



WEEKLY OUTLOOK

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CORN AND SOYBEAN STORAGE

AS CORN AND SOYBEAN HARVEST APPROACHES, producers need to carefully evaluate their pricing and storage alternatives. Because ample storage capacity is available this year, they may be tempted to store crops without examining the cost of storage and the potential returns to storage. They may also fail to evaluate alternatives to storage.

The place to start is with the cost of storing corn and soybeans. The cost items include warehouse costs, interest on the value of the grain, and the cost of any extra drying and resulting shrinkage to make grain safe for storage. For example, on August 27 the price of corn for October delivery was \$2.70 in central Illinois. At 14 percent interest, the interest cost of storing new crop corn is about 3 cents per month. If corn is stored at 14 percent moisture rather than 15.5 percent, an additional 1.5 points of moisture will have to be removed for storage. Using a shrink factor of 1.3 and a drying cost of 1.5 cents per point of moisture, the cost of the additional drying and shrinkage would be 7.5 cents per bushel. Commercial storage costs might be 12 cents per bushel from October 1 to January 1 and 1.5 cents per bushel per month after January 1.

Under these conditions, the cost of storing corn commercially from October 1, 1984, to March 1, 1985, is 37.5 cents per bushel. The cost to July 1 is 55.5 cents per bushel.

The price of soybeans for harvest delivery was around \$6.15 per bushel. The interest cost would be about 7 cents per month. Under normal circumstances, no additional drying is necessary to store soybeans. However, the monthly storage rate after January 1 might be higher, say 2 cents per bushel.

Under these conditions the cost of storing soybeans commercially from October 1, 1984, until March 1, 1985, is 51 cents per bushel. The cost to July 1 is 87 cents per bushel.

There are basically two ways to recover the costs of storing corn and soybeans. One is to store the grain unpriced and speculate that the cash price will increase enough to cover the costs. Under the circumstances described above, corn prices would have to increase to \$3.075 per bushel by March 1 or to \$3.525 by July 1 to cover the costs of storage. Soybean prices would have to increase to \$6.66 per bushel by March 1 and to \$7.02 per bushel by July 1.

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A second way to cover the costs of storage is to forward-price grain for delivery sometime after harvest if that price exceeds the harvest price by more than the cost of storage. On August 27, the price of corn for March delivery was \$2.85 and the price for July delivery was \$2.92 per bushel. Soybean prices for March and July delivery were \$6.55 and \$6.68 per bushel, respectively. The premiums for March delivery would just cover the interest cost. The premiums for July delivery were less than interest cost.

Alternatives to storage. The fact that producers have sold relatively small quantities of corn and soybeans for harvest delivery has resulted in a very strong new crop basis and small spreads in new crop futures prices. For producers who believe that the price level will move higher after harvest, there are less expensive alternatives for speculating on price than physical storage. Grain could be sold for harvest delivery and replaced with a long position in the futures market. Indirect methods of accomplishing the same thing include basis contracts and delayed pricing (DP) contracts. The cost of "owning" grain in the futures market is the direct cost of maintaining a futures account and any further basis improvement. In the case of corn, for example, the October price was 20.75 cents under March futures on August 27. The potential basis improvement between now and March 1 is probably less than the 37.5-cent storage costs.

Producers should be aware that once they move ownership out of the cash market to the futures market (either directly or indirectly on basis or DP contracts), they are speculating on the price in the futures market, not the cash market.

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