ACRE

Chad Hart Center for Agricultural and Rural Development Iowa State University

E-mail: chart@iastate.edu

June 18, 2008

State FSA Office Urbandale, Iowa





Average Crop Revenue Election (ACRE)

- ➤ Gives producers a one-time option to choose a revenue-based counter-cyclical payment program, starting in 2009
- Producers choose between the current stable of programs or ACRE
- ➤ Producers choosing ACRE agree to 20% decline in direct payments and 30% decline in loan rates

ACRE Settings

➤ Total acres eligible for ACRE payments limited to total number of base acres on the farm

➤ Farmers may choose which planted acres are enrolled in ACRE when total base area is exceeded

Loan Rates under ACRE

Crop	Unit	2009	2010-12
Corn	\$/bu.	1.365	1.365
Soybeans	\$/bu.	3.50	3.50
Barley	\$/bu.	1.295	1.295
Wheat	\$/bu.	1.925	2.058
Oats	\$/bu.	0.931	0.973
Cotton	\$/lb.	0.364	0.364
Sorghum	\$/bu.	1.365	1.365

Average Direct Payments Per Payment Acre

Crop	Current Program	ACRE	Difference
Corn	28.67	22.94	5.73
Soybeans	13.55	10.84	2.71
Barley	11.42	9.14	2.28
Wheat	17.94	14.35	3.59
Oats	1.16	0.93	0.23
Cotton	40.27	32.21	8.05
Sorghum	19.78	15.82	3.96

ACRE

- Program has state and farm trigger levels, both must be met before payments are made
- Expected state and farm yield based on 5 year Olympic average yields per planted acre
- ➤ ACRE price guarantee is the 2 year average of the national season-average price

ACRE Set-up for Iowa Corn

Year	Yield per Planted Acre (bu./acre)	Year	Season-average Price (\$/bu.)
2004	176.7	2007	4.25
2005	169.0	2008	5.50
2006	162.7		
2007	166.8	Average	4.875
2008	165.8		
Olympic Average	167.2		

The 2008 yield is based on trend yields (1980-2007). The 2008 price is USDA's May 2008 estimate.

So the expected state yield would be 167.2 bushels per acre and the ACRE price guarantee would be \$4.87 per bushel.

ACRE Structure

- ➤ ACRE revenue guarantee = 90% of ACRE price guarantee * Expected state yield
 - ➤ For our example, the ACRE revenue guarantee is 90% * 167.2 bu./acre * \$4.87/bu.

>\$732.84/acre

➤ ACRE actual revenue = Max(Seasonaverage price, Loan rate) * Actual state yield per planted acre

ACRE Structure

- ACRE Farm revenue trigger = Expected farm yield * ACRE price guarantee + Producer-paid crop insurance premium
 - Let's assume farm yields equal to state yields and use the average producer-paid crop insurance premium for 2008 (so far)
 - > 167.2 bu./acre * \$4.87/bu. + \$21.70/acre

>\$814.26/acre

ACRE Payment Triggers

➤ ACRE actual farm revenue = Max(Seasonaverage price, Loan rate) * Actual farm yield per planted acre

➤ Given our example, ACRE payments are triggered when ACRE actual revenue is below \$732.84/acre and ACRE actual farm revenue is below \$814.26/acre

ACRE Payments

- ➤ Payment rate = Min(ACRE revenue guarantee ACRE actual revenue, 25% * ACRE revenue guarantee)
- ➤ Payments made on 83.3% of planted/base acres in 2009-11, 85% in 2012
- ➤ ACRE payment adjustment: Payment multiplied by ratio of Expected farm yield to Expected state yield

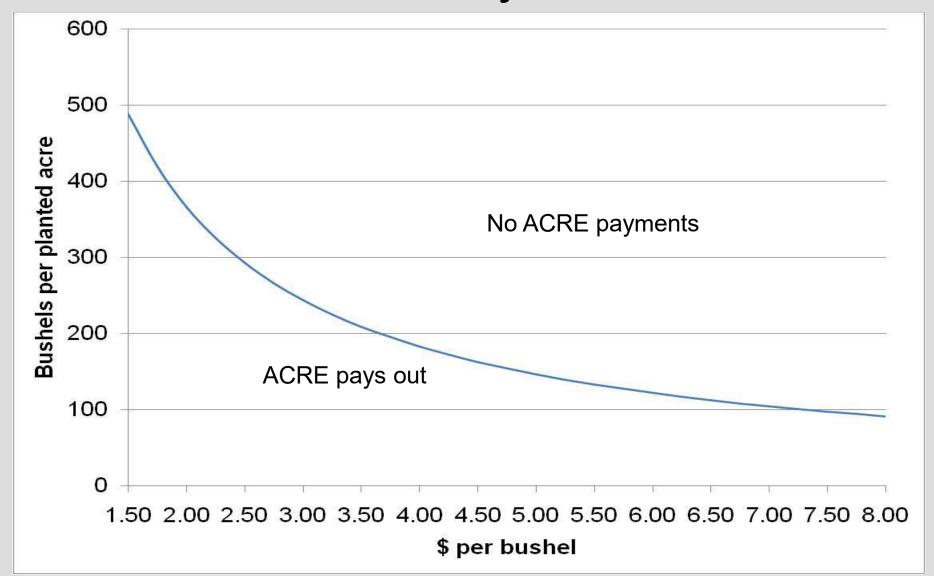
ACRE Payments

- ➤ Payment rate = Min(\$732.84 ACRE actual revenue, \$183.21)
- ➤ So the maximum per acre payment is \$183.21 in our example

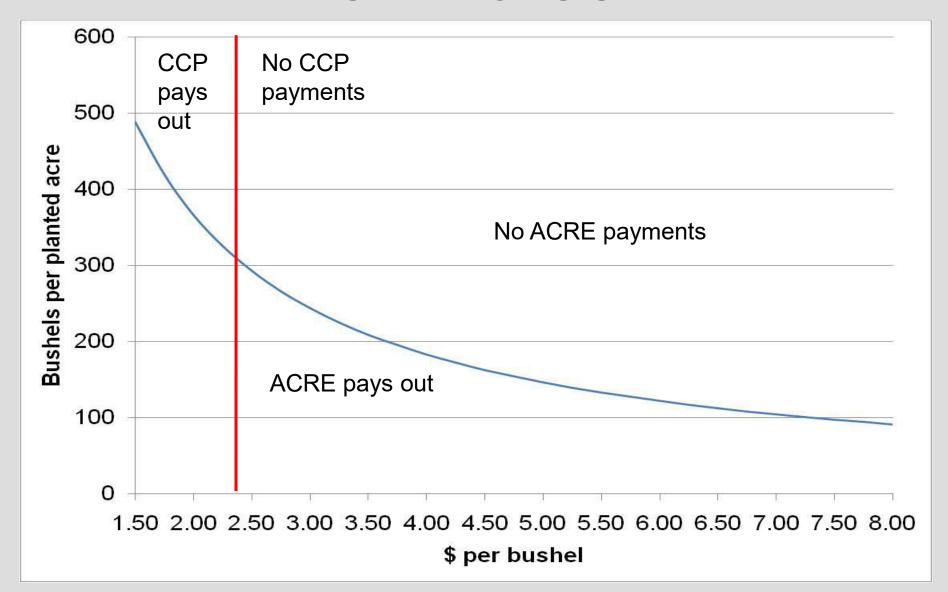
ACRE Payment Timing

- ➤ Payments can begin as soon as practicable possible after the end of the marketing year
 - ➤So 2009 ACRE payments could start to be paid out in October 2010
 - >There are no provisions for advance payments

ACRE Payments



ACRE vs. CCP



Looking Beyond 2009

- ➤ The ACRE revenue guarantee is updated each year using the same rules
 - > 5 year Olympic average for yields
 - > 2 year average for prices
- ➤ But the ACRE revenue guarantee can not change by more than 10 percent (up or down) from year to year
 - ➤ So if the 2009 ACRE revenue guarantee is \$732.84, then the 2010 ACRE revenue guarantee must be between \$659.56 and \$806.12

Farmer's Choice

➤ In deciding about ACRE, farmers must weigh:

The loss of 20% of their direct payments, a 30% drop in the marketing loan rate, and no access to CCP payments versus

➤ The potential for payments under ACRE

Comparing Program Parameters

- ➤ For Iowa Corn
 - ➤ Under the current CCP program
 - ➤ CCP Yield Average = 122.1 bushels per acre
 - ➤ CCP Effective Target Price = \$2.35/bushel
 - ➤In our example, for ACRE
 - ➤ ACRE Yield Guarantee = 167.2 bushels per acre
 - ➤ ACRE Price Guarantee = \$4.87/bushel
 - ➤ 20% of average lowa corn direct payment = \$6.50 per acre

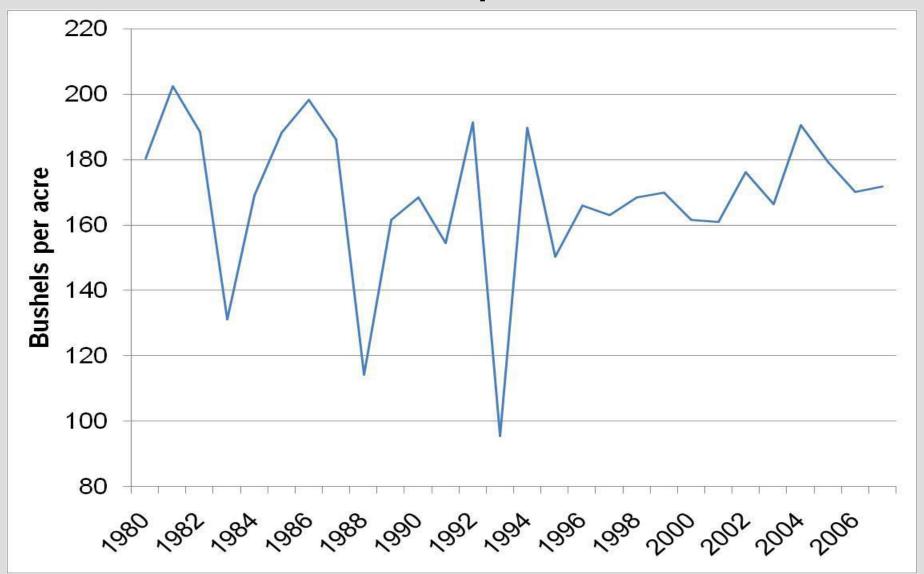
Preliminary ACRE Analysis

Currently running forward-looking ACRE analysis

➤ Based on lognormal price distribution and uptrended historical yields

➤ Comparing farm support under current set of programs versus ACRE

Historical Yields Uptrended to 2009



Preliminary Results

➤ ACRE looks more attractive given:

- ➤ Relatively lower 2009 expected prices
 - ➤ Below 2008 projected prices, but above the current effective target price
- ➤ Higher price volatilities

Preliminary Results

- Current programs look more attractive given:
 - > Ever increasing prices
 - ➤ Potentially no ACRE payments combined with cut in direct payments
 - ➤ Much lower expected prices
 - >Prices below the current effective target price
 - Here, it's a horse race as both ACRE and the current programs will provide support

Payment Limitations

- ➤ Direct payments: \$40,000 (w/o ACRE) \$32,000 (w/ ACRE)
- ➤ Counter-cyclical payments: \$65,000
- >ACRE: \$73,000 (\$65,000 + \$8,000)
- ➤ Marketing loans: No limits
- > Direct attribution of payments
- ➤ Elimination of the 3-entity rule

Thanks for your time!

Any questions?