

Revenue Risk, Forward Contracting, And Crop Insurance



DR. CORY WALTERS



DR. RICHARD PRESTON

PRINCETON, KY.

The 2012 corn crop has raised important questions about the validity of forward contracting. Forward contracts are a vital risk management tool because they remove price uncertainty. However, they must be used correctly to avoid increasing risk in other areas, namely yield risk. The purpose of this article is to discuss important pieces of information that need to be understood before signing a forward contract.

In the traditional view, crop marketing advisors tell you it is prudent to manage price risk through marketing. Crop insurance salespeople tell you it is prudent to manage yield risk through purchasing crop insurance (revenue insurance potentially provides price protection if revenue losses exceed the deductible). These two decisions are often made independently because crop marketing advisors don't always understand crop insurance and crop insurance salespeople don't always understand the market aspects, but this is slowly changing.

The decision of how much to forward contract and what crop insurance contract to purchase is related through an underlying price-yield relationship. Let's assume you took a marketing advisor's advice and forward contracted a percentage of expected production. Was price risk reduced? Yes, but now those bushels must be produced, so yield risk went up. A combination of price and yield risk, or revenue risk, provides the true measure of how much risk was reduced or possibly increased. Risk stemming from revenue uncertainty rose dramatically in recent years. Production costs also increased dramatically, increasing the risk of losing more capital. Prices throughout the crop year varied tremendously, increasing the risk of ending up in the

bottom third of prices. Farm yield risk was likely underestimated because in recent years, at least until this year (especially for corn), yield has been generally friendly.

Across a large region like western Kentucky, the relationship between harvest futures prices and farm yields is negative, meaning that lower yields generally result in higher prices. The strength of this relationship changes as we move away from average values to extremes. This year happens to be one where that relationship is strongly negative. A number of Kentucky producers are experiencing very low yields with very high prices. Consequently, in many cases this year, harvested yields have fallen below forward contracted levels, resulting in producers buying out of those positions. This situation shows the importance of understanding yield risk and the implications of having to buy back over hedged yield.

The ability to buy back depends upon the amount of available working capital. If capital is not available, the producer may be faced with default which in the extreme could result in farm liquidation. Crop insurance could possibly pay back a large portion, if not all, of these expenditures but insurance payments typically come after the buy-out has occurred. So, cash flow is needed.

The benefit from crop insurance for the 2012 crop will depend upon the type of selected crop insurance policy. With 2012 yields and harvest prices not yet known, a detailed analysis is not available. In lieu of this analysis, a good starting point for the 2013 crop would be a revenue protection policy at a high coverage level with enterprise units along with selecting trend adjustment. As for forward contracting, caution is warranted; we are a long ways away from 2013 harvest with likely good pricing opportunities to come, so forward contract in small percentages, until a better idea of crop size is evident, keep sold bushels below guaranteed bushels. And remember that these low yields of this year is an outlier, about 1 in 33 odds. For questions and comments please contact Cory Walters, Assistant Professor, University of Kentucky at cgwalters@uky.edu. Δ

DR. CORY WALTERS: Assistant Professor, University of Kentucky

DR. RICHARD PRESTON: Hardin County KY Producer, Kentucky Corn Growers Board Member



Link Directly To: [CACHE RIVER](#)



Link Directly To: [PIONEER](#)