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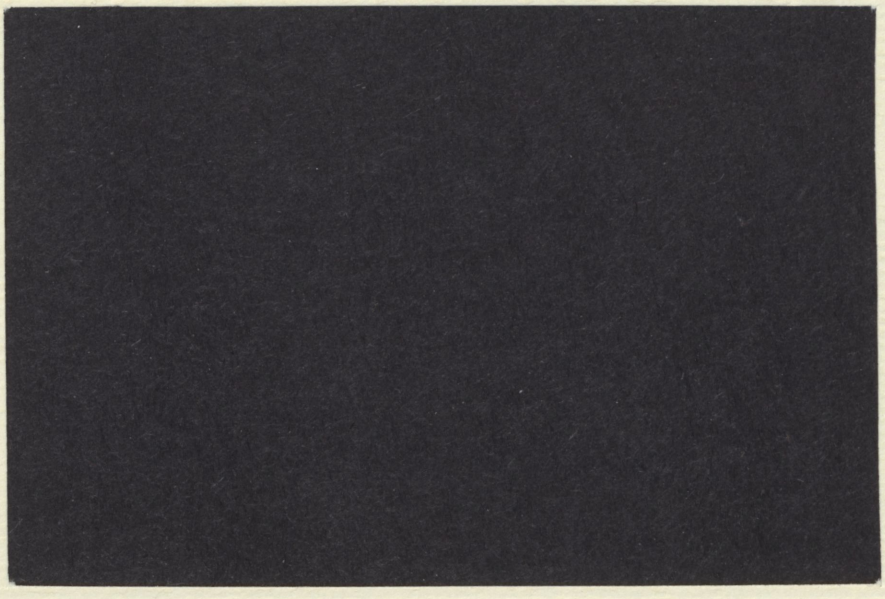

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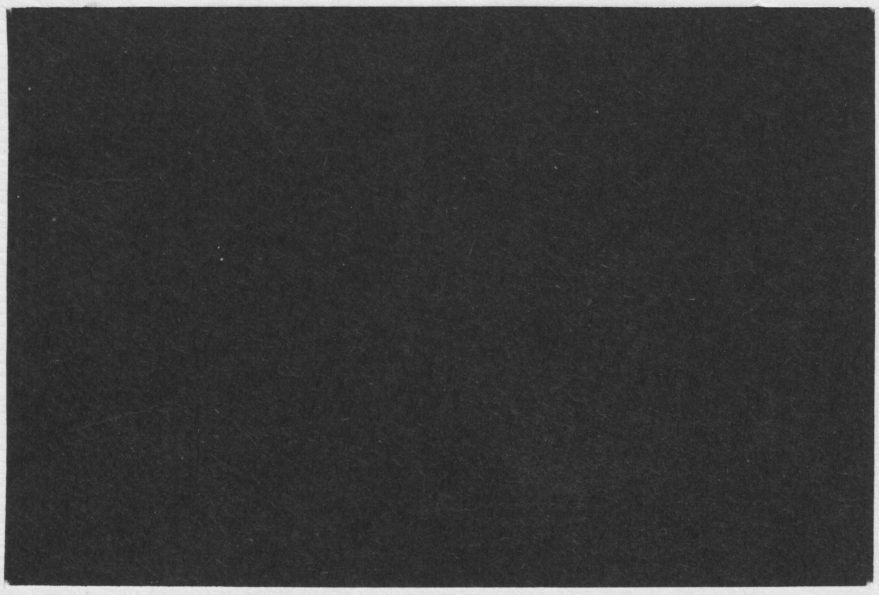

Economic Incentives and the Political Evolution of Major Proposals for the 1990 Farm Bill

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Debate on the 1990 Farm Bill was relatively more focused and less contentious than that leading up to the Food Security Act of 1985 (FSA85). The 1985 Farm Bill debate was heavily influenced by the farm financial crisis and the significant loss of U.S. export market share, both of which created a hostile environment with highly divergent views on how to overcome these problems. Bills were introduced that ranged from the Administration proposal, reflecting a freer market approach, to the Harkin-Gephardt proposal of mandatory supply controls (Meyers, et al). Consensus was reached on legislation that maintained price and income supports to producers, but significantly lowered loan rates and expanded export promotion programs in order to regain lost market shares. With real net farm income rising from $28 billion (1982 dollars) in 1985 to $37 billion in 1990 and the debt to equity ratio of the U.S. farming sector falling from 31 to 20 over the same period (USDA, 1991), debate on the 1990 farm bill reflected continuation of the general theme of the FSA85 rather than a substantial change in course.

Issues relating to the 1990 Farm Bill quickly narrowed to four major areas, (a) the environment, (b) participating producers' ability to plant alternative crops (planting flexibility), (c) the disparity of returns per acre across program crops (equitability), and (d) federal budget restrictions. Environmental concerns, arising primarily from non-agricultural interest groups concerned about water and land quality, resulted in proposals to protect farmers who adopt low-input and resource conserving crop rotations from losing program benefits, expand the existing Conservation Reserve Program (CRP), and protect ground water. Interest in providing program participants greater planting flexibility arose over concerns that previous farm programs dictated

producer planting decisions since producers were not allowed to plant alternative crops on their permitted base (the base less set-aside acres) without leaving the program. This left producers unable to alter planting decisions in order to better react to changing market signals and for alternative crop rotations that would be required to meet conservation compliance plans. Equitability concerns arose from Northern Plains producer groups that were concerned that returns for barley and oat producers participating in farm programs was below that of wheat and corn program participants in the Midwest. These concerns also arose from soybean producers who were interested in an income support program for oilseeds. And finally, Congressional interest in lowering the federal budget deficit resulted in eliminating many proposals that exceeded cost estimates associated with a continuation of FSA85 legislation. In addition, the final House and Senate Conference Bill that became the Food, Agriculture, Conservation and Trade Act of 1990 (FACTA90, S. 2830) was significantly amended by the Omnibus Budget Reconciliation Act of 1990 (OBRA90, H.R. 5835) in order to allow for spending cuts of $13.6 billion over the next five years.

The objective of this paper is to identify and evaluate the broad issues of the 1990 Farm Bill debate as related to major U.S. field crops, and to analyze the evolution of these issues into legislation within a political-economic context. The analysis focuses on those proposals that identify the major issues of planting flexibility, equitability, and budget restrictions. Excluded from discussion are proposals that reflect environmental concerns which have been discussed elsewhere (e.g., Ikerd; Ayer and Abdalla; Bird and Edmond; Crutchfield). The first section of this paper identifies the producer economic-incentives of select proposals. The second section highlights the modeling framework and policy evaluation process used to evaluate these

proposals. The third section provides an analysis of market impacts of the various proposals. The final section traces the evolution of the political and economic considerations that led to the FACTA90 as amended by title one of the OBRA90.[1]

Economic Incentives for Major Proposals

Each of the major proposals for field crop legislation is discussed next. These proposals relate to planting flexibility, equitability, and federal budget restrictions. Despite the similarity of these various proposals in terms of planting flexibility and equitability, the economics for each and the implications for various players within the agricultural sector were quite different.

Flexibility

Two major proposals that fell under the general heading of flexibility were the Administration's proposal and one called "Flex No-pay." Differences between these two proposals related to the level of government support on that portion of a producers' base that can be planted to an alternative non-program crop. The Administration's option would have allowed producers both planting opportunities for these alternative crops on their base acreage with a continuation of deficiency payments. Deficiency payments are equal to the difference between a target price and the higher of the market price or the loan rate. These payments are made using a fixed program yield and are paid on a producer's permitted base. The Flex No-pay option also provided producers greater planting flexibility, but required producers to forfeit deficiency payments on that portion of their base that was planted to the alternative crop.

The basic thrust of the Administration's proposal was to decouple program payments while providing greater planting flexibility (USDA, 1990a). A normal crop acreage (NCA) system was proposed that assigned each farm an NCA equal to the sum of the acreage bases for

individual program crops and historical plantings of oilseeds. With only limited restrictions, farmers could plant any program crop or oilseed within their NCA and still retain deficiency payments. Deficiency payments were determined by historical crop-specific bases that were unaffected by current planting decisions. Acreage reduction programs remained in effect, but producers could choose to plant the program crop or approved experimental or industrial crops on their set-aside acreage (ACR). For each acre of ACR land that was planted, however, the producer would forego an acre of deficiency payments.

The Administration's proposal thus provided strong economic incentives for producers to participate in government programs. Since producers had the option to plant their ACR and retain future base and some deficiency payments, the opportunity cost for program participation was quite low. Only producers wishing to plant more than their NCA, unable or unwilling to comply with conservation compliance provisions, or ideologically opposed to government programs would have reasons not to participate. Participating producers would have incentives to plant their non-ACR and ACR acres as follows:

(1) $APP = f(EP^{PC}, EP^{AC})$

(2) $ACR = f(EP^{PC}, EDP)$

Producer decisions on which crop to plant on their eligible base (APP) or non-ACR acres would be conditioned on the expected market price of the program crop (EP^{PC}) relative to alternative non-program crops (EP^{AC}) since producers would be free to plant any crop they desire and still retain deficiency payments. Producer decisions to plant their ACR to the program crop (ACR) would be conditioned on the expected market price for the program crop and the expected

deficiency payment rate (EDP) since the latter is forfeited on each acre of ACR acreage that is planted.

The Flex No-pay option differs from the Administration's proposal in that producers would not have the option to plant their ACR, and would be required to forego deficiency payments if they planted a non-program crop on their eligible base. Future program benefits such as base acreage and deficiency payments, however, were not forfeited under this option. This program was more restrictive than the Administration's proposal in terms of planting flexibility. The economic incentives under the Flex No-pay option were also different from that of the Administration's proposal as follows:

(3) $APP = f(EP^{PC}, EP^{AC}, EDP)$

A producer's planting decision on eligible base (APP) is conditioned on the expected market price of the program crop relative to that of the alternative crop and the expected deficiency payment rate. Thus deficiency payments would enter into a producer's decision to plant under the Flex No-pay option.

Equitability

Two major proposals considered under the issue of equitability was the Price Support Equilibration (PSE) option, and a soybean marketing loan program. The PSE option was introduced by a group of Northern Plains Senators and supported by those that contended that levels of government support for commodities such as barley and oats were below that of other program commodities such as corn and wheat. Comparisons were made between net returns per acre across various program crops. Specific interest in soybean support resulted in a marketing loan proposal with rates ranging initially from $6.25 per bushel to $5.25 per bushel. One

variant of this option was the Original Soybean Graduated Equity Loan (GEL) Program proposed by the American Soybean Association (ASA). This option was not initially given serious consideration because of a perceived "perverse" program requirement that the amount of production eligible for the GEL loan rate was to increase with higher soybean stock levels. The ASA, however, contended that the GEL loan rate would eventually fall in the face of higher soybean stocks since it was conditioned on corn and cotton set-aside rates (FAPRI 1990f).

The PSE option utilized an NCA approach for crop acreage similar to the system that existed in the early 1970's. Deficiency payments were made only on acreage actually planted and therefore varied depending on the crop planted. Set-aside rates were required and expressed as a portion of the crop area actually planted. Producers could, for example, plant their whole NCA to wheat and receive a wheat deficiency payment even if they originally had a corn base, as long as they met the wheat set-aside requirement. In order to provide for greater equity between crops, a marketing loan rate would be extended to soybeans and the level of support across all program crops would be equalized on the basis of participant net returns per acre. The soybean marketing loan was set relative to the target price of corn and cotton as proposed by the ASA as follows:

$$SML = TP^c * (1 - ARP^c) * 2.5 * P + TP^T * (1 - ARP^t) * 10 * (1 - P)$$

where SML is the soybean marketing loan, TP is the target price for corn (superscript c) and cotton (superscript t), ARP is the set-aside rate, and P is the proportion of corn acreage planted to both corn and cotton. The marketing loan was made available to producers on a proportion of production determined by projected levels of carryover stocks. Barley target prices were increased 15 percent above baseline levels to $2.72 per bushel in order to equalize

barley participant returns with that of the wheat program. The oat target price was increased by 50 percent to $2.17 per bushel to equalize participant returns with those of barley. After returns for soybeans, barley, and oats were equalized, all support prices were reduced by an equal percent until the average budgetary cost of the program over the life of the farm bill fell to baseline levels. Support levels increased for soybeans, barley, and oats, but decreased for wheat, corn, sorghum, cotton, and rice. Producers under this option would have incentives to expand planting of those crops with the highest support rates net of set-aside requirements. Thus one would expect a priori some acreage shift to soybeans, barley, and oats.

Soybean marketing loan options were considered in order to provide additional support to the U.S. soybean industry without supporting the world soybean price and significantly increasing government budget exposure. Initial consensus formed around a program that would employ a loan rate that would limit government cost to an average of $500 million per year. The program would use recourse loans in order to avoid costly loan forfeitures, and producers would repay the loan within 9 months either at the lower of the original loan rate or the prevailing market price. The loan rate would not be coupled with any set-aside requirements. Producers would have an incentive to participate in the program if future prices were expected to be at or below the loan rate. Marketing premiums could be realized if producers repaid their loans at market prices below the loan rate. In addition, the program would allow producers to face less income risk. These two factors combined could stimulate an expansion in acreage planted to soybeans depending on the level of the soybean loan rate.

Triple Base

One proposal considered early in the farm bill debate was the Triple Base option. The objective of such a proposal was to improve planting flexibility and reduce budget exposure. Target prices would be maintained, but the amount of acreage that was eligible for deficiency payments would be reduced. The program consisted of three bases. The first and second bases involved the traditional set-aside acres and acres eligible for deficiency payments. The third base, designed for budget savings, would be considered flexible and could be planted to any crop desired, but would be ineligible for deficiency payments. For example, if a producer with a 100 acre corn base faced a 10 percent set-aside rate and a 15 percent triple base rate, then the first base (set-aside) would equal 10 acres, the second base (eligible for deficiency payments) would equal 75 acres, and the third base (ineligible for deficiency payments but available for alternative crops) would equal 15 acres. Thus producers would give up deficiency payments on a portion of land previously supported, but would have greater planting flexibility for conservation compliance provisions and the opportunity to better follow market signals. The Triple Base option would provide producers strong incentives to plant their third base to crops with the highest relative expected returns. As a result, market prices for the program crop could rise relative to the alternative crop if a significant amount of acreage shifted to the alternative crop.

Modeling Framework

The options presented in this paper were analyzed using the Food and Agricultural Policy Research Institute (FAPRI) Agricultural Policy Model. This model has components for each of the major commodities for livestock (beef, hogs, and poultry), dairy, and crops (feedgrains - corn, sorghum, oats and barley - soybeans, wheat, rice, and cotton). The econometric models

for the commodity components include behavioral relationships for production, stocks, exports, imports, final consumption, and if appropriate, consumption as intermediate products. The demand for exports facing the U.S. for crops is characterized by a number of equations that reflect the rest of the world.

The commodity components are linked between markets in the policy analysis exercises to reflect the simultaneity of price determination in U.S. agriculture. Livestock prices, for example, affect the demand for feedgrains, feedgrain prices, in turn, influence investment and production decisions for livestock and, correspondingly, livestock prices. These links across commodity markets are especially important for policy evaluation since policy impacts on crops have ramifications for the livestock markets.

In addition to the commodity components, the FAPRI Agricultural Policy Model has farm income and government cost components. The farm income component links gross returns and production expenses to major commodity components and macroeconomic projections to generate estimates of gross and net farm income. The government component estimates costs by commodity program and total budget exposure using output from the crop commodity components.

The dimensions of the FAPRI model are, by necessity, relatively large. The model rests on an extensive set of predetermined or exogenous variables. These variables reflect the U.S. domestic conditions, and other determinants of prices in agricultural commodity markets. The FAPRI model has a number of key structural parameters. A complete review of these and the total model specification is available in Brandt et al., 1987, 1990, and Westhoff et al. Estimated

elasticities that will contribute to a greater understanding of subsequent analysis of policy options are provided in Table 1.

Policy Evaluation Process

The policy evaluation process began with the development of a baseline against which policy changes were assessed. Policy and macroeconomic assumptions of the U.S. and the world were entered into the FAPRI Agricultural Policy Model and annual projections were made over the proposed life of the 1990 Farm Bill (in this case, 1991/92-1995/96). This process is illustrated in Figure 1. U.S. policy assumptions used in the construction of the baseline employed here reflect a continuation of the FSA85. After the baseline was completed and reviewed, alternative policy scenarios were developed from the proposals discussed earlier and were analyzed and compared to the baseline.

The basis for the analysis of the program options considered in this paper was the FAPRI March 1990 baseline (FAPRI, 1990e).[2] This baseline assumes a continuation of current agricultural policies for major world trading nations. U.S. target prices for program crops were frozen at 1990 levels, and formulas under the FSA85 determined loan rates. Similar assumptions were used in the world trade models, with support prices in the European Community and Japan frozen after 1990. Thus, no potential GATT agreement requiring reduced levels of government support for agriculture was assumed.

Analytical Results Using the FAPRI Model

Results of the analyses of the flexibility and equitability options are presented below and in Tables 2 and 3. In order to simplify the analysis, annual changes from the baseline under each scenario were averaged over the proposed 5-year life of the Farm Bill. Only the most

Table 1. Estimated Elasticities from the FAPRI Agricultural Policy Model

Commodity	Feed		Food		Exports		Free Stocks		Total	Acreage Response Elasticity
	Elasticity	Share[a] %	Elasticity	Share %	Elasticity	Share %	Elasticity	Share %		
Corn	-0.26	48.0	-0.09	10.0	-0.42	25.0	-0.67	5.0	-0.27	0.08
Wheat	-0.62	5.0	-0.02	26.0	-0.38	45.0	-3.89	9.0	-0.56	0.21
Soybeans	-1.17[b]	53.0			-1.07	29.0	-2.00	13.0	-1.19	0.34
Soymeal	-0.14	81.0			-1.88	18.0	-0.08	1.0	-0.45	
Rice			-0.07	32.0	-2.27	41.0	-0.19	13.0	-0.98	0.16
Cotton	-0.05[c]	43.0			-1.09	41.0	-0.33	16.0	-0.52	0.27

Table 1. Continued

	Export Demand Elasticities						
Commodity	Corn	Wheat	Soybeans	Soybean Meal	Soybean Oil	Rice	Cotton
Corn	-0.42			0.05			
Wheat	0.06	-0.38				0.08	
Soybeans			-1.07	0.86	0.37		
Rice		0.28				-2.27	
Cotton							-1.09

	Retail Meat Price and Income Effects[d]			
Commodity	Beef	Pork	Chicken	Income
Beef	-0.59	0.09	0.26	0.56
Pork	0.37	-0.98	0.39	0.39
Chicken	0.51	0.44	-0.61	0.35

[a] Shares are computed at 1989/90 levels for the indicated variables.
[b] Bean crush demand
[c] Cotton mill demand
[d] Off diagonal effects are retail cross price elasticities.
Source: Westhoff et al.

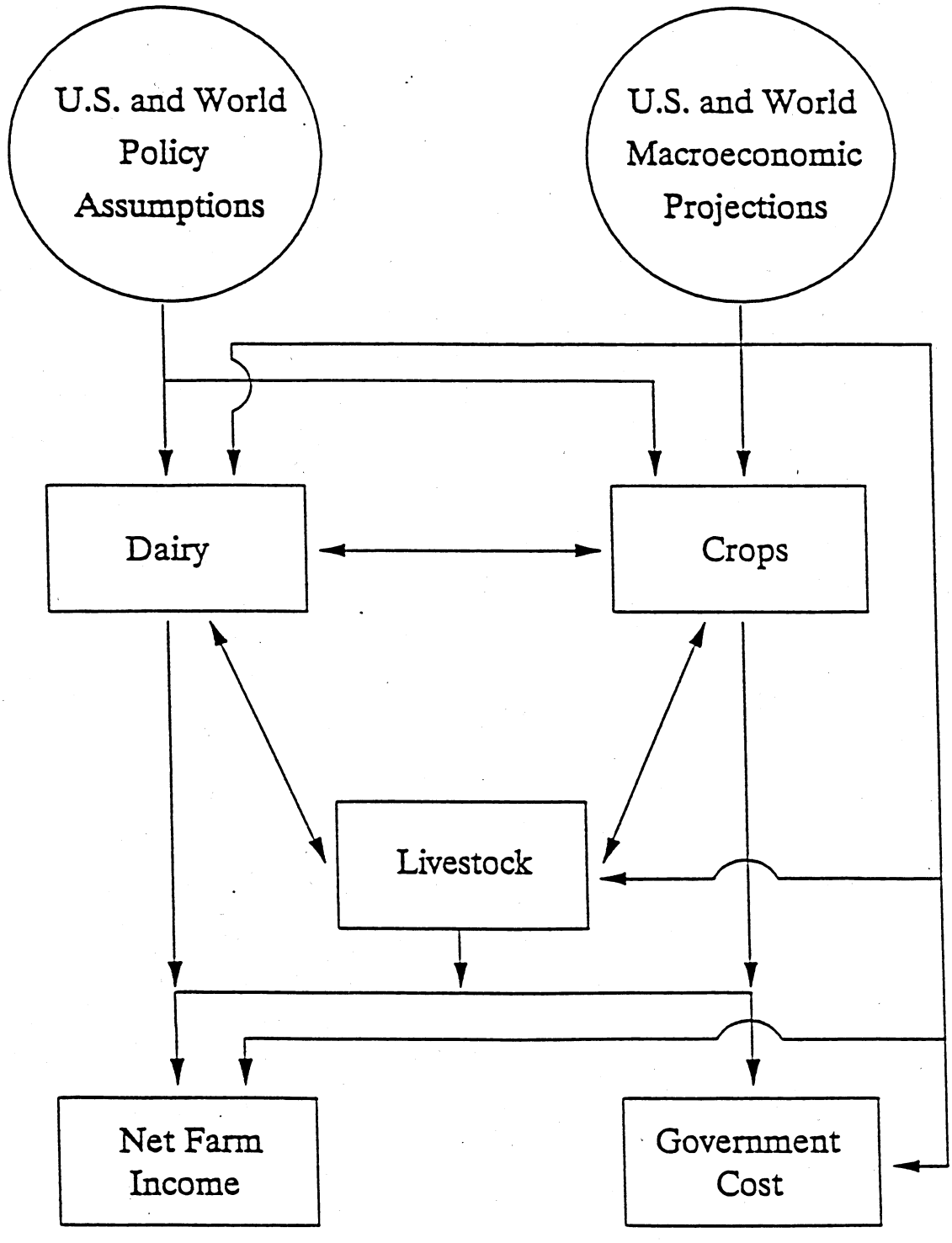

Figure 1. Policy Evaluation Process for the FAPRI Policy Modeling System

Table 2. FAPRI Analysis of Flexibility and Price Support Equilibration Options[a]

	Administration Proposal	Flex No-Pay	Price Support Equilibration
		--Million Acres--	
Area planted			
Corn	-1.5	-0.2	-0.8
Soybeans	1.7	0.2	1.0
Wheat	1.4	0.1	-0.9
Cotton	1.0	0.1	-0.2
Sorghum	-0.3	-0.1	0.5
Barley	-0.2	-0.1	0.8
Oats	0	0	0.6
Rice	0.1	0	0
15 crops	1.9	0	0.7
Area idled (15 crops)	-4.1	-0.2	-2.5
		--Dollars per Bushel--	
Farm Prices			
Corn	0.13	0.02	0.06
Soybeans	-0.70	-0.05	-0.29
Wheat	-0.10	0	0.04
Cotton (¢/lb.)	-3.87	-0.45	0.68
Sorghum	0.07	0.03	-0.02
Barley	0.08	0.02	-0.09
Oats	0.02	0.02	-0.17
Rice ($/cwt.)	-0.27	0	0.01
Target prices			
Corn	0	0	-0.03
Soybeans[b]	0	0	1.48
Wheat	0	0	-0.04
Cotton (¢/lb.)	0	0	-0.73
Sorghum	0	0	-0.03
Barley	0	0	0.33
Oats	0	0	0.70
Rice ($/cwt.)	0	0	-0.11
		--Billion Dollars--	
Net farm income	-0.58	-0.17	0.86
Net CCC outlays	0.43	-0.16	0.02

[a] Annual changes relative to the baseline averaged over the years 1991/92 to 1995/96.
[b] Loan rate.

Table 3. FAPRI Analysis of Soybean Marketing Loan Options[a]

	$5.25	$5.50	$5.75	$6.00
		--Million Acres--		
Planted acreage				
Corn	-0.1	-0.3	-0.5	-0.8
Soybeans	0.2	0.5	1.5	2.7
		--Dollars per Bushel--		
Prices				
Corn	0.01	0.02	0.04	0.05
Soybeans	-0.05	-0.14	-0.45	-0.84
		--Billion Dollars--		
Net CCC outlays	-0.02	0.06	1.02	2.43

[a] Annual changes relative to the baseline averaged over the years 1991/92 to 1995/96.

essential elements of the analysis are presented. More detailed studies of each proposal are referenced below.

Administration

The Administration's proposal results in significant increases in participation in government programs as producers respond to relative market prices, improved crop rotations and program changes (FAPRI, 1990b). Producers were eligible to plant any crop they desire on their permitted base (whole base less ACR requirements) and still retain their deficiency payments. In addition, producers could plant their ACR, provided they gave up deficiency payments on an acre for acre basis. Participation rates were estimated to reach 90 percent for wheat and feedgrains and 95 percent for cotton and rice reflecting little opportunity cost for program participation (Table 2). Producers who were previously unwilling to join the farm program because of set-aside requirements could now plant their entire base and receive some deficiency payments. Despite greater participation, acreage idled under all government programs was projected to fall an average 4.1 million acres per year relative to the baseline as producers choose to plant their ACR. The gain in the market value of the crop they produce less expected production costs outweighed the loss of deficiency payments. Only producers with relatively low potential yields on their ACR land would have incentives not to plant. While acreage planted to 15 major crops increased just 1.9 million acres relative to the baseline, there were significant changes in acreage planted to individual crops. Soybean acreage expanded 1.7 million acres, primarily at the expense of corn. Baseline soybean prices and returns were high relative to corn, therefore acreage shifted to soybeans as planting restrictions were lifted and corn deficiency payments were also received on base acreage planted to soybeans. Acreage also shifted from

feedgrains (particularly sorghum and barley) into wheat as baseline wheat prices were projected to be strong relative to feedgrain prices. The largest proportional increase in acreage was for cotton, reflecting higher baseline cotton prices, the binding nature of the cotton program under the baseline, and lower soybean prices under this option. Rice acreage increased slightly as a result of reduced land idling.

Farm prices generally move inversely to changes in production, so the Administration's proposal resulted in higher feedgrain prices and lower prices for all other commodities. As a result, net farm income fell less than one percent from baseline levels as lower crop receipts were offset somewhat by higher government payments. Net CCC outlays increased over 4 percent per year from baseline levels. The largest increases were for cotton and wheat, reflecting higher participation rates, lower market prices, and significant increases in deficiency payments. Feedgrain outlays fell slightly, as higher participation rates more than offset higher market prices. Also this program met with considerable resistance from Southern States; the estimated 70 cents per bushel decline in soybean price was not offset by sufficient base acreage with corresponding deficiency payments.

Flex No-pay

The Flex No-pay option reflected an effort to limit the wide planting possibilities in the Administrations program by forcing producers to give up deficiency payments on flexed acreage. This option resulted in very small changes in estimated planted acreage (FAPRI, 1990a). A producer would only plant an alternative crop on program base acres if the expected net market returns of that crop exceeded the expected net returns plus deficiency payments of the program crop. Given baseline target and market prices, there was little incentive for producers to shift

from one crop to another, especially if they forfeited deficiency payments to do so. Acreage shifts that did occur primarily represented improved crop rotations. As a result, estimated prices changed very little from the baseline. Net CCC outlays fell less than 2 percent from baseline estimates as producers elected to forfeit deficiency payments in order to improve their crop rotations (Table 2).

Price Support Equilibration

The PSE option attempts to provide for greater equity between crops (FAPRI, 1990c). This involved a two-step process that first raised support prices for "disadvantaged crops" to equal the other program crops, and second reduced all support rates by an equal amount in order to hold budget costs at baseline levels. The soybean marketing loan rate was initially determined by the formula proposed by the ASA in its' GEL proposal - this formula allowed for equity with corn and cotton program payments. The loan was made available on a proportion of production inversely related to projected carryover stocks. Thus this formula inverted the stock-trigger mechanism proposed by the ASA. Under this scenario, however, 65 percent of soybean production in every year of the analysis was eligible for the loan rate. Barley target prices were initially increased 15 percent above the baseline to $2.72 per bushel (Table 2). Such an increase would equalize barley and wheat program returns. The oats target price was increased by almost 50 percent to $2.17. This rather large increase was required to equalize oats participant returns with program returns to competing crops such as wheat and barley. All support rates were then reduced by 1 percent in order to lower projected CCC outlays to the baseline (see Table 2).

Another change required under this program was the elimination of the 0-92 program which allowed producers to idle their whole base and receive 92 percent of their eligible

deficiency payments. This change was required since program payments are made on planted acreage only. Set-aside rates were therefore increased to offset some of the acreage-increasing effects of eliminating the 0-92 program.[3] For wheat, feedgrains and cotton, set-aside rates were increased by 2.5 percent above the baseline. The rice set-aside rate was increased by 5 percent above the baseline since rice represents proportionally more 0-92 acres than these other crops. Since the ASA formula to determine the soybean marketing loan rate incorporated set-aside rates, the increased idling requirements reduced the initial soybean loan rate from $6.22 per bushel to $6.05 and was further reduced by one percent in this proposal.

The impact of the PSE option was an expansion of soybean, barley, and oats acreage planted reflecting the increased support rates. Similarly, corn, wheat, and cotton acreage fell as the target prices were reduced. Sorghum acreage remained 4.1 percent above the baseline despite a lower target price and a higher set-aside rate since the 0-92 program accounted for a significant proportion of sorghum base acreage under the baseline. Farm income increased less than 1 percent from the baseline since higher returns for some crops were offset by lower returns for others. Net CCC outlays did not increase significantly from the baseline as required by the program.

Soybean Marketing Loan

Four scenarios were evaluated for soybean marketing loan options which ranged from $5.25 per bushel to $6.00 per bushel (FAPRI, 1990d). These results are presented in Table 3. The analysis indicates that very little additional soybean acreage was planted relative to the baseline under a $5.25 and $5.50 soybean marketing loan, but expanded an average 1.5 and 2.7 million acres per year under a $5.75 and $6.00 marketing loan, respectively. This evaluation

suggests that support rates between $5.50 and $5.75 become critical turning points with regard to farmer's planting decisions. Additional supply response was realized when prices escalate to, or near, the average soybean baseline price of $5.80 per bushel. Program costs were also highly dependent on the market price projections under the baseline since the marketing loan rate was fixed for each scenario. Since market prices were expected to fall below the baseline as more soybean acreage was planted, lower baseline level prices would result in higher program costs. The analysis indicates that the cost of a soybean marketing loan program would be trivial under baseline conditions at loan rates at or below $5.50 per bushel. Costs escalate to an average $1.0 and $2.4 billion per year, however, at loan rates of $5.75 and $6.00 per bushel.

Triple Base

FAPRI analysis of the triple base options indicated that corn producers would have an incentive to plant part of their third base to soybeans (FAPRI, 1990g). Thus an average 1 million acres per year are shifted from corn to soybean production under the 10 and 20 percent triple base options (Table 4). Some of the decline in corn program acreage planted under the 20 percent triple base option was offset somewhat by an increase in nonprogram planted acreage in response to lower participation in the government corn program. The shifts in acreage under both options raised the corn price and lowered the soybean price. Government outlays thus fell due to less acreage eligible for deficiency payments, lower participation in the government corn program, and higher feedgrain prices. Thus a 10 percent triple base saved $4.7 billion in government spending over 5 years, compared to $7.5 billion under a 20 percent triple base. Each of these programs were estimated to be equivalent to options that reduced all target prices by 3.5 and 5.5 percent, respectively, the first year and then froze target prices at these reduced

Table 4. FAPRI Analysis of Triple Base and Target Price Reduction Options[a]

	Triple Base		Target Price Reduction	
	10%	20%	3.5%	5.5%
	--Million Acres--			
Acreage Planted				
Corn	-0.9	-0.7	0.2	0.2
Soybeans	1.0	1.2	0.3	0.4
	--Dollars per Bushel--			
Prices				
Corn	0.06	0.04	-0.02	-0.03
Soybeans	-0.29	-0.35	-0.08	-0.12
	--Billion Dollars--			
10-Crop net returns	-1.07	-1.98	-1.57	-2.40
Net farm income	-0.98	-1.53	-0.99	-1.53
Net CCC outlays	-0.95	-1.50	-0.99	-1.53

[a] Annual changes relative to the baseline averaged over the years 1991/92 to 1995/96. These scenarios use the FAPRI July 1990 baseline (FAPRI, 1990h).

rates over the next four years. The net impact of such a change was to reduce participation in government program for all program commodities. Some of the acreage that was idled under government programs was then planted, thus raising overall production and lowering farm prices for wheat and feedgrains. As a result, net farm income falls an average $1-$1.5 billion per year from the baseline under both options due to lower deficiency payments and lower market prices.

While changes in net farm income under triple base and target price reductions were similar, net return changes for the crops sector alone were marginally different. Changes in total net returns for the 10 major U.S. crops, reflecting both market and government returns, averaged $300-$400 million more per year under the triple base plan than under the target price reduction options since prices for most program commodities fell under the latter.

Evolution of the Policy Debate

Budget restrictions and planting flexibility were two primary issues that affected early debate on the 1990 Farm Bill. The House and Senate Agriculture committees had very little information about how much they were going to be required to reduce agricultural spending since a budget agreement was not reached until October 1990. Thus, the Agriculture Committees limited projected government outlays for all proposed options to $12 billion a year as projected by the Congressional Budget Office (CBO) under a continuation of the FSA85 legislation.

The PSE approach never gained early momentum. Raising support levels for barley, oats, and soybeans would have significantly increased budget exposure had not support for other crops been lowered. Interest in a soybean marketing loan program, on the other hand, generated widespread support. This support was strongest from Southern legislators. They contended that

the Administration's proposal would leave southern state producers at a disadvantage because of expected negative effects on soybean prices. Lower prices and the smaller base acres available in the South relative to the Midwest would significantly lower income for southern state producers. Interest ultimately shifted in the direction of the level of the loan rate that would be set into legislation. The House and Senate bills that entered conference (H.R. 3950 and S.2830) contained provisions that generally allowed for a soybean marketing loan ranging between $5.25 - $5.50 per bushel. The loan rate was then reduced to $5.02 per bushel during conference, the rate authorized by the FSA85 for 1985-86, in order to meet inevitable budget cuts.

The issue of planting flexibility began early in the Farm Bill debate with the Triple Base concept which was viewed as an approach that would provide greater flexibility for both planting decisions and inevitable spending cuts. Congressional interest in the approach faded early on as it was viewed by producer groups primarily as a quasi target price reduction.

The concept of decoupling became prominent when the Administration announced it's program in February 1990. Concern arose over this concept of providing both planting flexibility and deficiency payments on acreage planted to nonprogram crops. Other difficulties arose when both CBO and FAPRI estimated that program costs under the bill would exceed the baseline. Some commodity groups expressed reservations over the degree of flexibility in the Administration's proposal, arguing that competing crops could shift into their formally restricted base of production with government assistance, thus lowering market prices for their program crops.

These concerns were later addressed in an amendment introduced by Senator Grassley that limited the Administration's flexibility program by allowing producers to plant nonprogram

crops on just 25 percent of a producer's base. This amendment failed as opponents continued to argue against government payments on acreage planted to nonprogram crops. The next evolution incorporated into the House and Senate pre-conference bills was the concept of Flex No-pay, which allowed producers planting flexibility on 25% of their base in exchange for giving up deficiency payments on an acre-for-acre basis (see USDA, 1990b). Twenty five percent flex No-pay later evolved during conference into a 15 percent triple base option combined with 10 percent Flex No-pay. Thus, producers were required to forfeit deficiency payments on at least 15 percent of their base, but could decide whether to receive deficiency payments or plant a nonprogram crop on 10 percent of their base. This modification was required as part of the budget agreement (OBRA90) to reduce agricultural spending by $13.6 billion over 5 years in order to meet Gramm-Rudman-Hollings deficit reduction targets and avoid a sequester, which would proportionally reduce spending for all federal programs.

The House and Senate Agriculture Committees, which were responsible for implementing the $13.6 billion spending cuts, initially considered two options relative to commodity programs (a) a 10-20 percent triple base option, or (b) an across-the-board reduction in target prices. Three questions were to be resolved. First, how much savings could be realized over a five year period from a 10 and 20 percent triple base option. Second, as an alternative to triple base, how much would target prices for all program crops have to be reduced to match the savings estimated under the triple base option. Third, would a triple base option or a target price reduction option have similar or different implications for U.S. agriculture.

Summary and Conclusions

The Food, Agriculture, Conservation and Trade Act of 1990 (FACT90), as amended and signed by the President on November 28, 1990, generally reflected a continuation of the FSA85. This new legislation continues price and income supports for grains and export promotion programs with only minor modifications to loan rate formulas. This general trend towards greater market orientation was maintained in light of the relative success of the FSA85 in expanding trade and raising net farm income, and present budget pressures.

Refinements reflected in FACT90 were in terms of greater planting flexibility, support for oilseeds, and greater environmental concerns. The final provisions were shaped by a combination of economic analysis, budget restrictions, as well as political concerns. The Administration's flexibility option not only suggested significant potential economic losses for some commodities and regions of the U.S., but also became a partisan issue as opponents balked at the ideology of providing government support that was nearly decoupled from planting decisions. Support for oilseeds was generally favored on the basis of equitability, but was significantly reduced as the potential for large budgetary exposure became apparent.

The farm bill debate, however, was mostly dominated by budget concerns in order to meet Gramm-Rudman-Hollings deficit reduction targets and avoid a sequester. The debate began with much uncertainty over how much of the agricultural budget was going to be cut. The House and Senate Agriculture Committees underestimated the magnitude of the required cuts that finally took place during conference. Thus while economic analyses and political considerations evolved into what appeared to be a gentle reshaping of the old FSA85, Congresses' 5-year budget deal resulted in substantially less support for agriculture. Thus, even though the House

and Senate Agriculture Committees froze target prices in order to maintain income support, the Omnibus Budget Reconciliation Act of 1990 required an effective reduction in the target price via a 15 percent triple base provision.

Footnotes

1. While not described here, this legislation is discussed in detail by Harl.

2. The exceptions are the Triple Base and Target Price Reduction options which used the FAPRI July 1990 baseline.

3. Support price reductions greater than one percent would have been required had not set-aside rates been increased.

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