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Making Storage Decisions for 2003 Corn and Soybean Crops

Late season heat and dryness is bringing the midwest corn and soybean crops to maturity a little quicker than expected. As harvest draws near, producers must make pricing and storage decisions for that portion of the crop not already priced. Strategies for individual producers will likely depend on a number of factors, including expectations about potential changes in futures prices and basis over the next several months; cost and availability of storage; percentage of the crop already priced; and the level of cash prices in relation to the Commodity Credit Corporation (CCC) loan rate.

Changes in futures prices of corn and soybeans over the next several months are difficult to anticipate, due to the wide range of factors that can influence price. Often, crops that are smaller than anticipated, which appears to be the case this year, results in higher prices near harvest time. It is not unusual to see the highest cash prices occur at harvest time in small crop years (10 times in the past 30 years for corn, including last year, and 9 times in the past years for soybeans). However, prices do not always peak in the fall when crops fall short of expectations, as was the case for soybeans in 2002-03.

In addition to the uncertainty about U.S. crop size this year, prices will be influenced by smaller than expected grain crops in Canada, Europe, and the former Soviet Union. South American soybean acreage is expected to expand, but production uncertainty will exist for several months. In addition, small world inventories of feed grains and wheat keep the markets vulnerable to stronger-than-expected demand and/or future production shortfalls. Depending on the nature of the U.S. growing season in 2004, prices could become quite volatile next spring and summer. The trading range to date for December 2004 corn futures and November 2004 soybean futures is extremely narrow, suggesting that wide price swings should be expected over the next year. History suggests those contracts could establish new lows and new highs over the coming year.

The potential for higher prices over the coming year suggests that producers may want to maintain ownership of some of the crop well beyond harvest. The spreads in the futures market, the magnitude of the current basis and the expected basis change, and the level of storage costs determine the least cost method for maintaining a long position beyond harvest.
In the case of soybeans, the futures market reflects a small carry from November 2003 to January 2004, but is inverted from January forward. This type of price structure means that maintaining a long position in the futures market (either directly or indirectly with basis contracts) is relatively inexpensive. In south central Illinois, for example, the current average harvest bid is about $.215 under March 2004 futures and only $.135 under July futures. If the basis strengthens to a typical $.10 under March futures in March 2004 and $.05 under July futures in June 2004, the cost of maintaining ownership in the futures market (basis appreciation) is only about $.115 to March 2004 and only $.085 to June 2004. That cost is less than the cost (interest plus storage) of maintaining ownership of the crop for many producers. Maintaining a long position with at-the-money call options would add $.30 to $.35 to the cost of maintaining a long position with futures or basis contracts, but would provide some downside price protection. Similarly, storage of soybeans may be more expensive than alternatives, but does provide protection if prices drop below the loan rate. The current average harvest bid in south central Illinois is nearly $.50 above the loan rate.

The structure of the corn market differs from that of the soybean market. Spreads in the futures market are positive from December 2003 through July 2004. In south central Illinois, the current average bid for harvest delivery is about $.30 under March 2004 futures and about $.35 under July 2004 futures. If the basis strengthens to a typical level of about $.10 under March futures in March 2004 and $.10 under July futures in June 2004, the cost of maintaining a long position in the futures market is about $.20 to March 2004 and $.25 to June 2004. Many producers can store corn at a lower cost, particularly if the crop is placed under loan and only the out-of-pocket cost of on-farm facilities is considered. Additionally, maintaining a long position with storage keeps the price protection of the loan program in place.

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