

Provisions of Revenue-Based Support Determine Much

The guiding principle for a revenue-based payment is that the producer is compensated for the difference between a reference level of revenue per acre and a realized (that is, actual) revenue per acre. However, considerable scope is possible in crafting the details of revenue-based payment programs. Seemingly minor differences in program provisions may have significant impacts on, among other things, payment levels, year-to-year variability in payments, and administrative costs.

Among the program provisions that need to be set is the geographic administrative unit for the program. That is, are the differences between reference and realized revenue to be determined at the national, State, crop district, county, or even individual level? The more precisely the program is targeted geographically, the closer the payments will match actual farm-level changes in revenues.

At the same time, administrative costs will increase with more precise targeting of payments. Basing payments on the difference between an individual producer's reference (target or expected) revenue and realized revenue is likely to be prohibitively expensive. The other extreme would be to base payments on the difference between a national reference revenue and national realized revenue. While such an approach minimizes administrative costs, it potentially ignores even regional variations in revenues. To reduce the costs of commodity support under any level of aggregation, the potential for overlap of Title I support with Federal crop insurance could be assessed.

This analysis, in keeping with contemporary farm legislation, assumes that payments are not adjusted by costs of production. Factoring the costs of production (COP) into the calculation of payments – as originally suggested by the National Corn Growers Association (2006) – raises several problems. First, how one determines the costs of production is subjective: what costs and categories should be covered, and should they include only fixed or variable costs or both? Second, including COP in the calculation of payments may be indefensible from an economics standpoint (Pasour, 1980). In particular, government payments tend to get capitalized into the prices of inputs (land in particular), thereby raising COP. Hence, if the revenue-based program factors in COP, the payment itself will lead to increases in future payments (*ibid.*).

Finally, economic theory suggests that support tied to prices and/or production can stimulate more production than would occur without the support. While studies have examined the impacts of commodity support on production in both the European Union (EU) and the United States (for example, USDA/ERS, 2007c; USDA, 2004; Sckokai and Moro, 2006; Goodwin and Mishra, 2006; Anton and Le Mouel, 2004; Hennessy, 1998), none have addressed the potential production impacts of revenue-based support.¹⁷

As with price-based programs, economic principle suggests several avenues through which a revenue-based program may have impacts on production. For price-based programs such as marketing loan benefits, the more often

¹⁷An analysis of the potential impacts of revenue insurance on output (Turvey, 1992) found that such insurance could increase plantings of higher risk crops.

the marketing loan rate is above the market price and/or the greater the loan rate over the market price, the greater the effective price of the commodity (Westcott and Price, 2001). In other words, the greater the expected difference between the market price and the loan rate, the higher the effective price, and consequently the greater the impact on production.¹⁸ Production impacts will be lower the less coupled the program is to current production (Westcott et al., 2002).

A revenue-based support program could also have production effects, in this case by offering the producer a revenue floor via the revenue target. The more often the revenue target exceeds the realized revenue, and the greater the difference, the more production is likely to be stimulated. The degree of this impact can depend on whether the revenue target is fixed or moves with the market. The extent of the program's regional influence on production may also be affected by the geographic level at which payments rates are set. In addition, price- or revenue-based support programs can also affect the producer's wealth or variability of revenue, which can influence production decisions (Hennessey, 1998).

¹⁸The concept of the effective price as discussed in this section should not be confused with the "effective price" construct that is used in the countercyclical payment. The latter simply refers to a program provision that prevents the market price used in the payment rate calculation from falling below the loan rate.