PROJECTED IMPACT OF THE 1985 FOOD SECURITY ACT ON U.S. AGRICULTURE 1985-1995

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Introduction

The structure of U.S. agriculture has and will continue to be influenced by the Food Security Act of 1985 (FSA85). Characteristics of the FSA85 that have important implications for the structure of U.S. agriculture, for major agricultural commodities and for conditions in world markets are: 1) its market oriented pricing, 2) export enhancement, 3) farm income protection, 4) acreage reduction and conservation, and 5) budget exposure.

The FSA of 1985 is policy oriented legislation designed to move U.S. agriculture toward more market oriented pricing. Loan rates were reduced which have served as floor prices for most agricultural commodities. Provisions were included to encourage exports of U.S. products, for example, to countries requiring subsidies or loans to import. Farm incomes were protected through the maintenance of target prices at 1981 Farm Bill levels. Reductions in acreages occurred for the conservation reserve and program compliance. Finally, the government assumed the budget responsibility for moving U.S. agriculture to a market footing while maintaining farm income at the average for the 1981 Farm Bill.

During the debate on the FSA85 and its implementation, a number of major policy issues surfaced. Major issues involve the intent of the FSA85 and as well the experience gained in implementation. These major issues include: 1) the growth in agricultural trade, 2) the trade response to declining prices, 3) the U.S. world market share, 4) the structure of U.S. agriculture, 5) the effect on the developing world, and 6) the length of the transition period to the free market.

This paper evaluates these issues relative to the FSA85 and their potential resolution in the late 1980s. Clearly, U.S. agriculture is in transition. The role of government programs and the income maintenance provisions of the FSA85 will play a major role in this transition and in the ultimate structure for U.S. agriculture.

The paper includes: 1) a discussion of the models and analytical process used in the evaluation and projections, 2) a review of the macro and policy assumptions that were incorporated in the analysis, 3) a summary of projections for U.S. agriculture developed by the Center for Agricultural and Rural Development (CARD), the National Center for Food and Agricultural Policy (NCFAP), and the Food and Agricultural Policy Research Institute (FAPRI), 4) an evaluation of the policy impacts on the export and domestic markets, and 5) a discussion of implications of a continuation of the management approach to U.S. agriculture implicit in the FSA85.

The Analytical Process

The system used in the CARD/CNFAP/FAPRI analysis of the FSA85 for the structure of U.S. agriculture and world markets for agricultural commodities has two major components. These components are a regional trade component and a domestic component for U.S. agricultural production. The regional trade component is illustrated in Figure 1 and includes feedgrains, wheat, and soybeans. The analysis includes supply and demand in major importing and exporting countries and in the rest of the world. The domestic U.S. component is for major crop and livestock commodities, including corn, soybeans, wheat, rice, and cotton, and for livestock beef, pork, poultry, and dairy (Figure 2). The analysis is based on assumed conditions external to agriculture in the U.S. and in world markets, and on assumptions on the management of agricultural programs in the U.S. and in major exporting and importing countries. Thus, two major sets of assumptions undergird the analysis and projections: 1) a management strategy for U.S. agriculture and for agriculture in major importing and exporting countries, and 2) projections of domestic and foreign economic conditions, including exchange rates.

Results of the analysis are summarized in three areas: 1) market, 2) industry, and 3) sector (Figure 3). Results of the analysis include production, prices, consumption, exports, etc. The industry indicators of interest are gross farm receipts, net farm income, etc. that relate to the well-being of U.S. agriculture as impacted by the FAS85 and the external assumptions. Finally, government indicators of performance include government costs, stock levels, and the distribution of program benefits.

Policy and Macroeconomic Assumptions

The discussion of policy and macroeconomic assumptions is only indicative of the general

set of conditions imposed in the ten-year evaluation of the FAS85. Details of this evaluation are available in another FAPRI publication (FAPRI #86-2). This paper summarizes these conditions, developing an impression for the external assumptions incorporated in the analysis and projections. Of course, these external assumptions and conditions, especially for U.S. agriculture which is so highly attuned to the outcomes in world markets, are critical to the evaluation.

Macroeconomic Conditions

The macroeconomic conditions for the ten-year evaluation of the FAS85 and the policy exercise include the U.S. and other major trading countries. Selected values for the variables used for the analysis are reported in Table 1. The variables for the U.S. include the change in real GNP, the GNP deflator, the civilian unemployment rate, the 3-month treasury bill rate, the Moody's AAA corporate bond rate, and the federal budget surplus (deficit). The presumption is that the federal government will reduce the deficit -- expenditures relative to tax revenues. The budget deficit in the out-year, 1995, is projected at about $35 billion. Real GNP grows at an average of near 3 percent for the out-years. Unemployment holds at the 1980s level. Modest inflation is assumed, resulting in an increase in nominal interest rates, short and long term. However, real interest rates hold near 1986 levels.

The assumptions for foreign economies for the projection period are perhaps more optimistic than suggested by recent experience. Specifically, Latin America and Africa are presumed to grow at annual rates in excess of those experienced in the 1980s. Rates of growth for the developing economies are presumed to be above 3 percent on average through the evaluation period. The Pacific Basin countries return to an annual growth rate of above 5 percent. Western Europe increases to an average growth rate of above 2.5 percent annually, and the Centrally Planned economies are assumed to grow annually at near 3.5 percent. Generally, the forecast is for annual rates of income growth in the countries affecting world trade and agricultural commodities that are not as high in the late 1970s but higher than during the 1980s.

Two key factors for the analysis include foreign exchange and energy prices -- also included in Table 1. A recovery of oil prices to around $23 per barrel is projected. Thus, energy prices recover in 1989 but not to the level of 1985. For the exchange rate, the dollar devaluation continues but stabilizes in 1989. In general, the dollar devaluation relative to the developed countries is assumed to have ended. This exchange rate, however, is an index. There is a tendency to over shoot the devaluation. This is because of the relationship of the dollar to those currencies of the major exporters of agricultural products. During 1986, for example, the dollar appreciated against these currencies. Much is hidden in the index but the general condition is for exchange rates to stabilize in the evaluation period. The exchange rate enters the analysis as a change in relative prices.

Policy Assumptions

The policy assumptions used for the FSA85 analysis are outlined in Table 2. Generally, the assumption is for full implementation of the conservation reserve. Loan rates were reduced the maximum, as was the case in 1986. The exception is for soybeans where a loan rate to achieve a rough parity between net returns for producers of soybeans and corn producers participating in the program was imposed. This resulted in a loan rate for soybeans of $4.77 per bushel until 1989/90. After the duration of the FSA85 in 1989/90, loan rates were projected as in the final year. The assumption is that the Secretary of Agriculture and the Congress will continue to maintain an agricultural policy consistent with the FSA85 in the out-years. As is already clear, based on the announcement of the Secretary on October 24, 1985, additional measures to deal with the excess capacity for U.S. agriculture have been and will likely be required in the future given the developments in domestic and international markets.

The loan rates and target prices have important implications for the structure of U.S. agriculture. The target prices by being maintained and reduced slightly in the out-periods, provide income protection for U.S. agriculture. The loan rates, which have served as floors for world prices are reduced. The large stocks in the U.S. and in world markets and the excess production capacity make it difficult for world prices to move above these loan rates. In fact, contingent on the management of U.S. stocks, agricultural prices are shown to hold near the loan rates until the 1989/90 crop year.

Implicit in the policy arena is an assumption about the management of stocks and excess capacity. The management of the excess capacity situation is indicated by the levels of acreage reductions and paid diversions shown in Table 2. Management of the stocks is, however, much more subtle. Generally, the stocks are managed to permit a smooth reduction over the evaluation period. The implicit management strategy for stocks will be indicated in the evaluation of the supply and use for the major commodities (table 2).

Projections for the Export Market

For purposes of clarity, the results of the analyses for the export and domestic markets are presented separately. The review of the export market focuses on coarse grains, soybeans, and wheat. The FAPRI/CARD/CNFAP export market analyses are more adequately developed for these three commodities.

Price trends for crop years 1985/86 through 1994/95 show more strength in soybean prices than in wheat prices. Wheat prices are the most stable over the evaluation period. Corn prices show strength after the 1988/89 crop year. These price projections are reflective of the excess supply for U.S. agriculture, and the excess capacity in the U.S. and in the rest of the world.

The remainder of this section provides a brief analyses of the projected conditions emphasizing three major U.S. commodities. Similar conditions exist for cotton and rice. The general conclusion is that unless there is a major structural change, for example, a discontinuation of the CAP agreement in the EEC, the U.S. can not expect to gain market share in the world markets at the expense of exports of the major competitors. Also, there are indications of shifts in demand for major importers.

The projections for the Soviet Union are probably the least reliable. The Soviet Union is moving toward an incentive based agriculture. Our projections do not incorporate the structural impacts of this change in the incentive system. If, for example, it were to affect the Soviet export market position similar to the People's Republic of China (PRC), the outcomes would be greatly altered. The projections indicate a return to a relatively high import level for the USSR. Reductions are projected for the PRC, consistent with the 1980s experience related to the change in their incentive system for agriculture. Eastern European exports after the dip in the early 1980s, are projected to return to a relatively slow rate of growth. The implication is that the major potential for export growth, aside from the Soviet Union, is with the developing countries. Thus, wheat exports will depend heavily on income growth and distribution in the developing countries.

The major exporters of wheat are the U.S., Argentina, Canada, the EEC, and Australia. U.S. production of wheat is projected for the years following 1984/85. A projected reduction is due to the conservation reserve and the acreage reduction provisions of the FSA85, and the high program participation implied by the difference between the loan rate or market price and the target price. Growth rates for Canada, Argentina, and Australia are expected to be relatively modest, reflecting to an extent, the pressure on these countries from the export subsidies by the U.S. and EEC. The growth rate for the EEC is projected to continue, but at a lower rate than experienced in the late 1970s and early 1980s. Thus, the implication is for continued pressure on world markets due to increases in production at or near the increased import levels.

A reduction in U.S. wheat exports is anticipated due to the decrease in production. Generally, the impact of the FSA85 is expected to reduce U.S. exports until the markets begin to "takeoff," then U.S. exports should increase as the excess capacity is brought into production. The rate at which this excess capacity is brought into production will affect U.S. prices, the position of U.S. in the world market and the level of direct payments to farmers. An apparent major gainer in the export market is Argentina. Total exports for the EEC, Canada, and Australia remain relatively constant or grow at a slow rate as compared with levels prior to the FSA85.

The share of the U.S. in the wheat export market is expected to grow slowly during the evaluation period. The projected growth in the U.S. share is related to income growth and the growth of the world market rather than to the price pressure that has developed as a result of the export subsidies implicit in the FSA85. The two countries which subsidize wheat exports, the EEC and the U.S., are projected to increase in the short run while the countries that do not subsidize exports lose slightly.

The situation for coarse grain is similar to that for wheat but there may be shifts in the important players in the market. The major feedgrain importers have traditionally been the EEC, Japan, and the USSR. The projection is for feedgrain imports to increase in Japan at roughly on-trend rates through the evaluation period, increasing more rapidly in the out-years. The EEC is projected to become a net exporter by 1985/86. The scenario calls for a major change in the market related to the position of the EEC. Coarse grain imports by the Eastern Europe Countries and the USSR are expected to continue to increase as is the case for the rest of the world. For the USSR, however, the imports reach levels of the late 1970s only at the end of the evaluation period. It is important to emphasize the sensitivity of the U.S. export market for coarse grains to the imports in the planned economies and the rest of the world.

The U.S. and EEC are the major coarse grain producers. Production of coarse grain is expected to increase in most other countries but remain relatively stable in the U.S. due largely to the heavy acreage diversion programs of the FSA85.

The U.S. and Argentina market share of coarse grain exports is expected to increase slightly in the out-period. However, market shares are projected to remain relatively constant over time and change mostly in response to world income levels and the size of the export market rather than to relative prices. The U.S. a traditional residual supplier and, with Argentina, is expected to gain most of the growth in the export market due to increased income and the lowered prices related to the FSA85.

The scenario for soybeans is more optimistic attributed to the growing world market for protein feed. The implication is for a stable and slightly growing U.S. share of the world market. Brazil and Argentina are expected to decline in export market shares, largely related to the change in prices. The soybean market is anticipated to expand, in contrast with coarse grains and wheat. Thus, the U.S. market share can increase and the shares of the major competitors in the market can decrease while the competitors maintain levels of exports consistent with the 1980s.

In summary, the value of U.S. exports is projected to recover under the FSA85 but not as rapidly as might have been anticipated. The value of U.S. exports is not expected to recover to the peak year of 1979 by 1994/95. The component of gross farm income derived from the export markets is projected to fall short of the level of the late 1970s through the evaluation period. If net farm income is maintained, government programs involving substantial income transfers will have to continue during the projection period. The result is continued reliance on direct payments and a highly regulated agriculture for the U.S. The implication for the structure of U.S. agriculture is for financial stress with a heavy emphasis on cost reducing technology.

Implications for U.S. Agriculture

The implications of the projections to 1995 and the assumptions on the management of the U.S. and other agricultural sectors and for domestic agricultural markets and the sector is summarized in this section. The summary includes information on: 1) planted acres, 2) the supply and utilization, 3) an assessment of excess capacity, 5) estimated livestock production, and 6) farm income and government costs.

The area planted to the three major crops of corn, wheat and soybeans in the U.S. is projected to fall substantially as a result of the management strategy implicit in the FSA85. Wheat acreage is expected to fall by the largest amount and by the end of the evaluation period does not recover to levels of the early 1980s. A similar but less dramatic scenario is expected for corn. Conversely, soybean acreage is projected to increase over the average for those experienced during the life of the 1981 Farm Bill. There is a large subsidy for U.S. agriculture and the export markets in the FSA85. This subsidy, particularly for export markets, is not expected to bring U.S. acreage back to levels experienced under the 1981 Farm Bill.

The expected situation for corn is high stocks relative to the historical trend, and production capacity in excess of actual production. The potential supply of corn is approximately 150 percent of actual production in 1985/86 and that this level is not expected to decline until the late 1980s.

The soybean market is more balanced relative to long term trend than is the corn market. Also, the potential production of soybeans is not high relative to actual production. In fact, potential production represents only the soybean acreage going to the conservation reserve since there is no reduced acreage program for soybeans. In general, the reason for the anticipated price strength in the international soybean market compared to the markets for corn and wheat is indicated by this supply and use relative to potential production.

The situation for wheat is quite different than that for soybeans and corn. Stocks of wheat increased during the late 1970s and early 1980s. The wheat stock level is expected to be reduced in the out-period but at high government cost and large acreage reduction -- with a vast difference in potential and actual production. The potential supply of wheat in the immediate out-years is projected at about 250 percent of actual production. The implication is that a long adjustment period in the wheat market will be required for target prices to equal market prices.

The situation for rice and cotton is similar to that for wheat. The area planted to cotton is projected to decrease and remain at a relatively low level throughout the evaluation period. A similar scenario is projected for rice. The FSA85 mandated a marketing loan for cotton and rice even though the production potential and excess supply situations for cotton and rice are high, the stocks positions are expected to move to near long term levels more rapidly than cotton as the market price is allowed to fall below the loan rate. The anticipated direct cost for the rice and cotton program is, however, quite high including the deficiency payment -- the difference between the target and loan rates -- and a payment equal to the loan rate less the market price in the immediate out-years.

Livestock prices and livestock production levels will respond to the expected lower feedgrain prices and to trends in the demand for red meat and poultry. Beef production is projected to remain relatively constant in response to an anticipated increase in feedgrain prices, poultry production will respond rapidly to changes in feed costs while pork production increases at a lower rate than poultry.

The net farm income situation is not optimistic for the 1985-95 decade. Direct government payments to farmers are expected to be high relative to the past. Farm income is anticipated to be low compared to the past. The implication, unless there is a major change in the structure of world markets, is for U.S. agriculture to continue to be highly

subsidized and for a net farm income depending very heavily on U.S. farm programs.

Evaluations of Policy Impacts

One factor that is certain to change the mix of resources in U.S. agriculture and the location of resources is the response in world markets to U.S. agricultural policy. For purposes of evaluating the FSA85 implications, an experiment with the CNFAP/CARD/FAPRI modeling system was conducted. Under this experiment, a continuation of the management strategies used for U.S. agriculture under the 1981 Farm Bill was compared to the FSA85. It is important to stress that in addition to the higher loan rates, it was presumed in the analysis that appropriate diversion and other program parameters would have been used to balance domestic agricultural supplies and demands. The emphasis in the experiment is on the response in world markets. The baseline is the FSA85 and the "high loan" is for the world markets with loan rates at levels in the 1981 Farm Bill.

Wheat exports are projected to increase as prices are lowered and the subsidies of the FSA85 are introduced. Also, competitors exports are slightly higher under the high loan rates than under the lower loan rates of the FSA85. However, the difference for competitors is only slight, indicating that major exporting countries may maintain their export levels at nearly the same levels under the FSA85 as they would have under the high U.S. loan rate. In short, the model shows that the major competitors have as difficult a time adjusting their production levels as does the U.S. A large share of the increase in world wheat exports is likely to be obtained by the U.S. over the evaluation period. However, the value of the U.S. exports is projected to be nearly the same under both the baseline and the high loan rate. Thus, the result of the FSA85 is a likely increase in U.S. wheat exports with only a slight change in value. The impact of the FSA85 is largely short term. That is the low loan rate will have a modest impact on exports from the U.S. compared with a continuation of high loan rate of the 1981 Bill.

The results of the experiment were different for soybeans. The general trends are the same but the increase in the volume of exports relative to 1985, as a result of the lower FSA85 prices, is not as great as for wheat. This is attributed to a soybean market increasing at a faster rate than is the case for wheat. The pattern is, however, the same, exports are projected to increase. But the value of U.S. exports is roughly similar under the two policies.

The situation for coarse grains, largely corn, falls somewhere in between that for soybeans and wheat. The expected export response to the FSA85 prices compared to the high loan rate of the 1981 legislation is not as pronounced because of the prominent position of the U.S. in the world coarse grains export markets. The U.S. is expected to capture a large share of increased exports due to the lower loan rates. The projected values of exports under the FSA85 loan rate and the 1981 Farm Bill loan rates are roughly similar. The implication is that the high subsidization of exports will not increase appreciably the value of U. S. exports in the near term.

In summary, the reduction in loan rates is expected to increase export volume. With anticipated lower prices, world markets are expected to expand with the U.S. capturing a large share of the growth. However, the value of U.S. exports are projected to remain essentially the same under the two loan rate policies. Aside from positioning the U.S. in the export markets in terms of volume and discouraging the competitors from expanding production, the impact of the FSA85 and the high subsidization of U.S. exports implicit in the FSA85 is to yield an export value which is very similar to that which could have been obtained had 1981 Farm Bill loan rates been continued.

Implications

The evaluation and policy option evaluated with the NCFAP/CARD/FAPRI modeling system has produced a number of implications regarding the resource mix for U.S. agriculture as affected by likely macroeconomic conditions, domestically and internationally, and the Food Security Act of 1985. Agricultural trade is anticipated to increase in response to the lower prices and the implicit export subsidies of the FSA85. That is, the volume of trade in agricultural commodities over the evaluation period increases a total of approximately 40 percent. However, this is not all good as the value of the U.S. agricultural trade is expected to remain essentially the same as it would have under the loan rates of the 1981 Farm Bill. Thus, unless there is a major structural change in the production and consumption patterns in major importing and exporting countries, the general impact of the high direct payments and export subsidies of the FSA85 is conjectured to be largely neutral. That is, the value of exports will not change appreciably from a scenario with higher loan rates.

The expected trade pattern response to the lower prices of the FAS85 reveals some interesting observations. The growth in the market for foodgrains is largely in the centrally planned economies and the developing countries. This growth is in response to expected income growth. These projections could be on the high side should the optimistic assumptions for economic growth in the centrally planned and in the developing economies not be realized. Also, these expected results could change appreciably should the incentive systems being introduced in the eastern block have impacts similar to the experience for the PCR. The anticipated

growth in the market shares of the U.S. is more in response to the growth of the world market than to changes in relative prices.

Perhaps the major implications of the FSA85 are for the resource mix and the U.S. agriculture. The FSA85 does not include financial support for agriculture sufficient to alter the farm debt situation. Thus, the farm financial crisis in U.S. agriculture and financial institutions supporting U.S. agriculture is anticipated to continue, largely unabated. This implies substantial transfers of ownership and continued sluffing of unsustainable debt. Impacts of both of these conditions for the structure of U.S. agriculture are difficult to project. Many argue that the result will be an increase in farm size. The financial pressure and the low prices will continue the pressure for lower costs and, to the extent that they are size specific, for larger farm size. The livestock industry will benefit from the lower feedgrain prices in the short run. These lower feedgrain price may also result in important regional shifts in livestock production as the basis between regions with surpluses and regions deficit in feedgrains widens.

An observation which deserves emphasis involves the developing world. The U.S. will have to look to the developing world for expanded markets for agricultural commodities. This market will grow only with increasing incomes of the developing countries. How is this increase to be generated? Should it be fostered in the U.S. by transfers of agricultural technology to developing countries. It is not clear that the impact for U.S. export markets will be positive. Obviously, there are some very complex questions facing the U.S. on the potential for exports of agricultural products in the developing world and the close tie between this potential and the income growth in the developing world.

There is a prevailing sentiment that the U.S. agricultural sector should become more market oriented. The FSA85 was, in fact, designed to effect this transition. The results of the analysis suggest that the transition period will be of substantial length and that barring unforseen weather difficulties or unanticipated rates of income growth, the U.S. will be in an excess capacity situation relative to target prices over the near and intermediate term. The implication is for continued government intervention in agriculture and a U.S. agriculture with fortunes highly dependent on policies pursued during the 1985-95 decade.

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Table 1. Domestic and Foreign Economic Projections Used in the 10-Year Evaluation of the FSA85

Variable	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
United States											
Real GNP (% change)	2.5	3.8	3.0	2.6	2.7	-0.2	5.7	3.3	2.9	2.9	2.6
GNP Deflator (% change)	3.5	2.4	4.0	4.4	5.2	5.4	3.8	3.9	4.7	4.8	5.1
Civilian Unemployment Rate (%)	7.3	6.8	6.3	6.5	6.4	8.0	6.6	6.2	6.1	6.0	6.0
3-Month T. Bill Rate (%)	7.5	6.1	6.7	7.6	8.2	9.3	6.7	6.5	6.8	7.0	7.2
Moody's AAA Corporate Bond Rate (%)	11.4	9.5	9.4	9.6	10.1	10.6	9.7	8.9	8.8	8.6	8.7
Federal Budget Surplus (Bil. $)	-190.6	-163.4	-134.2	-118.3	-112.1	-111.5	-75.0	-64.2	-51.9	-38.9	-36.2
Foreign/Domestic											
Light Arabian Crude Oil ($ per barrel)	28.0	16.0	16.0	18.0	21.0	23.0	23.0	23.0	23.0	23.0	23.0
Foreign Currency/ Dollar (% change)*	4.1	-14.6	-7.4	-4.4	-1.9	-0.4	-0.6	-0.7	-1.1	-1.0	0.3
Real GNP (% change)											
Africa	-.78	.88	2.4	3.11	3.37	3.0	3.2	3.1	3.0	3.1	3.1
Latin America	3.6	1.2	3.3	3.7	2.6	3.5	3.6	3.6	3.6	3.6	3.5
Pacific Basin	2.5	3.4	5.3	5.3	4.8	5.5	5.2	5.2	5.3	5.3	5.2
Western Europe	2.2	2.9	2.5	2.3	2.2	2.6	2.6	2.6	2.6	2.6	2.6
Centrally Planned	3.9	3.8	3.2	3.3	3.3	3.4	3.5	3.5	3.4	3.5	3.5

SOURCES: Wharton Econometric Forecasting Associates, Long-Term Forecast and World Economic Outlook, March 1986.

*Based on the average exchange rates for the calendar year, higher for 1985 than 1984 even though the dollar depreciated substantially during 1985.

Table 2. Values for Selected Policy Parameters, FSA85 and Beyond

Crop & year	Loan rate	Target price	Reserve		ARP	Paid diversion		CR
			Entry	Release		Level	Rate	
	Dollars per bushel				Percent of base		$/bu	Million acres
Corn								
85/86	2.55	3.03	2.55	3.25	10	--	--	0.0
86/87	1.92	3.03	1.92	3.25	17.5	2.1	0.73	1.0
87/88	1.82	3.03	1.82	3.25	20	--	--	2.2
88/89	1.73	2.97	1.73	3.25	20	--	--	3.3
89/90	1.65	2.88	1.65	3.25	20	--	--	5.2
90/91	1.56	2.74	1.56	3.25	20	--	--	7.0
91/92	1.49	2.74	1.49	3.25	20	--	--	7.0
92/93	1.76	2.74	1.76	3.25	10	--	--	7.0
93/94	1.90	2.74	1.90	3.25	10	--	--	7.0
94/95	1.92	2.74	1.92	3.25	10	--	--	7.0
	Dollars per bushel				Percent of base		$/bu	Million acres
Wheat								
85/86	3.30	4.38	3.30	4.45	20	10	2.70	.0
86/87	2.40	4.38	2.40	4.45	22.5	10	1.10*	2.8
87/88	2.28	4.38	2.28	4.45	27.5	--	--	8.2
88/89	2.17	4.29	2.17	4.45	30	--	--	13.7
89/90	2.18	4.16	2.18	4.45	25	--	--	18.9
90/91	2.19	3.95	2.19	4.45	20	--	--	24.1
91/92	2.20	3.95	2.20	4.45	20	--	--	24.1
92/93	2.21	3.95	2.21	4.45	20	--	--	24.1
93/94	2.22	3.95	2.22	4.45	10	--	--	24.1
94/95	2.23	3.95	2.23	4.45	10	--	--	24.1
	Cents per bushel				Percent of base		¢/lb	Million acres
Cotton								
85/86	57.0	81.0	--	--	20	10	30	-
86/87	55.0	81.0	--	--	25	--	--	.4
87/88	52.0	79.0	--	--	25	--	--	0.8
88/89	50.0	77.0	--	--	25	--	--	1.2
89/90	50.0	75.0	--	--	25	--	--	1.2
90/91	50.0	73.0	--	--	25	--	--	1.2
91/92	50.0	73.0	--	--	25	--	--	1.2
92/93	50.0	73.0	--	--	25	--	--	1.2
93/94	50.0	73.0	--	--	25	--	--	1.2
94/95	50.0	73.0	--	--	25	--	--	1.2
	Dollars per bushel				Percent of base		$/cwt	Million acres
Rice								
85/86	8.00	11.90	--	--	20	15	3.50	0
86/87	7.20	11.90	--	--	35	--	--	0
87/88	6.84	11.66	--	--	35	--	--	0
88/89	6.50	11.30	--	--	35	--	--	0
89/90	6.50	10.95	--	--	35	--	--	0
90/91	6.50	10.71	--	--	35	--	--	0
91/92	6.50	10.71	--	--	35	--	--	0
92/93	6.50	10.71	--	--	35	--	--	0
93/94	6.50	10.71	--	--	35	--	--	0
94/95	6.50	10.71	--	--	35	--	--	0
	Dollars per bushel				Percent of base		$/bu	Million acres
Soybeans								
85/86	5.02	--	--	--	--	--	--	0
86/87	4.77	--	--	--	--	--	--	1.2
87/88	4.77	--	--	--	--	--	--	2.5
88/89	4.77	--	--	--	--	--	--	3.7
89/90	4.50	--	--	--	--	--	--	5.9
90/91	4.50	--	--	--	--	--	--	8.14
91/92	4.50	--	--	--	--	--	--	8.14
92/93	4.50	--	--	--	--	--	--	8.14
93/94	4.50	--	--	--	--	--	--	8.14
94/95	4.50	--	--	--	--	--	--	8.14

____ million acres in 1988/89 and 45 million acres in 1990/91.
APR: Acreage Reduction Program
CR: Conservation Reserve

*Also, 10 percent paid diversion for winter wheat producers at $2.00/bu.

REGIONAL TRADE MODEL

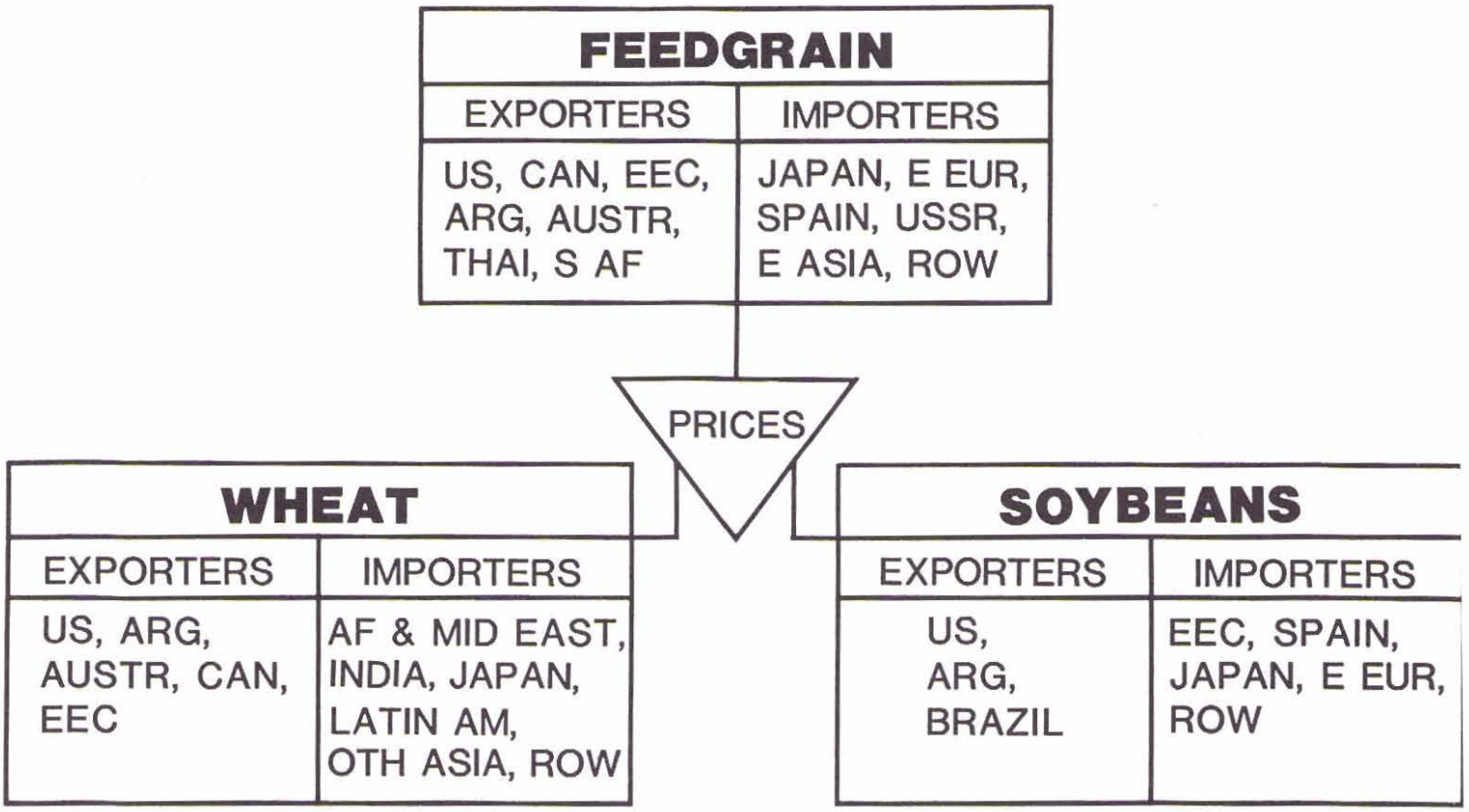

FIGURE 1

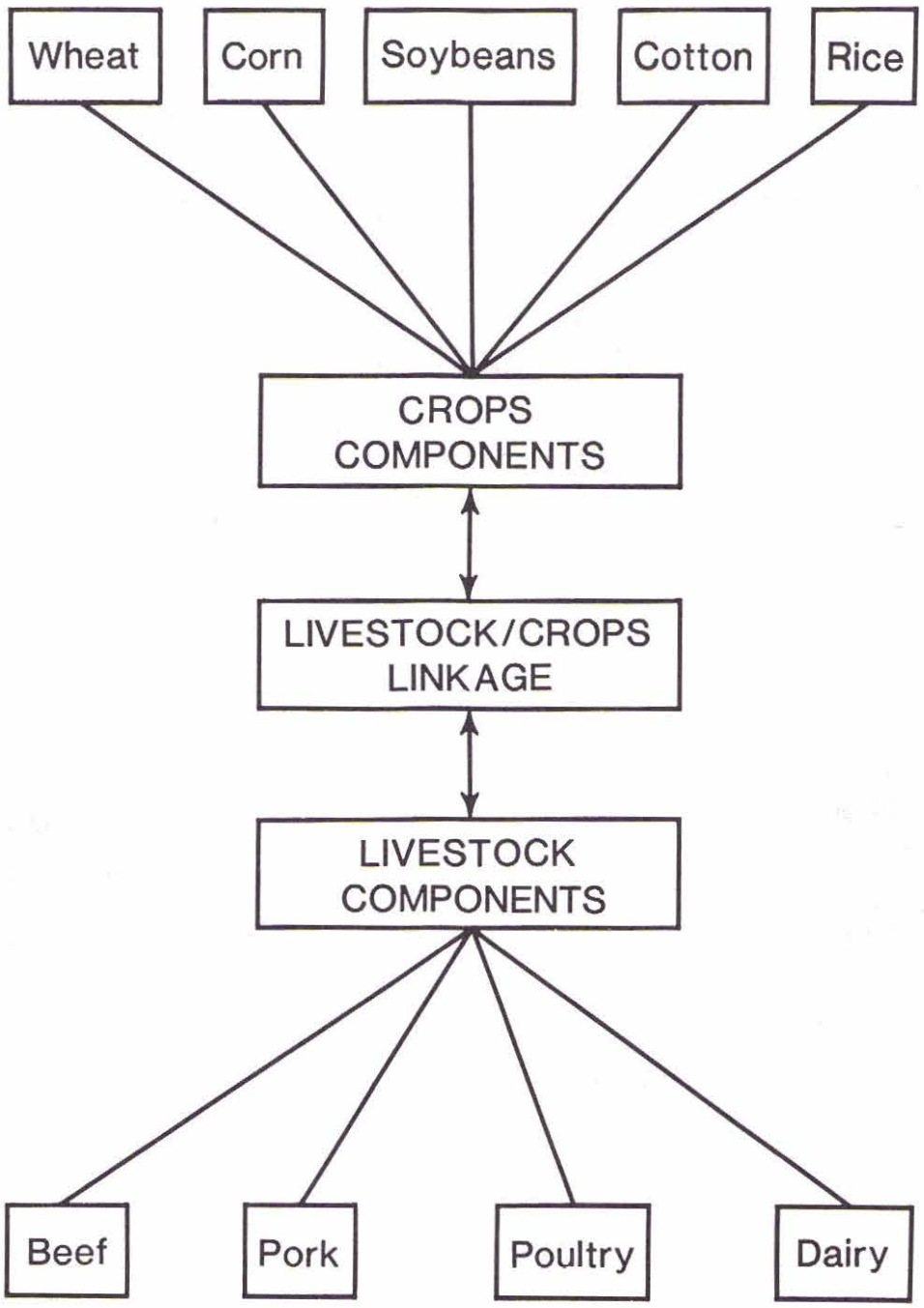

FIGURE 2 Linkages Among Commodity Components in the FAPRI Policy Modeling System

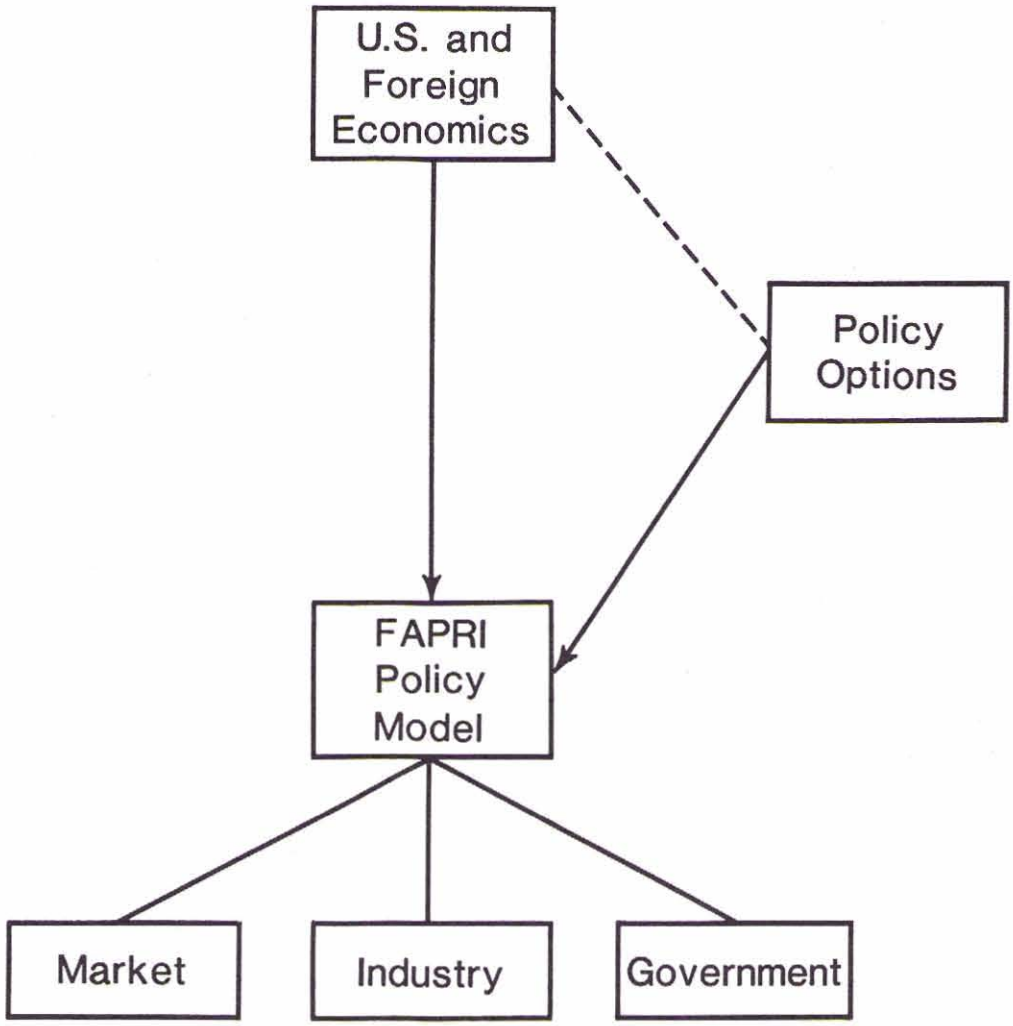

FIGURE 3 Policy Evaluation Process for the FAPRI Model