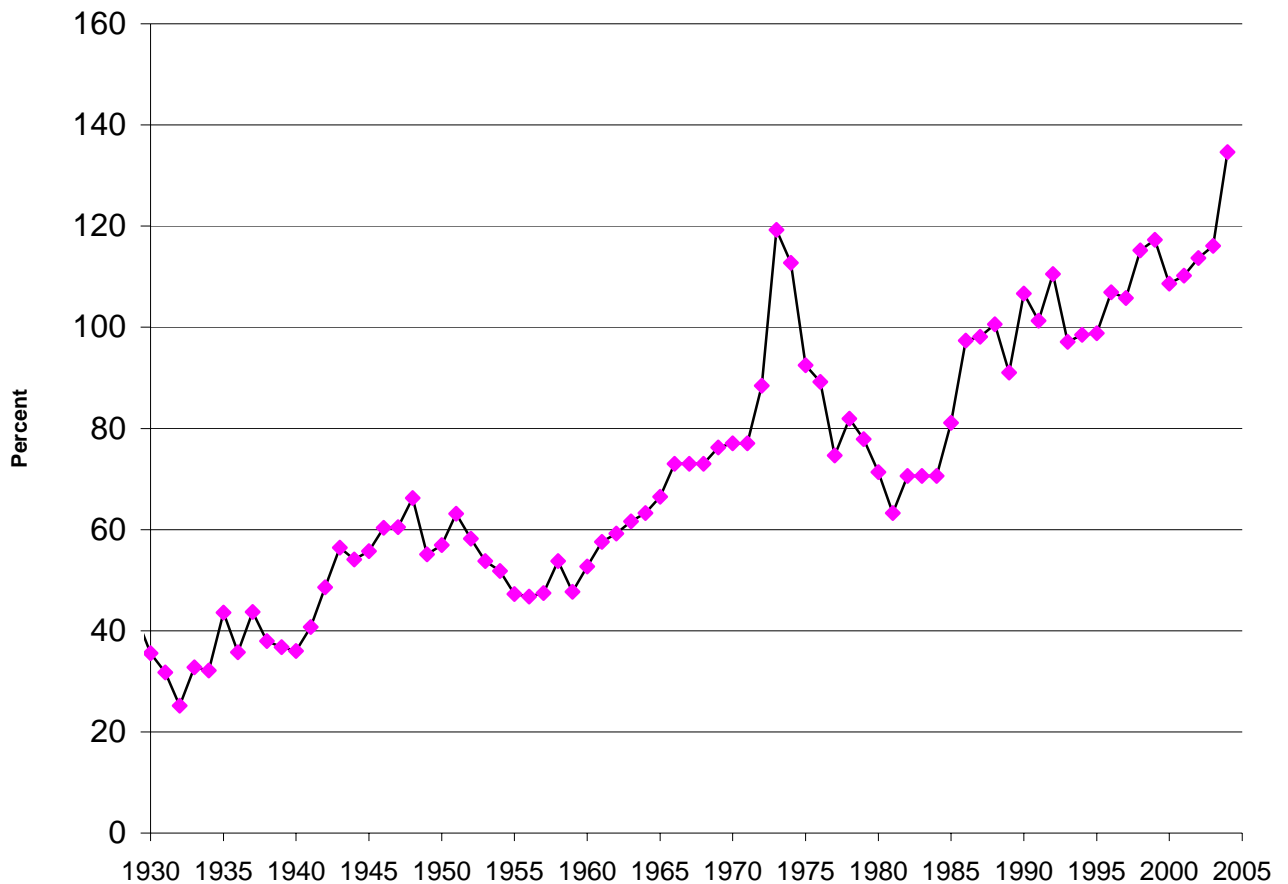
<sup>4</sup>For detailed sources, see Gardner (2007).

labor input. USDA's index of aggregate input quantities is unchanged between 1950 and 2002, implying that overall total factor productivity growth has proceeded at about 2 per year. This productivity growth has allowed agricultural exports to continue to expand at the same time that the U.S. population has increased and U.S. demand for food has expanded. Agricultural imports have also grown, reflecting a globalization of the food economy. Import data indicate that much of the expansion of agricultural imports is in highly processed products (beer, wine, processed specialty foods) imported from Europe, along with fruits and vegetables imported during off-seasons for U.S. produce.

The result of growing agricultural productivity, a competitive farm industry, and openness to imports has been continuing low food prices and a declining share of consumers' income spent on food. Thus the success of agriculture as an industry has provided benefits to producers and consumers alike.

Figure 1. Farm Household Income as a Percentage of U.S. Household Income, 1930–2005

**Figure 1. Farm Household Income As Percent of U.S. Household Income**



*Source:* Covey and others (2005).

The question remains however of the extent to which the economic success stories of commercial agriculture and farm households have been fostered by commodity support programs and other farm policies, and are now dependent upon them. As we will see, farm

commodity programs have been aimed at a narrow group of commodities and have no particular linkage to farm productivity that underlies the success of agriculture or to alleviating America's remaining farm poverty.

### **What Would Happen Without the Commodity Programs: Short-term Impacts**

Consider first the complete and rapid elimination of commodity programs. What would this entail? The government would cease a variety of activities that differ greatly for different commodities. For most commodities (such as fruits and vegetables, hay, meat products, ornamentals), there is little government involvement or income support and little to eliminate. In the commodities where the government is active, its main roles are: intervention to support domestic commodity markets by adding to demand for products, regulation to support commodity prices by limiting supplies; payments made directly to commodity producers; and regulation of international trade in agricultural commodities, either to keep other countries' products out or to market more U.S. products in foreign countries.

Interventions by the U.S. government to acquire commodities when prices are low—either for later resale, as with classical grain stockpiling, or for redistribution through food aid programs—were once a central device of commodity support. While authorization of government commodity purchase remains for dairy products and for purchases of surplus commodities for food distribution by USDA, this approach has been abandoned as a means of support for the major crops. Even for dairy, its use is much reduced. The hoped-for benefits of price stabilization for both producers and consumers never materialized. Instead, the accumulation of stockpiles generated intolerable costs as the government's buying prices tended to be too high, and producers objected to the price-depressing effects of government sales.

Regulation of production, through acreage restrictions or production quotas, began in the 1930s for the major crops and persisted until the last decade for a few products such as peanuts. But this approach to commodity support has now been abandoned, again because of perceptions by both commodity buyers and producers that the costs were great but the gains small. Production restrictions create obvious costs to those who must buy at higher prices or are rationed out of the market. It often entailed idling productive land and other resources, with obvious waste and impacts on competitiveness. Producers were convinced by the growing response of competing agricultural exporting countries that expanded production as the United States held its output in check. Congress removed the authority to implement annual acreage restricting programs in the "Freedom to Farm" Act of 1996.

Payments to producers of program crops and those who have a history of such production have been increasing in importance in recent decades. Since 1985 for cotton and rice, and the early 1990s for grains and oilseeds, "marketing loan" payments have gradually replaced government acquisition as a mechanism to guarantee minimum prices to farmers. This approach gives producers price protection, but without accumulating commodity stocks and without choking off market demand through higher market prices. Instead the costs of support are borne by taxpayers, who provide the funds for the payments. Previously existing support payments varied inversely with market price, were tied directly to current production, and required annual acreage idling. These were replaced in the 1996 Act by payments—renamed Direct Payments under the current 2002 Act—that are based on past acreage and yield of the program crop and do not vary from year to year. This form of

payment goes some way to reduce the criticism of earlier price supports that they generated overproduction of supported commodities.

The Countercyclical Payments Program, introduced in 2002, is intermediate between the marketing loans and the “direct payments.” The countercyclical payments are tied to the history of production of the program crop and vary inversely with market price of that crop; however, like the direct payments, they are not tied to current production.

The many complexities of current programs and their national and international market consequences are discussed in the AEI papers by Alston (2007a), Babcock (2007), Balagtas (2007), Barrett (2007), Beghin (2007), Brester and Smith (2007), Kirwan (2007), Paggi (2007), and Sumner (2007b). The central issue we consider here is the implications for U.S. agriculture if these programs were to end. This issue is clouded by the fact that the consequences of an end to commodity support looks quite different for the immediate future than the consequences would have been in the immediate past. The reason is that the immediate past includes several low-price years for major commodities from 1999 to 2005, when marketing loan programs as well as payments under the Countercyclical Payment Program were substantial. Market prospects for the next five years, at least, are much more favorable, according to the estimates of both USDA and private prognosticators (USDA 2007a; FAPRI 2007). Accordingly, payments under current programs would be much lower in the future than they have been in the past: reduced by roughly half, according to the baseline published by the U.S. Congressional Budget Office (CBO) in spring 2007 (CBO 2007).

Babcock (2007) considers the market situation for program crops without the full complement of commodity programs, under 2002–05 market conditions. When all programs are removed simultaneously, Babcock estimates that there would be relatively little readjustment in acreages for the grains and oilseeds and little overall reduction in production. The price of corn would have been 1.1 percent higher; the price of soybeans, 0.4 percent lower; the price of wheat, 0.6 percent higher; and the price of rice, 1.7 percent higher. Only for cotton would the effects remain relatively large: an increase in price of 9.7 percent. Overall, these are small effects for payments that averaged \$16 billion per year in this period, amounting to about 25 percent of the market value of the commodities supported. Prices rise as production falls in most cases, with a slight price decline for soybeans because of a shift of acreage from corn. The effects are small because of the presumed minimal supply response to them in the analysis carried out. This means that buyers of commodities that receive payments will not pay much more if commodity programs are ended. Taxpayers will pay much less, and the losses will accrue in the supply side of the markets.

On the supply side, losers include farmers, landowners, and owners of other resources used in farm production. Direct payments and countercyclical payments are directly tied to specific farms with program base. Therefore landowners would be expected to reap gains from these payments. Subsidies to output are expected to accrue to suppliers of inputs according to the effects on the demand and supply of these inputs. Direct evidence of these incidence effects is not available, but from analysis of agricultural input markets Alston (2007a) estimates that 20 to 45 percent of output subsidies ends up in the pockets of landowners, many of whom are also producers. The findings of Kirwan (2007) on the effects on land rental rates of payments tied to land are consistent with this range: suggesting that, at least in the short run, each of the main forms of commodity program payments accrue significantly to producers and suppliers of other farm inputs, as well as landowners.

These considerations are important because they determine who will feel the economic pain were the commodity support programs to end. It is clear that operators that grow program crops and landowners with program crop base will bear the greatest losses, as they are the chief gainers from the existence of the programs. Would their losses trigger wider economic problems in rural areas? The possibility has been raised of bankruptcies among farmers and consequent problems for rural banks and others with whom farmers do business. Several factors indicate that the risks of financial calamity with an end to commodity programs are actually quite low.

First, the ratio of debt to assets in U.S. agriculture is now historical low, with total farm debt at 13 percent of farm assets in 2005, as mentioned earlier. Farm real estate debt is \$120 billion: just 7.5 percent of the \$1.63 trillion value of farm real estate. If we suppose that \$8 billion annually (half of the \$16 billion in program payments from 2002 to 2005) would translate to a decline in the rental value of land, and that this loss was capitalized at ten times the rental value, the \$1.63 trillion would be reduced by \$80 billion to \$1.51 trillion: the kind of losses that occur to some business sector every year without triggering a financial crisis.

Of course, much farm real estate is not cropland that has program base, or is it in the part of the country where farm payments are most important. That suggests that any problems caused by the loss of farm real estate values would be regional. But, even here the problems are limited. For example, in Iowa much of the cropland has program base. Iowa averaged \$1.3 billion in payments per year in 2002–05, which, using the ratios above, would translate into a loss of land values of about \$6.5 billion. The value of Iowa's farmland was about \$102 billion in 2006. So the estimated loss in land value would be about 6 percent. Even if the loss were twice that estimate, land values would decline by only a little over 10 percent of the 2006 level. Furthermore, given that land values in Iowa have risen by over 50 percent between 2002 and 2006, the loss would simply offset a single year's gains during those years.<sup>5</sup>

Second, the majority of cropland is not owned by the farm operator who grows crops on it. Thus the losses would be spread over a substantially larger population than the farmers who own cropland. And, the farmers who own the smallest percentage of the land they farm are the larger commercial grain producers. These are farmers who in some cases do have large debts: for machinery and operating funds, more than for real estate acquisition. But loss of payments tied to land would be a smaller loss for them. Losses in the value of land they own would be offset by reduction in their payment for land they rent from landlords.

Third, small farms, which are the ones where the farmer is predominantly also the landowner, have still less dependence on farm income and land as an asset in their total wealth position, and have less real estate debt, than the larger, commercial farms. So an end to commodity programs would not trigger financial stress for them either.

Fourth, it is important to remember that the farm community will not lose nearly as much as taxpayers gain when payments end. In part this is because market prices will rise when surplus production induced by the program ends. Moreover, the government's costs of operating the agencies that operate the payment and support programs and the crop insurance programs are approximately \$3 billion per year (Glauber 2007; USDA 2007b). This is spending that puts nothing in the pockets of farm operators, landowners, or other agricultural interests, and so will not be missed by any of them. Still further, raising the taxes (or increasing the deficit that will have to be covered by future taxes) to fund commodity

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<sup>5</sup> Data from Iowa State University's Farmland Value Survey, which estimated the average value per acre at \$2,083 in 2002 and \$3,204 in 2006.



programs imposes costs on the economy through efficiency losses that are just as substantial for decoupled payments as for any other program spending. These “deadweight losses” of taxation at the margin have been estimated at 20 cents per dollar of revenue raised as a conservative estimate (Ballard, Shoven, and Whalley 1985). Thus an end to \$16 billion in annual budgetary cost of farm programs (including crop insurance) will generate an additional \$3 billion in real gains to the U.S. economy.

Fifth, the present time is propitious for an end to programs because of the strength of commodity markets and the expectation that the strength will continue over the next decade. The increased financial caution of farmers and other investors in agriculture since the 1980s has meant that land prices have only recently returned to their nominal levels of 30 years ago. From current levels, the projected strength of grain markets attributed to expected future demands for bioenergy is likely to increase the value of cropland. In this environment, an end to farm programs will not mean \$16 billion less per year, but rather less than half that, because the only loss is that of direct payments. This loss would perhaps place a damper on the enthusiasm with which current optimistic market expectations are raising already high land prices even higher. This last point is perhaps most important in sealing the case for reform now.

### **The Long Term with a Free-Market Agricultural Policy**

Over the longer term (beyond the 8 to 10 years of the baseline projections discussed earlier), the downsides of an end to commodity programs will be lessened, and the upsides heightened, for all American economic interests. First, the United States would be in a better position to obtain improved access to foreign markets for U.S. agricultural products, a more promising source of income for U.S. farming than government subsidies could hope to provide—as argued in the papers of Sumner (2007b) and Josling (2007).

Second, while current programs have already eliminated many of the inefficiencies generated by past excesses in commodity market management and supply control, these features persist in dairy and a few other commodity market interventions, and support prices still distort market signals significantly in cotton, sugar, and cotton. An end to these relics of past mismanagement would permit improved efficiencies that would benefit consumers and taxpayers, and quite likely producers too. That U.S. farm commodity producers have nothing to fear from free markets has been demonstrated by the success of those parts of the U.S. agricultural economy that have never relied on commodity programs, notably livestock, hay, and the collection of fruits, vegetables, and other commodities that sometimes go under the label of specialty crops (see Paggi 2007). Farmers have responded to value-added and other sales opportunities such as organic production that have enabled them to prosper without any significant subsidies of the kind that commodity programs have provided.

Table 1 shows that farming in states with high reliance on government payments—those states with agriculture production concentrated in grains, oilseeds, and cotton—is not more profitable than farming in states with little reliance on government payments. California and Florida produce relatively little of the program crops and receive little in government payments relative to the size of their agricultural output. Agriculture in Iowa, Mississippi and North Dakota is devoted much more to grains, oilseeds and cotton and receives a much larger share of government payments relative to the value of their farm output. But, agriculture is no better off in the states with high government payments in terms of net farm income relative to

the value of total agricultural output, or in terms of net farm income per farm in the state.  
 <<insert table 1 near here>>

**Table 1. Government Payments and Net Value Added, Selected States, 2000–05 Average**

	California	Florida	Iowa	Mississippi	North Dakota
Share of value of ag. production from cotton, grains, and oilseeds	0.06	0.01	0.43	0.24	0.54
Ratio of government payments to value of ag. production	0.02	0.02	0.12	0.16	0.19
Ratio of net farm income to gross value of production	0.25	0.36	0.21	0.32	0.25
Net income per farm (\$thousand)	95	60	33	31	33

*Source:*

USDA, Economic Research Service, Farm Income Data Files,  
<http://ers.usda.gov/data/FarmIncome/finfidmu.htm>.

USDA, 2002 Census of Agriculture,  
[http://www.nass.usda.gov/Census\\_of\\_Agriculture/index.asp](http://www.nass.usda.gov/Census_of_Agriculture/index.asp).

Third, the funds now expended could be returned to taxpayers or turned to other public goods that have benefits greater than their costs. This could occur in the short run as well as the longer run, but in the long run agricultural policy reform would be notable as an element in a broader program of balancing the federal budget and returning to a more limited government that would involve reform in many areas of government spending. Agriculture is only a small part of the federal budget—but it is representative of, and a long-standing contributor to, a political culture of wasteful spending directed at special interests. The recent Iraq spending bill, which depended for passage in the House of Representatives on the inclusion of billions of dollars of special funding for peanut storage, Midwest drought payments, and spinach growers, among other agricultural interests, is an example of how individually small programs coalesce to a multibillion dollar aggregate of economic mischief. A principled end to commodity programs would over the longer term go a long way toward curing this economic ill.

Finally, the experience of other countries, as described in the paper by Alston (2007b), is heartening in its demonstration that the almost complete end of formerly highly protectionist policies in Australia and New Zealand have worked out well after a period of adjustment. These reforms have been in place for thirty years now in the case of New Zealand. Despite being implemented in a period of farm financial crisis, exacerbated by European and U.S. export subsidies depressing the world markets for their farm products, the

experience in both New Zealand and Australia has been positive. Consumers and taxpayers have clearly gained, and producers' incomes have grown, and they are not asking for a return of governmental protection from market forces. This is further support for the belief that after U.S. commodity support programs are gone for a time, our producers will not want them back either.

### **Answers to Some Objections**

It is natural that proponents of current farm programs are plentiful, since payment recipients face potential losses if these programs were ended—at least in the short run. But, whether fueled by self-interest or public interest concerns, other participants in the political process have also voiced arguments in favor of retaining current U.S. farm programs. Sumner (2007a) outlines a dozen rationales for offered by farm program supporters; a few of these were introduced in the first section in this overview. They can be summarized as a list of alleged market failures: persistent characteristics of the market environment that warrant government intervention, some argue. These failures would negate the efficiency gains that this overview has suggested would flow from ending the programs, supporters of farm program argue.

Supporters of the status quo argued the following points:

- Farmers cannot be expected to cope with the uncertainty and variability that unregulated markets generate.
  - Food has special characteristics as a good necessary to health and survival that calls for a government regulatory role.
  - Farmers cannot earn fair returns in unregulated commodity markets because of special characteristics of farming, the regulations they face, or the market power of companies that buy farm products.
  - Foreign governments through their policies impose costs on U.S. agriculture that call for a U.S. policy response.
  - In unregulated markets, only large, industrial farming would survive and there is social value in preserving small-scale, diversified, low-technology farming.
- These objections are taken up in turn.

**Dealing with Variability and Risks in Agriculture.** There is no doubt that agricultural prices and yields are variable from year to year. Farmers well understand such variability and take measures to reduce the implied income variability, including recognizing that low yields often engender higher prices—so for many farmers, market conditions create a natural hedge. Nonetheless, uncertainty and variability are undoubtedly serious issues for farmers for two reasons. First, variable returns can cause mistakes in allocating resources. Second, variable incomes can cause problems for household consumption. The question is whether remedies through farm policies are a better solution than private markets can provide. Those farm programs aimed at price variability have focused on government acquisition and storage of commodities at guaranteed minimum producer prices, idling acreage in years when commodity stocks have become large, and providing payments that establish a floor for producers, while letting market prices decline to equate supply and demand. The first two of these approaches have already been deemed a failure by a sufficient political coalition of buyers and producers of farm products, for reasons described earlier. Payments to farmers in

years of low prices are better accepted politically, but as discussed, their actual effect on stabilization of agriculture is limited and their economic costs are unacceptably high.

Insurance programs aimed at crop failure and other forms of output risk can be better targeted at risk management as opposed to income transfer, but, as discussed in depth in Glauber (2007), these programs have huge costs for the small risk reduction they have achieved. In 2005, farmers received \$3.1 billion in indemnity payments and paid \$2 billion in insurance premiums, so they experienced a net gain of \$1.1 billion in protection against risk from these programs. However, the government's premium subsidies, payments to insurance companies, and administrative costs added up to \$3.0 billion. So the taxpayers paid \$3 for every \$1 in protection given to producers. This experience is typical of recent years and can be expected in the future.

Not only are these programs hugely inefficient, but there are private insurance markets for many agricultural risks—and there would be more if government-subsidized and regulated insurance did not provide unbeatable competition. In addition, forward pricing and futures markets provide price risk protection that many farmers use. Perhaps the most effective risk management tools in commercial agriculture today are contracting arrangements with farm product buyers—prevalent in broilers, eggs, processed and fresh fruits and vegetables, and increasingly, in hogs and cattle—where growers are paid agreed-upon prices or service payments, plus incentive payments for delivery of specified commodities. Finally, there is no reason to believe that governmental provision of subsidized risk management is more appropriate or necessary for agriculture than for any other industry.

**Food Security and Price Stability.** The argument that food is special is associated with the fact that U.S. farmers produce the raw materials for a low-cost, reliably supplied, and generally safe supply of food for consumers. This sterling performance is a fact, but the association of this success with commodity programs is not. Again there is abundant evidence, by contrast, between the large segments of U.S. agriculture that do not have program protections and the commodities that do. Supplies of unregulated crops and meats are no less reliable in supply or quality than the subsidized commodities. Furthermore, there is no evidence that imported foods are any less secure than domestically produced food. The United States has not been plagued with tainted coffee, bananas, or winter vegetables, nor are imported Canadian wheat or Mexican tomatoes any less reliable than supplies from North Dakota or California. The mantra of the United States in urging other nations to open their food markets to our exports is that imports are just as reliable as domestic production, and diversified imports are probably more reliable.

In addition, farm costs account for less than 10 percent of the retail value of food for the subsidized crops. The feed grains, such as corn and barley, and oilseeds, such as soybeans, enter the food supply only as feed for livestock or in highly processed food products. Wheat, the most important food grain, goes through the baking, pasta, or processed cereal industries before reaching the retail market and, of course, the cotton subsidy has no relation to food consumption. Finally, most of the consumer food budget is spent on foods that receive little or no support—and there is no more concern about security of access to oranges or pork chops than there is about access to corn flakes.

The general surge in farm prices in the mid-1970s raised alarms for some about the potential jump in food prices. What did the commodity programs—which at that time were more geared to stabilization and stockpiling than today, and so made more difference in the

stability of food prices than today's payment programs—accomplish in this situation? Very little. The stocks did not appreciably slow the price rises, and U.S. policies quickly turned to grain export controls to keep commodities at home rather than being shipped abroad. This had little effect, too, according to USDA's assessment after the fact (USDA, ERS 1986), but the farm community's spirited objection to policies that would attempt to hold prices down prevailed to an extent that "no grain embargoes" become a mantra of candidates for national political office for thirty years afterwards. In short, U.S. agricultural policy has never been effective at food price stabilization, and simply cannot do this job. We have learned not to rely on government to keep prices low when market conditions call for them to be high; now it is time for us to stop trying to keep prices high when market conditions call for them to be low.

**Farmers' Lack of Market Power.** A longstanding concern of farmers has been that agricultural product prices are lower than they should be because of the market power of processors and others who buy farm products. This concern has been recognized in the past by special allowances for farm marketing cooperatives and antitrust action against meatpackers and investigations of big grain companies. Brester and Smith (2007) review the area where these concerns have been expressed most intensely in recent years: in livestock slaughter and contacting of processing firms with livestock growers. The number of competing buyers for the output of a typical livestock producer is declining at many locations and for several categories of animals, but Brester and Smith show that the lower costs of larger firms offset any increase in marketing margins that lessened competition might have engendered. Nonetheless, there is a legitimate role for USDA's Grain Inspection and Packers and Stockyards Administration, along with the U.S. Department of Justice and the Federal Trade Commission to play in this area. It is not a promising approach, however, to have commodity support programs for livestock on this basis, and producers have no interest in such support. The existing commodity programs have no ability to target imperfect competition in the products they cover.

**Harm to U.S. Agriculture Due to Other Countries' Actions.** Foreign governments, more obviously than domestic food processors, have taken actions that have harmed the interests of U.S. farmers by reducing market outlets for their products. They do this through import restrictions against products from the United States and domestic and export subsidies to favor their own. Combating these efforts is an important task for the U.S. government, as discussed further below, but maintaining our own restrictions and subsidies generates costs greater than the benefits, taking a bad situation and making it worse instead of better. Removing U.S. subsidies would remove one rationale that other countries use to justify their own subsidies and trade barriers. Furthermore, as other countries have challenged the price-depressing impacts of U.S. programs, the United States is also free to use World Trade Organization (WTO) procedures to challenge programs of other countries deemed to be in violation of their international obligations.

**Promoting Small-scale Farming.** The idea of agricultural policy to promote traditional small-scale family farming is often repeated but is unrelated to the farm programs that now operate in the United States. Hence even if one accepts the appeal of a return to some version of the historical roots of family farming, this line of objection to free market agriculture does not improve the case for current programs. As shown above and, for example in Kirwan

(2007), the current farm programs reward farms roughly in proportion to their output and in most cases are roughly neutral to farm size and technology. They do tend to reduce the incentive for traditional livestock and crop mixed farming, and by leaving out specialty crops, reduce the further diversification of farm eligible for program payments. Of course, many participants in commercial agriculture would object strongly to farm programs that supported what they see as less efficient small-scale farm operations to the exclusion of the larger commercial farms.

*Payment Limits and Means Testing.* An often heard objection to current payment programs is that payments go to people who are rich and to farms that garner very large payments. This issue has been a staple of farm policy debates for four decades. The 2007 Farm Bill proposal from the USDA and several prominent Representatives and Senators have proposed various forms of means testing or payment limits as reforms of existing programs. The reform has obvious appeal if one considered the proper role of commodity programs to be welfare programs to help the needy. But, as noted above, farm program payments would need to be completely recast to target the farm poor or the farms that are in severe financial risk. From an efficiency perspective, it makes no sense to support high-cost failing farms and implicitly penalize successful operations. Clearly, a policy to foster a strong industry and efficient resource use would try to encourage low-cost production—not high-cost production.

Furthermore, as documented above, given the income and wealth of farm household both large and small, no welfare objective for farm program payments makes sense. But a policy to reach the farm poor could use income categories, as in the tax code. Indeed, an appropriate policy reform from this perspective would be end commodity supports and use some of these funds to provide payments along the lines of earned income tax credits for farm households with very low incomes. From that perspective, the cut off for payment eligibility would be in the range of \$20,000 to \$30,000 per household: not the \$200,000 adjusted gross income that Agriculture Secretary Mike Johanns has proposed. From the welfare perspective, why should farmers be treated differently from anyone else? That consideration leads back to agricultural policy as having industrial policy aims, not income redistributional aims. From that perspective, a focus on means tests or payment limits is a lame reform. The only sensible reform is a real one that eliminates the payments completely.

### **Some More Productive Roles for Government in Agriculture**

Let us turn now to productive roles for government in agriculture, ones that have better prospects of generating economic benefits that exceed their costs. Such efforts are now largely crowded out by the attention given to farm subsidies and the budget allocated to transfer payments.

**Agent of U.S. International Trade Interests:** Some other countries have hampered U.S. agriculture by placing restrictions on sales of U.S. farm products. . The U.S. government has the crucial and difficult task of eliminating these barriers wherever possible. Steps in this direction have been taken in World Trade Organization negotiations and in bilateral trade agreements between the United States and countries such as Chile, and in regional agreements such as the North American Free Trade Agreement (NAFTA) with Canada and Mexico, and the Central American Free Trade Agreement (CAFTA). However, these agreements in total

have taken only baby steps toward free trade as compared to what potentially could be accomplished, and they complicate broader free trade efforts. Of course, improvements in international trade arrangements cannot be accomplished without the United States being willing to remove or reduce its subsidies and allow foreign access to U.S. markets, notably the long-standing sugar import restrictions and the more recent tariff on imported ethanol.

Among the concerns are trade restrictions based on dubious claims of health or safety risks to plants, animals, or humans, such as bans on imports of beef and cattle from countries with minimal risk of mad cow disease and bans on genetically modified products in Europe and in developing countries. These are paralleled by U.S. insistence on modified domestic labor or environmental policies in other countries as a condition for importing their products into the United States. Reforms in these areas are important, but can be done only by improved federal policy, not a retreat from governmental involvement.

**Conservation and Environmental Improvement:** In the areas of conservation of soil and other natural resources such as endangered species, and environmental protection, the studies by Antle (2007), Heimlich (2007), and Kuminoff (2007) examine aspects of these complex matters. Evaluation of the Conservation Reserve Program, currently the largest conservation and environmental program, show that it has generated substantial benefits whose estimated value exceeds the program's considerable costs. What is perhaps surprising is that the main benefits are not reduction of soil erosion or improvements in water quality, but rather the provision of wildlife habitat. Heimlich (2007) develops a set of recommendations for targeting funds better to achieve environmental goals. The recommendations focus on more precise identification of land parcels and practices in the context of surrounding ecological conditions, unifying the current splintered set of programs, and better judging whether acreage retirement or altered practices on cropped acreage is most appropriate. With respect to land retirement, the issue is one of transition from the existing 10- or 15-year contracts to a more lasting structure of conservation, perhaps through purchase of permanent easements by which farmers give up rights to grow crops on certain acreage.

Other environmental concerns—such as poor water quality in the Chesapeake Bay, the Sacramento River delta, and the Gulf of Mexico; and broad-based issues such as global climate change—also relate to agriculture and are less well addressed by idling cropland. In general, the measurement of positive or negative environmental services from agriculture, and how they should be subsidized or taxed, is still an area of conceptual, empirical, and political uncertainties. Considerable additional analysis of both the benefits and costs is needed to inform public policy choices. Antle (2007) argues for a system of payments for ecosystem services that would replace current subsidy approaches. This would move the basis for policy beyond the interest-group politics of redistribution, to take advantage of the desire of farmers and other citizens to do the right thing with respect to conservation and environment while directing such efforts in the most productive ways.

**Advancing Bioenergy:** Bioenergy has become a central focus of the 2007 Farm Bill and is likely to be an agricultural policy issue for year to come. As shown in the paper by Miranowski (2007), the existing ethanol and biodiesel subsidies are not promising as a remedy for either the environmental or energy security objectives that have been used to justify them. Research and development spending in this area could prove productive, but should be undertaken with caution. The concern is that a new research and development focus

on bioenergy would drain funds from research areas of demonstrated success. Moreover, short-run applied research and demonstration projects are too likely to devolve into support for dubious prospects that would garner private investment if they had a strong likelihood of success.

**Promoting Rural Development:** Rural development, in the form of maintenance or growth of both agriculture-related and non-agricultural enterprises, has been an important contributor to the historical rise in farm household incomes. Studies by Renkow (2007) and Kilkenny and Johnson (2007) have investigated the possibilities for public investment or other policies in aimed at fostering rural development. Existing subsidy and investment programs have dubious prospects for meeting a benefit-cost test, as Renkow's paper shows. But Kilkenny and Johnson see scope for more productive federal efforts if they can be focused on public goods in truly isolated rural areas rather than private goods in towns near urban centers.

The possibilities for promoting traditional agriculture have been enlarged in the discussion of rural development to include direct sales of farm products to retail outlets or farmers' markets or buying clubs, value-added production on farms in which farmers take on some processing tasks, organic production, and increased roles for farmer cooperatives. Farms pursuing these paths are thriving in many parts of the country where consumers support the goods and service they provide. Should these sorts of activities be subsidized or promoted under federal farm policy? If reforms of current policies were to undertake these forms, the policies would not fit well under either of the two broad policy objectives stated earlier: the prosperity of agriculture as an industry, and the well-being of farm people. The tradition-minded objectives have more in common with policy for the arts or historical preservation: cultural policy better suited to local or state preferences, or if federal, through grants to states or local institutions to promote the traditions they hold dear.

**Enhancing Long-term Agricultural Productivity.** Some of the most cost-effective investments in U.S. agriculture have been in the areas of research and development and other services to protect and enhance agricultural productivity. Yet these investments have tended to be underfunded: in part because farm subsidy programs have captured the lions share of the agriculture budget. Moreover, such areas are unlikely to receive adequate investment from the private sector: precisely because they have elements of public goods. Within the narrow political calculus of the Farm Bill reauthorization, the specialty crops industries have made additional investments in protection from invasive species and additional funding for research the central features of their claims to redress the balance of Farm Bill attention across commodities, and a more general case along these lines can be made. A positive farm policy for the United States would improve agricultural productivity and competitiveness by cost-effective funding of basic infrastructure that would not receive adequate private sector investments. Such a policy could benefit consumers, producers, and the economy at large.

## **Conclusion**

The AEI studies have reviewed the evidence on commodity programs and other key elements of U.S. agricultural policy, and how these programs and policies fit in with the objectives of agricultural policy and the economic situation in rural America today. We conclude that while



there are productive roles for government to play in U.S. agriculture, the current focus on commodity programs is misplaced as a solution to problems that exist, and have imposed costs on taxpayers far in excess of the benefits they deliver to either rural America or the nation as a whole. The 2007 Farm Bill could take a significant step toward improving the nation's welfare by starting the process of eliminating those programs, and by adopting prudent reforms in crop insurance, conservation, bioenergy, and rural development.

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