

**Analysis of the Harkin 2007 Farm Bill
Commodity Program Proposals for
Loan Rates, Counter-Cyclical Revenue Payments
and Payment Limits.**

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Introduction

This report briefly describes the impact on Arkansas representative panel farms from Senator Harkin's Farm Bill proposal for loan rates, the counter-cyclical program, and the stricter payment limits. The panel farms' characteristics are described in Table 1. The results can be compared directly to a previous analysis of the USDA farm bill proposal and the H.R. 2419 Farm Bill¹. Table 2 presents the commodity program variables for the current 2002 Farm Bill which is used as the baseline for comparison of the proposals. Table 3 presents the average loan rates under Senator Harkin's proposal used in this analysis. The loan rates were calculated as 85% of the 5-year Olympic average market price, but the rates would only be allowed to increase or decrease by a maximum of 1% from the previous year. Senator Harkin's proposal on the counter-cyclical revenue program would be based on target revenue per acre with adjustments tied to changes in production costs each year. This analysis assumes the USDA proposed target revenues would be used as the starting target revenue in 2008 and then adjusted for variable costs increases each subsequent year and are presented in Table 4. Projected increases in variable costs per acre per year come from the USDA's Economic Research Service Agriculture Baseline Database. The payment limit proposal adjusts the payment limits compared to the 2002 Farm Bill as follows: (1) the direct payment limit is increased from \$40,000 to \$50,000; the counter-cyclical payment is reduced from \$65,000 to \$50,000; and the marketing loan gain/loan deficiency payment is increased from \$75,000 to \$150,000. A married couple shall be considered as one entity, unless before the marriage both had separate operations and after marriage the operations were kept separate. The

¹ See Hignight et al. SP 03 2007 at:
http://www.uark.edu/depts/agriecon/pdf_files/HR2419_USDA2007FarmBillProposal.pdf

maximum for all three program payments cannot exceed \$250,000 compared to the three-entity limit in the 2002 Farm Bill of \$360,000. The loan rate program, the counter-cyclical program, and stricter payment limits are analyzed separately and cumulatively.

Results

The results in Table 5 are indexed against each farms' baseline. Government payments and net farm income are averaged over the period 2008-2012. The baseline is an extension of the current 2002 Farm Bill provisions and is indexed to equal 100. Indices reported in Table 5 that are above 100 indicate higher net returns than under the 2002 Farm Bill and those lower than 100 indicate lower net returns.

The results indicate that the three Arkansas farms with only soybeans, rice, and wheat would have higher incomes under the loan rate proposed program due to higher loan rates for each of the three commodities. The cotton loan rate was adjusted downward below the current loan rate and negatively impacted the representative farms with substantial cotton acreage. Under the Harkin loan rate proposal, net farm income weighted by acres across all eight farms averaged 83.4% of the baseline net farm income.

The Harkin counter-cyclical loan program increased net farm income for all the farms on average by 13%. Counter-cyclical payments increased each year due to increasing target revenue adjusted for cost increases.

Payment limits have a negative impact on every farm. Under the baseline, both husband and wife participate under the assumption of two entities. Under Senator Harkin's

proposal the husband and wife are assumed to be only one entity to participate in the commodity programs. Under the Harkin scenario the weighted average net farm income was 144.7% less than the baseline and the cumulative impact Harkin’s Farm Bill would cause the panel farms to average 149.5% less net farm income than the baseline.

Table 1. Characteristics of Arkansas representative panel farms.

Location	Leachville	Osceola	Pine Bluff	McGehee	Stuttgart	Wynne	Hoxie	Forrest City
Farm Name	ARNC5000	ARCR6500	ARCR4000	ARC6000	ARSR3640	ARWR1200	ARHR3000	ARC4200
Total Cropland	5,000	6,500	4,000	6,000	3,640	1,200	3,000	4,200
Acres Owned	1,000	1,950	1,200	1,200	728	360	1,000	1,000
Crop Share Lease	3,200	3,185	2,520	4,800	2,912	740	1,900	1,500
Cash Lease	800	1,365	280	0	0	100	100	1,500
Planted Acres for Simulation								
Irrigated Cotton	4,500	1,316	1,320	2,000	0	0	0	2,600
Dryland Cotton	500	1,609	0	0	0	0	0	0
Rice	0	1,625	800	2,000	1,620	600	1,750	0
Medium Grain Rice	0	0	0	0	0	0	175	0
Dryland Soybeans	0	1,365	376	0	0	24	125	1,200
Wheat	0	0	0	0	324	60	0	0
Corn	0	0	0	0	0	0	0	400
Grain Sorghum	0	0	0	500	0	0	0	0
Policy Variables								
Base Acreage								
Irrigated Cotton	4,050	987	1,320	1,900	0	0	0	780
Dryland Cotton	450	1,207	0	0	0	0	0	0
Rice	0	975	800	1,900	1,620	600	1,750	0
Irrigated Soybeans	0	999	1,504	2,000	1,620	576	1,125	0
Dryland Soybeans	0	2,332	376	0	0	24	125	780
Wheat	0	0	0	0	235	60	0	0
Direct Payment Yield								
Irrigated Cotton	480	650	800	640	0	0	0	500
Dryland Cotton	480	650	0	0	0	0	0	0
Rice	0	5,000	4,500	4,500	5,500	5,230	4,630	0
Irrigated Soybeans	0	22	19	22	29	31	31	0
Dryland Soybeans	0	22	19	0	0	31	31	20
Wheat	0	0	0	0	44	47	0	0
Counter-Cyclical Payment Yield								
Irrigated Cotton	725	750	900	920	0	0	0	825
Dryland Cotton	725	750	0	0	0	0	0	0
Rice	0	4,995	5,850	5,500	5,900	5,230	5,600	0
Irrigated Soybeans	0	30	35	30	36	31	37	0
Dryland Soybeans	0	30	35	0	0	31	37	25
Wheat	0	0	0	0	44	47	0	0

Table 2. Commodity program variables for the 2002 Farm Bill.

	Unit	Direct Payment	Target Price	Loan Rate
Corn	\$/bu	0.28	2.63	1.95
Cotton	cents/lb	6.67	72.40	52.00
Sorghum	\$/bu	0.35	2.57	1.95
Soybeans	\$/bu	0.44	5.80	5.00
Rice	\$/cwt	2.35	10.50	6.50
Wheat	\$/bu	0.52	3.92	2.75

Table 3. Mean loan rates under Senator Harkin's proposal.

	Unit	2008	2009	2010	2011	2012
Corn	\$/bu	2.25	2.27	2.29	2.31	2.34
Cotton	cents/lb	42.81	42.81	43.24	43.68	44.11
Sorghum	\$/bu	2.05	2.07	2.09	2.11	2.13
Soybeans	\$/bu	5.25	5.25	5.30	5.35	5.41
Rice	\$/cwt	6.75	6.73	6.80	6.87	6.94
Wheat	\$/bu	3.10	3.13	3.16	3.19	3.22

Table 4. Per acre target revenue assumed under Senator Harkin's proposal.

	Unit	2008	2009	2010	2011	2012
Cotton	\$/ac	516.86	522.78	526.94	531.13	535.57
Soybeans	\$/ac	219.58	220.51	221.38	222.24	223.13
Rice	\$/ac	548.06	554.60	560.14	565.60	571.44
Wheat	\$/ac	140.42	141.81	143.15	144.45	145.85

**Table 5. Index of Impacts of Senator Harkin's Loan and Counter-cyclical Proposed Programs, Payment Limits, and Cumulative Proposal on Arkansas Panel Farms¹.
Extension of 2002 Farm Bill = 100.**

Farm	Harkin			
	Loan Rate	Harkin CCRP	Payment Limits	Harkin Cumulative
ARNC5000				
Total Payments	89.0	109.4	31.6	25.4
Net Income	93.0	106.3	56.2	52.5
ARCR6500				
Total Payments	101.3	104.1	34.6	33.8
Net Income	114.0	134.0	-536.4	-543.4
ARCR4000				
Total Payments	97.8	108.5	50.9	48.1
Net Income	99.9	105.1	70.3	68.6
ARC6000				
Total Payments	99.1	104.9	32.2	31.6
Net Income	98.2	109.9	-239.8	-240.9
ARSR3640				
Total Payments	103.9	107.9	58.3	61.3
Net Income	108.5	116.9	8.0	14.7
ARWR1200				
Total Payments	105.0	107.7	90.6	99.3
Net Income	102.9	104.3	94.6	99.5
ARHR3000				
Total Payments	105.0	107.2	44.9	46.8
Net Income	103.1	104.3	65.8	66.9
ARC4200				
Total Payments	64.6	105.7	69.6	49.1
Net Income	52.0	107.6	62.1	58.5
Weighted Average of All Farms				
Total Payments	97.0	106.7	43.5	41.6
Net Income	83.4	113.0	-144.7	-149.5

Note: The Baseline is indexed at 100.

¹Results assume a continuation of the 2002 Farm Bill for all other provisions not analyzed under the scenario. Characteristics of panel farms are given in Table 2.