DEPARTMENT OF AGRICULTURAL, ENVIRONMENTAL, AND DEVELOPMENT ECONOMICS

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COMPARISON: ALTERNATIVE CALCULATIONS OF ACRE'S PRICE COMPONENT

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Issue: Intense debate has arisen over which method to use to calculate the price component of the ACRE (Average Crop Revenue Election) program's revenue guarantee. This debate has centered on two alternatives, which will be referred to as the Administration and Congressional methods.

(1) The Administration Method uses the two most recent years for which complete information on U.S. price is available. For example, for the 2009 crop year, ACRE's revenue guarantee would be calculated using the average of U.S. cash prices for the 2006 and 2007 crop years.
(2) The Congressional Method uses the most recent years for which any information on U.S. price is available. For example, for the 2009 crop year, ACRE's revenue guarantee would be calculated using the average of U.S. cash prices for the 2007 and 2008 crop years.

Administration vs. Congressional Method: Using the most recent data, the Congressional method generated a 23% to 26% higher ACRE price component for 2009 corn, soybeans, and wheat (Figure 1, page 2). This reason is the substantial increase in prices since 2005.

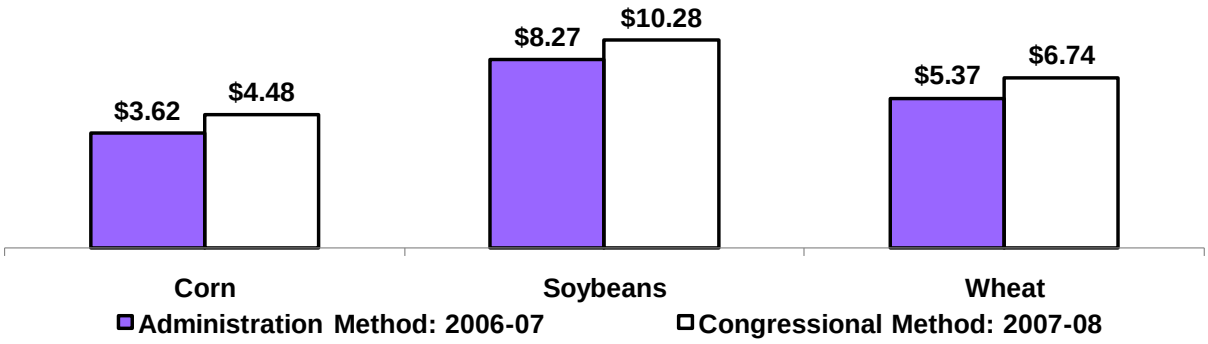
- ► The Congressional method's higher price component means that its revenue guarantee will be about 25% higher than the revenue guarantee resulting from the Administration method. As an illustration, the projected 2009 ACRE revenue guarantees from both methods are presented in Figure 2 (page 2) for Ohio corn, soybeans, and wheat.
  - ▲ Moreover, ACRE's revenue guarantee cannot increase or decrease by more than 10% in a year. Thus, given current market conditions, it appears likely that the Congressional method will also have a higher ACRE revenue guarantee for the crops harvested in 2010.
    - ■ For these reasons, most farm organizations support the Congressional method.

Historical Analysis of ACRE Payments from Both Methods: Payments from ACRE for corn, soybeans, and wheat over the historical period of 1996-2006 were estimated to be $6 billion higher for the Administration than for the Congressional method (Figure 3, page 2). A brief description of the analysis is presented in the notes to Figure 3 (page 2).

Discussion/Implications:

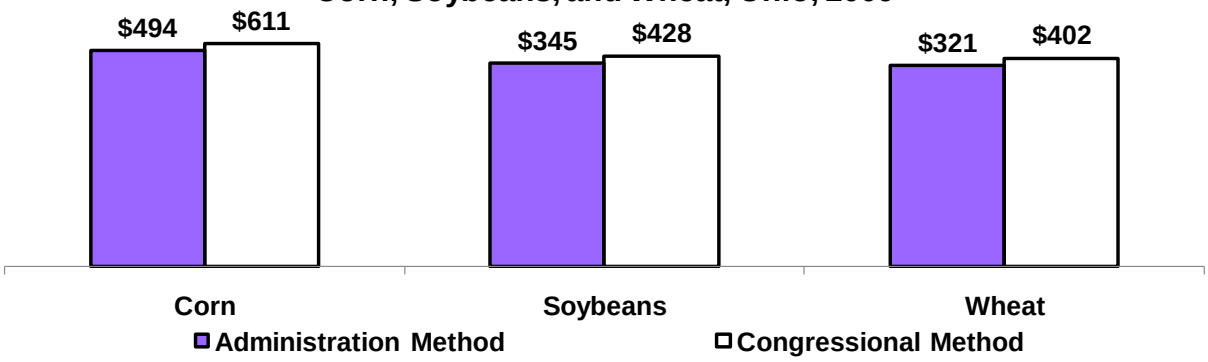
- ► Results from the historical analysis of ACRE payments may seem surprising, but they clearly illustrate that payments from ACRE depend on more than the method used to calculate its price.
- ► Examination of the data and results from the historical analysis reveals the importance of the path that prices take over time. Depending on the crop, prices declined from 1995 or 1996 through the late 1990s. Also, the Congressional method's highest price was for 1997, not 1996.
  - ▲ The path that prices take are not just functions of supply and demand trends and surprises, but also of the elasticity (i.e., response) of supply and demand to changes in prices.
- ► The historical results imply that predicting payments from ACRE for the 2009 through 2012 crops depends critically upon predicting the changes in prices that will occur through 2012.
  - ▲ However, overwhelming evidence from academic studies, as well as common sense, reveals that very few individuals possess the ability to predict future changes in prices.
- ► Given the inability to predict future changes in prices, the debate over which price calculation method to select might best be served by examining the question: "Which method results in an ACRE program that provides the best addition to farmers' risk management toolkit?" when all factors are considered, not just the starting price.

Figure 1. Alternative Calculations of the Price Component of ACRE's State Revenue Guarantee, Corn, Soybeans, and Wheat, 2009



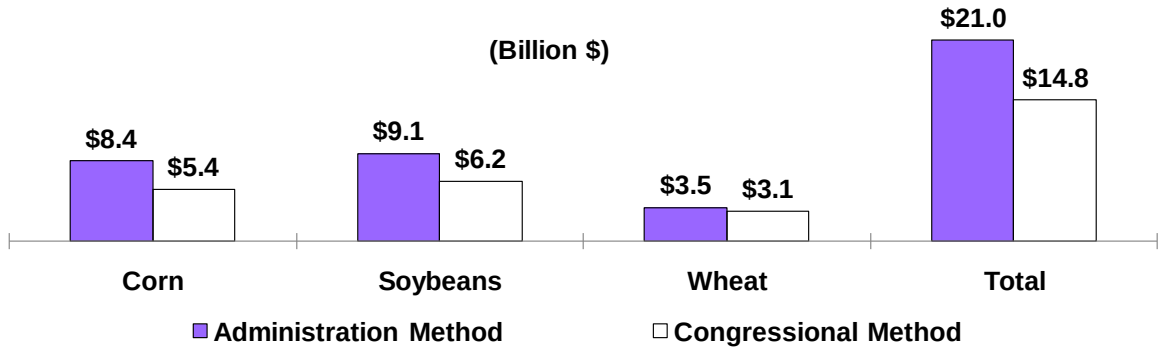
NOTES: Source is the U.S. Department of Agriculture, October 2008 *World Agricultural Supply and Demand Estimates*. Price for the 2008 crop year is the midpoint of the reported range.

Figure 2. Alternative Calculations of ACRE's State Revenue Guarantee, Corn, Soybeans, and Wheat, Ohio, 2009



NOTES: Source is original calculations using prices from Figure 1 and Ohio Olympic average yields per planted acre for crops harvested in 2004 through 2008.

Figure 3. ACRE State Revenue Payments for Alternative Calculations of ACRE's Revenue Guarantee, Corn, Soybeans, and Wheat, U.S., 1996-2006 Crop Years



NOTES: Source is original analysis based on ACRE provisions in the 2008 Farm Bill, except for the irrigated acreage provision and farm loss requirement. ACRE payments are estimated at the state level for all states for which National Agricultural Statistical Service data are available. The analysis begins with 1996 because annual land set asides, a significant impact on prices, were eliminated starting with the 1996 crop.