Cooperative Extension Service

WEEKLY OUTLOOK

A joint publication of the Department of Agricultural Economics, College of Agriculture, Purdue University, West Lafayette, Indiana, and the Department of Agricultural and Consumer Economics, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana-Champaign.

FEBRUARY 19, 1996

USE CAUTION IN FORWARD PRICING 1996 CROPS

The goal in marketing is to make money on crop sales regardless of the impact of weather on production. Nearby corn futures are at 15 year highs. Prices are being supported by strong demand following a shortfall in production. Prices will rise to accomplish the job of curtailing use. This may require futures prices over $4 per bushel. If there are weather problems with the 1996 crop, prices could go even higher.

Current cash bids for harvest delivery are approaching $3 per bushel for corn and $7 per bushel for soybeans in the eastern corn belt. By historical price standards, it is very tempting to lock in prices on 50 percent or more of normal production. These prices offer returns of 30 percent or more above the average cost of producing a normal crop. However, there are three possible pitfalls to consider — pricing too soon, unfavorable weather reducing production, and pricing too late (after prices have declined).

To illustrate the impact of reduced yield, assume that expected corn yield is 140 bushels per acre and total cost of production is $322 per acre. The expected cost per bushel would be $2.30 cents. If unfavorable weather cuts the yield by 20 percent, to 112 bushels per acre, the cost jumps to $2.88. A 40 percent yield reduction results in 84 bushel per acre at a cost of $3.83 per bushel.

For soybeans, assume a normal yield of 48 bushels per acre, with total production costs of $288 per acre. This results in an expected cost of $6.00 per bushel. A 20 percent reduction in yield would result in 38.4 bushels per acre and a cost of $7.50 per bushel. A 40 percent reduction results in a soybean yield of 28.8 bushels and a cost of $10.00 per bushel.

Making forward sales (at a profit) on part of the expected production lowers the break-even cost on the remaining bushels to be sold, assuming normal production. If yields were cut by 30 to 40 percent, the break-even price rises to the point where it is nearly impossible to make a profit.

What can be done to offset these risks? A number of alternatives might be considered. Buying call options to offset forward sales helps protect equity, but requires a premium payment and does not increase the contract price. Buying crop insurance can also help protect against crop loss in that insurance payments can help purchase additional grain. However, insurance proceeds may not cover all of the crop shortfall. Buying put options establishes a minimum price and allows the producer to share in part of the gain from higher prices, should they occur. If price rises above the strike price, the value of the options will decline and eventually expire worthless. The producer will then have to decide when to make new crop sales.

If price declines, the put options can be sold for a higher premium or exercised for a short position in the futures market, at the strike price. The options expire approximately one month ahead of the futures contracts, so options should be purchased on deferred futures contracts (September or later). Purchasing at-the-money options is expensive, but offers the greatest protection.

Farmers may make forward sales simply because the price offered is profitable (assuming normal production) and because they remember the low price in the fall of 1994 and declining prices after each previous short crop year. We probably have demand for about 9 billion bushels of corn and 2.4 billion bushels of soybeans in the 1996-97 marketing year. If so, the production risks are greater than the price risks until 1996 crop prospects are more certain. The easiest way to defend cash equity is to not be in a hurry to forward price grain until more is known about 1996 acreage and the condition of spring plantings.

Some analysts are recommending multi-year sales. This has merit, if done at prices that will be satisfactory in 1997 and later. The time to think about multi-year sales is when (if) prices set new records and/or peak with favorable production prospects for the 1996 crop.

Bill Uhrig

Issued by J. William Uhrig
Extension Economist
Purdue University

CES Newsletter Service
University of Illinois
at Urbana-Champaign
69 Mumford Hall
1301 West Gregory Drive
Urbana IL 61801

FIRST CLASS