

Economic Analysis of Base Acre and Payment Yield Designations Under the 2002 U.S. Farm Act

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Introduction

The Farm Security and Rural Investment Act of 2002 (2002 Farm Act) provides income support to U.S. agriculture through various programs for 2002-07, including direct and counter-cyclical payments. Direct payments replaced production flexibility contract (PFC) payments provided under the 1996 Farm Act. Counter-cyclical payments were newly designed under the Act to replace market loss assistance payments that had been provided on an ad hoc basis during 1998-2001. Direct and counter-cyclical payments are determined using base acres and program payment yields. Base acres reflect historical use of the land for eligible crops, and program payment yields are historically determined commodity yields. The 2002 Farm Act gave farmland owners several options for establishing base acres, including retaining their existing PFC acreage as base acres and other similar alternatives or updating base acres using actual plantings during 1998-2001. In addition to granting eligibility to the seven crops (corn, grain sorghum, barley, oats, wheat, rice, and upland cotton) eligible for PFCs, the Act also permitted farmland owners to include oilseeds in base acres.

Program signup results indicate that a majority of farmland owners elected not to update program base acres to 1998-2001 plantings. Many farmland owners opted to keep PFC acreage as base acres and augment them with oilseed acreage when advantageous. Less than 20 percent of farmland owners updated their base acres, representing 39 percent of base acres. This higher share of acres relative to owners indicates that, in general, farmland owners who updated base acreage had larger-than-average-sized farm operations.

This report explores the base acre and yield designation decisions made by program participants under the 2002 Farm Act to determine if choices were influenced by current plantings or, alternatively, by efforts to maximize direct and counter-cyclical program payments independent of current plantings. A related issue not directly investigated in this report is whether expectations of future opportunities to update base acres and payment yields may influence current production decisions. Allowing acreage bases and payment yields to be updated could distort production if farmland owners do not fully respond to signals from the marketplace but instead respond to market signals augmented by expected benefits of future programs and program changes (Westcott and Young). Anton et al. and Sumner identify a number of factors that would influence any such effect, including the probability of

future updating, the timing of the update, the basis for the update, the discount rate, and the marginal value of the updated payments. Estimating the impacts of expectations of future base updating is further complicated by the difficulty of anticipating future policy decisions and assessing farmland owners' perceptions of the probability of future opportunities to update payment acres and program yields. Anton et al. note that "once the expectation is well defined, there are economic techniques that allow the magnitude of these effects to be estimated. However, there are no standard economic techniques to estimate the nature and magnitude of these expectations or the mechanisms that generate them."