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WEEKLY OUTLOOK

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WHAT DOES THE MARKET SAY ABOUT CROP SIZE?

The USDA will release new estimates of the potential size of the 2003 corn and soybean crops on September 11. These estimates will be the most important price factors for several weeks, or longer. There is more than the usual amount of uncertainty about the magnitude of the September estimates this year. First, the August estimates were smaller than expected, prompting some to think that the USDA had factored a forecast of a hot, dry August into the August estimates. However, the USDA August estimates reflect the assumption of normal or average weather conditions subsequent to the time of data collection. Second, August weather conditions resulted in an historic decline in crop condition ratings during the month. Third, widespread precipitation arrived during the last few days of August, raising questions about the potential yield benefits of such late precipitation. Fourth, there is some uncertainty about the impact of adverse weather conditions in some western states on the magnitude of acreage that will be harvested for grain.

While it is difficult to anticipate the size of the September estimate, or final crop size, it is interesting to ponder what crop size is reflected in current price levels. One approach is to examine the magnitude of price changes that occured in July and August as production expectations changed and then to infer current expectations about crop size from recent price changes. This approach clearly has limitations and, in particular, assumes that no market fundamentals except expected crop size have changed significantly over the past two months and that the market was correctly priced in July.

In the case of corn, December 2003 futures traded near $2.20 in early July on the expectation of a 10.3 billion bushel crop and reached a low of about $2.10 in late July when there was considerable talk of a potential crop of 10.5 billion bushels. By August 11, the day before the release of the USDA production estimate, December futures settled at $2.18. The average trade guess for the USDA corn crop estimate was reported at 10.29 billion bushels. On August 12, and for the next few days, December futures traded around $2.30, reflecting the August crop estimate of 10.064 billion bushels. This crude analysis suggests that for every 100 million bushel change in expected crop size over that period the price of corn changed about $.05 per bushel. Currently, December futures are $.13 higher than following the release of August crop estimate. Does that imply the market believes the crop is about 260 million bushels below the August estimate? If so, the market is currently trading a crop of about 9.8 billion bushels. Last week's published

guesses by private firms were for a crop in the range of 9.82 to 9.93 billion bushels.
In the case of soybeans, November 2003 futures traded around $5.30 in the second week of July on expectations of a 2.9 billion bushel crop and reached a low of $5.10 in late July when talk centered around the potential for a 3 billion bushel crop. On August 11, November futures settled at about $5.30. The average trade guess for the USDA soybean crop estimate was reported at about 2.94 billion bushels. On August 12, and for the next few days, November futures traded around $5.45, reflecting the August crop estimate of 2.862 billion bushels. This analysis suggests that the price of soybeans changed about $.25 per bushel for each 100 million bushel change in expected crop size. Currently, November futures are trading about $.40 above the level immediately following the August crop report. This price seems to imply an expected crop of about 2.7 billion bushels, 160 million below the August estimate. Last week's published guesses by private firms were for a crop of 2.72 to 2.76 billion bushels.

The corn market appears to be trading a 2003-04 marketing year supply (production plus September 1 stocks) that is about 200 million bushels larger than last year's supply. Yet the market is offering an average price for the year ahead very near the $2.30 average for the year just ended. The price level implies stronger demand during the year ahead. Processing use of corn will increase and feed use will decrease. At the margin, then, stronger demand will have to come in the export market.

The soybean market appears to be trading a 2003-04 marketing year supply about 100 million bushels smaller than last year's supply. The market is currently offering an average price for the year ahead of about $5.65. That is about $.15 higher than the average of the past year. The current price appears to correctly reflect current U.S. market fundamentals, if the crop is near 2.7 billion bushels. The question is, does it correctly anticipate a South American crop that is potentially 200 to 300 million bushels larger than this year's harvest?

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