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STORING CORN AND

As harvest begins in the prices for corn and soybe with a relatively large car unpriced crops as possible.



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t, producers are facing the third consecutive year of low harvest time hese low prices, reflecting low futures prices and a weak basis, along futures market, will likely encourage producers to store as much of the

The average spot cash bid for corn in central Illinois on September 8 was \$1.605 per bushel, reflecting a basis of \$.30 under December futures. That is about equal to the basis on the same date the past two years, but at least \$.10 weaker than the typical basis prior to 1998. With July 2001 futures nearly \$.26 higher than December futures, the current basis is \$.56 under July futures. Typically, the central Illinois basis is the strongest in May following harvest. Prior to 1999, the basis in May usually strengthen to about \$.10 under July futures. In 1999, the basis in May strengthened to only about \$-.15, and this year strengthened to only about \$-.20. Depending on spring basis, the corn market is currently offering from \$.35 to \$.45 per bushel to store the corn crop for seven months.

The cost of storing corn from harvest until May depends on whether the crop is stored commercially or on the farm. In central Illinois, the cost of commercial storage from harvest until mid-May might average about \$.24 per bushel. The cost of additional drying and shrinkage from 15 to 14 percent moisture would add another \$.03 in cost. At a 10 percent annual rate, the interest cost for seven months storage for corn valued at \$1.605 per bushel would be about \$.09, bringing the total commercial storage cost to \$.36 per bushel. The cost would be about \$.025 less if the inventory is financed with a CCC loan.

The out-of-pocket costs for using existing on-farm storage facilities would be considerably less than the commercial storage cost, assuming quality is maintained. The cost, including interest, might be from \$.12 to \$.14 per bushel, but could vary considerably from farm to farm.

The current price structure in the corn market suggests that there is only a small incentive to put corn in commercial storage and forward price for later delivery. Under the best basis and lowest cost scenario, that alternative could result in a return of about \$.10 per bushel by May 2001. Under the scenario developed here, the market is signaling the producer that has only commercial storage alternatives to either sell the crop at harvest or store it unpriced. For on-farm storage, however, the market is offering a return of \$.20 to \$.30 per bushel. To capture that return, the crop needs to be hedged or forward contracted (depending on the forward basis) as it is stored. The producer would likely want to establish the loan deficiency payment on that portion of the crop when it is priced. Assuming the posted county price and local cash price are moving together, this strategy results in a net price of \$.20 to \$.30 above the CCC loan rate.

For soybeans, the average central Illinois cash price on September 8 was \$4.79, \$.26 under November futures and \$.59 under July 2001 futures. The basis relative to November futures is about equal to that of the past two years, but is \$.05 to \$.10 weaker than experienced prior to 1998. Typically, the strongest basis for soybeans in central Illinois occurs in early June following harvest. In the four years prior to 1999, that basis ranged from about \$.10 under to \$.04 over July futures. In 1999 the basis strengthened to only \$.15 under; this year the basis strengthened to only \$.20 under July futures in early June.

Assuming a July basis in early June 2001 of \$.10 to \$.15, the market is currently paying \$.44 to \$.49 to store the soybean crop until early June. Commercial storage in central Illinois would cost about \$.25 per bushel. Interest cost would range from \$.21 to \$.30 per bushel, depending on whether or not a CCC loan is used. The out-of-pocket cost for using existing on farm storage, including interest, might vary from \$.26 to \$.35 per bushel.

The soybean price structure suggests that there is no incentive to store soybeans commercially and forward price for later delivery. The returns to existing on farm storage could be near \$.20 per bushel, if the crop is forward contracted as it is stored.

While forward pricing a crop stored on the farm can yield a positive return, there is no opportunity to benefit from a significant price rally over the next six months. An alternative to forward pricing is to hedge with put options. Owning put options establishes a minimum price, but also allows the producers to reap some benefit from higher prices later on. On September 8, the premium for at the money July 2001 corn put options was about \$.15. Buying put options, then, would still lock in a minimum price of \$.05 to \$.10 over the harvest price (for farm storage) and provide opportunity to receive a higher price. The premium for at the money July 2001 soybean put options was about \$.40 per bushel. The premium exceeds the potential return to storage, making the transaction less attractive than for corn.

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