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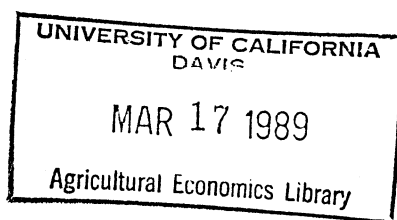
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**Impacts of Alternative Programs  
Indicated by the FAPRI Analysis\*\***

by

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*Agriculture--Economic aspects--Mathematical models*



65

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### Abstract

Four alternative agricultural programs are evaluated quantitatively for various agricultural sector, budgetary, and consumer impacts: (1) a continuation of the Food Security Act of 1985 (FSA85) largely as it has operated so far; (2) extending the marketing loan provision in FSA85 to wheat, feed grains, and soybeans; (3) the Administration proposal in the FY88 budget; and (4) the Harkin-Gephardt.

The evaluation included specific quantitative impact estimates for FY88 to FY91, and a more qualitative discussion of long-term impacts. The evaluation found substantially different impacts from the alternative programs on government cost, net farm income, level and value of agricultural exports, crop acreage planted, carryover stock levels, crop prices, program participant returns, and the livestock sector. For instance, under the Administration proposal, net farm income was projected to be lower by 20 percent or more annually from 1989 to 1991 compared to a continuation of FSA85 as it has operated so far. Under the Harkin-Gephardt Bill, increased food costs to consumers exceed farm income gains and government cost savings by \$25 billion by 1995 compared to a continuation of FSA85. Critical assumptions used in the analysis are discussed. Continued quantitative evaluation of policy options is urged, even though it is cautioned that the results should be viewed qualitatively.

## Introduction

Although the Food Security Act of 1985 (FSA85) has been in operation for less than one year, significant changes in the commodity program provisions are being suggested. Two specific proposals that have surfaced to date are from the Administration in the FY1988 budget, and the Harkin-Gephardt proposal. Both proposals, although differing in philosophy, imply substantial changes from the FSA85 in support to farmers, government cost, organization of commodity markets, consumer impacts, and other performance measures.

It is not likely that the U.S. Congress will seriously consider major changes in the FSA85 during the 100th Session. However, the two proposals in existence, and numerous other less comprehensive proposals offered so far, are not merely choices for this year. More importantly, they are part of a continuing debate on alternative long-term strategies for U.S. agricultural policy. Even if only marginal changes in current programs were to occur, they could be influenced by the long-term issues raised by the more radical approaches to regulation in the recently introduced proposals.

A third alternative evaluated in this analysis is the extension of the marketing loan provision in FSA85 to wheat, feed grains, and soybeans. The Secretary of Agriculture can expand the marketing loan to these three commodities under the current legislation. This alternative is consistent with the FSA85 philosophy, allowing market supply and demand to more fully determine commodity prices while protecting farmer income with target prices, deficiency payments, and marketing loan subsidies.

## Comparison of Program Provisions

The major difference between the FSA85 and the 1981 Farm Bill is the reduction of loan rates. In the FSA85, the Secretary has authority to reduce

the loan rates for feed grains, wheat, rice, and cotton by 25 percent, an action taken for the 1986/87 crop year. Also, higher acreage reductions were mandated by the legislation, and paid diversions were authorized at the discretion of the Secretary. A long-term conservation reserve was implemented as well to remove 40 to 45 million acres of erodible land from production during the five-year period of the legislation.

The approach to export enhancement in the FSA85 is largely through lower market prices, stimulated by the reduced loan rates and decreased government stocks. However, additional authority was given the Secretary for marketing incentives to counter anti-competitive activities of other major exporters of agricultural commodities. The Payment-in-Kind authority (PIK) of the FSA85 has been used extensively by the Secretary in managing the program during 1986/87. In this evaluation, it is presumed that PIK and the acreage reductions will continue to be broadly used as methods of reducing government stocks.

### **Marketing Loan**

As shown in Table 1, the extension of the marketing loan to wheat, feed grains, and soybeans requires the fewest changes in current farm program provisions. In fact, the only significant change is the extension of the marketing loan, which permits farmers to repay Commodity Credit Corporation (CCC) price support loans at market prices, if market prices are below the loan rate. The marketing loan was already mandated for cotton and rice in the FSA85. The extension of the marketing loan would allow market prices for feed grains, soybeans, and wheat to fall if current loan rates are holding prices artificially above market equilibrium levels. But, repayments cannot be less than 70 percent of the statutory loan rate. Thus, in effect, a new and lower support price is implied. Although it does not occur within the four year

Table 1. Comparison of Alternative Program Provisions with those  
in the Food Security Act of 1985

Policy Instrument	Marketing Loan	Administration Proposal	Harkin-Gephardt Proposal
Target Price	No Change	Reduce 10% Annually	Eliminate
Loan Rate	No Change	No Change	Raise to 70-80% of Parity
Loan Repayment	Can be Below Loan but not less than 70% of the stationary loan rate	No Change	No Change
Acreage Reduction	No Change	Offer the 0-92 Option (Decoupling)	Mandatory RAP and Paid Diversion
Payment Limitations	No Change	Reduce from \$250,000 to \$50,000 per farm	No Change
Long-Term Conser- vation Reserve	No Change	No Change	No Change
Export Programs	No Change	No Change	Require Cartel Among Current Exporters and Increase Food Aid
Import Programs	No Change	No Change	Require EEC-typ Tariffs or Quote to Protect Do- as mestic Markets Textile imports restricted to 1980 levels

analysis reported, the lower market prices could trigger lower loan rates in the following years, since the loan rates are computed as a percentage of the moving average market prices.

### **Administration**

The most important change in the Administration proposal is the 10 percent reduction in target prices for all program commodities in each crop year beginning in 1987/88. The purpose of this reduction is to lower the high cost of the deficiency payments and, accordingly, the budget exposure of the FSA85. The Administration also proposes to offer participating farmers the option of receiving 92 percent of the deficiency payment even if they elect not to plant any base acres. This "decoupling" provision is an extension of the 50-92 option already in FSA85. The more generous decoupling parameters provide an added incentive for farmers to take land out of production, which would further reduce supplies. A third major change proposed by the Administration is to decrease the limitation for direct payments and marketing loan subsidies from \$250,000 to \$50,000 per farm. This is designed to provide a more even distribution of benefits among program participants, but it is expected to decrease the number of diverted acres.

### **Harkin-Gephardt**

The Harkin-Gephardt Bill proposes the most dramatic change in policy, with higher domestic and international prices and larger production cutback requirements. Target prices would be eliminated. The loan rate would rise to 71 percent of parity in the 1987/88 crop year and thereafter by 1 parity point per year to reach 80 percent of parity by 1995/96. Market prices would be maintained at the loan rate, not by accumulating stocks but by mandatory

acreage set-asides. Livestock producers would be partially shielded from the sharply higher feed prices by receiving subsidized grain for a three-year transition period.

The national acreage allotment would be determined using projected domestic and export demand to form the basis for the yearly set-aside required of all producers. Maximum set-aside percentages in the Bill are 35 percent for the largest farms. These percentages decline to 15 percent for smaller soybean farms, 20 percent for smaller feed grain farms, and 25 percent for smaller wheat farms. Additional acreage reductions necessary to maintain the supply demand balance at the predetermined prices are obtained by mandatory paid diversions. The long-term conservation reserve program would continue to be implemented to a level not exceeding 45 million acres.

The Harkin-Gephardt proposal presumes a market-sharing cartel among current exporters to maintain higher prices in international markets. Cartel members would agree to export price levels consistent with U.S. support prices. Trade shares among exporters would be maintained at 1986/87 market levels. Increased food aid is proposed to lessen the high commodity price impacts on Third World importing countries. Import tariffs would be imposed for all crop, livestock, and dairy products to ensure parity price protection. Textile imports would be rolled back to 1980 levels as proposed in the 1985 Textile Bill.

#### **Comparative Evaluation of Program Options**

The analysis of the four program options was conducted assuming the same foreign and domestic economic conditions used in the FAPRI FSA85 projections. These assumptions and the detailed FSA85 projections are provided in FAPRI Staff Report #3-86. The macroeconomic conditions assumed are significantly



improved over the early 1980s, but not as favorable for agriculture as those of the 1970s. It is assumed that changes in domestic and foreign country agricultural programs evaluated here would not alter these macroeconomic conditions or the domestic agricultural policies in major importing countries.

### **Government Costs**

A major motivation for proposing changes in the FSA85 was current and projected annual program costs of \$20 to \$25 billion. The general effort to reduce the budget deficit has brought about specific pressure to limit expenditures on agricultural commodity programs. The marketing loan increases government costs over the baseline in every year but one, and the average increase over the four-year period from FY88 to FY91 is \$1.0 billion (Table 2). The other two proposals--Administration and Harkin-Gephardt--reduce government expenditures compared to the baseline. The Administration proposal saves \$6 to \$7 billion in each of the last two years, and on average for the four years reduces costs by \$5.1 billion per year.

The Harkin-Gephardt mandatory program reduces government expenditures by as much as \$12 billion in FY89; but net savings are reduced to less than \$6 billion in the last year, since the cost of food aid exports rises. Compared to the baseline, the average cost reduction over the four year period is nearly \$9 billion per year. Thus, the mandatory program is less costly than the Administration program during FY88, FY89, and FY90, but more costly in FY91 and thereafter.

### **Net Farm Income**

A broad indicator of the well-being in agriculture is net farm income. Under the marketing loan proposal, net farm income is higher every year from

1988 onward and increases over the baseline by an average of about \$1.2 billion per year (Table 2). This increase is slightly more than the increase in government costs required by the marketing loan. The Administration proposal reduces net farm income every year, with an average reduction of \$4.0 billion annually for the period. The net farm income under the mandatory program is estimated to be more than \$17 billion higher than the FSA85 in the first year, 1987. The gains are much smaller in the next few years, since the livestock industry incurs losses due to the sharply higher feed costs. Over the evaluation period, net farm income increases over the baseline an average of \$12.2 billion annually.

#### **Level and Value of Agricultural Exports**

The level and value of agricultural exports are important for their contribution to the gross farm receipts and the U.S. trade balance. The combined volume of corn, wheat, soybean, and soybean meal exports is higher in the early years under the marketing loan proposal due to lower market prices, but falls below the baseline by 1990/91 as prices rebound. The Administration proposal generally leads to higher prices and slightly lower exports in the evaluation period. For the mandatory program, export volumes average 17 million metric tons below the baseline during this same period.

Because of the export cartel assumption and the increased export assistance in the Harkin-Gephardt proposal, the mandatory supply program offsets lower export volumes with higher prices; and export values rise to slightly above the peak year 1980/81. However, if the cartel fails, an average annual export subsidy of \$125 billion is required during the first four years to maintain U.S. baseline export volumes. The other two alternatives have export values similar to the base, with the marketing loan being slightly lower during the first three years and higher thereafter.

### **Crop Acreage Planted**

An aggregate measure of the degree to which available productive resources in agriculture are utilized is the acreage planted to feed grains, wheat, soybeans, cotton, and rice. This has implications both for societal costs of idle resources and for demand in the inputs industry. The acreage planted for these five program crops is similar among the marketing loan, Administration, and baseline options, although there are differences in the year-to-year levels. The mandatory program, however, requires a substantially larger cutback in acreage to accommodate the reduced domestic and export demands at the higher prices. This cutback averages 37.5 million acres per year over the crop years 1987/88 to 1990/91--in addition to the average of 75 million acres estimated to be idled annually under the baseline. A reduction of this size would be more than one third of the base acreage for corn, wheat, soybeans, cotton, and rice.

### **Carryover Stock Levels**

One of the major current problems, and a manifestation of the surplus condition in U.S. agriculture, is the large level of carryover stocks. A major objective of the FSA85 was to reduce these carryover stocks to normal levels. With the marketing loan proposal, the government can reduce stocks more quickly than under the FSA85, and this gap increases continuously over the evaluation period. The Administration program reduces stocks more quickly than the baseline in 1988/89 and 1989/90, but not in 1990/91. The reason for the 1990/91 result is that there are far fewer program participants, and the government has less opportunity to dispose of stocks through PIK payments. The mandatory program is designed to decrease stock levels more slowly than the

baseline in order to provide a food security reserve and a reserve for foreign-aid shipments.

### **Crop Prices and Participant Returns**

Factors that underlie the aggregate results can be illustrated by the patterns of farm prices and net returns to program participants. Data for the five program commodities are presented in FAPRI Staff Report #1-87. The extension of the marketing loan leads to lower market prices, but the returns to participants are essentially the same as under the FSA85 baseline. Except for soybeans, where net returns decline slightly, participant returns are protected by deficiency payments and marketing loan subsidies. Farm prices under the Administration proposal are slightly higher in most years due to reduced plantings and production, but net returns are substantially lower. Net returns under the mandatory program are substantially higher, since the percent increase in prices is proportionately larger than the reduction in planted acreage.

### **Livestock Sector Impacts**

Although the four policy options apply primarily to crops and dairy, the livestock sector is significantly influenced. The evaluation of the FSA85 reported in FAPRI Staff Report #3-86 concludes that the livestock industry is likely to be destabilized by the current program management strategy. Artificially low feed prices in the early years resulting from large disbursements of government stocks (through PIK) generate high profitability for livestock and induce investment. The rapid buildup of livestock herds brings about a significant decline in livestock prices just as feed prices are beginning to rise at the turn of the decade. The policy induced boom and bust

cycle in the livestock sector is exacerbated under the marketing loan proposal. Feed prices are even lower and livestock profits even higher in the early years, followed by a greater cost-price squeeze by 1991. By contrast, the Administration proposal slightly moderates the livestock cycle.

Mandatory supply control has just the opposite set of impacts on livestock. In the early years, livestock sector profits are severely reduced, although cushioned somewhat by transition provisions. The sharply higher grain and feed prices result in a substantial liquidation of livestock herds. This increases supply and reduces prices in the short run but leads to lower production (about 25 percent for beef and pork) and higher prices in the longer run. Profitability returns to the scaled-down livestock sector three or four years after the implementation of the mandatory program.

#### **Implications of Key Assumptions**

For each of the policy options, critical assumptions were made regarding program provisions for which there is little historical experience. New policy ideas are difficult to evaluate because there is limited empirical evidence upon which to base the critical parameters describing the behavioral responses. The policies evaluated include assumptions that should be highlighted as a basis for drawing attention to areas of uncertainty about the projected impacts.

The FSA85 and the marketing loan proposal are designed to make the U.S. more competitive in the world commodity markets and capture larger shares of world trade in program commodities. A key assumption for the evaluation of these two policies is that major foreign competitors do not retaliate to the U.S. initiatives by changing their own domestic or export programs. For example, this assumption means that the European Community, as in the past, simply meets world prices by increasing its export subsidies. And, Canada and

Australia do not institute programs to protect their own producers or subsidize exports. If, in fact, U.S. competitors change their policies to protect export levels or market shares (as Canada has already done), the projected growth in U.S. exports and increases in U.S. market shares for the FSA85 and marketing loan are overly optimistic. In this situation, the United States would have more difficulty reducing stocks, and the program costs would increase.

For the Administration proposal, there is uncertainty about participation in the 0-92 (decoupling) option and the affect of reduced payment limits on commodity program participation rates. At average levels of yields and costs, the net return for participants in the 0-92 option is substantially lower than the net return to the regular participant. However, there are differences in conditions faced by individual farmers. A farmer who has good alternative employment opportunities or very low land productivity may find this option attractive. Our estimates are that the 0-92 option will reduce 1988/89 plantings 5 million acres for wheat, 4 million acres for corn, and 0.5 million acres for rice. In later years in the evaluation period, fewer acres are idled under the 0-92 option, since lower target prices imply lower payments. By 1990/91, the impact of 0-92 on acreage is estimated to be insignificant.

The response of program participation rates to the reduced payment limits under the Administration proposal is also a subject of great uncertainty. It is clear that the reduced limit will have a greater impact on cotton and rice, since a greater proportion of these producers fall into the group now receiving payments of more than \$50,000 per year. However, these producers historically have found ways to deal with payment limitations. The estimate is that the change in payment limitations alone will reduce 1988 participation rates by 4 percent for corn, 5 percent for wheat, 10 percent for rice, and 10 percent for

cotton. Impacts of the payment limitation will be smaller in later years, since lower deficiency payments will leave fewer farmers in the high payment category.

For the Harkin-Gephardt proposal, the critical assumption is the market-sharing cartel among the exporting countries. For the export cartel to be effective, all exporters would have to agree to sell their products at prices consistent with the U.S. loan rates, and they would also have to agree to maintain market shares at 1986 levels. This reduces the effect of the high prices on U.S. export levels, since the only permitted adjustment is in supplies and consumption of importing countries. The response of the importing countries to these higher prices is also muted by the fact that the United States would substantially increase food aid shipments to developing countries. The effective price to developing countries would be lower than the established export prices. By 1990/91, such export donations are set at 16 percent of corn exports and 39 percent of wheat exports compared with about 2 percent and 12 percent, respectively, in the baseline.

There is serious doubt that it would be possible to organize and enforce the cartel. If the cartel assumption is removed, there would be two alternatives for the United States. One is to have no export enhancement policy, in which case U.S. exports would drop at least twice as rapidly as they do under the cartel assumption and eventually disappear. The result would be a U.S. agriculture serving only the domestic market. In this event, much larger acreage reductions would be required over time to compensate for the reduced utilization.

A more likely possibility, and an assumption of an earlier version of the mandatory plan, is to employ a two-price system and subsidize exports. This

policy is much like that of the European Community, where export subsidies are set to dispose of production exceeding domestic use and stocks targets. If a two-price system were used to assure the level of exports in the FSA85 baseline, it would eliminate the need for a paid diversion but result in substantial costs. The cost of the export subsidy for the two-price scheme is about \$11.2 billion in FY88 and increases to about \$14 billion by FY91. By FY95, the estimated costs of the export subsidy exceed those of the FSA85 by nearly \$10 billion (Table 2). These rising costs are due to the rising level of exports and to the increasing differential between the parity-based domestic prices and the baseline world price.

#### **Long-Term Implications**

As indicated by the previous discussion, the long- and short-term implications of policy choices are sometimes quite different. For example, the Harkin-Gephardt proposal with the export cartel is less costly to the government than the FSA85 and the Administration proposal for the first four years. However, in FY91 the cost of the Harkin-Gephardt proposal begins to surpass that of the Administration proposal, and by FY95, it is approaching the cost of the FSA85 (Table 2). The cost of the mandatory program would be likely to rise in subsequent years, while the costs for the other alternatives evaluated would decline.

A crude measure of the comparative net benefits to the economy of the programs is to sum the farm income gains and the government cost savings and compare them with the increase in consumer food expenditures. In the first three years, compared to the baseline, it is estimated that the gains in farm



Table 2. Short- and Long-Term Impacts of Policy Options Compared with the 1985 Food Security Act

	Marketing Loan		Administration		Harkin-Gephardt	
	Proposal		Proposal		Proposal	
	1987-90	Average 1995 <sup>a</sup>	1987-90	Average 1995 <sup>a</sup>	1987-90	Average 1995
<b>Payments &amp; Subsidies</b>						
(bil \$)	+1.4	-	-4.1	-	-7.1	-5.6
<b>Government Cost<sup>b</sup></b>						
(bil \$)	+1.0	-	-5.1	-	-8.9	-0.8
					-4.6*	+9.8*
<b>Net Farm Income</b>						
(bil \$)	+1.2	0	-4.0	-	+12.2	+39.7
<b>Export Volume (mnt)</b>						
	+0.8	0	-1.8	0	-17.2	-32.2
					0.0*	0.0*
<b>Export Value (bil \$)</b>						
	-0.5	0	-0.1	0	+10.4	+21.9
					0.0*	0.0*
<b>Acreage Planted (mil)</b>						
	-1.7	0	-0.9	+	-37.5	-55.9
					-25.2*	-28.8*
<b>Carryover Stocks</b>						
(mil. acre equivalents)	-8.1	-	-3.4	0	+1.8	+8.6
<b>CPI Food (% change)</b>						
	-1.6	0	0.1	0	+ 3.2	+14.4
<b>Food Expenditures</b>						
(bil. \$)	-2.1	0	0.1	0	+12.0	+65.5

\*Cost, exports, and acreage planted levels if the cartel fails and export subsidies are used to maintain baseline export volumes.

<sup>a</sup>Analysis was only carried out five years. The symbols "-", "+", and "0" indicate the authors judgement that the level would be lower, higher, or about the same in a 10-year analysis.

<sup>b</sup>Government cost averages are for fiscal years 1987/88 (FY88) to 1990/91 (FY91).

income and cost savings exceed the additional consumer costs by about \$10 billion per year. However, beginning in 1990, as higher livestock and other food prices are passed on to consumers, the increased consumer costs exceed the gains to farmers and the federal treasury. By 1995, the increased costs to consumers exceed the gains to farmers and the government by about \$25 billion (Table 2). This measure understates the net cost of the Harkin-Gephardt proposal to society, since it does not include the reduction in consumer welfare due to shifts to less desirable food bundles.

If the marketing loan option had been evaluated over this additional five-year period, it is likely that the market prices would have recovered more rapidly than under the baseline and that government costs would therefore have declined at a faster rate (Table 2). The reason for this anticipated outcome is that carryover stocks for feed grains, wheat, and soybeans are reduced more rapidly under marketing loan in the early years of the evaluation. Net farm income, export volumes and values, and planted acreages are not expected to differ much from the baseline in the long term.

Under the Administration proposal, which decreases target prices by 10 percent annually, the reduced acreage and paid diversion programs could be completely phased-out over the five-year period from 1991 to 1995. Target and market prices for the program crops converge rapidly. For cotton, the farm price is already above the target price by 1990/91. For wheat and corn, deficiency payments are projected to be eliminated by 1992/93. Thus, the long-term conservation reserve would remain as the only significant acreage reduction mechanism by the early 1990s. At this point, the only significant government cost for agriculture would be the long-term conservation reserve and the nine-month commodity loan program. Thus costs are likely to continue

to remain below the baseline. Net farm income levels under the Administration proposal would probably not return to baseline levels until the mid to late 1990s. The long-term levels of export volumes and values and stocks are not clear, but may not differ much from the baseline. Planted acreages are likely to be higher in the absence of acreage reduction program participation.

### Conclusions and Implications

The Food Security Act of 1985 evolved from a long debate over whether or not to move U.S. agriculture quickly toward a free-market system, and how much to protect producers relative to the 1981 legislation. The result of the debate was a compromise among interested parties that called for relatively rapid declines in price support levels coupled with a slow decline in target prices to protect producer income. The apparent philosophy behind the program was that U.S. agriculture should move toward a more market-oriented posture in world markets and that the risk should be borne primarily by the government budget (taxpayers) rather than by farmers. If export markets were to respond quickly, as some had expected they would (and as suggested by the budgeted cost of the FSA85), then government costs would have quickly diminished as market prices increased. If, on the other hand, export markets responded slowly (as has been the case), farmers' incomes would be protected by continuing deficiency payments linked to the target price levels.

Two of the proposals evaluated deviate substantially from the compromise imbedded in the FSA85. The Administration proposal deviates by reducing the target price protection much more rapidly than what was agreed to in the current legislation. The Harkin-Gephardt proposal completely reverses the strategy for protecting farm income and implicitly rejects the idea that U.S.

agriculture can gradually can become more market-oriented. The market loan option, by contrast, can be seen as a more aggressive implementation of the philosophy of the FSA85. If export markets continue to respond slowly to declining prices, this more aggressive posture leads to increases in market shares and export volume but at even higher government costs.

Since the Administration and Harkin-Gephardt proposals depart significantly from the FSA85, debate over alternatives will involve the Congress in a serious discussion of the implied trade-offs. In the case of the Administration proposal, the major trade-off is between government budget outlays and net farm income. The structure of the current program, which relies heavily on deficiency payments to support farm income, and the high stocks and diverted acres position results in an almost dollar-for-dollar trade-off between government cost savings and farm income losses. The average net farm income loss from the Administration proposal is 15 percent annually, with annual losses from 1989 to 1991 of 20 percent or more. Clearly, a change of this magnitude in net farm income would exacerbate current farm financial problems and require a significant realignment of the political forces that brought about the bill.

The Harkin-Gephardt bill involves an even more complex set of trade-offs. It is clear that crop producers or owners of "production rights" would be the major beneficiaries of the higher income levels generated by this proposal. In the long-term, the cropland owners or production right holders benefit as higher net income levels are capitalized, raising land values. Providers of labor and management services would not benefit, since entry into these input markets is free and, due to the reduced output levels, there would be an initial surplus of both. There are also gains with respect to the government budget.

The costs of the Harkin-Gephardt proposal would be borne by a number of other sectors. Livestock producers in the United States and most other exporting countries would see sharp increases in feed prices, which would decrease profits substantially until the livestock sector adjusted. For the United States, it would take three to four years for profitability to return to the livestock industry as herds are cut and prices increase. Consumers in the United States, as well as in many exporting and importing countries, would pay higher prices for food. The degree to which the higher costs impact consumer well-being differs by income group. Lower-income consumers, who spend larger shares of their incomes on food, would be affected to a greater degree than higher-income consumers. At the other end of the food chain, the input industry would also be affected by substantially reduced planted acreage and associated input levels.

The policy options selected are broad in range but highly specific as implemented in the evaluation exercise. There are numerous incremental adjustments to these three options and the FSA85 that would have changed the outcomes. For example, in the case of the FSA85, increases in required acreage reductions required of participants, more rapid implementation of the long-term conservation reserve, or less aggressive use of PIK payments, which depress market prices and increase deficiency payments, could have reduced government costs.

Two-price schemes could have been used with either the voluntary or mandatory supply control programs. With the two-price schemes, farmers could have been given the alternative of producing exportable quantities strictly for the world market price. Although the Administration proposal includes a form of decoupling, a more complete decoupling scheme has been advanced by Senators Boschwitz and Boren. The latter proposal would provide farmers

income support on a phased, declining scale with no planting or acreage idling stipulations.

The purpose of this comparison has been to provide perspectives on consequences of the alternatives. As the specifics of the policies are changed, the outcomes would be different. Thus, carefully developed evaluation systems are important to both the design and implementation of policy. It is critical to quantify the assumptions and outcomes of the evaluation. But, even with these systems, projected future outcomes should be viewed qualitatively. The differences in outcomes identified by this exercise, the continuing frail financial condition of U.S. agriculture, the changes in technology, and the changes in policies of other countries emphasize the value of thorough empirical analysis to support policy debate.

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