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Ames, Iowa

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Grain Prices Remain Sensitive to Weather, Export Developments

Correction for the July 1 Iowa Farm Outlook

In the section titled "Possible Future Acreage Revisions", we noted that the 1975 planting season was similar in some respects to this year. **The year, 1975, should have been 1995.** The corrected version is now available.

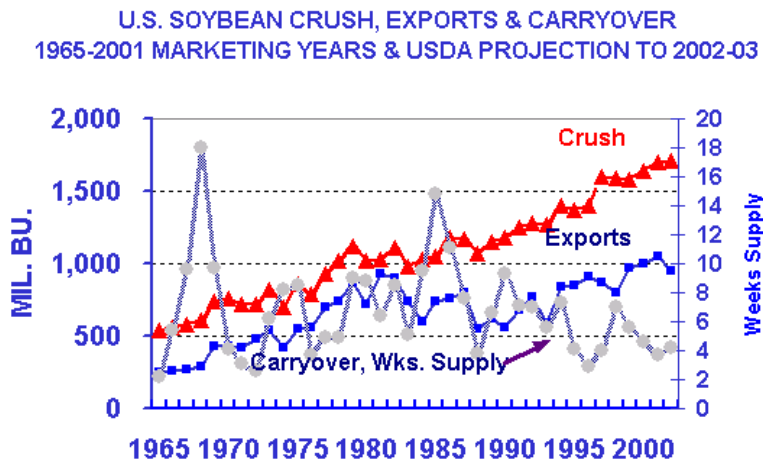
With prospects for declining carryover stocks in the year ahead (second in a row for corn and wheat, third for soybeans) *if yields are normal*, grain prices will remain quite sensitive to weather, crop conditions, and export sales reports through mid to late August. As this is being written, there are prospects for good (possibly record) yields in Iowa and Minnesota. *However, both corn and soybean crop prospects look much less favorable in Kansas, Nebraska, South Dakota, Missouri, Illinois, Indiana, Ohio, and Michigan.* In a normal year, these latter states would produce about 5.4 billion bushels of corn and 1.6 billion bushels of soybeans. *Also note that about one-fourth of the U.S. corn crop was planted later than normal*, so part of the crop will need later than normal frosts this fall to reach full maturity. The U.S. winter wheat crop is expected to be the smallest in 31 years, with the smallest harvested acreage since 1917, although increased production in some foreign areas will partially offset U.S. crop problems. *Corn and soybean percentages of the crop rated good to excellent in the USDA July 15 Weekly Weather and Crop Bulletin for the major states as a group dropped 4 and 2 percentage points respectively from the previous week. The corn percentage is down 16 percentage points from last year, while soybeans are down 7 percentage points. The soybean percent blooming was 74 percent in Iowa, but was only in the 20 percent range in Illinois and Indiana, and was 19 percent in Ohio this week, reflecting late planting in these states. Illinois usually is the nation's leading soybean producing state. Lateness of the soybeans there will allow the crop to wait for rain. However, yield prospects and prices will be unusually sensitive to August weather and the timing of the first frost.*

Unless generous widespread rains occur from central Nebraska through Ohio, a re-test of recent highs of new-crop corn futures cannot be ruled out. At this writing, the market has failed to close a gap on both corn and soybean price charts that occurred in late June. From a technical standpoint, failure to close the gap is positive to price prospects because some traders view it as a break-away gap in a shift to a longer-term up-trend in prices.

Soybeans

Despite USDA's projection of rising soybean carryover stocks next year, technical indicators at this writing suggest further strength in November soybean futures is possible if August weather is dry across the Midwest. USDA's projection of Brazil's newly harvested soybean crop remains 36 to 54 million bushels *above* private analyst projections, thus influencing its 2002-03 projections of U.S. soybean exports. A number of private analysts also consider the USDA's 39.7 bushels per acre U.S. average soybean yield to be a bit optimistic, and the projected exports for 2002-03, at 90 million bushels less than this year, to be somewhat conservative. With small adjustments in either or both of these variables, the ending soybean carryover stocks for August 31, 2003 drop below this year's level. This year's stocks are expected to drop to 2.7 week's supply, about the minimum working stocks level needed by the industry to keep plants operating and exports moving until the new crop is moving widely in trade channels. Our latest balance sheets, (see <http://www.econ.iastate.edu/faculty/wisner/>) with a slightly smaller decline in soybean exports and a 0.7 bushel per acre yield lower yield than USDA, show next year's soybean carryover at 3.4 week's supply. USDA projections for 2002-03

utilization along with actual crush, exports, and ending soybean stocks since 1965, in weeks' supply, are shown in the chart below.



Crop Condition Reports

A summary of USDA's latest crop condition ratings for corn and soybeans, and comparisons with last week and last year are shown below in Table 1. For corn and soybean acreages by states, see the July 1 issue of Iowa Farm Outlook.

Table 1. Corn & Soybeans, Percent of Crops in Good-to-Excellent Condition Selected Dates and States.

	Corn %	Corn: %		Soybeans %	Soybeans: %	
	Good/Excellent 6/30/02	Good/Excellent 7/15/01	Good/Excellent 7/14/02	Good/Excellent 6/30/02	Good/Excellent 7/15/01	Good/Excellent 7/14/02
Iowa	66	55	61	64	49	65
S. Dakota	49	76	41	45	70	41
Nebraska	45	72	41	35	60	24
N. Dakota	45	78	47	49	74	54
Minnesota	70	54	62	62	41	64
Kansas	52	54	36	57	54	56
Missouri	48	60	39	47	38	37
Illinois	57	74	43	57	62	42
Indiana	62	78	48	61	70	51
Ohio	52	70	38	53	60	39
Wisconsin	73	51	71	75	53	73
Mich.	58	42	52	58	51	54
Arkansas	Not Avail.	N.A.	N.A.	64	47	54
18 STATES (U.S.)	58	65	49	56	57	50
Prev. Year	62	75	65	62	66	57

These crop condition reports can still change significantly in the next few weeks. At this point, the numbers suggest that good yields are quite possible in Iowa, Minnesota, and Wisconsin, while yield prospects are quite uncertain in most other major producing states.

Exports to Date & Prospects

U.S. corn shipments from the start of the marketing year, September 1, 2001 through July 10, and outstanding unshipped sales were up 0.7 percent from the same period last year. Cumulative export inspections, another data series compiled by USDA, show season to date exports up 2.2 percent from last year. *The major test for old-crop corn exports will occur from now through August 31, and then in September and October for the new marketing year.* Last year, U.S. corn

exports strengthened substantially in late July and August. Whether this pattern will occur in 2002 remains uncertain. **South American corn exports from the just-completed harvest are projected by USDA to be 316 million bushels below last year. That is the usual source of major competition in the world corn market during the summer and fall.** Alternative sources of competition this year include old-crop supplies of feed wheat and feed grains from Eastern Europe and the former Soviet republics, Chinese corn exports, and feed wheat from India. All of these supplies may have some competitive advantage vs. the U.S. by virtue of being non-GMO supplies. China's summer corn export volume appears likely to be similar to last year. Prospects for 2002 crops in Eastern Europe and former Soviet republics are well below last year.

As an indication of possible preferences for alternative non-GMO grains, U.S. corn exports and outstanding unshipped sales to date to Japan are down 0.2 percent from last year's depressed level, while U.S. exports and outstanding sales of grain sorghum (non-GMO) are up 44 percent from the same period last year. For Mexico, the total for U.S. corn is down 9 percent from last year, while grain sorghum exports and outstanding unshipped sales are up 6 percent so far this season. Mexico and Japan account for by far the largest share of U.S. sorghum exports.

Markets where U.S. corn exports and outstanding sales are above last year include Canada, Columbia, a few other Latin American countries, parts of north Africa, and the Middle East. Exports to Canada are up sharply from a year earlier due to the 2001 Canadian drought. Rainfall has been variable in Canada again this year, and early indications point to at least slightly below normal yields for the 2002 crop although production is expected to be above last year.

Weekly exports needed to meet USDA projections

Cumulative U.S. corn exports from last September 1 through July 11 totaled 1,581 million bushels, up 34 million bushels from a year earlier. **To reach USDA projections, weekly U.S. corn exports from now through August 31 will need to average about 14 percent less than a year earlier, or about 37.5 million bushels per week.** In the past 10 weeks, U.S. corn export inspections averaged 38.1 million bushels per week. For soybeans, the season to date total is 1,000 million bushels, up 58 million bushels from a year earlier. **To reach official projections, weekly soybean exports from now through August 31, 2002 will need to average 22 percent less than last year, or about 6.2 million bushels per week.** For the last 10 weeks, soybean export inspections have averaged 10.47 million bushels per week. Many analysts expect USDA to revise its 2001-02 soybean export projections up again next month.

Figures 1 and 2 show U.S. corn and soybean weekly exports, respectively, vs. a year earlier. Note the strong increase in weekly U.S. corn exports in late July and August last year, vs. relatively flat soybean exports.

**Figure 1. U.S. Weekly Corn Export Inspections
2000-2002**

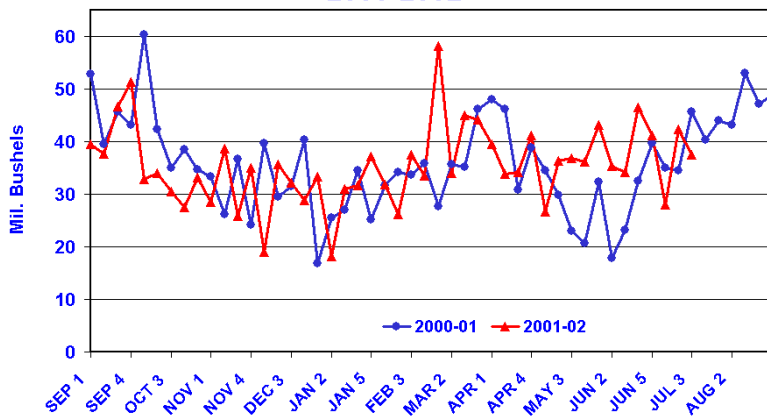
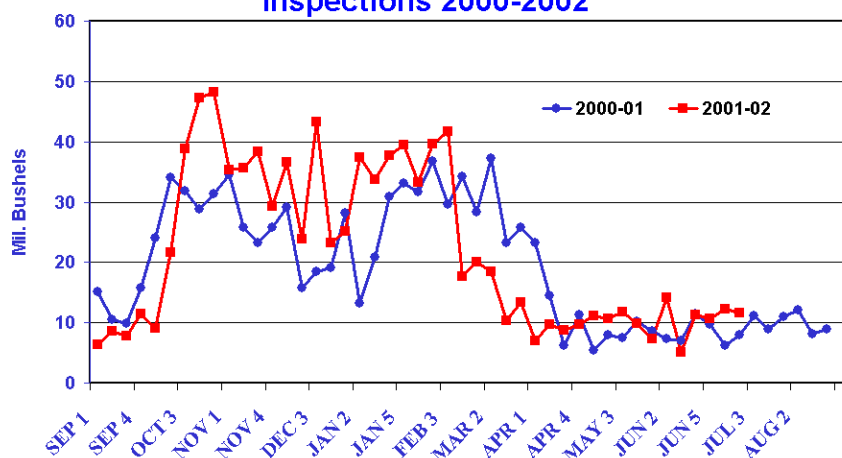


Figure 2. U.S. Weekly Soybean Export Inspections 2000-2002



Robert Wisner

Hog Insurance Comparison

Beginning this month, two new federally reinsured insurance programs are available for Iowa hog producers seeking market risk protection. The livestock risk protection (LRP) insurance program began sales July 8 and is available year round. Livestock gross margin (LGM) insurance for fall coverage is available from July 15 through July 31st.

The primary difference between the two insurance alternatives is that LRP protects the producer from lower than expected hog prices while LGM covers both hog prices and feed prices. Additional details regarding LRP are available at <http://www.aa-bic.com/>. The insurable gross margin levels (hog revenue- estimated feed costs) under LGM are determined by lean hog, corn, and soybean meal futures prices for the contract months appropriate to the intended marketing dates, averaged over the 5 trading days before July 15. Table 1 shows the gross margins offered by the markets for each marketing month throughout the remainder of the year based on July 8-12 closing futures prices. These values were calculated from a spreadsheet developed by Iowa State University Extension. The spreadsheet can be accessed at: http://www.econ.iastate.edu/outreach/agriculture/livestock/Livestock_Rev_Ins.xls. Additional information regarding the insurance products is available at the following sites: <http://www.extension.iastate.edu/Publications/FM1871.pdf> <http://www.rma.usda.gov/news/pr/2001/011121.html>

Table 1. Insurable gross margins offered by the markets.

Marketing Month	Farrow to Finish	Finishing Only
-----Insurable Gross Margin (\$/Head)-----		
August	56.53	62.63
September	42.39	48.95
October	28.25	39.77
November	29.61	38.74
December	31.07	40.07

How Well Would It Have Worked?

The developers of the insurance products calculated “how the insurance would have performed” based on historical prices from March 1997 to March 2000. To help producers evaluate these products, we are presenting these results and comparing them to the performance of price protection using futures and options during the same period. The demonstration assumes a batch of hogs, fed 120 days, was marketed each month under each risk protection strategy. The comparison assumed 90% LGM coverage and 120 day LRP at 93% coverage. Table 2 shows the summary statistics. The

least profitable month to market hogs during the trial period was December 1998, when the cash market was losing \$64 per head. The net insurance return (indemnity payment minus the premium) for hogs sold this month was \$25.37 for LRP and \$9.70 for LGM. The largest losses under insurance coverage were \$55 per head for LGM and \$39 per head for LRP, both occurring in December 1998.

LRP vs. LGM

Data from the trial period appears to favor LRP. According to Table 2, average incomes were similar under both insurance alternatives. LRP, however, offered higher minimum and maximum income values. Table 3 presents the number of times net income under each risk protection strategy fell within a specified range. Income fell below -\$10 per head 49% of the time under LGM and 41% of the time under LRP. The proportion of observations falling between \$0 and \$20 per head were identical for both insurance products. LRP offered slightly more opportunities to generate income higher than \$20 per head.

Insurance vs. Futures and Options

The risk protection performance comparison to futures and options was mixed. All risk protection alternatives outperformed the cash market, reflecting the relatively unfavorable prices that prevailed during the trial period. A short hedge and an at-the-money put option both offered a higher average income and minimum income levels than either insurance alternative. Income variability, as measured by the standard deviation of returns, was highest under LGM and lowest under LRP coverage. Futures and options both allowed a greater number of observations within the \$0 to \$20 range, but slightly fewer opportunities for incomes greater than \$20 per head.

Table 2. Summary statistics for the historical comparison of risk management alternatives.

	Estimated Returns, Mar 1997- Mar 2000			
	Average	Standard Deviation	Minimum	Maximum
-----Dollars per Head-----				
Cash	-8.76	21.99	-64.62	27.58
Futures	-3.83	17.81	-37.12	21.88
ATM Put	-5.96	16.95	-36.64	21.23
LGM 90%	-7.81	19.96	-54.92	24.86
LRP 93%	-7.29	17.43	-39.25	25.32

Table 3. Frequency that income under each risk management strategy fell within the specified range.

Range	Cash	Futures	ATM Put	LGM 90%	LRP 93%
LT-\$20	32%	22%	15%	29%	24%
-\$10 – \$20	12%	17%	32%	20%	27%
\$0 – \$10	24%	20%	22%	20%	20%
\$0 – \$10	10%	10%	10%	7%	7%
\$10 – \$20	5%	24%	17%	12%	12%
GT \$20	17%	7%	5%	12%	10%

None of these options represent a “silver bullet” guaranteeing a positive return. Furthermore, producers considering these products should understand the underlying factors that caused these results. The advantage of LRP over LGM in this study is partly explained by declining grain prices throughout the trial period. In general, the portion of the indemnity payment compensating for rising grain prices did not offset the added premium necessary to cover this risk. Had the trial period included the 1995-1996 marketing years, when corn prices were high, the outcome may have been reversed. Likewise, the trial period covered a relatively unprofitable segment of the hog cycle, thereby favoring the risk protection over remaining unprotected in the cash market. Had the trial period covered the relatively profitable 2000-2001 period, the cash market would have appeared more favorable. Producers should remember past performance is not always a good indicator of future performance.

Gary May