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Staff Paper

**CORN AND SOYBEAN OUTLOOK
FOR 2002/03-2003/04**

2003 Spring Industry Outlook Conference

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CORN AND SOYBEAN OUTLOOK FOR 2002/03-2003/04
2003 Spring Industry Outlook Conference

Jim Hilker

“Given” all my numbers are right, we should expect 2003-04 corn and soybean prices to be lower than this year and better than the previous 4 years. I generally try and tell my stories using Supply/Demand Balance Sheets. Tables 1-5 (minus Table 2, Wheat) are attached. On the other hand, while my numbers shown are my best analysis, I feel there is a lot of price risk in both directions as we go from now through the 2003-04 marketing year. I keep my information undated and available bi-monthly on my Web site at <http://www.msu.edu/user/hilker/>. I also post future price probability distribution forecasts based on the options markets weekly, generally based on Tuesday’s closes.

Corn

We increased corn plantings by 3.3 million acres in 2002 as we had a nice spring in the western corn belt and we knew relative loan rates were changing. And from at least the users point of view it is a good thing we did as yield’s turned out to be 8 bushels below trend, abandoned acres were up 1-2 million acres, and silage acres were up a million acres because they were too poor to make corn. Total production was down a half million acres as show in Table 1. Beginning stocks are down 300 million bushels, but still 16% of use. Total supply at 10.6 billion bushels was down 800 million.

Feed and Residual use are projected to be down as hog numbers are down a bit, poultry numbers are not up much, and cattle on feed are down significantly. The first quarterly stocks report showed feeding rates were low and the feed use estimate for 2002-03 was lowered to 5600 million bushels from 5877 million bushels in 2001-02. Increased ethanol production is also an import factor in the decrease of corn being fed. The second quarterly report released March 31, 2003 indicated higher feeding rates brought on by the cold winter. I have increased my feed use projection by 80 million bushels. The USDA will update their numbers on April 10, 2003.

The real story as far as saving the corn market this year is ethanol production. You will see what I mean when we look at exports. Food, Seed and Industrial Use is expected to be up 211 million bushels this year, and the increase in ethanol production is responsible for most of that increase. Last year FSI was up 100 million bushels, and the typical year to year increase was 60-80 million bushels. The biggest driver is the switch over to ethanol from MBTE in California, but the high oil prices have helped considerably. It is in a lot more gas in Michigan than it was a year ago for example.

Corn exports are the real drag this year, both corn shipments and corn sales are way below last year. While price is part of it, there are a number of other factors. China had a huge corn crop on top of huge stocks. China corn exports are expected to be up 3.5 MMT this year, around 130-140 million bushels. The former Soviet Union countries are becoming a force in the world feed market as well with increasing exports of coarse grains.

As shown in Table 1, the projected 2002-03 ending stocks to use ratio is 9.5%, significantly below 2001-02, justifying the better prices.

While many of us thought we knew what the 2003 corn plantings would be, the March 1 Planting Intentions Report, released March 31, reminded us that we can be wrong. Expectations were for 80.5 million acres of corn to be planted, up 2.4 million from 2002, the report indicated that 79 million acres were intended to be planted, down slightly from last year. The western corn belt was down a little, the eastern corn belt was up a little, and Iowa was the same.

This does not mean that this will be the final number, nor should it. This is a signal to the market what producers are thinking so that the producers have a chance to adjust if the market calls for it. Given higher corn prices and lower oil prices, producers are liable to change some on the margin. And that does not include conditions at planting time, I will not try and forecast that. I am projecting producers will end up planting a half million more acres than they previously intended with average planting conditions.

I use a trend yield in Table 1 to get 2003-04 production. And while production is expected to be up 1.1 billion bushels, total supply is only expected to be up 400,000 due to the lower beginning stocks. I expect feed use to recover some as GCAU begin to increase over the 2003-04 year, although ethanol by-product will continue to temper corn feed growth. But that is okay, corn is being used.

I expect FSI use to grow over 100 million bushel again as we will not have exhausted demand and there will be enough production capacity. I expect exports to recover to the 2001-02 level as China would be expected to have a more normal crop and hopefully our new coarse grain competitors will benefit from increased demand.

As shown in the third column of Table 1 ending stocks and the ending stocks to use ratio are expected to be up a bit, suggesting a price level around \$2.15. However, while this level of ending stocks is sufficient, it is not over burdensome. It will not take much of a weather scare to have a strong price rally, and an easily attainable yield of 143 bu/ac could leave us with much lower prices.

SOYBEANS

I have attached my soybean, soybean meal, and soybean oil supply/demand balance sheets as Tables 3-5, remember no wheat. I have spent more time on the soybean table versus the meal and oil tables even though that is backwards.

We planted fewer acres this past spring and harvested even fewer than normal as shown on Table 3. On top of that the yield was 1.5 bushels below trend, but a lot better than we thought in August. Total supply was 200 million bushels below the previous year as beginning stocks were small as well.

Domestic crush is expected to be down as exports of meal and oil are down as well as GCAU. The ethanol by-products are affecting meal use as well. See the paper given at the USDA February 2003 Outlook Forum for a more complete story, it is on a USDA Web Site, <http://www.usda.gov/oce/waob/agforum.htm>.

Export shipments are running stronger than needed to meet the USDA projection and export sales are already 97% of the projection. This is despite Brazil and Argentina having huge crops, 86 mmt versus 73.5 mmt last year. This is 3.164 billion bushels, considerably larger than our record 2000-01 soybean crop of 2.891 billion bushels. The critical factor here is the ever expanding world demand, especially from China.

As shown on Table 3, this leaves us with very tight ending stocks. A 5.8% of use ending stocks would have given us \$6-7 prices just 5-6 years ago. What's happened? I call it the "Just in Time Inventory" phenomenon. Nobody is worried, by the time we know the U.S. crop size South America can still adjust, and vice versa. How likely is it that each of us won't have enough to get to the other ones harvest? It can happen, two bad crops, but unlikely.

The Planting Intentions Report also was a surprise for soybeans. The trade, the USDA at their outlook forum, and me, all expected that soybean acreage would be down 1-2 million acres, the intentions suggested they would be down 600,000 acres at 73.2 million. I am suggesting about 72.9 million soybean acres will be planted as I suggested more corn would be planted than March 1 intentions.

With a trend yield of 39.7 bu/ac, expected production would be 2.847 billion bushels, up 100 million. However, with the very tight stocks, total supply will be up by less.

The other question about 2003-04 is Argentina and Brazilian production. The long term USDA outlook suggest 3% a year increase, the USDA Ag. Attache recently suggested 6%, and the Brazilian's I talked to at the USDA outlook forum suggested 10%. Take your pick. I picked that world demand at the expected prices could eat up another 6%, so I left U.S. export the same at 960 million bushels. The USDA used 950 at the outlook forum.

This would leave ending stocks at 220 million bushels, 7.9 % of use. In the new setting, that suggests a soybean price around \$5.00.