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Comparative Analysis of Selected Policy Options for U.S. Agriculture

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Executive Summary

The Food Security Act of 1985 (FSA85) has been in operation for less than one year, but the high current and anticipated future costs of the program have led to numerous proposals for change. Three specific policy options were selected for a comparative analysis. The Administration and the Harkin-Gephardt proposals were selected because they are the first concrete proposals to be offered; and they represent diametrically opposing philosophies on the future direction of agricultural policy. The extension of the marketing loan program was selected as an option because it is a relatively minor but often discussed modification in the FSA85 that can be activated through a discretionary decision by the Secretary of Agriculture.

The three policy options are compared in terms of government costs, net farm income, crop exports, planted acreage, the livestock industry, and the consumer sector.

The marketing loan option merely extends to wheat, feedgrain, and soybean producers the option of repaying commodity loans at market prices below the loan rate. The Administration proposal contains a 10 percent annual reduction in target prices for program crops, the 0-92 decoupling option, and a reduction in payment limitations from $250,000 to $50,000 per farm. The Harkin-Gephardt proposal eliminates the target price, raises loan rates to 70 to 80 percent of parity, imposes a mandatory reduced acreage and paid diversion program, requires a market sharing cartel among exporters, and requires EC-type tariffs or quotas on imports.

- During the first four years, the marketing loan increases both government costs and net farm income by about 1 billion dollars annually. Export volumes increase slightly and values decline slightly. Since participation rates increase, planted acreage in corn, wheat, and soybeans decline by an average of 1 to 2 million acres per year. Carryover stocks are reduced more rapidly than under the current programs, so market prices are expected to turn around more quickly in the early 1990s, allowing government costs to decline more rapidly. The lower feed prices in the early years induce a greater investment in the livestock industry and lead to overproduction and more rapid price declines in the early 1990s.

- The Administration proposal leads to declines in both costs and net farm income of 4 to 5 billion dollars annually. During the first four years, planted acreage declines as a consequence of the 0-92 option and the reduced payment limitations. This leads to slightly higher prices, lower exports, and lower stocks. In the early 1990s, it is expected that target prices would be reduced to market price levels, so participation rates and costs would decline further and planted acreage would increase. It is expected that net farm income would be substantially below the baseline levels for several years, adding to the current financial stress problems in agriculture.

- The Harkin-Gephardt proposal would reduce costs even more than the Administration proposal in the first few years, but costs would rise in the early 1990s and nearly reach the cost of current programs by 1995. Net farm income averages over 40 percent higher during the first four years

and by 1995 is more than double the levels under current programs. Export levels decline by 20 to 30 percent, even under the cartel assumption, and planted acreage needs to be reduced by an average of nearly 40 million acres during the first four years and more than 50 million acres by 1995. By 1990, the cost savings and farm income gains are more than offset by increases in consumer food expenditures. By 1995 the losses to consumers in terms of food expenditures are more than 25 billion dollars greater than the farm income gains and cost savings. The other major distributional impact of the mandatory program is that the livestock industry faces a severe cost-price squeeze, while crop producers receive substantial income gains.

Numerous other options should be discussed and evaluated, including incremental changes in FSA85 provisions or program management. Every proposed change carries with it a set of trade-offs for those who may gain and those who may lose. It is of vital importance that everyone involved in the policy debate, at all levels, be well aware of the distributional impacts of proposed policy alternatives.

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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 announced on February 5, 1987. 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 possible that the U.S. Congress will not seriously consider major changes in the FSA85 during the 100th Session. However, the two proposals in existence, and others that may come later in the Session, are not merely choices for this year. More importantly, they are part of a continuing debate on alternative long-term strategies to be incorporated in U.S. agricultural policy.

The proposals already on the table reflect two very different philosophies for future agricultural policy. The changes in the current commodity program provisions may be incremental. However, these changes, if they occur, will 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 to wheat, feedgrains, and soybeans. This alternative can be viewed as tuning the FSA85 and, in fact, does not require new legislation. 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 and deficiency payments.

Comparison of Program Provisions

The major difference between the FSA85 and the 1981 Farm Bill was 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 45 million acres of erodible land from production during the four-year period.

The approach to export enhancement in the FSA85 was 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, feedgrains, 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 mandated for cotton and rice in the FSA85. The extension of the marketing loan will 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 lower support price is implied. Although it does not occur within the four year analysis reported, the lower market prices could trigger lower loan rates in the later 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 their 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 will result in 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 proposal seeks the most dramatic change in policy, with higher domestic and international prices and larger production cutback requirements. Target prices are no longer used to encourage program participation and regulate farm income. The loan rate is increased 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 are maintained at the loan rate, not by accumulating stocks but by mandatory acreage set-asides. Livestock producers are partially shielded from the sharply higher feed prices for a three-year transition period by receiving subsidized grain.

The national acreage allotment is determined on the basis of projected domestic and export demand; it forms the basis for the yearly set-aside.

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 for Wheat, Feedgrains, and Soybeans	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 Conservation 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-type Tariffs or Quotas to Protect Domestic Markets

Maximum set-aside percentages are 35 percent for the largest farms, declining to 15 percent for smaller soybean farms, 20 percent for smaller feedgrain farms, and 25 percent for smaller wheat farms. The set-aside is required of all producers. 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 continues to be implemented to a level not exceeding 45 million acres.

The Harkin-Gephardt proposal requires a market-sharing cartel among current exporters to maintain the parity prices in international markets. All exporters must agree to export price levels consistent with the U.S. parity prices. Trade shares among exporters are maintained at 1986/87 market levels. Increased food aid shipments are used to lessen the high commodity price impacts on Third World importing countries. Import tariffs are imposed for all crop, livestock, and dairy products to ensure that foreign products can not undercut the domestic parity prices.

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 baseline or FSA85 projections. These assumptions and the detailed baseline or 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. Changes in domestic and foreign country agricultural programs are assumed not to alter these macroeconomic conditions.

Government Costs

A major motivation for proposing changes in the FSA85 is 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. A comparison of actual and estimated annual government outlays for the three program alternatives to the baseline for fiscal year 1986 (FY86) to fiscal year 1991 (FY91) for grains, soybeans, cotton, and dairy is presented in Figure 1. 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 programs--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 (Appendix Table 1). The 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 as 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.

Table 2. Estimated Government Costs by Policy Option (billion $)

Policy	FY88-FY91 Average
FSA85	17.1
Marketing Loan	18.1
Administration	12.0
H-G Mandatory	8.2

SOURCE: Appendix Table 1--Feedgrain, Food Grain, Soybean, Cotton, and Dairy Costs

Table 3. Estimated Net Farm Income by Policy Option (billion $)

Policy	1988-91 Average
FSA85	29.0
Marketing Loan	30.1
Administration	25.0
H-G Mandatory	41.2

SOURCE: Appendix Table 2

Table 4. Estimated Export Volume and Value by Policy Option

Policy	------1987-90 Average------ Volume	Value
	(mmt)	(bil $)
FSA85	110.6	15.6
Marketing Loan	111.4	15.2
Administration	108.8	15.5
H-G Mandatory	93.0	26.0

SOURCE: Appendix Table 3--Grains, Soybean Equivalents, and Cotton

Net Farm Income

A broad indicator of the well-being in agriculture is net farm income (Figure 2). Under the marketing loan, net farm income is higher every year from 1988 onward and increases over the baseline by an average of about $1.1 billion per year from 1987 to 1991 (Table 3). 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, an average $4.0 billion annually. This net farm income decrease is $1 billion less than the average reduction in government cost. The net farm income under the mandatory program is estimated to be over $17 billion higher than the FSA85 in the first year, 1987. The gains are much smaller in the next few years, as the livestock industry incurs losses due to the sharply higher feed costs. Over the five-year evaluation period, net farm income increases over the baseline an average of $12.2 billion annually.

Level and Value of Agriculture Exports

The level and value of agricultural exports is important for its contribution to the gross farm receipts and the U.S. trade balance. The implications of these program options for export quantities and values are presented in Figures 3 and 4 and Table 4. The combined volume of corn, wheat, soybeans, and soybean meal exports is higher in the early years under marketing loan 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 lower exports in the early years. For these two options, exports rise approximately to 1983/84 levels by 1990/91. In the case of the mandatory program, export volumes barely rise above 1986/87 levels during this same period.

Because of the export cartel assumption 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. The other two alternatives have export values similar to the base, with the marketing loan being slightly lower during the first three years. The latter suggests that the increased volumes are not sufficient in the short run to make up in export value for the lower prices.

Crop Acreage Planted

An aggregate measure of the degree to which available productive resources in agriculture are utilized is the acreage planted to feedgrains, wheat, soybeans, cotton, and rice. This figure has implications both for societal costs of idle resources and for demand in the inputs industry. A comparison of planted acreages to the program crops is presented in Figure 5. The acreage planted for these five 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 (Table 5) in addition to an average of 75 million acres estimated to be idled annually under the baseline.

Table 5. Estimated Crop Acreage Planted by Policy Option (million acres)

Policy	1987-90 Average
FSA85	201.7
Marketing Loan	200.0
Administration	200.8
H-G Mandatory	164.2

SOURCE: Appendix Table 5--Corn, Wheat, Soybean, Cotton, and Rice

Table 6. Estimated Carryover Stocks in Acreage Equivalents (million acres)

Policy	1987-90 Average
FSA85	91.3
Marketing Loan	83.2
Administration	87.9
H-G Mandatory	93.1

SOURCE: Estimated from Appendix Tables 6 through 10 with carryover quantities divided by crop yield

Carryover Stock Levels

One of the major current problems and a manifestation of the surplus capacity 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. In Figure 6 and Table 6, effects of the four program options on carryover stocks are summarized by converting all stocks to acreage equivalents and adding them across the five major crops. With the marketing loan, the government can reduce stocks more quickly than under the FSA85, and this gap increases continuously through the evaluation period. The Administration program reduces stocks more quickly than in 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 government stocks through PIK payments. The mandatory program is designed to accumulate fairly high levels of stocks after the first few years 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 Appendix Tables 6 through 10. Figures 7 and 8, for corn, are representative of the general results. 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, the 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 increase in prices is larger in percent 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 imprudent investments. 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 boom and bust cycle in the livestock sector is exacerbated under the marketing loan (Figures 9 and 10). Feed prices are even lower and livestock profits even higher in the early years followed by a greater cost-price squeeze by 1991.

The Administration proposal and the baseline affect the livestock sector similarly. But mandatory supply control has just the opposite set of impacts on livestock. In the early years, livestock sector profits are squeezed, 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% for beef and pork) and higher prices in the longer run. Profitability returns to the livestock sector 3 or 4 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 are designed to make the U.S. more competitive in the world commodity markets and capture larger shares of world trade. A key assumption for the evaluation of these two policies is that major competitors do not retaliate to the U.S. initiatives by changing their own domestic or export programs. For example, this 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, 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 effect of reduced payment limits on commodity program participation rates . At average levels of yields and costs, the net return for participation 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 may find this option attractive. It is unlikely, however, that many farmers will choose the 0-92 option and essentially stop farming without an alternative job. Our estimates are that the 0-92 option will reduce 1988/89 wheat plantings by 5 million acres, corn by 4 million acres, and rice by 500 thousand acres. In later years in the evaluation period, fewer acres are idled under the 0-92 option, as lower target prices imply lower payments. And the impact of 0-92 on acreage is estimated to be insignificant by 1990/91.

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 over $50,000 per year. However, these producers already 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 is substantially 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 by many analysts that it will 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 perhaps 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. Figure 11 compares the estimated cost of the export subsidy necessary to maintain baseline export levels to the Harkin-Bephardt cartel proposal and the FSA85 cost. The cost of the export subsidy for the two-price variation is about $11.2 billion in fiscal year 1987/88 and increases to about $14 billion by fiscal year 1990/91. Thereafter, estimated costs of the export subsidy exceeds those of the FSA85, reaching about $26 billion by fiscal year 1994/95. These rising costs are due to the differential between the parity-based domestic prices and the baseline world price that increases with time, and to the level of exports that also rises.

Long-Term Implications

As indicated by the previous results, the long- and short-term implications of policy choices are sometimes quite different. For example, in Figures 1 and 11 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 fiscal year 1990/91 the Harkin-Gephardt proposal cost begins to surpass that of the Administration proposal and, by fiscal year 1994/95, it is approaching the cost of the FSA85 (Table 7). The cost of the mandatory program is projected to rise in subsequent years, while the costs of the other alternatives evaluated decline.

The results of a comprehensive evaluation of the mandatory program and the FSA85 are shown in Figure 12. A crude measure of the comparative net

Table 7. Short- and Long-Term Impacts of Policy Options Compared with the 1985 Food Security Act.

	Marketing Loan Proposal		Administration Proposal		H-G Mandatory Proposal*	
	1987-90 Average	1995	1987-90 Average	1995	1987-90 Average	1995
Payments & Subsidies (bil $)	+1.4	-	-4.1	-	-7.1	-5.6
Government Cost (bil $)	+1.0	-	-5.1	-	-8.9	-0.8
Net Farm Income (bil $)	+1.2	0	-4.0	-	+12.2	+39.7
Export Volume (mmt)	+0.8	0	-1.8	+,-	-17.2	-32.2
Export Value (bil $)	-0.5	0	-0.1	+,-	+10.4	+21.9
Acreage Planted (mil)	-1.7	0	-0.9	+	-37.5	-55.9
Carryover Stocks (mil. acre equivalents)	-8.1	-	-3.4	+,-	+ 1.8	+8.6
CPI Food (% change)	+,-	+,-	+,-	+,-	+ 3.2	+14.4
Food Expenditures (bil. $)	+,-	+,-	+,-	+,-	+12.0	+65.5

*See FAPRI Staff Report #2-87 for long-term impact estimates and more details on the Harkin-Gephardt proposal.

benefits to the economy of the two 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, related to the baseline, it is estimated that the gains in farm 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. 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. Other comparisons, shown in Table 7, indicate that the net farm income and export value gains continue to grow over time, and the export volume and planted acreage losses become larger.

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. The reason for this anticipated outcome is that carryover stocks for feedgrains, 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 a subsequent five-year period. 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 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 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 market support levels coupled with a very slow decline in target prices, protecting 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 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 budgetary costs would have quickly diminished as market prices increased. If, on the other hand, export markets responded slowly (as has been the case), farmer's incomes would be protected by continuing deficiency payments linked to the target price levels.

Two of the proposals evaluated here 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 imbedded in 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 trade-offs implied by these changes. 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, relying 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 is 15 percent annually, with annual losses from 1989 to 1991 at 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, as government program expenditures are reduced even more than under the Administration proposal in the short-run, although not in the long-run.

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 participant acreage reductions, 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 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 will be different. Thus, carefully developed evaluation systems are important to both the design and implementation of policy. 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.

FIGURE 1: GOVERNMENT COSTS

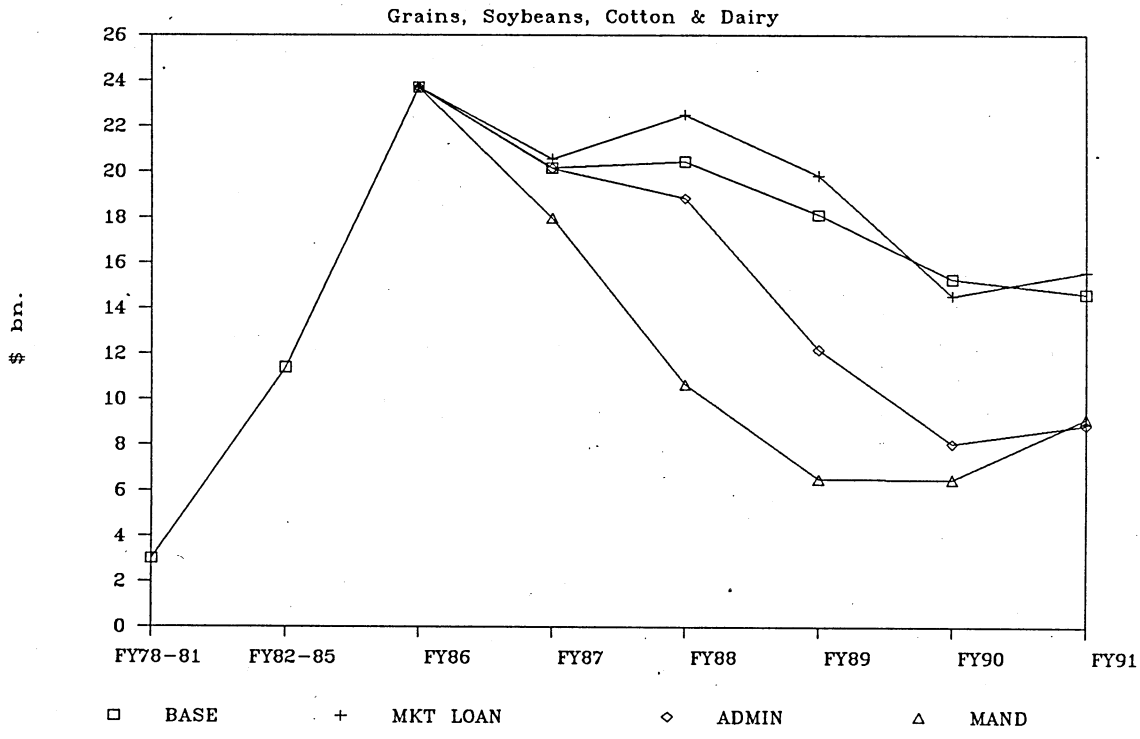


FIGURE 2: NET FARM INCOME

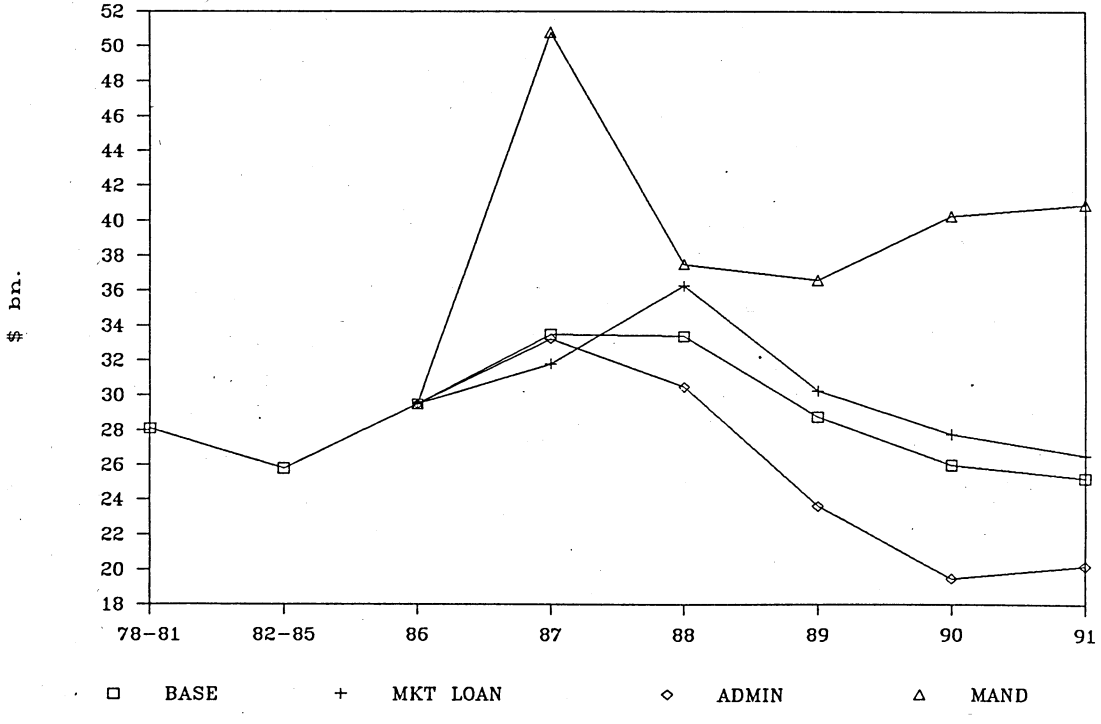


FIGURE 3: VOLUME OF U.S. CROP EXPORTS

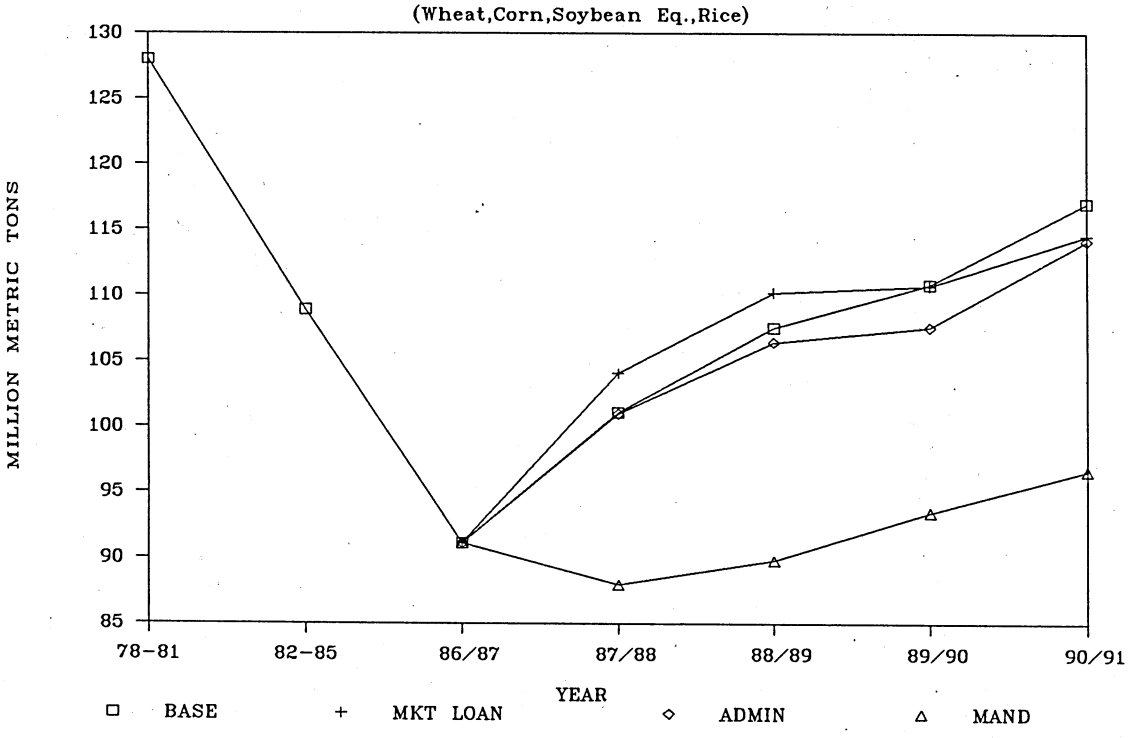


FIGURE 4: VALUE OF U.S. CROP EXPORTS

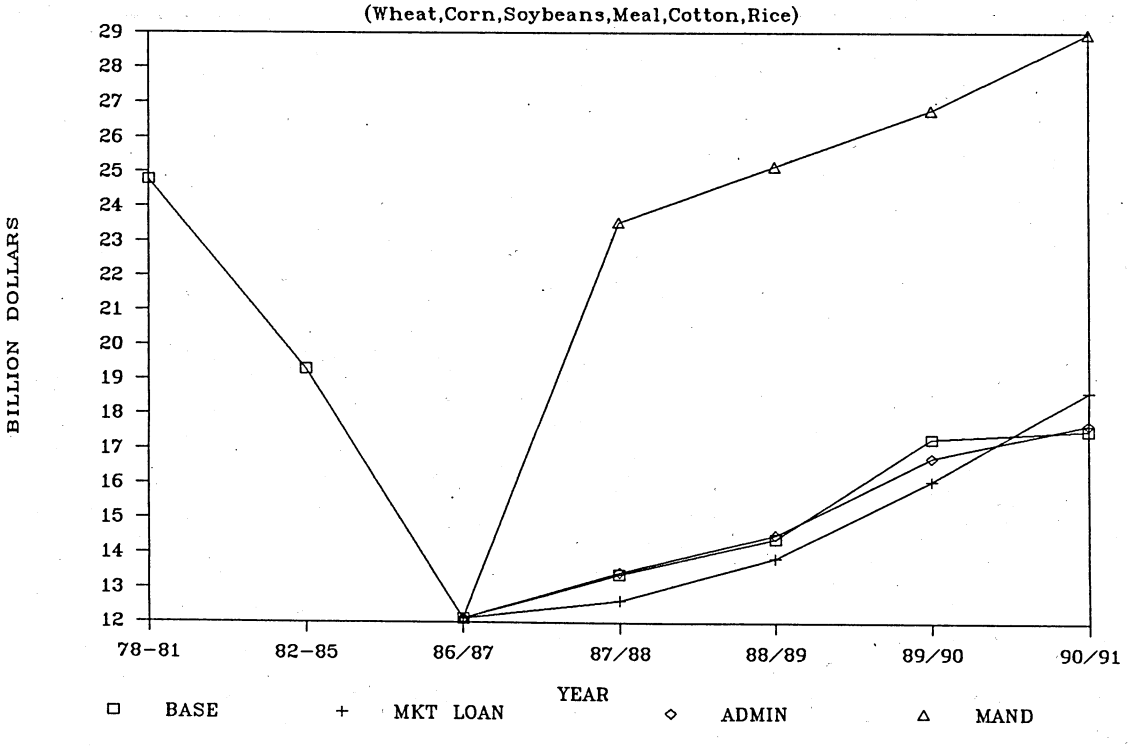


FIGURE 5: TOTAL CROP ACRES PLANTED

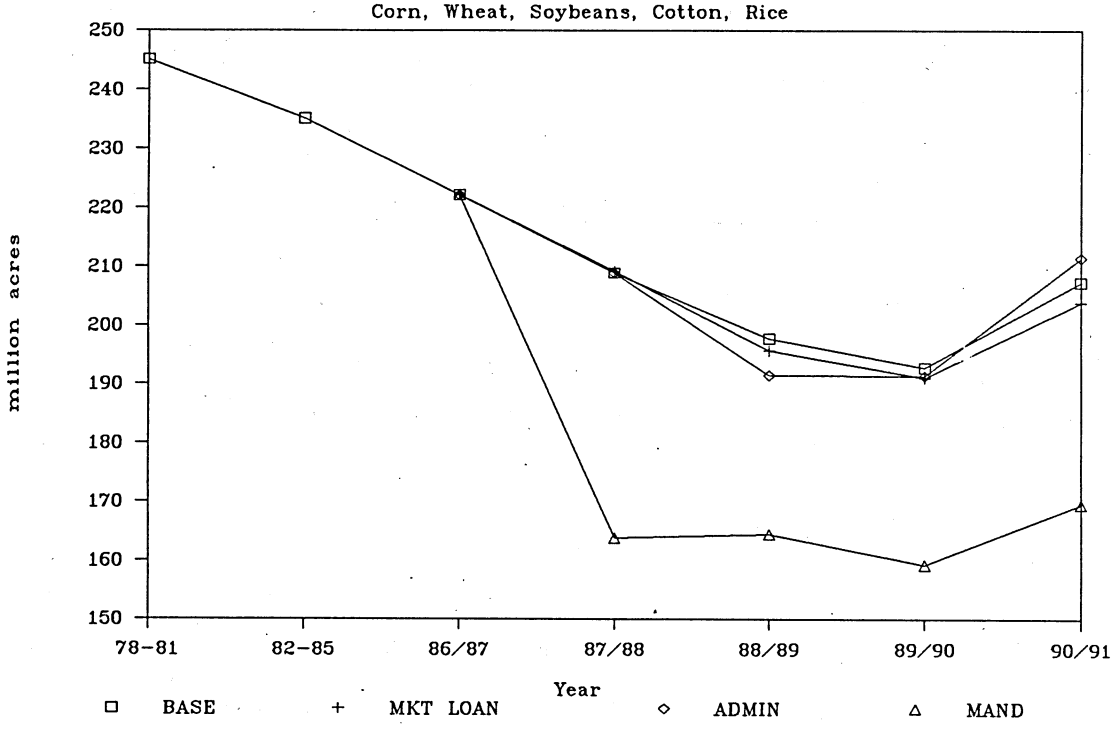


FIGURE 6: ENDING STOCKS IN ACRE-EQUIV.

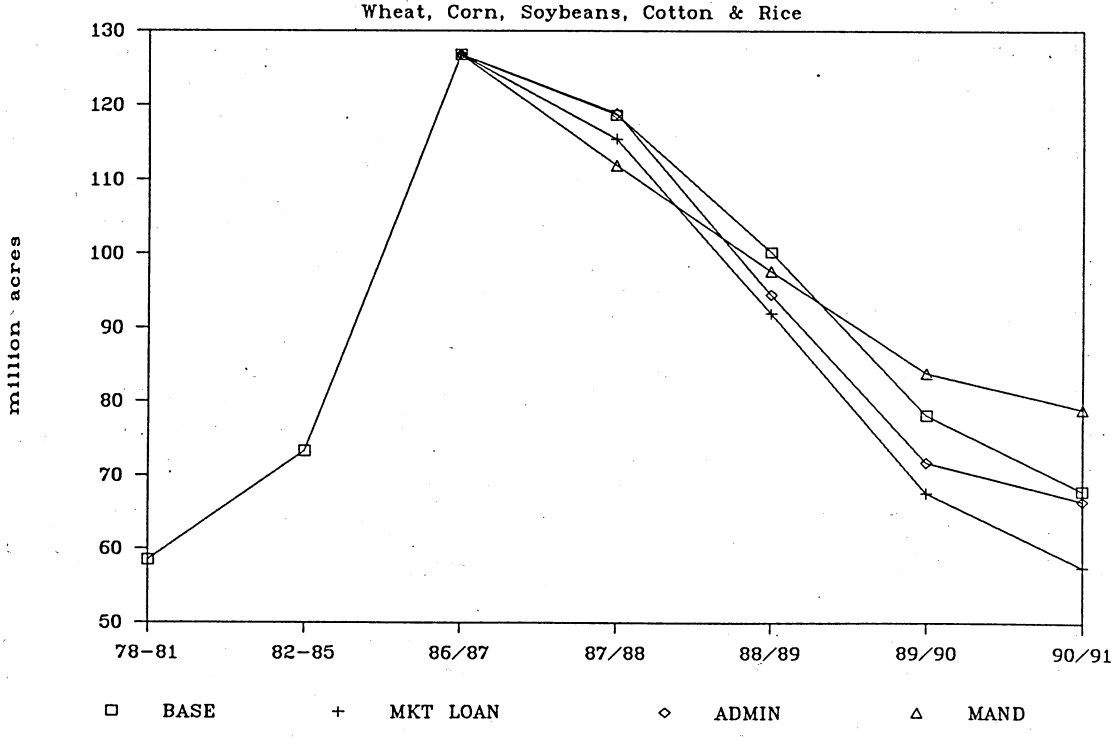


FIGURE 7: CORN PARTICIPANT NET RETURNS

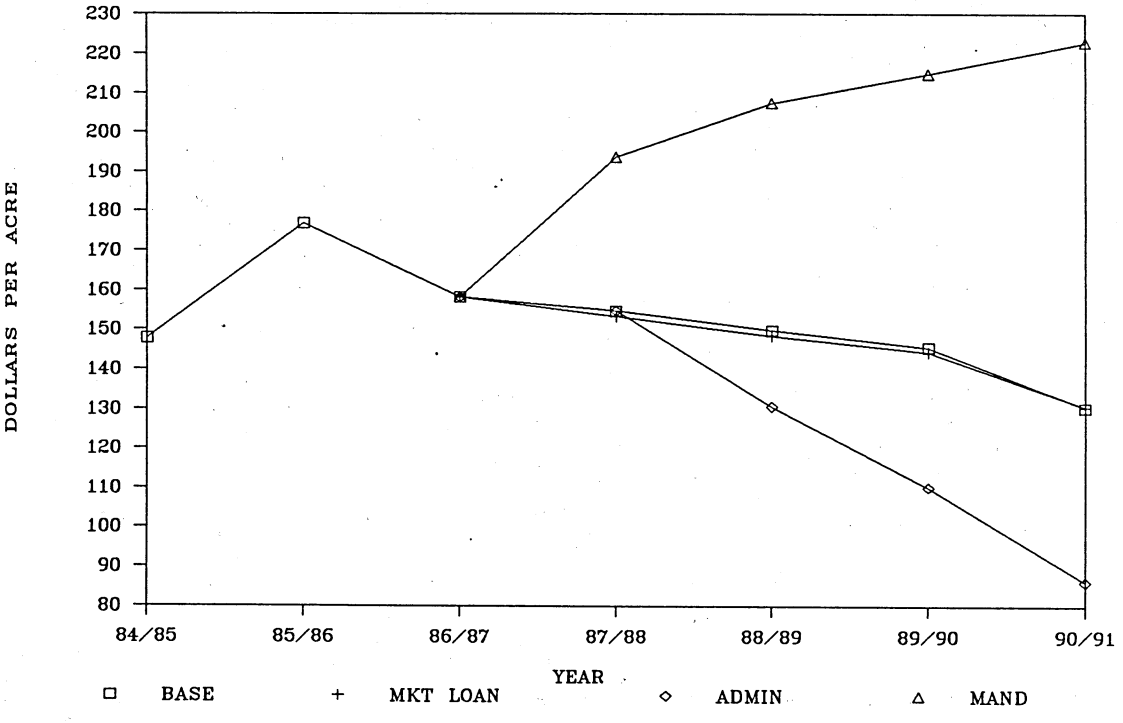


FIGURE 8: CORN FARM PRICE

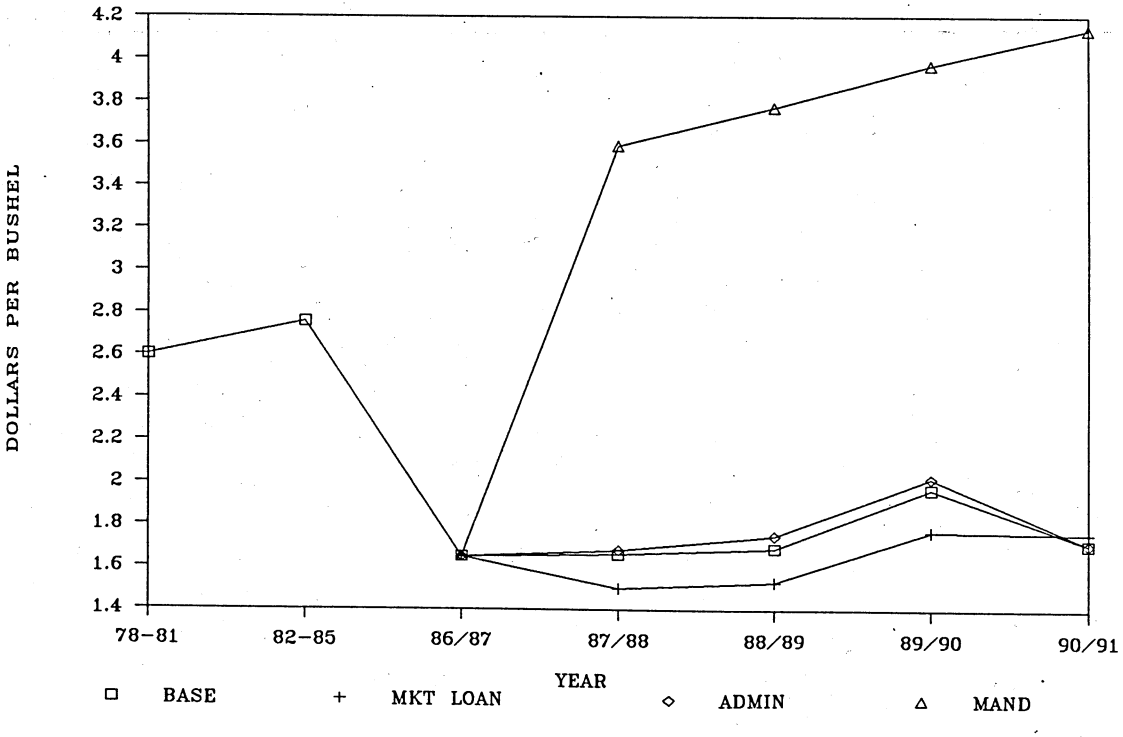


FIGURE 9: OMAHA SLAUGHTER STEER PRICE

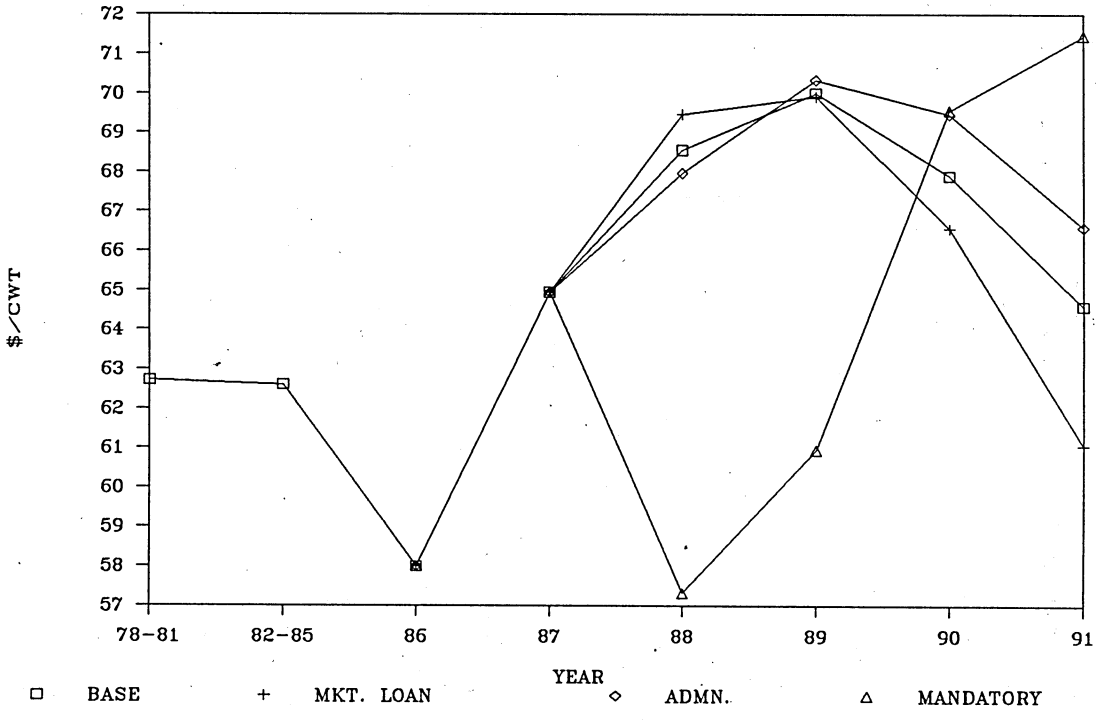


FIGURE 10: COMMERCIAL BEEF PRODUCTION

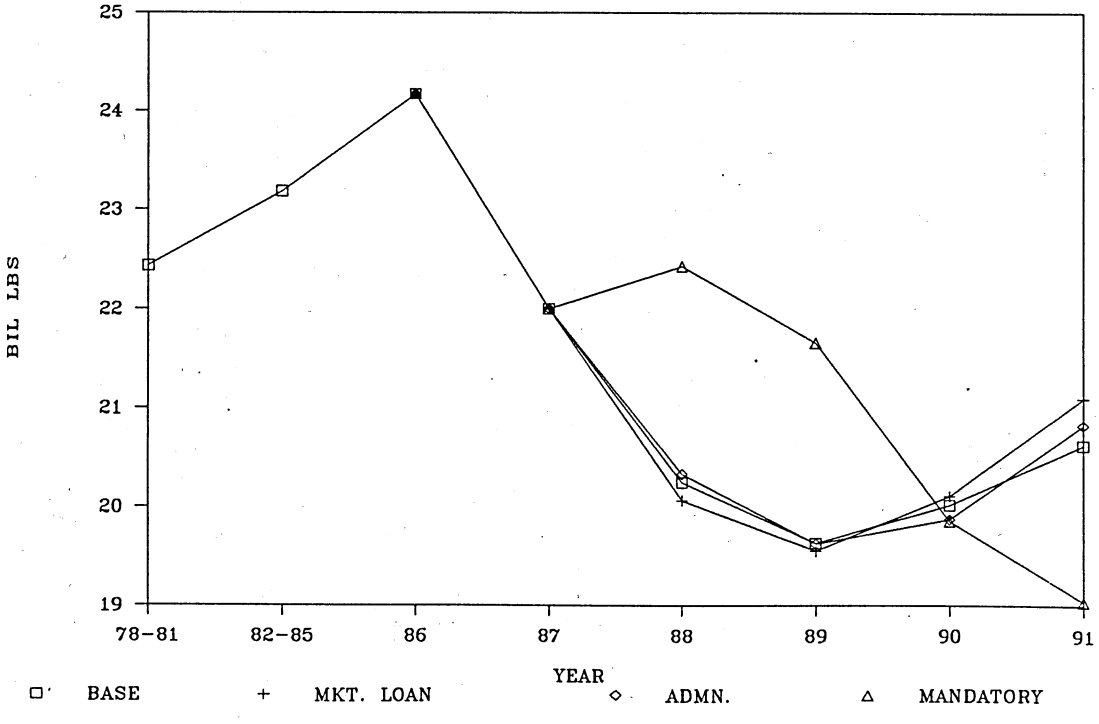


FIGURE 11: GOVERNMENT COST COMPARISON

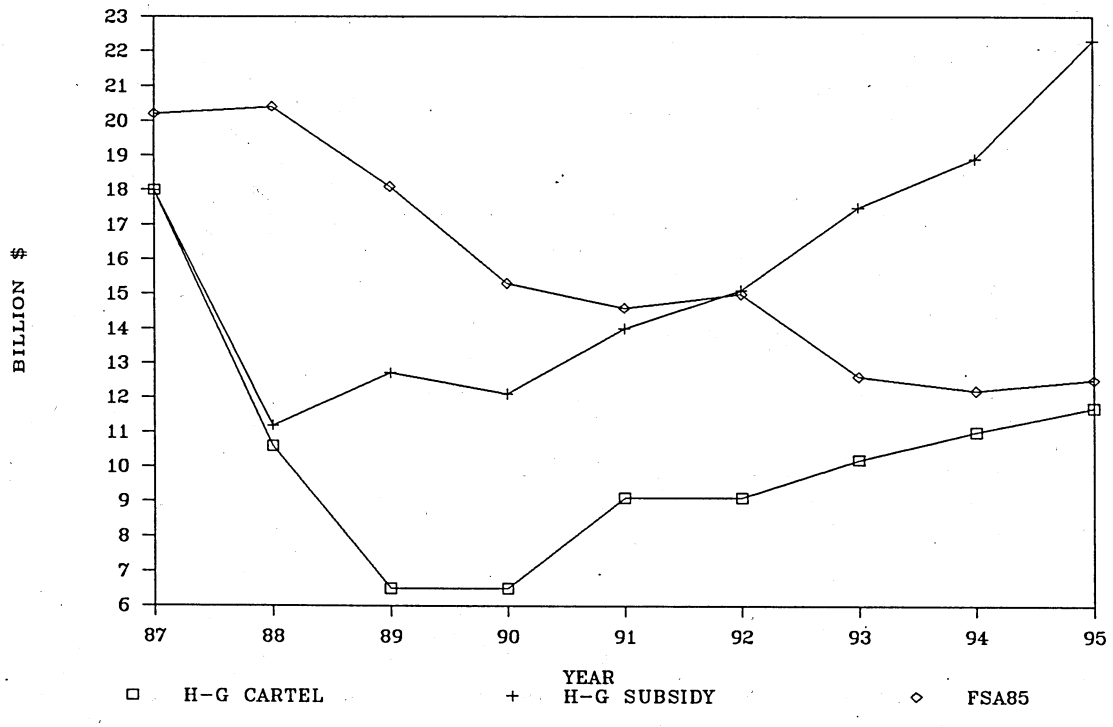
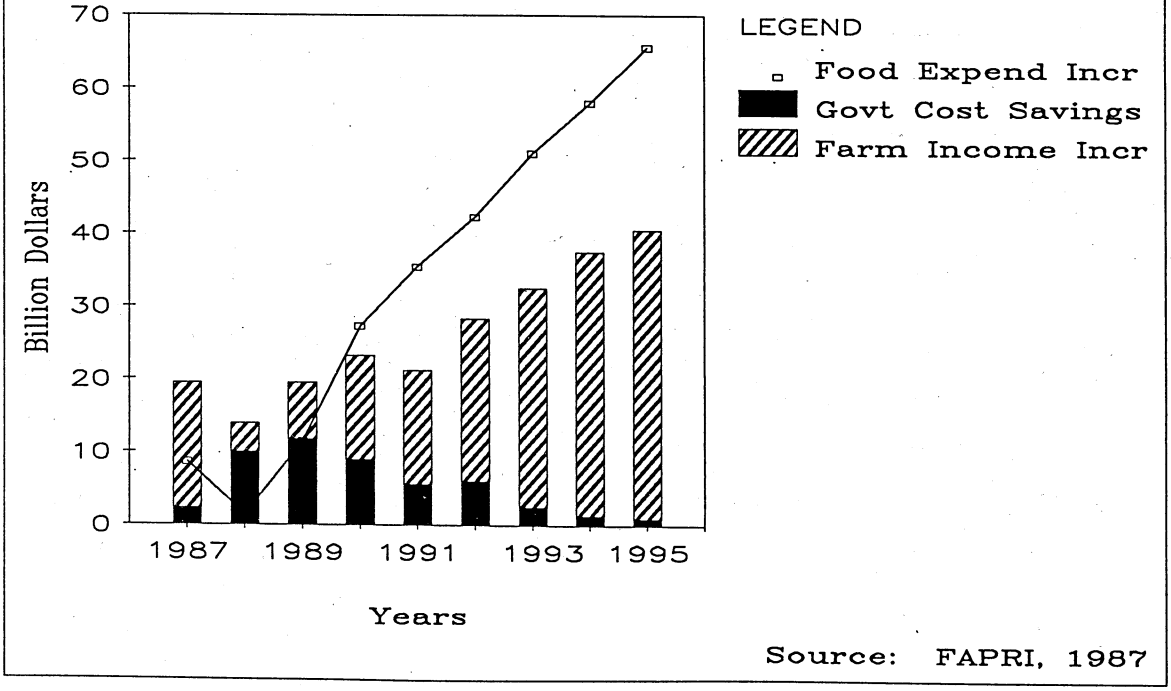


Figure 12: Impacts of a Mandatory Control Program
Farm Income, Govt Cost & Food Expend.



Source: FAPRI, 1987

Appendix Tables

Table A.1

FAPRI POLICY PROJECTIONS FOR GOVERNMENT COSTS UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Fiscal Year) FY87	FY88	FY89	FY90	FY91	FY88-FY91 Average
		Million Dollars					
Feed Grains	BASELINE	10,247	11,693	10,631	9,402	7,774	9,875
	MARKETING LOAN	10,395	12,263	11,494	9,142	8,758	10,414
	ADMINISTRATION	10,247	10,727	7,037	5,177	3,986	6,732
	MANDATORY	9,441	5,057	1,869	2,111	2,416	2,863
Food Grains	BASELINE	6,311	6,791	5,723	4,129	4,581	5,306
	MARKETING LOAN	6,311	6,996	5,835	3,833	4,465	5,282
	ADMINISTRATION	6,311	6,350	3,565	1,618	2,808	3,585
	MANDATORY	5,272	4,669	3,298	2,743	5,081	3,948
Soybeans	BASELINE	438	(96)	(489)	361	368	36
	MARKETING LOAN	438	990	21	110	368	372
	ADMINISTRATION	438	(81)	(295)	172	368	41
	MANDATORY	309	707	1,108	1,432	1,461	1,177
Cotton	BASELINE	780	468	742	(79)	347	370
	MARKETING LOAN	780	468	742	(79)	347	370
	ADMINISTRATION	780	286	356	(365)	156	108
	MANDATORY	1,543	209	208	184	179	195
Dairy	BASELINE	2,388	1,588	1,490	1,455	1,546	1,520
	MARKETING LOAN	2,621	1,798	1,732	1,542	1,642	1,679
	ADMINISTRATION	2,368	1,549	1,514	1,431	1,538	1,508
	MANDATORY	1,391	0	0	0	0	0
Total	BASELINE	20,164	20,444	18,097	15,268	14,616	17,106
	MARKETING LOAN	20,545	22,515	19,824	14,548	15,580	18,117
	ADMINISTRATION	20,144	18,831	12,177	8,033	8,856	11,974
	MANDATORY	17,956	10,642	6,483	6,470	9,137	8,183

Table A.2

FAPRI POLICY PROJECTIONS OF FARM INCOME AND GOVERNMENT PAYMENTS UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Calendar Year) 1986	1987	1988	1989	1990	1991
		----------Billions of Dollars----------					
Crop Farm Cash Receipts	BASELINE	61.7	58.8	60.0	63.3	68.4	71.0
	MARKETING LOAN		57.7	58.0	61.3	67.3	72.3
	ADMINISTRATION		58.9	59.9	63.1	68.0	71.4
	MANDATORY		69.9	84.7	88.3	93.2	98.7
Livestock Farm Cash Receipts	BASELINE	73.1	72.9	71.3	69.2	67.0	65.6
	MARKETING LOAN		73.0	72.0	69.0	66.8	64.3
	ADMINISTRATION		72.9	70.6	69.0	67.4	66.0
	MANDATORY		76.9	66.5	69.0	73.4	75.8
Government Payments and Subsidies	BASELINE	10.9	14.0	16.7	15.4	13.4	12.2
	MARKETING LOAN		15.3	19.3	16.9	13.8	13.4
	ADMINISTRATION		13.6	14.3	10.3	7.0	5.9
	MANDATORY		11.0	10.0	5.7	4.8	4.7
Total Farm Cash Receipts	BASELINE	151.8	151.7	154.0	153.9	154.8	154.7
	MARKETING LOAN		152.0	155.3	153.2	153.9	156.1
	ADMINISTRATION		151.4	150.8	148.4	148.4	149.4
	MANDATORY		163.8	167.3	168.9	177.4	185.2
Production Expenses	BASELINE	130.1	125.2	128.1	133.3	136.2	140.9
	MARKETING LOAN		124.5	126.8	131.7	135.3	141.0
	ADMINISTRATION		125.3	126.9	132.9	136.4	140.1
	MANDATORY		127.7	136.7	143.0	147.8	156.7
Net Farm Income	BASELINE	29.5	33.5	33.4	28.7	26.0	25.2
	MARKETING LOAN		31.8	36.3	30.2	27.7	26.5
	ADMINISTRATION		33.2	30.5	23.6	19.5	20.2
	MANDATORY		50.8	37.5	36.6	40.3	40.9
Net Farm Income (1972 $)	BASELINE	8.8	11.0	10.5	8.8	7.8	7.3
	MARKETING LOAN		10.5	11.4	9.2	8.4	7.7
	ADMINISTRATION		10.9	9.6	7.2	5.9	5.8
	MANDATORY		16.7	11.8	11.2	12.1	11.8

Table A.3

FAPRI POLICY PROJECTIONS FOR EXPORT VOLUMES UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
		Million Metric Tons				
Wheat Exports	BASELINE	27.3	29.7	32.5	35.2	36.6
	MARKETING LOAN	27.3	31.9	34.4	33.6	34.2
	ADMINISTRATION	27.3	29.7	32.3	32.3	34.3
	MANDATORY	27.3	25.7	25.9	27.2	28.2
Corn Exports	BASELINE	33.4	38.8	40.4	39.8	43.2
	MARKETING LOAN	33.4	39.4	41.1	40.9	43.3
	ADMINISTRATION	33.4	38.7	40.1	39.3	42.6
	MANDATORY	33.4	33.5	34.1	35.1	36.8
Soybean Eq. Exports	BASELINE	27.1	28.9	30.8	31.8	33.2
	MARKETING LOAN	27.1	29.1	30.9	32.4	33.0
	ADMINISTRATION	27.1	28.9	30.8	32.2	33.0
	MANDATORY	27.1	26.6	27.7	28.9	29.4
Rice Exports	BASELINE	3.4	3.6	3.8	3.9	4.1
	MARKETING LOAN	3.4	3.6	3.8	3.9	4.1
	ADMINISTRATION	3.4	3.6	3.3	3.8	4.2
	MANDATORY	3.4	2.3	2.2	2.2	2.3
Total Grains & Soy	BASELINE	91.1	101.1	107.5	110.8	117.1
	MARKETING LOAN	91.1	104.1	110.2	110.7	114.6
	ADMINISTRATION	91.1	101.0	106.5	107.6	114.2
	MANDATORY	91.1	87.9	89.8	93.5	96.6
Cotton Exports	BASELINE	1.5	1.5	1.5	1.5	1.5
	MARKETING LOAN	1.5	1.5	1.5	1.5	1.5
	ADMINISTRATION	1.5	1.4	1.5	1.5	1.4
	MANDATORY	1.5	1.1	1.1	1.1	1.1

Table A.4

FAPRI POLICY PROJECTIONS FOR EXPORT VALUES UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
		Million Dollars				
Wheat	BASELINE	2689	2922	3190	3856	4154
	MARKETING LOAN	2689	2737	3133	3937	3966
	ADMINISTRATION	2689	2925	3231	4050	3910
	MANDATORY	2689	5495	5807	6443	6954
Corn	BASELINE	2560	3014	3205	3705	3483
	MARKETING LOAN	2560	2759	2941	3405	3597
	ADMINISTRATION	2560	3044	3296	3752	3428
	MANDATORY	2560	5741	6157	6683	7320
Soybean	BASELINE	3835	4028	4278	5622	5436
	MARKETING LOAN	3826	3714	4010	4589	6454
	ADMINISTRATION	3835	4020	4187	4767	5985
	MANDATORY	3835	8185	8684	8492	8950
Soymeal	BASELINE	882	922	1010	1128	1256
	MARKETING LOAN	881	922	1049	1162	1404
	ADMINISTRATION	882	943	1074	1154	1327
	MANDATORY	882	848	966	1410	1794
Cotton	BASELINE	1725	2019	2189	2397	2560
	MARKETING LOAN	1725	2019	2189	2397	2560
	ADMINISTRATION	1725	2026	2137	2311	2406
	MANDATORY	1725	2414	2563	2702	2854
Rice	BASELINE	425	479	530	585	654
	MARKETING LOAN	425	479	530	585	654
	ADMINISTRATION	425	479	602	702	634
	MANDATORY	425	850	967	1031	1098
Total	BASELINE	12116	13384	14402	17292	17543
	MARKETING LOAN	12107	12629	13852	16075	18636
	ADMINISTRATION	12116	13437	14526	16735	17690
	MANDATORY	12116	23532	25145	26762	28970

Table A.5

FAPRI POLICY PROJECTIONS FOR PLANTED ACRES UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
		Millions of Acres				
Planted Acres Corn	BASELINE	76.6	67.8	65.7	64.0	64.8
	MARKETING LOAN	76.6	66.9	64.4	62.8	64.1
	ADMINISTRATION	76.6	67.8	62.7	63.8	67.9
	MANDATORY	76.6	47.9	51.0	48.2	48.4
Planted Acres Soybeans	BASELINE	61.8	60.0	59.5	59.0	65.0
	MARKETING LOAN	61.8	61.2	60.4	59.7	61.8
	ADMINISTRATION	61.8	60.0	60.7	60.5	63.5
	MANDATORY	61.8	54.6	57.4	54.9	57.1
Planted Acres Wheat	BASELINE	71.8	68.6	58.7	55.6	63.0
	MARKETING LOAN	71.8	68.6	57.1	54.3	63.5
	ADMINISTRATION	71.8	68.6	54.9	53.4	65.6
	MANDATORY	71.8	49.6	44.8	45.0	52.6
Planted Acres Cotton	BASELINE	9.59	10.10	11.20	11.60	11.90
	MARKETING LOAN	9.59	10.10	11.20	11.60	11.90
	ADMINISTRATION	9.59	10.10	11.01	11.21	11.64
	MANDATORY	9.59	10.17	9.67	9.56	9.68
Planted Acres Rice	BASELINE	2.35	2.37	2.58	2.58	2.58
	MARKETING LOAN	2.35	2.37	2.58	2.58	2.58
	ADMINISTRATION	2.35	2.37	2.10	2.44	2.75
	MANDATORY	2.35	1.47	1.53	1.57	1.64
Total Crop Acres Planted	BASELINE	222.1	208.9	197.7	192.8	207.3
	MARKETING LOAN	222.1	209.2	195.7	191.0	203.9
	ADMINISTRATION	222.1	208.9	191.4	191.4	211.4
	MANDATORY	222.1	163.7	164.4	159.2	169.4

Table A.6

FAPRI POLICY PROJECTIONS FOR CORN UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
Planted Acres	BASELINE	76.6	67.8	65.7	64.0	64.8
(Millions of Acres)	MARKETING LOAN	76.6	66.9	64.4	62.8	64.1
	ADMINISTRATION	76.6	67.8	62.7	63.8	67.9
	MANDATORY	76.6	47.9	51.0	48.2	48.4
Production	BASELINE	8223	7065	6990	6930	7101
(Millions of Bushels)	MARKETING LOAN	8223	6973	6855	6808	7026
	ADMINISTRATION	8223	7065	6591	6749	7209
	MANDATORY	8223	5290	5658	5468	5555
Domestic Use	BASELINE	5509	5635	5709	5595	5748
(Millions of Bushels)	MARKETING LOAN	5508	5702	5821	5771	5827
	ADMINISTRATION	5509	5624	5643	5544	5716
	MANDATORY	5509	4693	4735	4485	4500
Total Exports	BASELINE	1314	1526	1590	1568	1702
(Millions of Bushels)	MARKETING LOAN	1314	1552	1617	1609	1706
	ADMINISTRATION	1314	1522	1577	1548	1676
	MANDATORY	1314	1317	1343	1382	1449
Total Carryover	BASELINE	5441	5348	5040	4808	4460
(Millions of Bushels)	MARKETING LOAN	5442	5163	4580	4009	3503
	ADMINISTRATION	5441	5362	4733	4391	4209
	MANDATORY	5441	4726	4306	3907	3513
Farm Price	BASELINE	1.65	1.66	1.69	1.97	1.71
(Dollars per Bushel)	MARKETING LOAN	1.65	1.50	1.53	1.77	1.76
	ADMINISTRATION	1.65	1.68	1.75	2.02	1.71
	MANDATORY	1.65	3.59	3.77	3.97	4.14
Loan Rate	BASE, MKT, ADMIN	1.92	1.82	1.73	1.65	1.56
(Dollars per Bushel)	MANDATORY	1.92	3.59	3.77	3.97	4.14
Target Price	BASE, MKT	3.03	3.03	2.97	2.88	2.74
(Dollars per Bushel)	ADMINISTRATION	3.03	3.03	2.73	2.45	2.21
Participant Returns	BASELINE	158.22	154.75	149.90	145.53	130.39
Over Variable Cost	MARKETING LOAN	158.22	153.31	148.51	144.42	130.68
(Dollars per Acre)	ADMINISTRATION	158.22	154.75	130.64	110.27	86.17
	MANDATORY	158.22	193.78	207.45	214.83	222.87

Table A.7

FAPRI POLICY PROJECTION FOR SOYBEANS UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
Planted Acres	BASELINE	61.8	60.0	59.5	59.1	65.0
(Millions of Acres)	MARKETING LOAN	61.8	61.2	60.4	59.7	61.8
	ADMINISTRATION	61.8	60.0	60.7	60.5	63.5
	MANDATORY	61.8	54.6	57.4	54.9	57.1
Production	BASELINE	2009	1893	1900	1910	2118
(Millions of Bushels)	MARKETING LOAN	2009	1932	1930	1928	2016
	ADMINISTRATION	2009	1893	1939	1955	2070
	MANDATORY	2009	1719	1833	1771	1854
Domestic Use	BASELINE	1176	1205	1228	1222	1242
(Millions of Bushels)	MARKETING LOAN	1177	1215	1230	1242	1208
	ADMINISTRATION	1176	1208	1232	1250	1228
	MANDATORY	1176	982	1033	1047	1087
Total Exports	BASELINE	748	789	834	863	884
(Millions of Bushels)	MARKETING LOAN	748	795	838	879	869
	ADMINISTRATION	748	789	838	887	890
	MANDATORY	748	834	843	784	793
Total Carryover	BASELINE	621	519	357	182	174
(Millions of Bushels)	MARKETING LOAN	620	542	404	211	149
	ADMINISTRATION	621	516	386	205	156
	MANDATORY	621	524	480	420	395
Farm Price	BASELINE	4.65	4.63	4.65	5.90	5.57
(Dollars per Bushel)	MARKETING LOAN	4.64	4.27	4.36	4.82	6.61
	ADMINISTRATION	4.65	4.62	4.53	4.89	6.09
	MANDATORY	4.65	8.88	9.32	9.80	10.21
Loan Rate	BASE, MKT, ADMIN	4.77	4.77	4.53	4.50	4.50
(Dollars per Bushel)	MANDATORY	4.77	8.88	9.32	9.80	10.21
Participant Returns	BASELINE	90.83	82.57	81.77	121.09	107.36
Over Variable Cost	MARKETING LOAN	90.49	87.09	77.95	85.29	142.20
(Dollars per Acre)	ADMINISTRATION	90.83	82.25	77.84	87.66	124.68
	MANDATORY	90.83	169.12	192.77	195.99	215.53

Table A.8

FAPRI POLICY PROJECTIONS FOR WHEAT UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
Planted Acres	BASELINE	71.8	68.6	58.7	55.6	63.0
(Millions of Acres)	MARKETING LOAN	71.8	68.6	57.1	54.3	63.5
	ADMINISTRATION	71.8	68.6	54.9	53.4	65.6
	MANDATORY	71.8	49.6	44.8	45.0	52.6
Production	BASELINE	2077	2141	2020	1934	2195
(Millions of Bushels)	MARKETING LOAN	2077	2141	1956	1886	2213
	ADMINISTRATION	2077	2141	1865	1833	2270
	MANDATORY	2077	1750	1591	1602	1870
Domestic Use	BASELINE	1086	1103	1124	1119	1097
(Millions of Bushels)	MARKETING LOAN	1086	1106	1121	1090	1086
	ADMINISTRATION	1086	1100	1124	1105	1088
	MANDATORY	1086	971	887	840	829
Total Exports	BASELINE	1002	1092	1196	1294	1345
(Millions of Bushels)	MARKETING LOAN	1002	1173	1264	1233	1256
	ADMINISTRATION	1002	1093	1185	1185	1262
	MANDATORY	1002	943	950	1001	1036
Total Carryover	BASELINE	1903	1853	1555	1078	833
(Millions of Bushels)	MARKETING LOAN	1903	1769	1342	908	781
	ADMINISTRATION	1903	1855	1412	957	879
	MANDATORY	1903	1763	1516	1277	1282
Farm Price	BASELINE	2.29	2.28	2.27	2.53	2.62
(Dollars per Bushel)	MARKETING LOAN	2.29	1.99	2.11	2.71	2.68
	ADMINISTRATION	2.29	2.28	2.32	2.90	2.63
	MANDATORY	2.29	4.93	5.17	5.44	5.67
Loan Rate	BASE, MKT, ADMIN	2.40	2.28	2.17	2.06	1.95
(Dollars per Bushel)	MANDATORY	2.40	4.93	5.17	5.44	5.67
Target Price	BASE, MKT	4.38	4.38	4.29	4.16	3.95
(Dollars per Bushel)	ADMINISTRATION	4.38	4.38	3.94	3.55	3.19
Participant Returns	BASELINE	61.21	67.89	62.49	57.77	54.22
Over Variable Cost	MARKETING LOAN	61.21	67.72	62.44	57.87	54.27
(Dollars per Acre)	ADMINISTRATION	61.21	67.89	54.27	43.37	31.77
	MANDATORY	61.21	68.09	67.20	66.06	68.41

Table A.9

FAPRI POLICY PROJECTIONS FOR COTTON UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
Planted Acres	BASELINE	9.59	10.10	11.20	11.60	11.90
(Millions of Acres)	MARKETING LOAN	9.59	10.10	11.20	11.60	11.90
	ADMINISTRATION	9.59	10.10	11.01	11.21	11.64
	MANDATORY	9.59	10.17	9.67	9.56	9.68
Production	BASELINE	9.78	11.58	13.14	13.79	14.32
(Millions of Bales)	MARKETING LOAN	9.78	11.58	13.14	13.79	14.32
	ADMINISTRATION	9.78	11.58	12.92	13.33	14.00
	MANDATORY	9.78	12.35	12.46	12.61	12.93
Domestic Use	BASELINE	7.01	7.14	7.28	7.43	7.50
(Millions of Bales)	MARKETING LOAN	7.01	7.14	7.28	7.43	7.50
	ADMINISTRATION	7.01	7.14	7.27	7.43	7.49
	MANDATORY	7.01	7.50	7.58	7.72	7.96
Total Exports	BASELINE	6.75	6.66	6.98	7.05	7.09
(Millions of Bales)	MARKETING LOAN	6.75	6.66	6.98	7.05	7.09
	ADMINISTRATION	6.75	6.57	6.70	6.69	6.47
	MANDATORY	6.75	5.05	5.08	5.09	5.17
Total Carryover	BASELINE	5.48	3.37	2.36	1.77	1.60
(Millions of Bales)	MARKETING LOAN	5.48	3.37	2.36	1.77	1.60
	ADMINISTRATION	5.48	3.47	2.52	1.83	1.98
	MANDATORY	5.48	4.88	4.28	3.68	3.08
Farm Price	BASELINE	0.48	0.57	0.59	0.64	0.68
(Dollars per lb.)	MARKETING LOAN	0.48	0.57	0.59	0.64	0.68
	ADMINISTRATION	0.48	0.58	0.60	0.65	0.70
	MANDATORY	0.48	0.90	0.95	1.00	1.04
Loan Rate	BASE, MKT, ADMIN	0.55	0.52	0.50	0.50	0.50
(Dollars per lb.)	MANDATORY	0.55	0.90	0.95	1.00	1.04
Target Price	BASE, MKT	0.81	0.79	0.77	0.75	0.73
(Dollars per lb.)	ADMINISTRATION	0.81	0.79	0.71	0.64	0.58
Participant Returns	BASELINE	156.56	175.48	165.74	149.07	134.19
Over Variable Cost	MARKETING LOAN	156.56	175.48	165.74	149.07	134.19
(Dollars per Acre)	ADMINISTRATION	156.56	175.53	137.33	98.35	121.47
	MANDATORY	156.56	169.85	174.70	183.77	190.96

Table A.10

FAPRI POLICY PROJECTIONS FOR RICE UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Crop Year) 1986/87	1987/88	1988/89	1989/90	1990/91
Planted Acres (Millions of Acres)	BASELINE	2.35	2.37	2.58	2.58	2.58
	MARKETING LOAN	2.35	2.37	2.58	2.58	2.58
	ADMINISTRATION	2.35	2.37	2.10	2.44	2.75
	MANDATORY	2.35	1.47	1.53	1.57	1.64
Production (Millions of cwt)	BASELINE	129.5	142.8	155.0	158.0	159.0
	MARKETING LOAN	129.5	142.8	155.0	158.0	159.0
	ADMINISTRATION	129.5	142.8	126.6	149.5	169.3
	MANDATORY	88.0	93.2	96.2	101.2	106.8
Domestic Use (Millions of cwt)	BASELINE	58.4	59.2	61.3	63.4	64.8
	MARKETING LOAN	58.4	59.2	61.3	63.4	64.8
	ADMINISTRATION	58.4	59.2	59.7	62.7	65.4
	MANDATORY	58.4	46.8	48.9	51.2	53.1
Total Exports (Millions of cwt)	BASELINE	75.9	80.3	84.2	86.9	89.9
	MARKETING LOAN	75.9	80.3	84.2	86.9	89.9
	ADMINISTRATION	75.9	80.3	73.5	83.1	93.5
	MANDATORY	75.9	50.0	48.0	49.0	49.7
Total Carryover (Millions of cwt)	BASELINE	57.1	55.8	60.4	63.5	63.2
	MARKETING LOAN	57.1	55.8	60.4	63.5	63.2
	ADMINISTRATION	57.1	55.8	44.5	42.9	48.1
	MANDATORY	57.1	48.2	44.6	40.6	39.1
Farm Price (Dollars per cwt)	BASELINE	4.32	4.86	4.96	5.26	5.62
	MARKETING LOAN	4.32	4.86	4.96	5.26	5.62
	ADMINISTRATION	4.32	4.86	6.50	6.50	5.00
	MANDATORY	4.32	14.04	14.74	15.50	16.16
Loan Rate (Dollars per cwt)	BASE, MKT, ADMIN	7.20	6.84	6.50	6.50	6.50
	MANDATORY	7.20	14.04	14.74	15.50	16.16
Target Price (Dollars per cwt)	BASE, MKT	11.90	11.66	11.30	10.95	10.71
	ADMINISTRATION	11.90	11.66	10.49	9.44	8.50
Participant Returns Over Variable Cost (Dollars per Acre)	BASELINE	247.51	266.40	292.25	287.76	281.76
	MARKETING LOAN	247.51	266.40	292.25	287.76	281.76
	ADMINISTRATION	255.31	266.40	257.29	222.17	185.15
	MANDATORY	255.31	188.94	212.53	232.00	255.01

Table A.11

FAPRI POLICY PROJECTIONS FOR DAIRY UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Calendar Year) 1986	1987	1988	1989	1990	1991
Total Milk Prod (Bil lb)	BASELINE	145.00	140.45	144.72	146.44	149.79	151.22
	MARKETING LOAN	145.00	141.39	145.81	147.82	150.36	151.77
	ADMINISTRATION	145.00	140.37	144.52	146.58	149.63	151.18
	MANDATORY	145.00	121.15	122.00	122.51	123.06	123.39
Mfg Milk Com Use (Bil lb)	BASELINE	85.12	86.17	88.68	90.51	93.03	95.32
	MARKETING LOAN	85.12	86.17	88.68	90.51	93.03	95.32
	ADMINISTRATION	85.12	86.17	88.68	90.51	93.03	95.32
	MANDATORY	85.12	70.30	71.84	73.04	74.25	75.22
Fluid Milk Cons (Bil lb)	BASELINE	51.96	51.83	51.53	51.23	50.95	50.78
	MARKETING LOAN	51.96	51.83	51.53	51.23	50.95	50.78
	ADMINISTRATION	51.96	51.83	51.53	51.23	50.95	50.78
	MANDATORY	51.96	50.85	50.16	49.47	48.81	48.17
Govt Purchases (Bil lb)	BASELINE	10.85	6.21	9.66	9.86	10.97	10.27
	MARKETING LOAN	10.85	7.16	10.75	11.21	11.54	10.82
	ADMINISTRATION	10.85	6.13	9.46	9.97	10.81	10.23
	MANDATORY	10.85	0.00	0.00	0.00	0.00	0.00
Prices ($/cwt)							
Farm, All Milk	BASELINE	12.35	12.29	11.62	11.10	10.61	10.13
	MARKETING LOAN	12.35	12.29	11.62	11.10	10.61	10.13
	ADMINISTRATION	12.35	12.29	11.62	11.10	10.61	10.13
	MANDATORY	12.35	16.95	17.79	18.71	19.51	20.56

Table A.12

FAPRI POLCIY PROJECTIONS FOR BEEF UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Calendar Year) 1986	1987	1988	1989	1990	1991
Omaha Price (Dollars per cwt)	BASELINE	58.00	64.95	68.55	70.00	67.90	64.60
	MARKETING LOAN	58.00	64.95	69.84	70.11	67.04	60.93
	ADMINISTRATION	58.00	64.95	67.96	70.34	69.46	66.61
	MANDATORY	58.00	64.95	57.32	60.94	69.56	71.46
Commercial Production (Millions of Pounds)	BASELINE	24174	22000	20240	19630	20020	20620
	MARKETING LOAN	24174	22000	20007	19525	20037	21080
	ADMINISTRATION	24174	22000	20324	19624	19875	20826
	MANDATORY	24174	22000	22429	21656	19855	19038
Per Capita Consumption (Lbs./Cap. Retail)	BASELINE	79.80	73.20	67.40	64.80	65.10	66.10
	MARKETING LOAN	79.80	73.20	66.67	64.47	65.15	67.48
	ADMINISTRATION	79.80	73.20	67.66	64.78	64.67	65.36
	MANDATORY	79.80	73.20	73.80	70.50	64.30	61.50
Retail Price (Dollars per Pound)	BASELINE	2.38	2.66	2.90	2.99	2.89	2.79
	MARKETING LOAN	2.38	2.66	2.93	2.98	2.87	2.71
	ADMINISTRATION	2.38	2.66	2.89	2.99	2.92	2.83
	MANDATORY	2.38	2.66	2.48	2.64	3.00	3.08

Table A.13

FAPRI POLCIY PROJECTIONS FOR PORK UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Calendar Year) 1986	1987	1988	1989	1990	1991
7 Market Price (Dollars per cwt)	BASELINE	51.40	51.90	45.00	37.00	30.00	35.00
	MARKETING LOAN	51.40	51.90	42.35	33.23	27.13	33.73
	ADMINISTRATION	51.40	51.90	45.22	38.44	31.49	35.90
	MANDATORY	51.40	51.90	36.87	45.04	53.87	59.67
Commercial Production (Millions of Pounds)	BASELINE	14097	13850	15560	16260	17310	15925
	MARKETING LOAN	14097	13850	15524	16879	17928	16071
	ADMINISTRATION	14097	13850	15014	16033	17018	15799
	MANDATORY	14097	13850	15312	13802	12454	11231
Per Capita Consumption (Lbs./Cap. Retail)	BASELINE	59.60	58.70	63.20	66.40	68.70	63.00
	MARKETING LOAN	59.60	58.70	64.96	68.78	71.00	63.61
	ADMINISTRATION	59.60	58.70	63.02	65.55	67.61	62.52
	MANDATORY	59.60	58.70	64.10	58.30	52.50	47.30
Retail Price (Dollars per Pound)	BASELINE	1.72	1.78	1.62	1.55	1.49	1.62
	MARKETING LOAN	1.72	1.78	1.57	1.47	1.41	1.59
	ADMINISTRATION	1.72	1.78	1.63	1.58	1.53	1.64
	MANDATORY	1.72	1.78	1.43	1.69	1.98	2.20

Table A.14

FAPRI POLCIY PROJECTIONS FOR CHICKEN UNDER THE MARKETING LOAN, ADMINISTRATION, AND MANDATORY PROPOSALS

VARIABLE	POLICY	Projection (Calendar Year) 1986	1987	1988	1989	1990	1991
12-City Wholesale Price (Dollars per Pound)	BASELINE	0.55	0.53	0.49	0.48	0.46	0.44
	MARKETING LOAN	0.55	0.53	0.48	0.47	0.45	0.44
	ADMINISTRATION	0.55	0.53	0.49	0.48	0.46	0.44
	MANDATORY	0.55	0.53	0.48	0.52	0.57	0.60
Production Broiler (Millions of Pounds)	BASELINE	14298	15264	15934	16385	16875	17415
	MARKETING LOAN	14298	15264	15948	16398	16900	17418
	ADMINISTRATION	14298	15264	15947	16410	16936	17466
	MANDATORY	14298	15264	15452	16144	17265	17689
Per Capita Consumption (Lbs./Cap. Retail)	BASELINE	56.80	60.20	61.90	62.90	63.70	64.70
	MARKETING LOAN	56.80	60.20	61.96	62.95	63.80	64.71
	ADMINISTRATION	56.80	60.20	61.94	63.01	63.90	64.90
	MANDATORY	56.80	60.20	60.00	61.90	65.20	65.80
Retail Price (Dollars per Pound)	BASELINE	0.79	0.74	0.72	0.71	0.69	0.68
	MARKETING LOAN	0.79	0.74	0.71	0.70	0.68	0.68
	ADMINISTRATION	0.79	0.74	0.72	0.71	0.69	0.68
	MANDATORY	0.79	0.74	0.72	0.77	0.81	0.85

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