

Government Program Payments for Crop Cost-Return Budgets

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

Troy J. Dumler
Agricultural Economist

Terry L. Kastens
Agricultural Economist
Crop Production

The Food, Conservation and Energy Act of 2008 maintains the primary safety net elements of the 2002 Farm Bill in establishing farm policy through 2012. Direct payments, counter-cyclical payments, and marketing loans remain in place under the new farm bill. A new, optional program available to producers in 2009 is the Average Crop Revenue Election (ACRE) program. This optional program is a state-level revenue counter-cyclical program that would replace the price counter-cyclical program. Should producers elect to enroll in ACRE, payments would be made when actual state revenue is less than the state revenue guarantee and actual farm revenue is less than the benchmark farm revenue. In addition, to participate in ACRE, producers must reduce direct payments by 20 percent and loan rates by 30 percent.

Direct payments are determined according to the following formula for each crop: Direct Payment = Direct Payment Rate $\times$ Program Acreage Base $\times$ Direct Payment Yield $\times$ 83.3 percent. Thus, fixed payments are a function of the base acreage and payment yield decisions made at initial program sign-up.

Like direct payments, counter cyclical payments are tied to the base acreage and payment yield decisions made at initial program sign-up and are calculated according to the following formula for each crop: Counter-Cyclical Payment = Counter-Cyclical Payment Rate $\times$ Program Acreage Base $\times$ Counter-Cyclical Payment Yield $\times$ 85 percent. For each year of the new farm bill, the counter-cyclical payment rate for each crop is equal to the target price for that crop minus the direct payment rate minus the higher of the national

average marketing year price or the national average loan rate. Thus, the counter-cyclical payment can vary each year, dependent on market prices.

Marketing loans are available on actual production, and provide benefits when the local posted county price of a commodity is below that county's adjusted loan rate. Thus, expected benefits under the marketing program can be estimated with expected local market prices and need not be estimated separately.

Estimating direct payments per acre is a function of the legislated payment rates as well as the base acreage and payment yield decision made by the producer at sign-up in the first year of the new farm bill. Estimating counter-cyclical payments per acre is a function of the base acreage and payment yield decision too, but also depends on expected market prices over the life of the farm bill. As such, the choice of expected market prices is critical to determining expected government payments.

Using the loan rates, direct payment rates, and target prices as set in the farm bill (Table 1), expected government payments can be calculated under various market price scenarios. One scenario is the marketing year average prices estimated by USDA in the World Agricultural Supply and Demand Estimates report. Those price estimates, made as of December 10, 2009, are reported in Table 2.

The program payment values listed in the crop cost-return budgets in the Farm Management Guide series are based on an analysis of a set of Kansas Farm Management Association farms regarding program sign-up decisions. Direct and counter-cyclical payments were calculated on

Table 1. *Loan Rates, Direct Payment Rates, and Target Prices for Program Commodities*

Crop	Loan Rates		Direct (Fixed) Payment Rates	Target Prices	
	2008-2009	2010-2012	2008-2012	2008-2009	2010-2012
Corn (bu)	\$1.95	\$1.95	\$0.28	\$2.63	\$2.63
Sorghum (bu)	\$1.95	\$1.95	\$0.35	\$2.57	\$2.63
Barley (bu)	\$1.85	\$1.95	\$0.24	\$2.24	\$2.63
Oats (bu)	\$1.33	\$1.39	\$0.024	\$1.44	\$1.79
Wheat (bu)	\$2.75	\$2.94	\$0.52	\$3.92	\$4.17
Soybeans (bu)	\$5.00	\$5.00	\$0.44	\$5.80	\$5.80
Other Oilseeds (cwt)	\$9.30	\$10.09	\$0.008	\$10.10	\$12.68
Rice (cwt)	\$6.50	\$6.50	\$2.35	\$10.50	\$10.50
Upland cotton (lb)	\$0.52	\$0.52	\$0.0667	\$0.7125	\$0.7125

the estimated program acreage bases and payment yields for the farms in the analysis.

The estimated direct payments are listed in the second column of Table 3 by Kansas Farm Management Association region and are designed to be used for yield level II in the cost-return budgets. Counter-cyclical payments are estimated for 2005 through 2010 using the K-State and USDA price projections. These estimated payments are listed in columns 3 through 8 of Table 3. The sum of the direct payment and the 2010-crop counter-cyclical payment is reported in column 9 of Table 3. This sum represents the total estimated government payment for 2010 for use in the crop cost-return budgets. Tables 4 and 5 are companion

tables to Table 3 and estimate payments that are 8 percent higher and lower than Table 3 payments. They are designed to be used with yield levels I and III respectively in the cost-return budgets.

Estimated ACRE payments for the 2009/2010 crop marketing year are shown in Table 6. Since producers must reduce direct payments by 20 percent to participate in the program, total government payments (averaged across the six regions in Kansas) are shown for each of the five primary program crops in the state. Since less than 2 percent of Kansas producers elected to participate in the ACRE program in 2009, the estimated ACRE payments are not included in the crop budgets. The estimated ACRE payments are simply provided for comparison purposes.

Table 2. *Estimated National Average Marketing Year Prices (\$/bushel)**

Crop (Marketing Year)	Marketing Year (Beginning Year of Harvest)					
	2005	2006	2007	2008	2009	2010
Wheat (June-May)	\$3.42	\$4.25	\$4.28	\$6.48	\$6.78	\$4.85
Corn (September-August)	2.00	3.20	3.05	4.20	4.06	3.55
Milo (September-August)	1.80	3.30	3.30	4.08	3.20	3.15
Soybeans (September-August)	5.65	6.20	6.36	10.10	9.97	9.50

* Reported or estimated by USDA, December 10, 2009.

Table 3. *Estimated Direct and Counter-cyclical Payments per Acre of Cropland by Farm Management Association Region, 2005-2010, Yield Level II (\$/Acre)*

Region of Kansas	Estimated Direct Payments	Estimated Counter-cyclical Payments*						2010 Estimated Government Payments**
		CC 2005	CC 2006	CC 2007	CC 2008	CC2009	CC2010	
NW	\$12.36	\$6.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.36
SW	13.66	6.80	0.00	0.00	0.00	0.00	0.00	13.66
NC	14.16	6.84	0.00	0.00	0.00	0.00	0.00	14.16
SC	15.35	6.83	0.00	0.00	0.00	0.00	0.00	15.35
NE	13.60	7.65	0.00	0.00	0.00	0.00	0.00	13.60
SE	11.39	5.54	0.00	0.00	0.00	0.00	0.00	11.39

* The estimated counter-cyclical payments for each year are based on K-State and USDA projected prices.

** The estimated government payments in each crop budget for 2010 are based on the estimated direct payments plus the estimated counter-cyclical payments for 2010.

Table 4. *Estimated Direct and Counter-cyclical Payments per Acre of Cropland by Farm Management Association Region, 2005–2010, Yield Level I (\$/Acre)*

Region of Kansas	Estimated Direct Payments	Estimated Counter-cyclical Payments*						2010 Estimated Government Payments**
		CC 2005	CC 2006	CC 2007	2 CC 008	CC 2009	CC 2010	
NW	\$11.37	\$5.95	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11.37
SW	12.57	6.26	0.00	0.00	0.00	0.00	0.00	12.57
NC	13.03	6.29	0.00	0.00	0.00	0.00	0.00	13.03
SC	14.12	6.28	0.00	0.00	0.00	0.00	0.00	14.12
NE	12.51	7.04	0.00	0.00	0.00	0.00	0.00	12.51
SE	10.48	5.10	0.00	0.00	0.00	0.00	0.00	10.48

* The estimated counter-cyclical payments for each year are based on K-State and USDA projected prices.

** The estimated government payments in each crop budget for 2010 are based on the estimated direct payments plus the estimated counter-cyclical payments for 2010.

Table 5. *Estimated Direct and Counter-cyclical Payments per Acre of Cropland by Farm Management Association Region, 2005–2010, Yield Level III (\$/Acre)*

Region of Kansas	Estimated Direct Payments	Estimated Counter-cyclical Payments*						2010 Estimated Government Payments**
		CC 2005	CC 2006	CC 2007	CC 2008	CC 2009	CC 2010	
NW	\$13.35	\$6.99	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13.35
SW	14.75	7.34	0.00	0.00	0.00	0.00	0.00	14.75
NC	15.29	7.39	0.00	0.00	0.00	0.00	0.00	15.29
SC	16.58	7.38	0.00	0.00	0.00	0.00	0.00	16.58
NE	14.69	8.26	0.00	0.00	0.00	0.00	0.00	14.69
SE	12.30	5.98	0.00	0.00	0.00	0.00	0.00	12.30

* The estimated counter-cyclical payments for each year are based on K-State and USDA projected prices.

** The estimated government payments in each crop budget for 2010 are based on the estimated direct payments plus the estimated counter-cyclical payments for 2010.

Table 6. *Estimated Direct and ACRE Payments per Acre of Cropland by Crop for the 2009/2010 Marketing Year, Yield Level II (\$/Acre)*

Crop	Estimated Direct Payments*	Estimated ACRE Payments**	2010 Estimated Government Payments***
Wheat	\$10.74	\$6.94	\$17.68
Non-irrigated Corn	10.74	0.00	\$10.74
Irrigated Corn	10.74	3.00	\$13.74
Grain Sorghum	10.74	0.00	\$10.74
Soybeans	10.74	0.00	\$10.74

* The estimated direct payments for each year are an average of the six Kansas Farm Management Association regions.

** The estimated ACRE payments for each crop are based on USDA projected prices and yields.

*** The estimated government payments under the ACRE program are not used in the crop budgets as less than 2 percent of producers participated in 2009.

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