



# The 1995 Farm Bill

*A Special Series of Alternative Policy Analyses*

Agricultural Policy Analysis Center • The University of Tennessee  
Great Plains Agricultural Policy Center • Oklahoma State University

November 1995

No. 8

## Comparing the FFA and Senate Bills

By Daryll E. Ray, Michael R. Dicks,  
Daniel G. De La Torre Ugarte,  
and Richard L. White<sup>1</sup>

By the end of October 1995, the Senate and House agriculture committees had sent farm bills to their respective budget committees for reconciliation. The House Committee on Agriculture actually was unable to achieve a consensus; Chairman Pat Roberts (R-Kan.) subsequently sent his Freedom to Farm Act (FFA) to the House Budget Committee. On the Senate side, a compromise bill was approved, though by the end of the month it had not received a number or formally been written.

The House and Senate bills approach the deficit-reduction concerns which drive this year's farm bill process in dramatically different ways, although they have a common bond of decoupling direct payments to farmers and production decisions. This paper attempts an "apples-to-apples" comparison of the two farm policy alternatives, using a *complete 1996-2002 baseline*, the last two years of which recently became available from the Congressional Budget Office (CBO).

This paper first examines the substantive differences between the House and Senate bills and how their authors intend to achieve budget savings. Subsequently, the impacts of each on U.S. agriculture will be examined, followed by a discussion of other comparisons which can be drawn between the legislative proposals.

### Highlights

While Freedom to Farm Act and the Senate Bill approach deficit reduction quite differently, they both decouple payments from production decisions to a greater or lesser extent. Compared to continuing current policy, these bills would result in the following changes over their duration:

- ACREAGE AND PRICES: Acreage is up slightly to 4.3 percent under FFA; up slightly under Senate Bill. FFA wheat and soybean prices are lower; Senate Bill soybean prices are lower.
- TOTAL GOVERNMENT PAYMENTS AND NET RETURNS TO THE SEVEN MAJOR CROPS: FFA payments total \$5.6 billion less and returns total \$9.8 billion to \$32.9 billion less; Senate Bill payments total \$7.9 billion less and returns \$9.3 billion less.
- NET FARM INCOME: totals \$2.8 billion to \$19.3 billion less under FFA; Senate Bill totals to \$7.3 billion less
- Using a ratio of losses in net returns to the major crops/budget savings, the Senate Bill costs crop farmers 73 cents for each dollar in budget savings. Each dollar of FFA savings costs farmers from 73 cents to \$2.45 in lost returns.

<sup>1</sup> Authors are Blasingame Chair of Excellence in Agricultural Policy, The University of Tennessee; Associate Professor of Agricultural Economics, Oklahoma State University; and Research Assistant Professor of Agricultural Economics and Information Specialist, both of The University of Tennessee.

### What Each Bill Does

As just mentioned, the two bills adopt dramatically different deficit-reduction strategies. The FFA would replace direct payments to farmers with a seven-year contract between farmers and the federal government. Through these contracts, farmers would receive an annual payment based on a percentage of their historical (1990-95) Commodity Credit Corp. payments.

Farmers under contract would be required to maintain conservation compliance plans in order to receive payments. The Acreage Reduction Program (ARP) and other short-term, land-retirement programs would be eliminated, as would all crop-specific bases.

The FFA offers a complete decoupling of federal payments and farm production decisions. Farmers receive payments unrelated to current production decisions and determine their own crop mixes.

The Senate Bill, on the other hand, generally retains the existing commodity program structure. This bill relies on a mix of increased planting flexibility and per-bushel deficiency payment caps to achieve savings. Normal flex acreage (the portion of base for which farmers do not receive payments but to which they may plant other crops) is increased from 15 percent to 30 percent.

Also, other crops may be planted to wheat and feed grains base without a loss of deficiency payments for that base; thus optional flex has changed in concept for these base acres. For cotton and rice, optional flex retains its current meaning. Although 100 percent of base may be "flexed," farmers lose payments for other crops grown on cotton and rice base.

Thus, the Senate Bill is a de facto decoupling of payments and planting decisions for much of crop agriculture. The Senate Bill also sets a per-bushel cap on the deficiency payment rate at the level provided in the CBO baseline. A program-by-program comparison of the two bills can be found in table 1.

As mentioned in prior issues of this series, the CBO baseline, or expected situation,

assumes a continuation of current policy and is used in the Policy Analysis System (POLYSYS) to simulate the bills' impacts on agriculture. The changes noted here should be analyzed as changes away from this baseline.

### Understanding Budget Savings

As has been shown in previous issues of this series, each bill achieves different levels of commodity program savings. However, both bills have a \$13.4 billion target – originally set by the House and embraced by the Senate – for total budget savings from commodity-related agricultural programs during 1996-2002.

FFA budget savings are established in the legislation through caps on agriculture and agricultural export program outlays (table 2). CBO calculates that \$5.6 billion are saved in direct payments to farmers, with another \$3.1 billion saved by reducing loan rates. The proposal sets a total cap on spending of \$43.2 billion during fiscal 1996-2002, the duration of the entire bill. Because spending is capped, savings are insensitive to price levels.

The Senate Bill also achieves the bulk of its savings – \$7.2 billion over 1996-2002 – by reducing payments for the seven major crops (corn, wheat, soybeans, cotton, grain sorghum, oats, and barley) to farmers. CBO calculations show that for several smaller commodity programs which are eliminated and others which are altered, another \$2.6 billion in budget savings are achieved by 2002 (table 2). Because the Senate Bill does not reach this \$13.4 billion goal for commodity programs, the remainder is drawn from the nutrition side of the total budget.

This paper's estimates of Senate Bill budget savings (i.e., total government payments) are somewhat different from those of CBO. The differences stem from the analytical tools used in each analysis. This paper shows Senate Bill direct payments to the seven major crops are an accumulated \$7.9 billion below baseline (table 3), compared with the CBO calculation of \$7.2 billion.

Table 1. How Each Bill Affects Federal Agriculture Programs

Program	The Freedom to Farm Act	The Senate Bill
Normal Flex Acreage	Eliminates crop-specific base acreages.	Increases to 30 Percent.
Optional Flex Acreage	Eliminates crop-specific base acreages.	Allows other crops on wheat, feed grains base. Allows other crops on cotton and rice with no loss of base but loss of payments.
Acreage Reduction Programs	Eliminates.	Eliminates.
0-50/85	Eliminates all programs under this category	Consolidates all similar programs, except for rice.
Deficiency Payments	Replaces with contracts that decouple planting decisions and payments; contracts are based on a percentage of historical CCC payments.	Caps the per-bushel rate at the baseline level.
Price-Support Loans	Reduces loan rates by changing the formula by which they are calculated	Remain under 1990 bill formulas.
Program Participation	Farmers must have participated during three of the previous five years.	Farmers must have participated during three of the previous five years.
Honey Program	No impact.	Eliminates.
Peanut Program	Eliminates minimum quotas and undermarketings; lowers the loan rate.	Reauthorizes through 2000; eliminates minimum quota and lowers loan rate.
Sugar Program	Increases marketing assessments.	Increases deficit-reduction assessments; price support loans are available, but with a recourse "trigger" and forfeiture penalties for nonrecourse loans.
Farmer-Owned Reserve	Ends extended loans, storage payments.	Ends legislative authority.
Emergency Feed Programs	Eliminates.	Eliminates.
Export Enhancement Program	Reduces funding a total of \$1.2 billion over the life of the bill.	Cuts funding by 20 percent.
Market Promotion Program	Not affected.	Cuts funding approximately 30 percent.
Conservation Reserve	Caps enrollments at 36.4 million acres; 1.6 million acres in planned 1997 enrollments would be prohibited.	Caps enrollment at 36.4 million acres; allows additional enrollments as acres leave the program.
Catastrophic Coverage	Not required to participate in programs.	Not required to participate in programs.

Source: Congressional Budget Office

### Analytical Issues

With the FFA, the fate of the land in the 0-50/85 program is critical in estimating the proposal's impacts because the baseline includes roughly 15 million acres in the program during 1996-2002. Thus, the analysis examines several *potential* levels of land returning to production from the program – 0 percent, 25 percent, 50 percent, and 75 percent. Subsequently, the results presented here will treat this potential range of impacts as separate FFA scenarios.

In simulating the Senate Bill, optional flex acreage for wheat and feed grains base

acreage is increased to 70 percent (though farmers still receive payments for this base) to capture the the farmers' ability to plant other crops on this base. For wheat and feed grains base acres which are planted to other crops, payments are based on the base acres enrolled in the baseline. The treatment of cotton optional flex is unchanged from current policy. Thus, as mentioned earlier, farmers actually may "flex" 100 percent of their base to other crops under this proposal.

The Senate Bill analysis does not attempt to capture the impacts of reducing Export Enhancement Program outlays because it is unclear in the preliminary descriptions of the

Table 2. How Each Bill Reaches the \$13.4 Billion Agricultural Budget Savings Goal

Category	Freedom to Farm Act	The Senate Bill
	-----Million Dollars-----	
Direct Payments to the Seven Major Crops <sup>1</sup>	5,586	7,208
Other Commodity Programs <sup>2</sup>	935	3,092
Loan Rates	3,101	—
Dropping Mandatory FCIC	180	151
Cotton Storage and Step 2 Payments	931	120
Single Entity Payment Limit	470	—
Export Programs	1,751	566
Conservation <sup>3</sup>	—	409
Other	491	1,117
<b>SUBTOTAL</b>	<b>13,445</b>	<b>12,663</b>
Nutrition	—	737
<b>TOTAL <sup>4</sup></b>	<b>13,445</b>	<b>13,400</b>

Source: CBO

<sup>1</sup> Under the FFA, payments take the form of seven-year contracts. The seven major crops are corn, wheat, soybeans, cotton, grain sorghum, oats, and barley.

<sup>2</sup> Includes rice, honey, peanuts, dairy, and sugar programs.

<sup>3</sup> The Senate Bill caps CRPacres and reduces Wetland Reserve Program funding but increases Environmental Quality Improvement funding.

<sup>4</sup> FFA savings are fixed by the bill at these levels. The Senate Bill reaches the \$13.4 billion target for agricultural budget savings through reducing nutritional spending by the amount that commodity program savings fall short.

bill how the funding reduction would be implemented.

A more complete treatment of the analytical issues and results regarding the FFA and Senate Bill analyses may be found, respectively, in issues 6 and 7 of this series. A discussion of the broader issues regarding the analysis, the methodology, and the modeling assumptions can be found in this series' first issue.

### Impacts on Agriculture

**Harvested Acreage.** Under the FFA, eliminating 0-50/85 and ARPs boosts total harvested acreage above the baseline for the seven major crops. The average annual increase above baseline for the seven major crops ranges from slight if no 0-50/85 acreage returns to production (reflecting only returning ARP acreage) to 4.3 percent (10.2 million acres) if 75 percent of such acres is returned to production. Wheat and soybeans acreage changes the most under the FFA scenarios.

Average wheat acreage under the FFA ranges from slightly below baseline levels

under no returning 0-50/85 acres (subsequently referred to as *0 Percent*) to 4.0 million acres (5.9 percent) above baseline if *75 Percent* returns (table 4, figure 1). For soybeans, average acreage ranges from 2.4 million acres (3.9 percent) above baseline under *0 Percent* to 4.1 million acres (6.5 percent) higher under *75 Percent*.

Under the Senate Bill, harvested acreage for the seven major crops rises as a result of eliminating ARPs but only slightly, the result of acreage shifting to other crops. Combined acreage for these crops averages 1.1 million acres (0.5 percent) above baseline during the first five years of the bill, 1996-2002.

Under the Senate Bill, soybeans gains the most acreage, averaging 2.4 million acres (4.0 percent) above baseline although it dips down nearly to the baseline in 1998. For an explanation of this event, see issue 7 in this series. Corn acreage, on the other hand, is an average 1.4 million acres below baseline as corn acres are shifted to soybeans.

**Crop Prices.** As could be expected, crop prices move with the increases in acreage

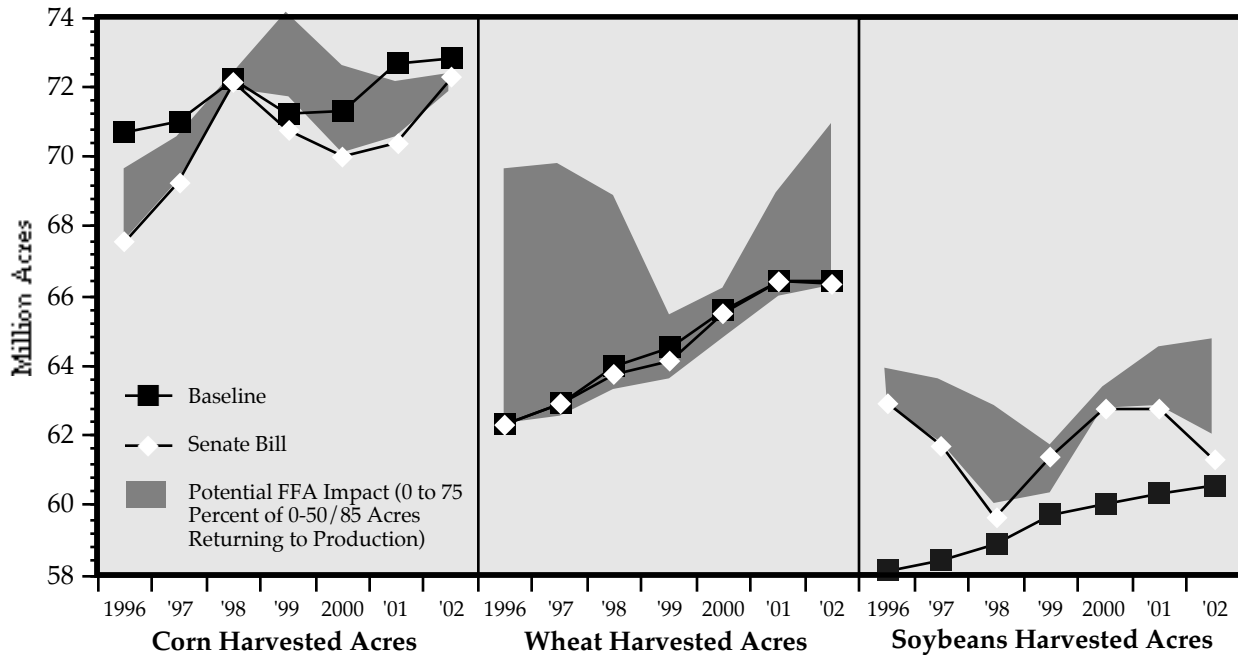


FIGURE 1

Senate Bill Corn Harvested Acreage is Down While Soybeans Acreage Rises; FFA Acreage Depends Heavily on the Level of 0-50/85 Acreage Returning to Production, Especially for Wheat

under the FFA. Wheat and soybeans, which gain the most acreage, suffer the greatest price declines.

FFA wheat prices average 16 cents per bushel below baseline under 0 Percent to as much as 63 cents below under 75 percent (table 5, figure 2). Soybeans follows the same pattern, ranging from an average annual 51 cents per bushel below baseline under 0 Percent to 84 cents below baseline under 75 Percent.

Under the Senate Bill, soybean and corn season average prices also move in the opposite direction of acreage trends, as would be expected. Soybean prices begin to approach baseline levels at the end of the simulation, averaging 51 cents per bushel below baseline (figure 2).

Corn prices under the Senate Bill, on the other hand, average 10 cents above baseline during 1996-2002, while wheat prices are slightly higher than baseline. Cotton prices are slightly below baseline levels until the final two years of the simulation, when they fall 5 cents below baseline.

**Exports.** Under the FFA, wheat and soybeans exports make relative gains under the scenarios as the amount of 0-50/85 acreage in production rises. Wheat exports rise but slightly above baseline under 0 Percent but make accumulated 1996-2002 gains of 1.2 billion bushels (12.0 percent) under 75 Percent. However, wheat loses export value in all scenarios.

Soybeans exports make accumulated 1996-2002 gains from baseline ranging between 500 million bushels (8.5 percent) under 0 Percent to 750 million bushels (12.3 percent) under 75 Percent. As with wheat under the FFA, the value of soybean exports is below baseline value across all scenarios.

Senate Bill exports are affected primarily by lower soybeans and cotton prices, as well as higher corn prices. Soybeans exports rise 8.5 percent (70 million bushels) above baseline over 1996-2002; their total value, however, drops slightly. Cotton exports are up an accumulated 2.5 million bales over 1996-2002, though total value declines slightly. Corn

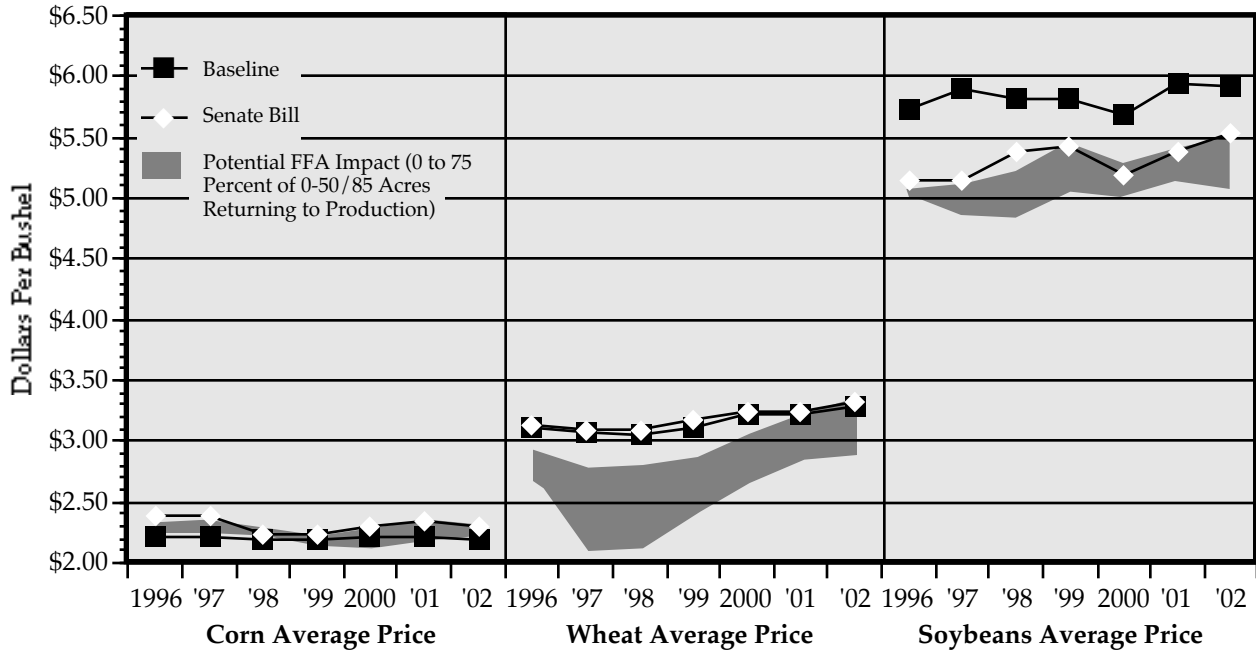


FIGURE 2  
Senate Bill Corn Prices Trend up and Soybeans Are Below Baseline; Under FFA, Wheat Prices Vary Significantly While Soybean Prices Average 51 Cents to 84 Cents Per Bushel Below Baseline

exports are down slightly, but their value is slightly higher. Wheat is virtually unchanged.

**Total Government Payments.** Rather than examining deficiency payments, changes in total government payments must be examined to capture the effects of the FFA payment contracts with farmers. Since these contracts are decoupled from other policy instruments, their levels do not change across scenarios and are compared with Senate Bill payments in figure 3.

Total government payments under the FFA accumulated to \$5.6 billion (13.4 percent) below total baseline levels over 1996-2002 (table 3, figure 3). More than half of these payment savings (\$3.2 billion) occur in the final two years of the bill's tenure.

The crop price declines which occur under the Senate Bill, together with the per-bushel payment cap and higher normal flexibility, also result in lower government payments to farmers. Over 1996-2002, total government payments are an accumulated \$7.9 billion

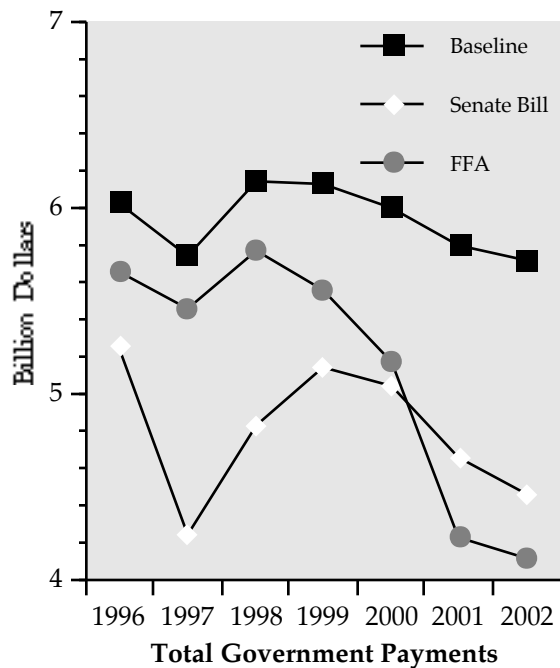


FIGURE 3  
Annual Total Government Payments Average \$330 Million Higher Under the FFA

(19.1 percent) below baseline levels. Nearly all of this decline is due to deficiency payments, which fall 20.1 percent below baseline levels.

**Net Returns to the Seven Major Crops.** Under the FFA, production and export gains do not make up for the price declines associated with the return of 0-50/85 acres and declining government payments to farmers. Over 1996-2002, net returns to the seven major crops are below baseline (table 3, figure 4), ranging from \$9.8 billion (7.9 percent) under 0 Percent to \$32.9 billion (30.8 percent) under 75 Percent.

Net returns under the Senate Bill average \$1.3 billion (6.9 percent) below baseline during 1996-2002, reaching a combined \$9.3 billion below baseline by the simulation's end.

A crop-by-crop examination of net returns would be meaningless due to the decoupling which occurs under the FFA and the farmers' ability under the Senate Bill to plant other crops on feed grains base acreage. However, a

geographic distribution of these changes in net returns to the seven major crops by U.S. Department of Agriculture (USDA) production region is shown in figure 5.

**Net Farm Income.** As occurs with other variables, the level of 0-50/85 acreage which returns to production significantly affects net farm income under the FFA (figure 6). Under the bill, average annual net farm income ranges from \$400 million (1.1 percent) below baseline under 0 Percent to \$2.8 billion (7.6 percent) below baseline under 75 Percent. On an accumulated basis over 1996-2002, net farm income ranges from \$2.8 billion to \$19.3 billion below baseline.

Compared against this range of possible income losses, Senate Bill net farm income averages \$1.0 billion (2.7 percent) below baseline, reaching an accumulated \$7.3 billion below baseline income over 1996-2002. Thus, although payments to farmers are lower under the Senate version, retaining acreage in the 0-50/85 program keeps prices high enough to somewhat offset the drop in payments.

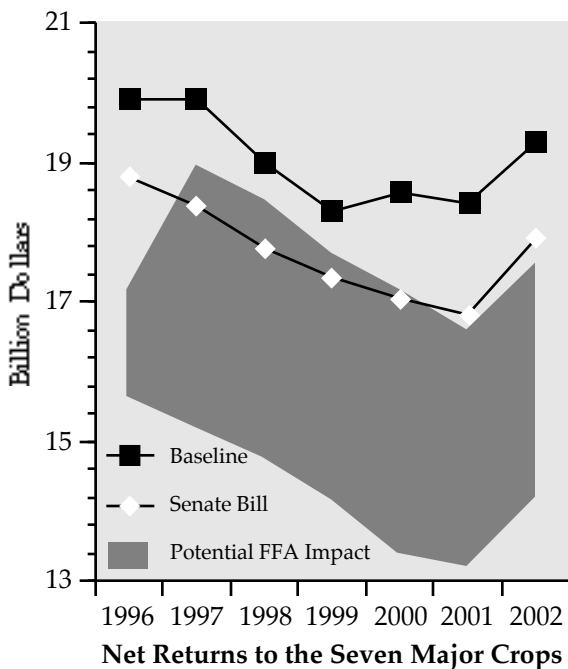


FIGURE 4  
As the Level of Returning 0-50/85 Acreage Increases, Net Returns Dip Sharply...

### Additional Comparisons

In addition to comparing the two bills on a program-by-program basis or on their impacts on U.S. agriculture, the bills also can be differentiated in terms of:

- Their intrinsic ability to accomplish economic or other policy objectives.
- Their budgetary savings per loss of farmer returns or income.

Because the two bills share a common strategy of decoupling income support payments from production decisions and provide almost full planting flexibility, both would result in a greater influence of market forces in production decisions. Either bill would result in more efficient production decisions than the current regime of policy instruments, which distorts the market signals farmers face when making planting decisions.

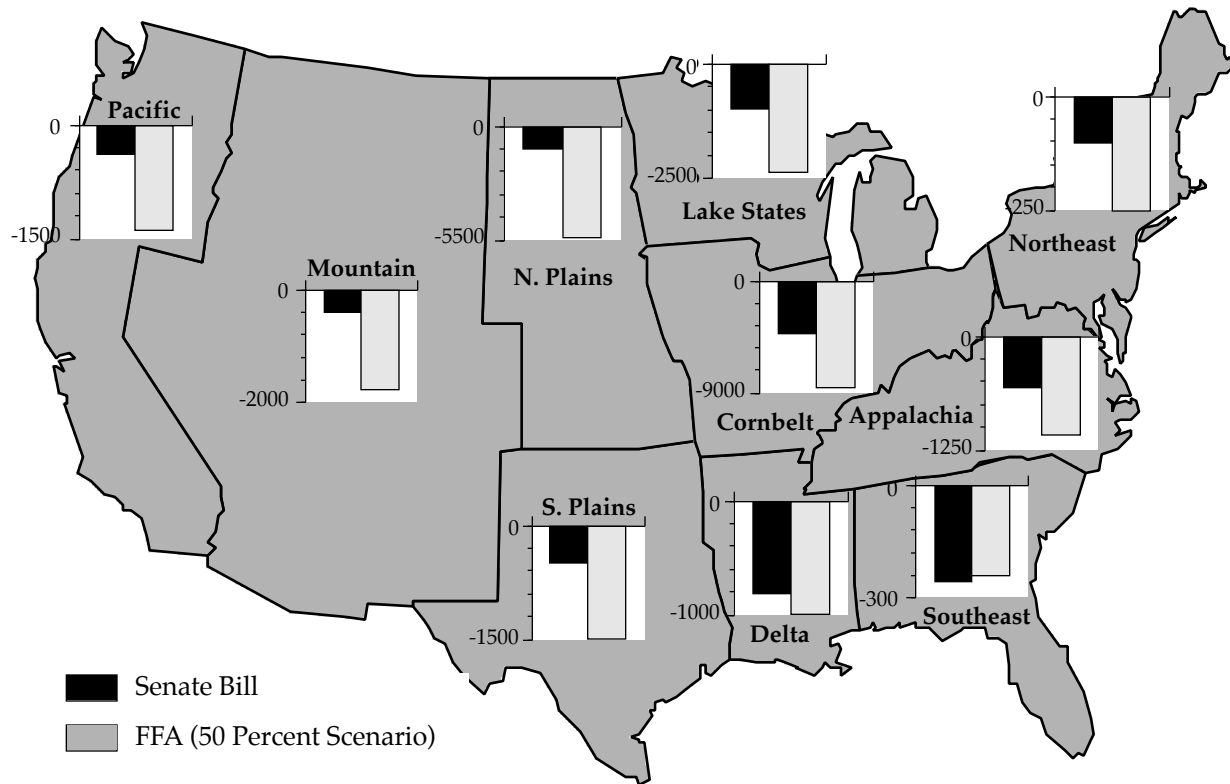


FIGURE 5

Accumulated 1996-2002 Changes from Baseline in Net Returns to the Seven Major Crops for the Senate Bill and FFA (50 Percent Scenario) by USDA Production Region, Million Dollars

Both bills also provide some measure of farm income support. Because payments are fixed under the FFA, any income-stabilizing effect of that bill is reduced. Payments are the same whether prices are high or low. Although the Senate Bill caps the payment rate per bushel, payments rise and fall inversely with price.

For policymakers emphasizing the need to reduce the federal deficit, the FFA provides a certainty with respect to agricultural outlays through 2002. Direct payments and other outlays are fixed by the bill. The Senate Bill does not provide this certainty; if prices are high during 1996-2002, Senate Bill savings will be greater than those of the FFA. If prices run lower, Senate Bill savings could be less than those of the FFA. Thus, while the FFA limits uncertainty with regard to governmental out-

lays for agriculture, the Senate Bill offers a greater opportunity for federal budgetary savings.

Another way to examine the utility of each bill would be to compare the budget savings from commodity programs to the amount lost in net returns to crop farmers. Such a ratio would show how much farm income or returns are reduced to achieve each dollar in budget savings – in effect, a measure of the efficiency with which savings are achieved.

Looking at net returns to the seven major crops, for each dollar of budget savings under the Senate Bill, farmers lose 73 cents in net returns. Of course, as has been mentioned, if crop prices trend higher than are shown in the baseline, the ratio would be smaller and vice versa. The following are the FFA ratios for

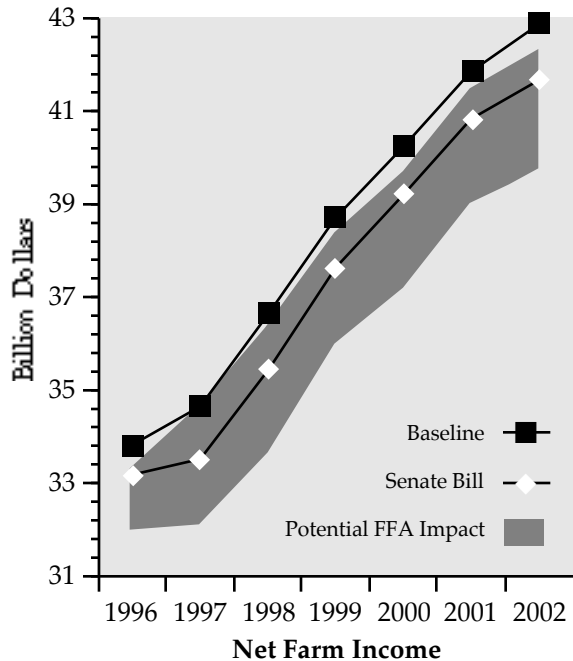


FIGURE 6  
FFA Net Income is Above or Below the Senate Bill, Depending on 0-50/85 Acreage Returns

each level of returning 0-50/85 acreage which returns to production:

<u>LEVEL OF RETURNING</u> <u>0-50/85 ACREAGE</u>	<u>LOSS IN RETURNS-TO-</u> <u>\$1 IN SAVINGS RATIO</u>
0 Percent	\$0.73
25 Percent	\$1.39
50 Percent	\$1.97
75 Percent	\$2.45

Interestingly, if no 0-50/85 acreage returns to production, one dollar of FFA budget savings costs crop farmers the same amount (73 cents) as the Senate Bill in lost net returns to the seven major crops. As the level of returning acreage increases, the same amount of budget savings costs major crop farmers more and more.

The relative distribution of these savings (and, by extension, the loss in net returns) differ by region. The geographic distribution of these impacts for the Senate Bill and the 50

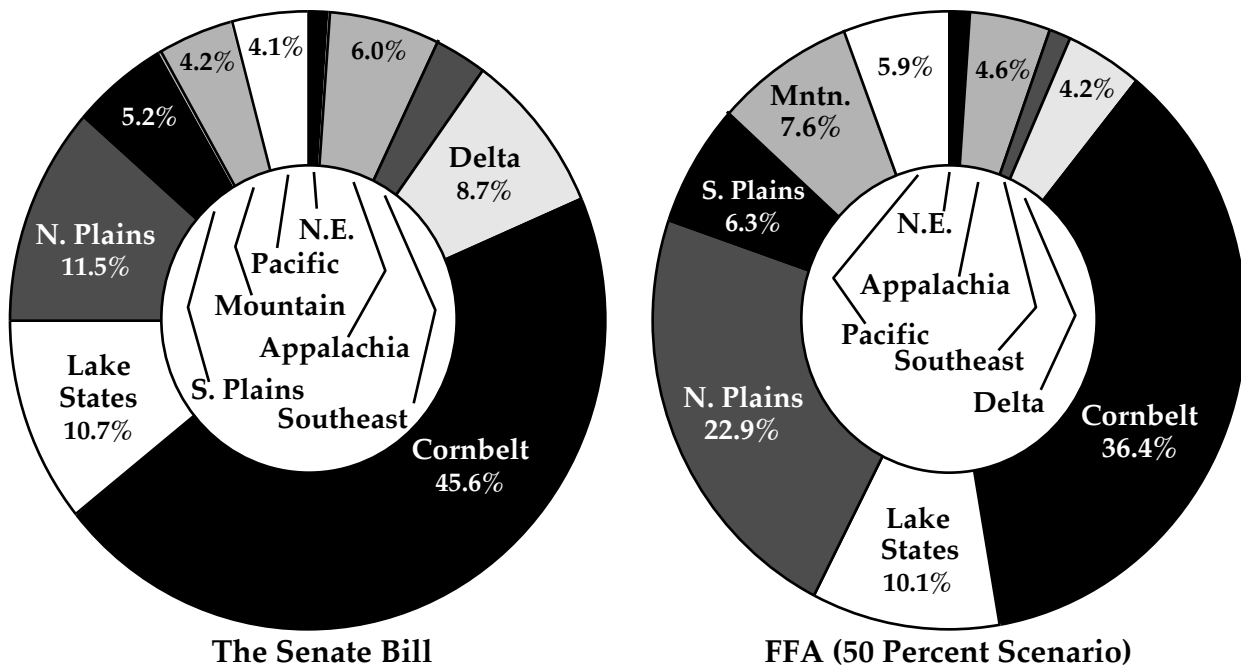


FIGURE 7  
Although Both Bills Draw More Than Two-Third of Their Budget Savings from Cornbelt, Northern Plains, and Lake States Crop Sectors, They Pose a Different Mix of Impacts on Returns

Percent FFA scenario by U.S. Department of Agriculture (USDA) production regions is shown in figure 7. This figure shows which region these total savings are drawn from on a percent basis.

### A Final Word

An additional point must be made about the bills' consideration of the future commodity prices on actual expenditures. FFA contract payments are based on CBO baseline estimates of deficiency payments, loan activity, and a predetermined level of outlays. The FFA is not intended to address price fluctuations.

The Senate Bill does consider the impacts of future price fluctuations. Senate Bill caps on the deficiency payment rate protect the federal treasury from the high payments associated with low crop prices. Further, as has been stated, the bill may result in larger budgetary savings than projected if prices trend high.

It is almost certain that actual 1996-2002 prices will not behave as they do in the baseline. CBO baseline price projections actually are mean prices for 1996-2002 and do not attempt to predict the price swings which one could expect to occur as a result of weather,

disease or other factors. For example, baseline wheat prices over the duration of the bills range from \$3.11 per bushel to \$3.23 per bushel. Baseline deficiency payments, as a result, range from \$1.4 billion to \$1.8 billion.

If, however, the *actual* prices of the 1978-94 period were used instead of baseline prices, the impact of real-world volatility on agricultural outlays can be seen. Under such a case, wheat prices range from \$2.71 to \$3.74 per bushel, and deficiency payments are \$2 billion lower over 1996-2002.

The Senate Bill would capture these savings. Because FFA contract payments are price-insensitive, this opportunity for additional budget savings would be missed.

The current situation and outlook for grains prices is another good example of such volatility. If grain prices remain as high as the USDA outlook estimate, fiscal 1996 payments under the current legislation would be significantly lower than the CBO baseline situation. If payments are but \$3 billion in fiscal 1996, then the FFA mark of \$6 billion will have overspent current policy. The Senate Bill would save as much or more than current legislation because it reduces payment acres while using the same approach for computing deficiency payment rates.

Table 3. Total Government Payments and Net Returns

Crop Year	Base line	Senate Bill	Freedom to Farm Act	Base line	Senate Bill	Freedom to Farm Act (0-50/85 Acres Returned to Production)			
						0 Percent	25 Percent	50 Percent	75 Percent
<b>Total Government Payments (Bil \$)</b>				<b>Net Returns to the Seven Major Crops (Bil \$)</b>					
1996	6.03	5.26	5.66	19.89	18.81	17.14	16.44	15.73	15.61
1997	5.75	4.25	5.46	19.90	18.39	18.95	17.63	16.51	15.19
1998	6.15	4.83	5.77	18.98	17.77	18.45	17.17	16.11	14.76
1999	6.13	5.14	5.56	18.32	17.35	17.69	16.21	15.07	14.13
2000	6.00	5.05	5.17	18.58	17.04	17.16	15.76	14.35	13.38
2001	5.80	4.66	4.23	18.41	16.83	16.60	15.28	13.96	13.19
2002	5.71	4.46	4.12	19.29	17.92	17.54	16.20	15.11	14.18
<i>Mean Shift</i>		-1.13	-0.80		-1.32	-1.40	-2.67	-3.79	-4.70
<i>Total Shift</i>		-7.92	-5.59		-9.26	-9.83	-18.67	-26.52	-32.92

Table 4. Harvested Acreage

Crop Year	Base line	Senate Bill	Freedom to Farm Act (0-50/85 Acres Returned to Production)				Base line	Senate Bill	Freedom to Farm Act (0-50/85 Acres Returned to Production)			
			0 Percent	25 Percent	50 Percent	75 Percent			0 Percent	25 Percent	50 Percent	75 Percent
<b>Corn (Million Acres)</b>							<b>Wheat (Million Acres)</b>					
1996	70.70	67.57	67.57	68.27	68.96	69.61	62.30	62.29	62.33	65.18	67.62	69.65
1997	71.00	69.24	69.21	69.61	69.94	70.55	62.90	62.91	62.52	65.20	67.72	69.78
1998	72.20	72.13	71.89	71.89	72.08	72.34	64.00	63.74	63.32	65.82	67.69	68.87
1999	71.20	70.75	71.69	72.68	73.49	74.12	64.50	64.15	63.62	65.16	65.34	65.42
2000	71.30	69.98	70.06	70.92	71.85	72.61	65.60	65.53	64.75	65.95	66.30	66.19
2001	72.70	70.40	70.51	71.17	71.84	72.15	66.40	66.43	65.97	67.35	68.16	68.94
2002	72.80	72.26	71.86	71.48	71.73	72.33	66.40	66.35	66.29	68.63	69.44	70.91
<i>Mean Shift</i>		-1.37	-1.30	-0.84	-0.29	0.26		-0.10	-0.47	1.60	2.88	3.95
<i>Total Shift</i>		-9.57	-9.11	-5.88	-2.01	1.81		-0.70	-3.30	11.19	20.17	27.66
<b>Soybeans (Million Acres)</b>							<b>Seven Major Crops (Million Acres)</b>					
1996	58.10	62.91	62.92	63.24	63.57	63.92	226.80	228.02	227.21	232.08	236.71	240.97
1997	58.40	61.71	61.78	62.55	63.20	63.58	227.30	229.14	228.12	232.98	237.45	241.63
1998	58.90	59.62	59.98	61.18	61.86	62.86	230.80	231.20	230.52	235.23	239.20	242.31
1999	59.70	61.40	60.38	60.35	61.07	61.67	231.20	232.41	231.46	234.90	237.40	239.07
2000	60.00	62.78	62.82	62.96	63.33	63.40	233.00	234.80	233.68	237.05	238.99	240.23
2001	60.30	62.74	62.88	63.58	64.02	64.49	235.60	236.18	235.30	238.39	241.05	242.91
2002	60.60	61.32	62.03	63.74	64.70	64.72	236.30	236.70	236.03	240.14	242.67	245.16
<i>Mean Shift</i>		2.35	2.40	3.09	3.68	4.09		1.06	0.19	4.25	7.50	10.18
<i>Total Shift</i>		16.48	16.79	21.60	25.75	28.64		7.45	1.32	29.77	52.47	71.28

Table 5. Crop Season Average Prices

Crop Year	Base line	Senate Bill	Freedom to Farm Act (0-50/85 Acres Returned to Production)				Base line	Senate Bill	Freedom to Farm Act (0-50/85 Acres Returned to Production)			
			0 Percent	25 Percent	50 Percent	75 Percent			0 Percent	25 Percent	50 Percent	75 Percent
<b>Corn (Dollars Per Bushel)</b>							<b>Wheat (Dollars Per Bushel)</b>					
1996	2.22	2.38	2.31	2.28	2.25	2.22	3.11	3.13	2.91	2.78	2.67	2.73
1997	2.22	2.38	2.34	2.29	2.27	2.23	3.06	3.09	2.76	2.55	2.33	2.09
1998	2.18	2.23	2.27	2.26	2.25	2.22	3.05	3.09	2.78	2.53	2.31	2.10
1999	2.20	2.24	2.22	2.18	2.14	2.12	3.11	3.17	2.87	2.59	2.51	2.38
2000	2.22	2.30	2.28	2.23	2.16	2.10	3.21	3.25	3.05	2.84	2.69	2.64
2001	2.21	2.35	2.34	2.28	2.21	2.17	3.22	3.25	3.21	3.03	2.89	2.83
2002	2.20	2.29	2.30	2.29	2.25	2.21	3.29	3.32	3.34	3.09	3.00	2.87
<i>Mean Shift</i>		0.10	0.09	0.05	0.01	-0.03		0.04	-0.16	-0.38	-0.52	-0.63
<b>Soybeans (Dollars Per Bushel)</b>							<b>Cotton (Dollars Per Pound)</b>					
1996	5.72	5.14	5.06	5.02	4.99	5.02	0.62	0.62	0.65	0.64	0.63	0.62
1997	5.90	5.14	5.09	4.99	4.91	4.83	0.60	0.57	0.62	0.60	0.59	0.59
1998	5.82	5.38	5.21	5.01	4.95	4.80	0.60	0.58	0.62	0.60	0.58	0.58
1999	5.81	5.42	5.46	5.37	5.19	5.04	0.59	0.56	0.61	0.59	0.58	0.57
2000	5.68	5.20	5.25	5.20	5.08	5.00	0.60	0.56	0.61	0.58	0.57	0.57
2001	5.93	5.38	5.40	5.31	5.22	5.12	0.61	0.56	0.61	0.59	0.58	0.58
2002	5.91	5.53	5.50	5.25	5.10	5.06	0.61	0.56	0.61	0.60	0.59	0.58
<i>Mean Shift</i>		-0.51	-0.54	-0.66	-0.76	-0.84		-0.03	0.01	0.00	-0.02	-0.02

## For Additional Information...

Lipton, K.L., and S.L. Pollack. *A Glossary of Food and Agricultural Policy Terms*, 1989. 1989. USDA/ERS Agricultural Information Bulletin No. 573.

Hallberg, M.C., R.G.F. Spitze, and D.E. Ray, ed.s. 1994. *Food, Agriculture, and Rural Policy into the Twenty-First*

*Century: Issues and Trade-Offs*. Westview Press.

Ray, D.E., S.P. Slinsky, R.M. Pendergrass, and R.L. White. 1994. *An Analytical Database of U.S. Agriculture, 1950 to 1992: The APAC Database*. APAC Staff Paper No. 4-94.

### Agricultural Policy Analysis Center

APAC was established by The University of Tennessee in 1991 to examine the impacts of changing policies and economic conditions at the national, regional, state, and farm level. The center is built around the Blasingame Chair of Excellence in Agricultural Policy, held by Daryll E. Ray.

Agricultural Policy Analysis Center  
The University of Tennessee  
310 Morgan Hall  
Knoxville, TN 37901-1071  
(615) 974-7407  
Email: dray@apac.ag.utk.edu

### Great Plains Agricultural Policy Center

The Great Plains Agricultural Policy Center was established in 1991 at Oklahoma State University in Stillwater, Okla. The center's mission is to analyze the implications of changes in federal and state policies on agriculture. Of particular interest are impacts on the economies, farms, and resources of the Great Plains.

Great Plains Agricultural Policy Center  
Oklahoma State University  
314 Ag Hall  
Stillwater, OK 74078-0505  
(405) 744-6163  
Email: mdicks@okway.okstate.edu



Richard L. White designs this series and provides editorial and graphic support

The University of Tennessee Institute of Agriculture does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap, or veteran status in provision of educational opportunities or employment opportunities and benefits.

The UT Institute of Agriculture does not discriminate on the basis of sex or handicap in the education programs and activities which it operates, pursuant to the requirements of Title IX of the Education Amendments of 1972, Public Law 92-318, and Section 504 of the Rehabilitation Act of 1973, Public Law 93-112, respectively. This policy extends both to employment by and admission to The University.

Inquiries concerning Title IX and Section 504 should be directed to the Office of Affirmative Action; 403-C Andy Holt Tower; The University of Tennessee, Knoxville; (615) 974-2498. Charges of violation of the above policy should also be directed to the Office of Affirmative Action.