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2008 FARM BILL: ACRE AND SURE



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Updated: February 17, 2009

Presentation at U.S. Department of Agriculture
Outlook Conference, February 27, 2009

Outline

Discuss SURE Program

Discuss ACRE Program

Discuss ACRE Program Decision

Discuss ACRE Program Analysis

Closing Thoughts

At end of slides is a listing of selected changes on payment limits

2008 Farm Bill Theme

A basic question of farm policy has been whether its objective is (1) to enhance farm incomes or (2) to help farmers manage risk.

(1) Risk management seeks to align payments with the occurrence of financial stress. Income enhancement seeks to increase annual income.

The *Food, Conservation, and Energy Act of 2008* (i.e., 2008 Farm Bill) clearly emphasizes risk management over enhanced farm income.

(1) This emphasis occurred throughout, but is best illustrated by the enactment of SURE and ACRE.

SURE (Supplemental Revenue Assistance): Thumbnail Sketch (as amended October 2008)

**SURE is a whole crop farm operation disaster assistance program,
but payment is tied to shortfalls in revenue.**

To receive a SURE payment, 3 conditions must be met:

(1) Crop insurance and NAP (Noninsured Crop Assistance Program) must be purchased for all crops excluding (a) pasture, (b) crops that are not economically significant, (c) crops for which NAP administrative fee exceeds 10% of coverage value, and (d) crops for which insurance or NAP are not available --- unless you confirm otherwise, assume NAP exists for crop.

(a) An economically significant crop is a crop that accounts for at least 5% of a farm's expected revenue.

(2) Farm is in a declared disaster (or contiguous) county, OR, due to disaster or adverse weather, actual production on farm is less than 50% of normal production.

(3) Production of at least 1 economically significant crop on farm is reduced by at least 10% by the disaster.

SURE (Supplemental Revenue Assistance): Thumbnail Sketch (as amended October 2008)

SURE payment = [60% of (farm SURE guarantee - farm all-crop revenue)]

- (1) SURE guarantee per planted (and prevented planted) acre is 115% of per acre insurance coverage level. SURE guarantee per planted (and prevented planted) acre is 120% of NAP coverage.**
 - (a) SURE guarantee is summed for all acres of insured and NAP crops, excluding crops noted on previous page (item 1) and crops subsequently planted on same land for which disaster assistance is received, except where double-cropping is a normal practice.**
 - (b) SURE Guarantee is capped at 90% of the farm's expected revenue.**
- (2) Farm all-crop revenue is sum of (A) insurance indemnities, (B) prevented planting payments, (C) other Federal disaster aid for same loss, (D) 15% of direct payments, (E) all ACRE counter-cyclical, and market loan payments, and (F) actual revenue on farm for SURE crops.**
 - (a) Actual revenue for a crop is 100% of price election used to calculate insurance indemnity if an indemnity is triggered times quantity of crop produced on farm, adjusted for quality losses.**
- (3) SURE payments are limited to \$100,000 per eligible producer, minus payments from the Livestock Indemnity, Livestock Forage Disaster, and Emergency Assistance for Livestock, Honey Bees, and Farm-Raised Fish programs.**

SURE: Initial Thoughts on Potential Implications

- (1) Existence of SURE reduces chance of *ad hoc* disaster assistance**
- (2) SURE is an incentive to buy at least 75% individual crop insurance (115% of 75% is 86%, just below 90% cap on SURE guarantee) and NAP.**
- (3) SURE most benefits areas with higher yield variability - greater chance of county disaster designation (or 50% decline in farm's production).**
- (4) SURE raises crop rotation questions since it benefits single-crop farms most. SURE payments are triggered by a disaster, but payment is based on shortfall in farm revenue relative to its SURE guarantee. Multiple crops reduce revenue variability. Simply put, for a single-crop farm, SURE increases insurance coverage by 15%, but only if a natural disaster occurs.**
 - (a) Will farmers adopt more monoculture?**
 - (b) Will farmers adopt all-crop alternative year rotations, (100% corn one year; 100% soybeans next year)?**
 - (c) Will farmers reduce smaller acre crops, such as wheat in Midwest? To qualify for SURE, crop insurance becomes cost for economically significant crops.**

Beginning with Crops Harvested in 2009, farmers and landowners have the choice between

(1) Traditional Suite of Programs

Marketing Loan

Direct Payment

Price Counter-Cyclical

(2) ACRE Suite of Programs

Marketing Loan Rate at 70%

Direct Payment at 80%

ACRE State Revenue Program

ACRE and SURE are Different Programs

ACRE and Crop Insurance/SURE address different risks.

(a) Objective of crop insurance/SURE is to help farmers manage idiosyncratic (specific to farm) yield or revenue risk that occurs between planting and harvest.

(b) Objective of ACRE is to help farmers manage systemic (i.e., market) risk associated with a decline over a few years in state revenue for a crop year, defined as U.S. crop year price times state yield for the crop year.

SURE applies to whole farm operation.

ACRE applies to an FSA farm.

SURE requires purchase of crop insurance or NAP.

ACRE does NOT require purchase of crop insurance or NAP.

SURE payment is triggered by a production disaster.

ACRE payment is triggered by a shortfall in state revenue for a crop.

Evolution of ACRE: Policy Process

This slide focuses on the 2008 Farm Bill. Numerous proposals for a revenue farm support program have appeared over the years.

Integrated Farm Revenue Proposal (IFRP)
Carl Zulauf
Basic concepts in *Ohio's Country Journal*, p. 12, 12/2004
Congressional Testimony, 9/21/2006



American Farmland Trust
American Farmland Trust adopts IFRP in its
*Agenda 2007: A New Framework and Direction
for U.S. Farm Policy*, 5/2006.



Average Crop Revenue (ACR) Program

- (1) Senators Richard Durbin, Illinois, and Sherrod Brown, Ohio, propose state-level ACR in S. 1872, 7/25/07.
- (2) ACR included in Chairman Senator Tom Harkins' mark of Senate's farm bill.
- (3) Senate Committee on Agriculture, Nutrition, and Forestry adopts ACR with modifications (Senator Pat Roberts' amendment).
- (4) ACR as amended remains in the Senate Farm Bill passed on 12/14/07.



Average Crop Revenue Election (ACRE) Program

- (1) Conference Committee includes ACRE in *Food, Conservation, and Energy Act of 2008* (agreement 5/8/2008).
- (2) Second veto override of H.R. 2419 occurs on 6/19/2008, completing action on 2008 Farm Bill.

County Revenue Counter-Cyclical Proposal
Bruce Babcock and Chad Hart
Iowa Ag Review, Spring 2005, Vol. 11, No. 2, pp. 1-3, 11
Congressional Testimony, (9/21/2006)



National Corn Growers Association
*Public Policy Action Team Proposes a county revenue
countercyclical program and farm-level base revenue
protection program*, 10/19/2006.



Evolution of ACRE: Comparison with Integrated Farm Revenue Policy Concepts

Policy Concept in Integrated Farm Revenue Proposal

Revenue instead of price support program

Revenue target market oriented (not fixed)
changes each year with product of
(a) harvest futures price and
(b) U.S. trend-line yield

Objective is to help farmers manage systemic revenue risk

Specifically, planting-to-harvest declines in U.S. revenue associated with crop production

Revenue support program integrated with crop insurance to remove systemic revenue risk from insurance products

Policy Concept in ACRE

Revenue instead of price support program

Revenue target market oriented (not fixed)
changes each year with product of
(a) 2-year moving average of U.S. cash price and
(b) 5-year Olympic moving average of state yield

Objective is to help farmers manage systemic revenue risk

Specifically, short-term declines in state revenue associated with crop production

Integration removed (Senator Roberts' amendment), but elements of coordination with crop insurance included in ACRE

Policy Innovations of ACRE's State Revenue Protection Program Compared to Traditional Price-Based Programs

<p>ACRE targets revenue (state yield times U.S. price)</p> <p>ACRE's revenue guarantee changes with state yield and U.S. price</p> <p>Farm must have a revenue loss for a crop relative to farm's ACRE benchmark revenue for the crop</p> <p>ACRE partially coordinated with crop insurance [premium added to farm's ACRE benchmark revenue for crop; ACRE state payment capped at 25% of state guarantee (most insurance is 75% coverage or less)]</p>	<p>Marketing Loan and Counter-Cyclical Programs target U.S. price</p> <p>Marketing loan rates and counter-cyclical target prices are fixed</p> <p>Counter-cyclical and marketing loan payments made if farm has sizeable loss or record income</p> <p>Counter-Cyclical and Marketing Loan programs not coordinated with crop insurance</p>
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ACRE Program Decision

Based on Final Interim Regulations, December 29, 2009

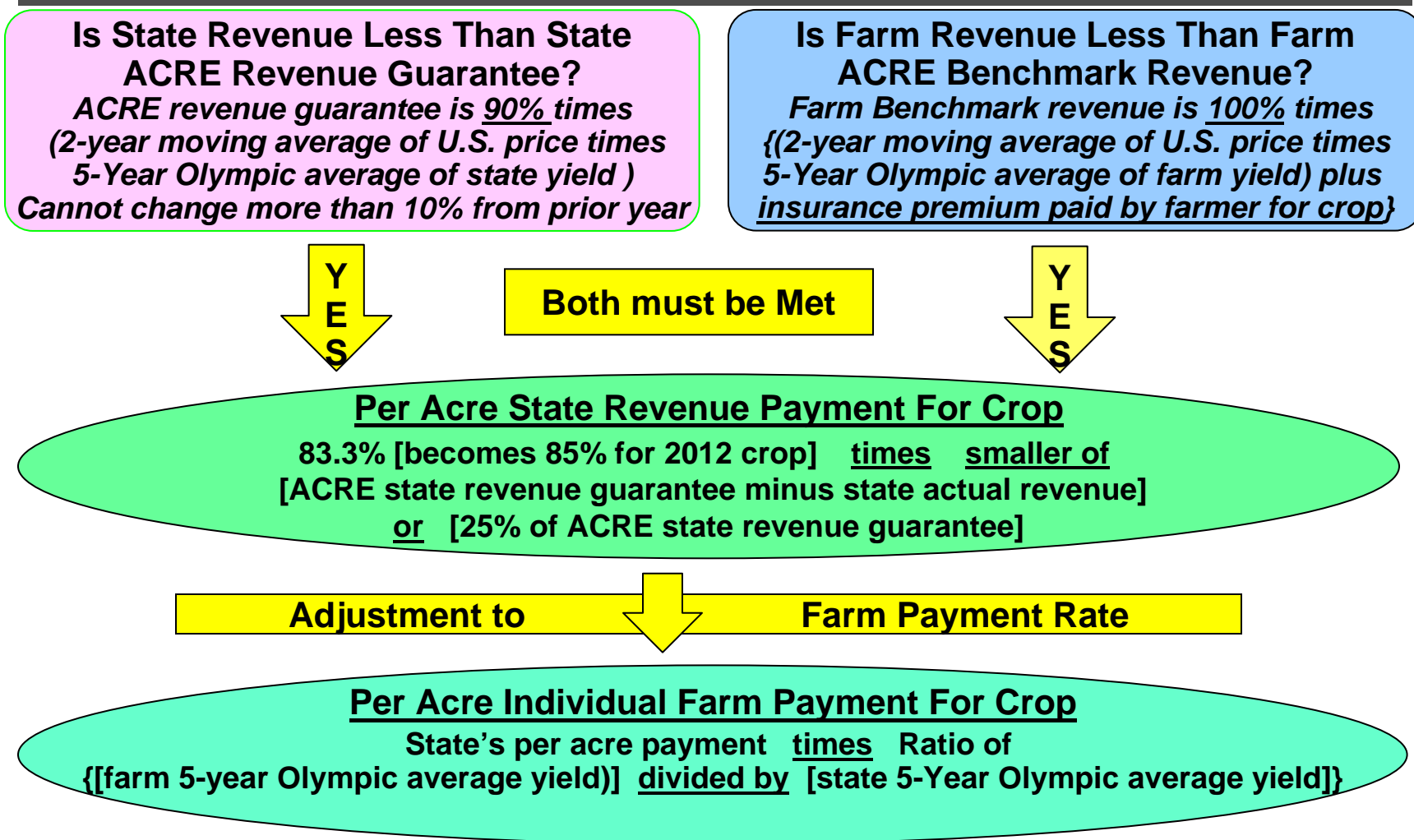
- (1) ACRE must be elected -- if no choice is made, a farm remains in the traditional suite of farm programs.**
- (2) As long as a farm is not in ACRE, election of ACRE is an annual decision. Once ACRE is elected, the farm is in ACRE through the 2012 crop. Thus, ACRE can be elected for the crop years of 2009-12, 2010-12, 2011-12, or 2012.**
 - (a) Calculation of the ACRE revenue guarantee begins with the 2009 crop year. Thus, all participants in the ACRE program for a given state and crop year will have the same revenue guarantee, regardless of what crop year they elect ACRE on an FSA farm.**

ACRE Program Decision

Based on Final Interim Regulations, December 29, 2009

- (3) ACRE must be elected for all covered program crops and peanuts grown on a farm (for example, if corn, soybeans, and wheat are grown on a farm, ACRE must be elected for all 3 crops). BUT, ACRE payments are crop specific (for example, corn but not wheat can receive a payment).**
- (4) ACRE election remains with the FSA farm, whether or not the owner and/or operator of the FSA farm remains the same.**
- (5) ACRE participation process is a 2-step process: election and enrollment.**
- (6) Deadline for ACRE decision is June 1 --- late farm program enrollment is no longer allowed.**

ACRE Per Acre Revenue Payment Schematic



Key Elements: ACRE State Revenue Program

ACRE revenue payment occurs if actual ACRE revenue for a crop for a state is less than the state's ACRE revenue guarantee for the crop

(1) ACRE per planted acre state revenue guarantee for a crop is:

[(90%) times (moving average of U.S. crop year cash price for 2 most recent years)

times (Olympic moving average of state's yield per planted acre for 5 most recent years (excludes high and low yields))]

(a) ACRE's revenue guarantee is not fixed but changes each year with moving averages

(b) ACRE's revenue guarantee cannot increase or decrease more than 10% from the prior year --- this is an important provision

(2) ACRE actual revenue for a crop year is:

{state yield per planted acre times [higher of (a) U.S. average price for crop year or (b) 70% of U.S. marketing loan rate]}.

Perspectives on ACRE State Revenue Program

- (1) ACRE is a deficiency payment program, just like the counter-cyclical and marketing loan programs**
 - (a) ACRE is a revenue program ---- revenue deficiency payment is made when state revenue is less than state revenue guarantee**
 - (b) Counter-cyclical and marketing loan programs are price programs - --- price deficiency payment is made when price is less than the support price**
 - (c) ACRE's revenue target (its revenue guarantee) is based on recent market revenue as determined by the moving average of state yield and U.S price; counter-cyclical target price and marketing loan rates are fixed by Congress**

- (2) ACRE is a multiple-year GRIP program, BUT ACRE is**
 - (a) Set at the state, not county, level**
 - (b) Uses cash, not futures, prices**
 - (c) Covers market year, not planting-to-harvest, period**

ACRE is a Revenue Program: Yield and Price Determine ACRE's Revenue Guarantee

SOURCE: USDA, National Agricultural Statistics Service and Farm Service Agency.

Crop	Ohio Olympic Average Planted Yield 2004-08 As of 2/10/09*	U.S. Average Cash Price 2007-08 As of 2/10/09*	Coverage Level	Ohio ACRE Revenue Guarantee 2009	Effective Target Price 2009
Corn	148.2/acre	\$4.05/bu.	90%	\$540/planted acre	\$2.35/bu.
Beans	46.1/acre	\$9.68/bu.	90%	\$401/planted acre	\$5.36/bu.
Wheat	64.0/acre	\$6.64/bu.	90%	\$383/planted acre	\$3.40/bu.

* ACRE average price and yield are not set until the end of the 2008-2009 crop year.

ACRE revenue payment occurs if state revenue for crop year is less than state revenue guarantee (for example, state corn revenue is below \$540 per planted acre). ACRE revenue guarantee is calculated as: {90% times Olympic average yield times average cash price} [for corn, (90% times 148.2 times \$4.05) = \$540/planted acre]

Counter-cyclical payment occurs if U.S. crop year price is below effective target price (for example, U.S. soybean price is below \$5.36). Effective target price equals (target price minus direct payment rate per bushel).

Calculating ACRE Payments

Example: Ohio Corn

Ohio Revenue for Year	Ohio ACRE Revenue Guarantee (as of 2/10/09)	Payment Rate	Ohio ACRE Revenue Payment
\$650/planted acre	\$540/planted acre	83.3%	\$0/planted acre
\$575/planted acre	\$540/planted acre	83.3%	\$0/planted acre
\$500/planted acre	\$540/planted acre	83.3%	\$33/planted acre
\$425/planted acre	\$540/planted acre	83.3%	\$96/planted acre
\$375/planted acre	\$540/planted acre	83.3%	\$112/planted acre
\$325/planted acre	\$540/planted acre	83.3%	\$112/planted acre

ACRE payment occurs only if state revenue for year is less than the state revenue guarantee.

ACRE state payment rate is 83.3% of (state revenue guarantee minus state revenue).

ACRE payment is capped at 83.3% of 25% of state revenue guarantee.

In above table, cap is \$112 per acre (.833 times .25 times \$525).

Payment rate is 85% for crops harvested in 2012.

NOTES: (1) ACRE state revenue payment varies by farm according to the ratio of the farm-to-state Olympic average yield. (2) For a farm to receive an ACRE revenue payment, the farm also must meet the farm's revenue eligibility condition.

Trying to Predict Which Program Suite Will Pay More is Almost Impossible

- (1) Predicting payments from the marketing loan, counter-cyclical, and ACRE state revenue programs requires that you predict the path prices will take between now and 2012. In other words, you must predict prices for 2009, 2010, 2011, and 2012.**

- (2) The accumulated evidence of many years of study is that very few people possess the ability to predict changes in prices for the next year let alone for four years.**
 - (a) If people could predict prices, we would see a lot of very rich folks.**
 - (b) We would not be talking about losses in the stock market since investors would have seen them coming and avoided them.**

Using A Risk Management Perspective to Make the Farm Program Suite Choice

- (1) A more useful approach is to examine the ACRE decision from the perspective of managing risk.**
- (2) In managing risk, you are concerned about the timing and size of program payments when something bad happens that could create financial stress. In other words, do payments occur when financial stress occurs?**
- (3) Most, not all, times financial stress occurs, revenue has declined.**
- (4) Financial stress can occur from factors that happen only on your farm (idiosyncratic risk) or from factors that occur beyond your farm at the market level (i.e., market or systemic risk)**
- (5) The ACRE state revenue, counter-cyclical, and marketing loan programs are designed to address market or systemic risk --- ACRE state revenue program addresses the risk of a decline in state revenue relative to the state revenue guarantee; counter-cyclical and marketing loan programs address the risk of low prices relative to the effective target price or loan rate.**

ACRE Farmer Decision: Central Question

“Does ACRE’s state revenue guarantee program improve management of systemic revenue risk enough compared to the price counter-cyclical program, to compensate for a 20% reduction in direct payments and 30% reduction in marketing loan rates?”

This question comes from applying the concept of partial budgeting to the choice of the two farm policy suites.

Partial budgeting asks what changes when you make a decision, and then assesses the benefits and costs of the changes.

The ACRE state revenue program substitutes for the price counter-cyclical program, 20% reduction in direct payments, and 30% reduction in marketing loan rates.

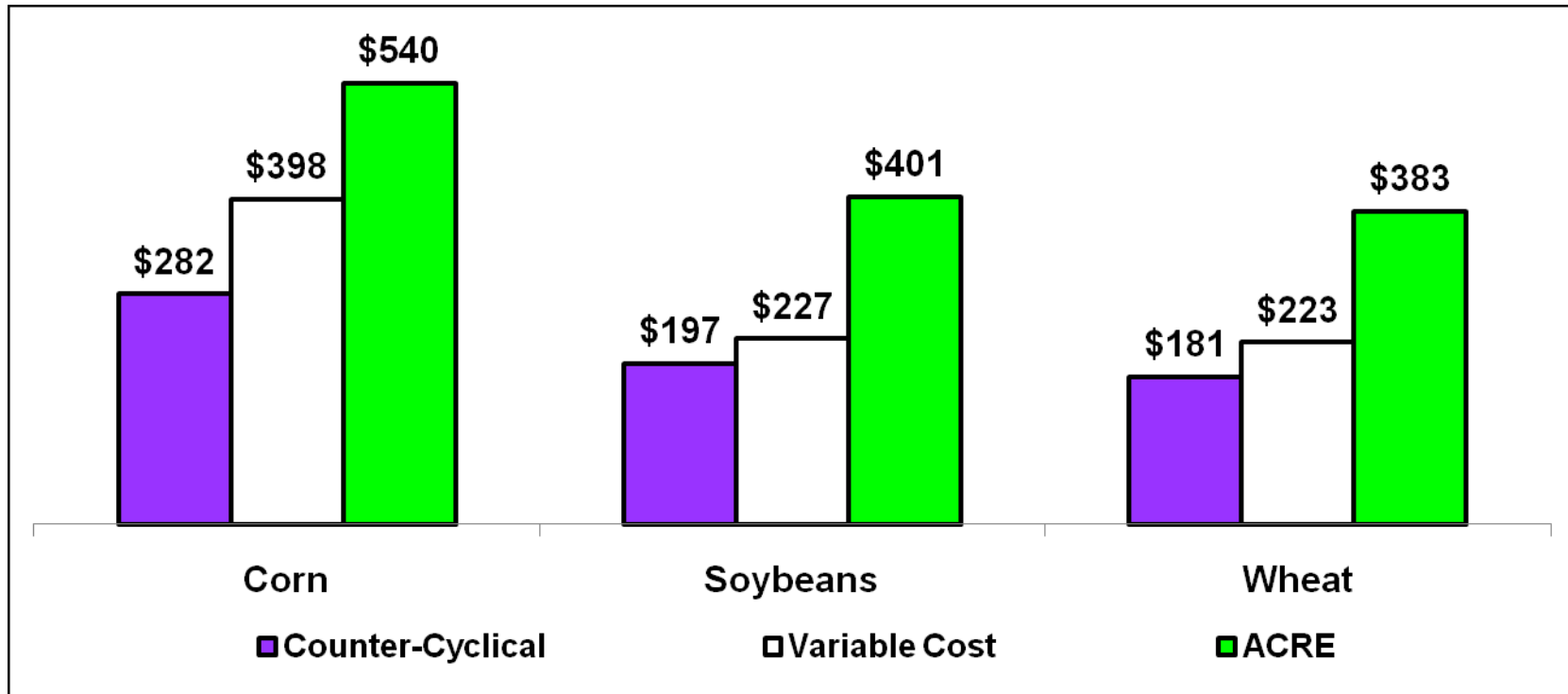
Benefit of Electing ACRE: ACRE's Revenue Target is higher than Counter-Cyclical Implied Revenue Target, Ohio, February 2009

Crop	Ohio Olympic Average Planted Yield 2004-08 As of 2/10/09	U.S. Average Cash Price 2007-08 As of 2/10/09	Ohio ACRE Revenue Target 2009	Ohio Average Counter-Cyclical Yield 2003	Counter-Cyclical Effective Target Price 2009	Counter-Cyclical Implied Revenue Target 2009
Corn	148.2/acre	\$4.05/bu.	\$540	119.8/acre	\$2.35/bu.	\$282
Beans	46.1/acre	\$9.68/bu.	\$401	36.8/acre	\$5.36/bu.	\$197
Wheat	64.0/acre	\$6.64/bu.	\$383	53.2/acre	\$3.40/bu.	\$181

Revenue target (revenue guarantee) for ACRE state revenue program equals [90% times average U.S. cash price times Olympic average state yield]. For corn, 90% times 148.2 times \$4.05 = \$540. ACRE payment rate is 83.3% for 2009-2011 and 85% in 2012. ACRE state payment is capped at 25% of the ACRE revenue target (revenue guarantee).

Implied revenue target for counter-cyclical program is [counter-cyclical yield times effective target price]. For corn, 119.8 times \$2.35 = \$282. Counter-cyclical payment rate is 85%.

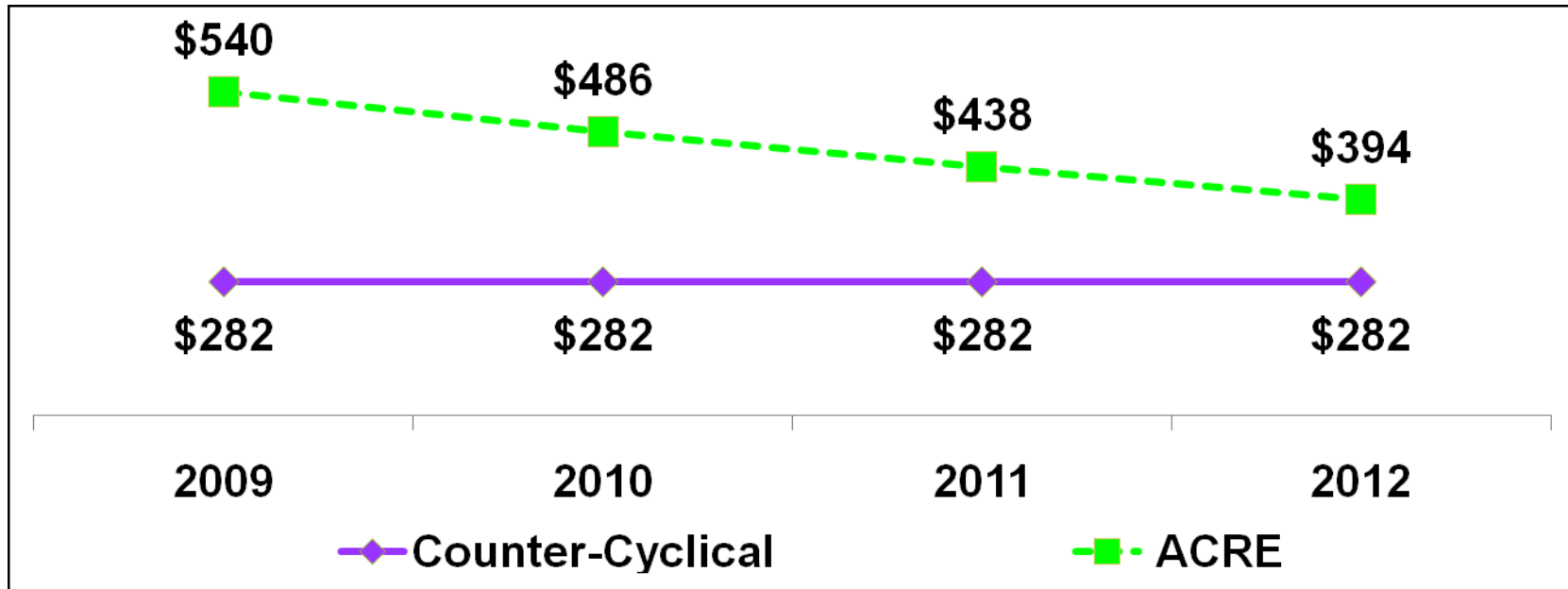
Per Acre Revenue Target: ACRE Revenue (as of 1/12/09) vs. Counter-Cyclical vs. Variable Cost



Variable production costs are seed, fertilizer, chemicals, fuel, oil, grease, repairs, crop insurance, miscellaneous, interest on operating capital, and hired labor. SOURCES: Original calculations and Ohio Crop Production Budgets at

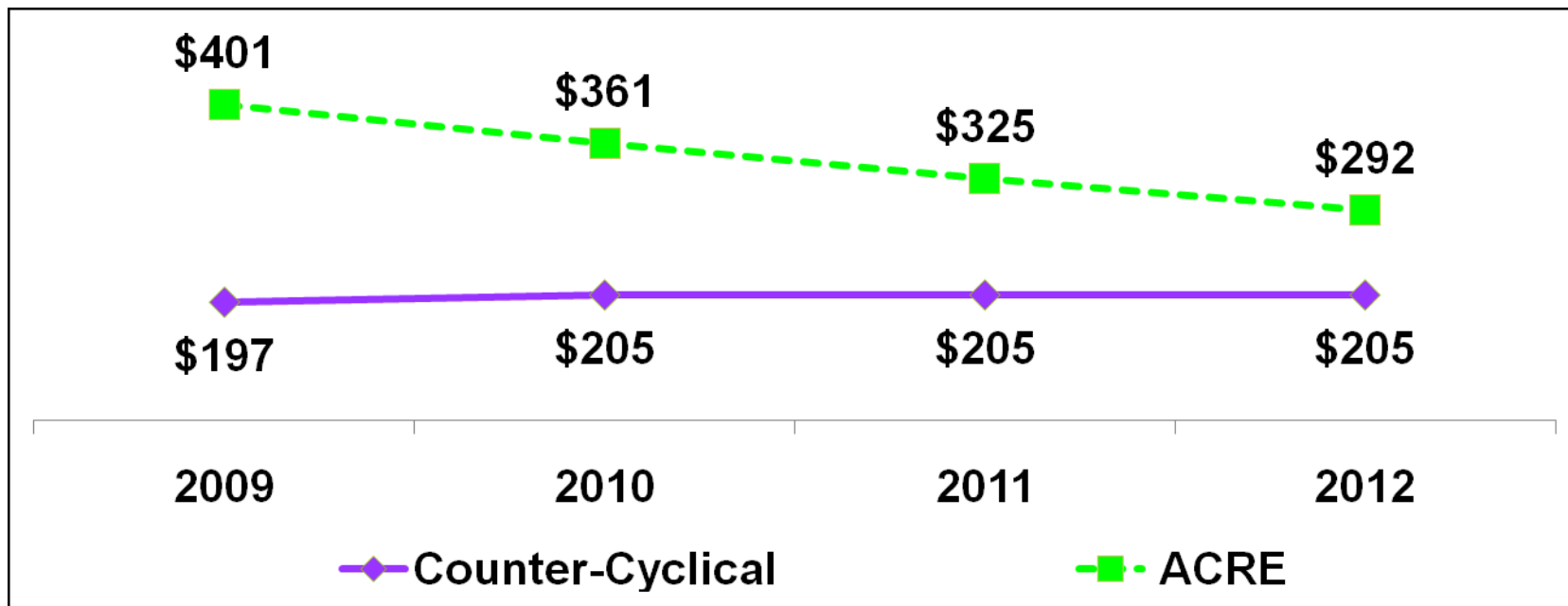
<http://aede.osu.edu/Programs/FarmManagement/Budgets/index.htm>

Minimum Per Acre Revenue Target, ACRE Revenue vs. Counter-Cyclical Programs by Year, Corn, Ohio, 2009-2012, As of 1/12/09



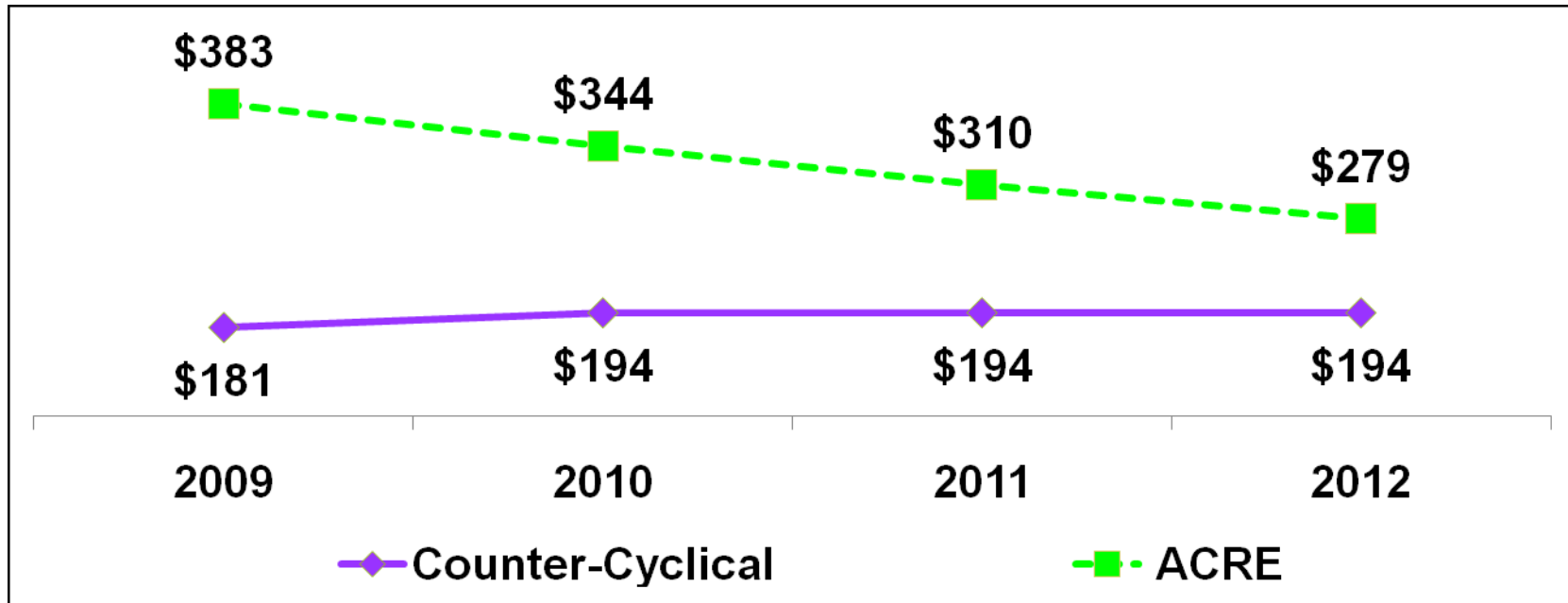
10% limit on decline in ACRE revenue target (revenue guarantee) per crop year allows its minimum target to be estimated for future years. Minimum target for 2010 crop year is 90% of \$540/acre or \$486/acre (a decline of 10%). For 2011 and 2012 crop years, the revenue target is again reduced by 10% per year. ACRE state payment is capped at 25% of the ACRE revenue target (revenue guarantee). Effective target price is \$2.35/bushel for 2009-2012 crops. ACRE payment rate is 83.3% for 2009-2011 and 85% in 2012. Counter-cyclical payment rate is 85% for 2009-2012.

Minimum Per Acre Revenue Target, ACRE Revenue vs. Counter-Cyclical Programs by Year, Soybeans, Ohio, 2009-2012, As of 1/12/09



10% limit on decline in ACRE revenue target (revenue guarantee) per crop year allows its minimum target to be estimated for future years. Minimum target for 2010 crop year is 90% of \$401/acre or \$361/acre (a decline of 10%). For 2011 and 2012 crop years, the revenue target is again reduced by 10% per year. ACRE state payment is capped at 25% of the ACRE revenue target (revenue guarantee). Effective target price is \$5.36 for 2009 crop and \$5.56/bushel for 2010-2012 crops. ACRE payment rate is 83.3% for 2009-2011 and 85% in 2012. Counter-cyclical payment rate is 85% for 2009-2012.

Minimum Per Acre Revenue Target, ACRE Revenue vs. Counter-Cyclical Programs by Year, Wheat, Ohio, 2009-2012, As of 1/12/09

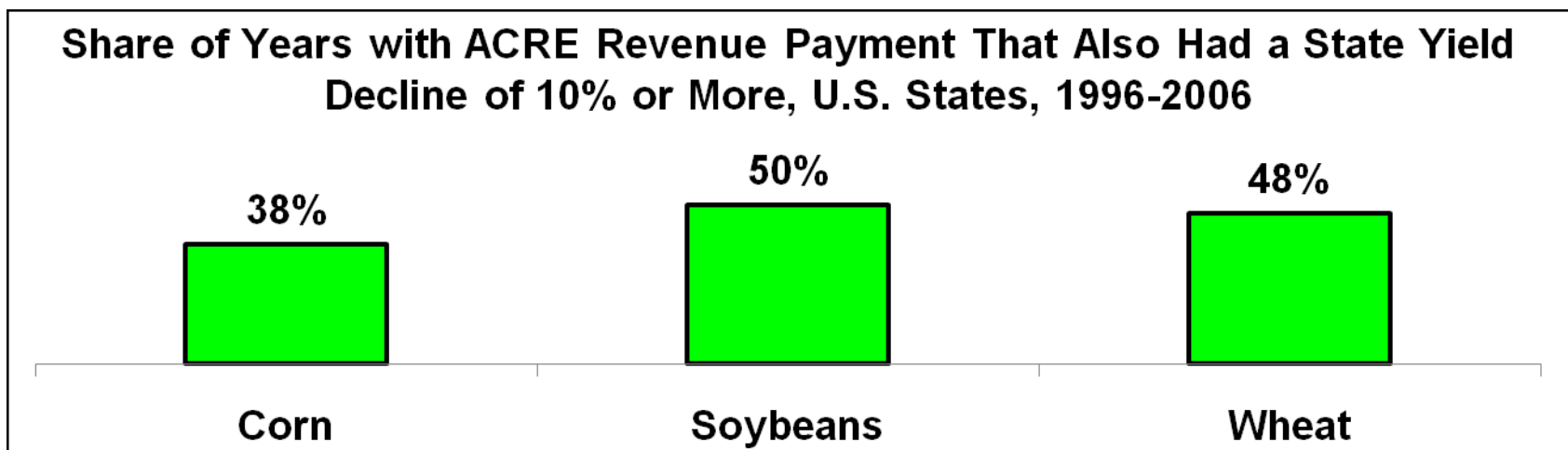


10% limit on decline in ACRE revenue target (revenue guarantee) per crop year allows its minimum target to be estimated for future years. Minimum target for 2010 crop year is 90% of \$383/acre or \$344/acre (a decline of 10%). For 2011 and 2012 crop years, the revenue target is again reduced by 10% per year. ACRE state payment is capped at 25% of the ACRE revenue target (revenue guarantee). Effective target price is \$3.40 for 2009 crop and \$3.65/bushel for 2010-2012 crops. ACRE payment rate is 83.3% for 2009-2011 and 85% in 2012. Counter-cyclical payment rate is 85% for 2009-2012.

ACRE Is A Revenue Program

Declines in price or yield or both trigger payments

**Most discussion of ACRE has focused on price.
However, it is a revenue, not price, program.**



Yield declines are a more important trigger of ACRE revenue payments in smaller producing states due to their less negative relationship between state yield and U.S. price. However, the state yield component of ACRE's revenue guarantee should not be ignored in any state.

Other Considerations Regarding ACRE Program Decision

- (1) ACRE revenue payments are based on planted, not base acres. ACRE payments are capped at existing base acres on farm.
- (2) More acres receive an ACRE than counter-cyclical payment.
- (3) Cost of participating in ACRE is the 20% reduction in direct payments. For most corn-soybean-wheat farms, this cost will be between \$2 and \$5 per planted acre each year.
- (4) Cost of participating in ACRE are potential counter-cyclical and marketing loan payments that occur if prices decline below their support rates. This value will depend upon each farmer's expectations on future price and their risk management preferences for these payment situation.
- (5) Payment limit considerations: ACRE payment limit is \$65,000 plus the reduction in direct payments. Counter-cyclical payment limit is \$65,000. Marketing loans have no payment limit.

For a more detailed discussion of these considerations, see my extension PowerPoint slide set and associated papers at <http://aede.osu.edu/people/zulauf.1> : "My Publications" on lefthand side

Other Considerations Regarding ACRE Program Decision

- (6) How will ACRE affect the use of marketing loan to manage cash flow and taxes?
- (7) ACRE state revenue payment is adjusted to the individual farm by a ratio of 5-year Olympic average yields on the farm relative to the state for the crop. The higher a farm's expected yield relative to the state's expected yield, the higher the farm's ACRE revenue payment.
- (8) ACRE farm payment depends on farm having a revenue less than its benchmark revenue.
- (9) How easy will it be to document yields on an FSA farm?
- (10) Different decision strategies are being discussed, including (1) instead of electing ACRE, use 20% reduction in direct payments under ACRE to buy higher revenue insurance coverage and (2) participate in both ACRE and traditional program suites if you have more than one FSA farm.

For a more detailed discussion of these considerations, see my extension PowerPoint slide set and associated papers at <http://aede.osu.edu/people/zulauf.1> : "My Publications" on lefthand side

BIG Picture Comparative Risk Payments

- (1) If state revenue increases, remains constant, or does not decline by more than 10% from 2009 through 2012, the traditional program suite has higher payments --- due to the 20% reduction in ACRE direct payments**
- (2) If price declines to, but not below the effective target price, ACRE has larger payments in almost all scenarios --- ACRE payments increase as price approaches the effective target price; counter-cyclical and marketing loan programs pay almost nothing**
- (3) If prices decline below the loan rate, ACRE makes large payments, but the traditional program suite makes even larger payments --- both marketing loan and counter-cyclical payments occur; no limit on marketing loan payments**

Decision makers need to think about the probability of each scenario and implications for their farm's risk exposure.

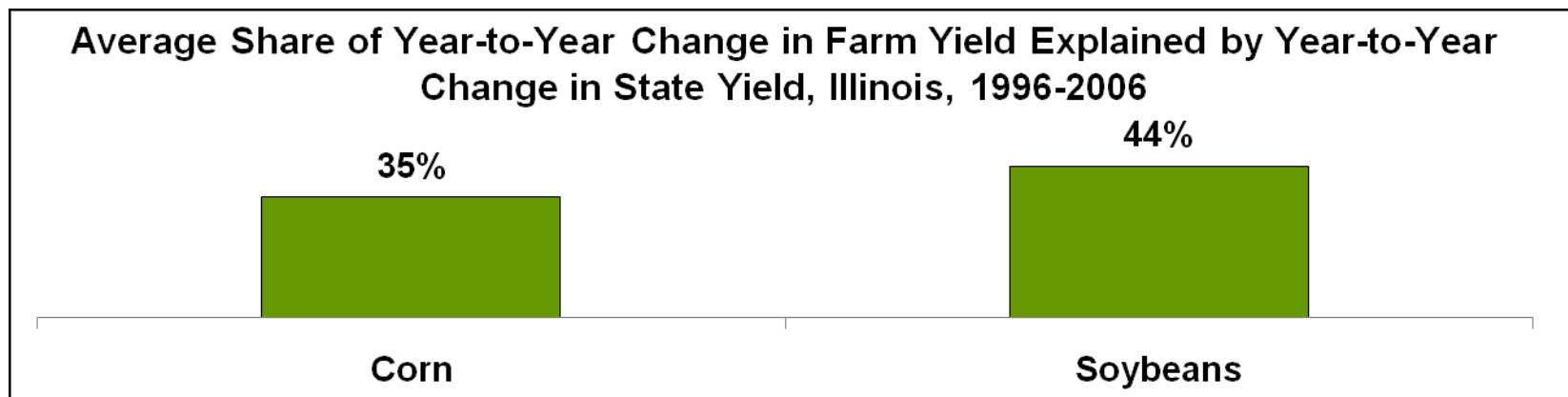
ACRE: Some Concluding Thoughts

1. ACRE is most likely to benefit:

- (a) Farmers whose planted and base acre crops differ substantively
- (b) States with higher yield variation
- (c) Crops with prices well above their loan rates
- (d) States and crops with larger increases in yields - corn is notable

2. ACRE is a poor substitute for crop insurance.

- (a) ACRE does not cover yield risk on an individual farm. It covers yield risk at the state level. See graph below. Thus, farmers who elect ACRE should consider purchasing insurance to help manage production risks associated with their farm.



ACRE: Some Concluding Thoughts

3. Crop insurance cannot replicate ACRE.

(a) Crop insurance coverage is not known for 2010 through 2012 crops. In contrast, a reasonable guess can be made of the minimum state revenue coverage from the ACRE state revenue program through the 2012 crops.

(b) Crop insurance covers risk between planting and harvest. In contrast, ACRE covers risk for the crop year. Thus, the two programs cover different risks over different time periods.

(c) Crop insurance uses futures prices while ACRE uses cash prices. Thus, the two programs cover different price risks, a consideration that has become more important with the increase in uncertainty about basis levels.

(d) In short, crop insurance and ACRE offer different risk management profiles. The two risk management profiles will never be the same and can vary substantively

Analytical Procedures and Parameters

- (1) Corn, Soybeans, Wheat**
- (2) Counterfactual Analysis – 1996-2006 Crop Years**
 - (a) After major policy changes enacted by 1996 Farm Bill: direct payments, freedom-to-farm, elimination of annual set asides, elimination of most public stocks program**
 - (b) Stationary price series**
- (3) Counterfactual Analysis – percent deviation of acres, prices, and yields for 1996-2006 crop years but applied to USDA average forecast acres, prices, and yields for 2009-2012 crop years.**

Key consideration in selecting counterfactual analyses is that little is known about key economic parameters (elasticities, temporal and cross correlations) in post 1996 Farm Bill markets

Average Annual Price, Yield, Revenue, and Planted Acres, Corn, Soybeans, and Wheat, U.S., 1996-2006 Crop Years and Forecast 2009-2012 Crop Years

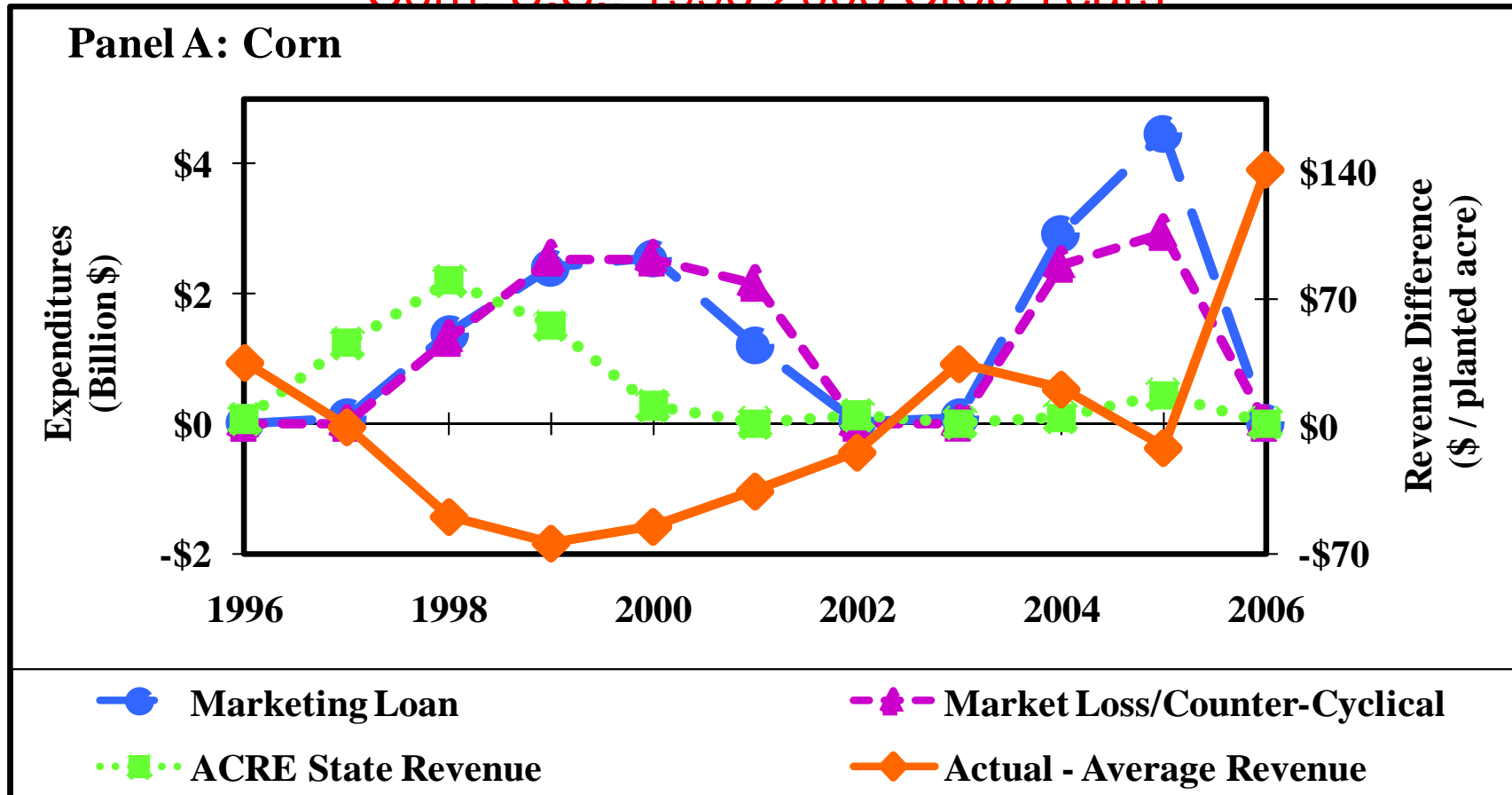
Period by Crop	Cash Price per Bushel	Yield per Planted Acre	Revenue per Planted Acre	Planted Acres (million)
Corn	\$2.23	136.7	\$305	79.1
1996-2006	\$3.60	158.0	\$569	91.8
2009-2012				
Soybeans	\$5.73	38.4	\$220	72.6
1996-2006	\$8.81	42.6	\$375	68.9
2009-2012				
Wheat	\$3.30	34.4	\$113	63.0
1996-2006	\$4.66	36.6	\$171	58.1
2009-2012				

Cumulative Actual Expenditures on Traditional Farm Program Suite and Estimated Cumulative Counterfactual Expenditures on ACRE Farm Program Suite, U.S., 1996-2006 Crop Years

Farm Program	Corn	Soybean	Wheat	Total
	----- Billion \$ -----			
Traditional Suite of Programs	\$25.1	\$3.0	\$14.4	\$42.5
Direct Payments	\$15.1	\$9.9	\$2.6	\$27.6
Marketing Loan	\$13.9	\$1.3	\$4.9	\$20.1
Counter-Cyclical/Market Loss	\$54.1	\$14.2	\$21.9	\$90.2
Total				
ACRE Suite of Programs				
Direct Payments	\$20.1	\$2.4	\$11.5	\$34.0
Marketing Loan Payments	\$0.0	\$0.0	\$0.0	\$0.0
State Revenue Payments	\$5.9	\$6.2	\$3.5	\$15.6
Total	\$26.0	\$8.6	\$15.0	\$49.6

Historical Marketing Loan and Market Loss/Counter-Cyclical Payments, Estimated Counterfactual ACRE Revenue Payments, and Deviation of Revenue from Average Revenue per Acre,

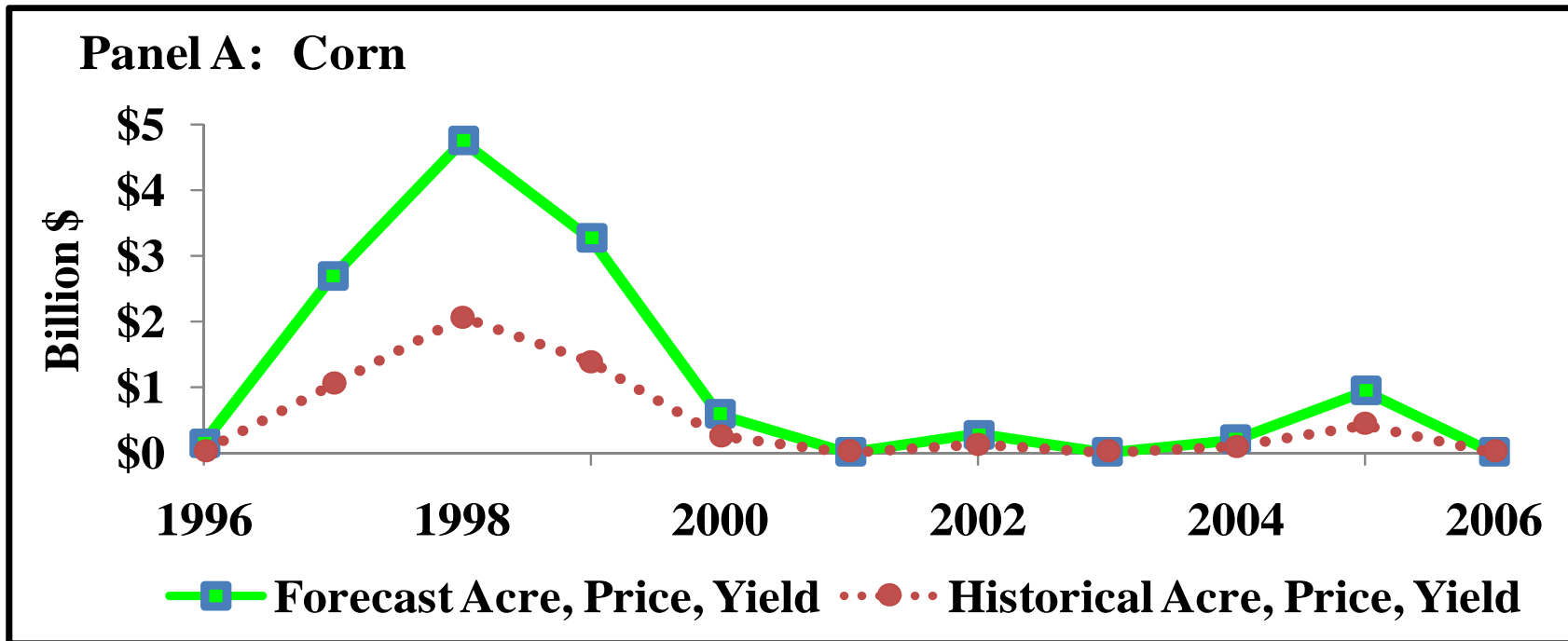
Corn U.S. 1996-2006 Crop Years



Cumulative Estimated Expenditures, Traditional and ACRE Program Suites, Counterfactual Analysis Based on 2009-2012 Forecast Average Acres, Prices, and Yields with Percentage Deviations for 1996-2006 Applied, U.S.

Farm Program	Corn	Soybean	Wheat	Total
	----- Billion \$ -----			
Traditional Suite of Programs	\$25.1	\$3.0	\$14.4	\$42.5
Direct Payments	\$0.0	\$0.0	\$0.1	\$0.1
Marketing Loan	\$0.0	\$0.0	\$0.8	\$0.8
Counter-Cyclical/Market Loss	\$25.1	\$3.0	\$15.3	\$43.4
Total				
ACRE Suite of Programs				
Direct Payments	\$20.1	\$2.4	\$11.5	\$34.0
Marketing Loan Payments	\$0.0	\$0.0	\$0.0	\$0.0
State Revenue Payments	\$12.9	\$10.2	\$4.7	\$27.8
Total	\$33.0	\$12.6	\$16.2	\$61.8

Counterfactual ACRE State Revenue Payments for 1996-2006 Observed Acres, Prices, and Yields and for 2009-2012 Forecast Average Acres, Prices, and Yields with Percent Deviations for 1996-2006 Applied, Corn, U.S.



ACRE AND WTO Considerations

- (1) ACRE is likely to be classified in the AMS category because it is tied to planted acres and market revenue**
- (2) At the level of acres, prices, and yields that occurred from 1996-2006, the U.S. likely would have remained compliant with its Uruguay Round AMS commitment.**
- (3) At the level of acres, prices, and yields that occurred from 1996-2006, the U.S. likely would have violated caps contained in the Doha draft rules.**
- (4) At the level of acres, prices, and yields forecast for 2009-2012, the U.S. likely would have remained compliant with its Uruguay Round AMS commitment.**
- (5) At the level of acres, prices, and yields forecast for 2009-2012, U.S. likely would violate caps contained in the Doha draft rules.**

Policy Questions Raised by ACRE

- (1) Trade off between Price and Revenue Protection**
 - (a) Different risks covered, thus different flow of payments**

- (2) Trade off between Support Floor and Support Tied to Market**
 - (a) Different risks covered, thus different flow of payments**

- (3) Is the international economic dislocation caused by policy that establishes a floor greater or less than the international economic dislocation caused by a policy whose level of support is determined by the market and thus has no floor?**

A key consideration in answering these question is likely to be whether “chronic” surplus capacity exists.

Concluding Thoughts

- 1. ACRE and SURE are potentially important new programs to help farmers manage risk, especially with high and volatile prices and costs.**
- 2. Final regulations are not known and could impact ACRE and SURE program performance and farmer decisions.**
- 3. Experiences with ACRE and SURE will affect future policy.**
- 4. As with any new policy, ACRE and SURE offer the potential for a rich area of research that will inform future policy decisions and thus will influence future policy.**

Policy Research Questions

1. **What are price correlations across years (time path tendencies)?**
 - (a) **What are the short and intermediate term elasticities of supply in a freedom-to-plant world?**
 - (b) **What are the short and intermediate term elasticities of demand when food is not the only use of farm crops?**
2. **What is the interface between crop insurance, farm support programs, and the supplemental revenue assistance program?**
 - (a) **What type of integration between insurance and support programs is optimal?**
3. **What is the share of farm risk that is systemic and idiosyncratic?**
 - (a) **What are the correlations between yields and revenue at the farm and higher aggregation levels: county, state, U.S.?**
4. **What are farmers' risk and policy tool preferences?**

Websites

My PowerPoint extension presentation on ACRE and associated papers are available at <http://aede.osu.edu/people/zulauf.1> : "My Publications" on lefthand side

Zulauf, Carl R, Michael R. Dicks, and Jeffrey D. Vitale. "ACRE (Average Crop Revenue Election) Farm Program: Provisions, Policy Background, and Farm Decision Analysis." *Choices*. Volume 23, Issue 3 (3rd Quarter 2008): 29-35. Available electronically at

<http://www.choicesmagazine.org/magazine/issue.php>

Website at University of Illinois for ACRE calculator (under FAST Tools), crop insurance calculator and other material:

<http://www.farmdoc.uiuc.edu/>

Historical information on Farm Bills:

<http://www.nationalaglawcenter.org/farmbills/>

Questions ?

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ACRE Mechanics: Thumbnail Sketch

ACRE is a crop specific, state revenue risk management program.

To receive an ACRE payment, 2 triggers must be met:

- (1) State realized revenue is less than state revenue guarantee for crop.**
 - (a) State realized revenue for crop year is (state yield times U.S. market year cash price)**
 - (b) State revenue guarantee for a crop is: [(90%) times (moving average of U.S. crop year cash price for 2 most recent years) times (Olympic moving average of state's yields for 5 most recent years)].**
 - * Revenue guarantee cannot change more than 10% from prior year's guarantee**
 - * ACRE's payment is capped at 25% of state revenue guarantee**
 - (c) State revenue payment is adjusted to individual farm by yield ratio**
- (2) Individual farm's revenue for crop less than its ACRE benchmark revenue.**
 - (a) Farm's actual revenue for crop is: farm's actual yield times U.S. crop year price**
 - (b) Farm's ACRE benchmark revenue for crop is: [(Olympic average of farm's yields for 5 most recent years) times (moving average of U.S. crop year cash price for 2 most recent years)] plus (per acre insurance premium paid by farmer for crop)**

Payment based on acres planted to crop, but ACRE payments cannot be received on more than farm's total base acres.

For a more detailed presentation of ACRE see Carl Zulauf, ACRE (Average Crop Revenue Election) Provisions in *Food, Conservation, & Energy Act of 2008*, AEDE-RP—0104-08, May 2008, available at <http://aede.osu.edu/resources/docs/display.php?cat=21>

Changes in Payments Limits Were Substantive in 2008 Farm Bill

- (1) Denies farm program payments to anyone whose average adjusted gross nonfarm income for 3 previous tax years exceeds \$500,000**
- (2) Denies direct payments to anyone whose average adjusted gross farm income for 3 previous tax years exceeds \$750,000**
 - (a) Expands definition of income derived from farming to include, among other items, the packing, storing, and transporting of agricultural commodities; production of livestock products; farm-based production of renewable bio-energy; and, in some instances, provision of operational inputs to farmers, ranchers, and foresters.**
- (3) Denies conservation program payments to anyone whose average adjusted gross nonfarm income for 3 previous tax years exceeds \$1,000,000 unless 66.66% or more of total adjusted gross income is derived from farming, ranching, and forestry operations**
- (4) Spot checks will be conducted with individuals and entities expected to provide documentation that their income does not exceed any of the adjusted gross income limits**

Changes in Payments Limits Were Substantive in 2008 Farm Bill

- (5) Direct attribution of payments occurs - removes potential to double payment limit
- (6) To receive payments, individual or entity must be “actively engaged in farming” **EXCEPTION:** qualifying spouses are eligible to receive payments and have a separate payment limit
- (7) Retains \$40,000 limit on direct payments if farmer does not participate in ACRE; if farmer participates in ACRE, \$40,000 limit reduced by amount of direct payment reduction under ACRE
- (8) Removes current limit of \$75,000 on marketing loan program benefits --- no limit exists
- (9) Retains \$65,000 limit on counter-cyclical payments
- (10) Limits ACRE revenue payments to \$65,000 plus amount direct payments reduced under ACRE