

ANALYSIS OF THE AVERAGE CROP REVENUE ELECTION PROGRAM, A REPRESENTATIVE FARM APPROACH

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ABSTRACT

The Average Crop Revenue Election (ACRE) program was created in the Food, Conservation and Energy Act of 2008. The program is intended to help offset years of low market revenues for agricultural producers. However, those who enroll in ACRE must forego portions of traditional payments. This study was conducted to determine what types of farms are good candidates for the ACRE program and the sensitivity of those results to input parameters and program provisions.

These objectives were accomplished by creating four model farms representing typical, full-time operations. This resulted in representative farms in the following counties: McLean, Illinois; Sumner, Kansas; Hale, Texas; and Boliver, Mississippi. One thousand stochastic prices and yields were generated for each crop on each representative farm. Correlations were imposed on the variables to create the appropriate interactions between prices and yields.

The results of the Monte Carlo simulations show that cotton producers are unlikely to benefit from the ACRE program, as the payments foregone to enroll in this new program are very high. Additionally, states with lower price/yield correlation tend to receive ACRE payments more often. Furthermore, 2009 is shown to be the best year to enroll under the assumed price path. Altering the price path can change the ACRE enrollment decision as demonstrated in the analysis. Likewise, the optimal producer decision is shown to be sensitive to the base acres on each representative farm. Finally, the analysis reveals that ACRE benefits are dependent on the program's payment rate restrictions.