ANALYSIS OF DECEMBER USDA HOGS AND PIGS REPORT

The December USDA Hogs and Pigs report estimated all hogs and pigs on farms in the U.S. at 59.4 million head. This inventory estimate is 4.5% below December 1, 1998 and 2.9% below December 1, 1997. The breeding herd estimate of 6.24 million head was 6.6% below 1998 and 10.2% below 1997. The market hog inventory of 53.2 million head was off 4.2% from 1998 and 1.9% below 1997. The estimates in the report were very near the pre-report expectations and the report should be considered neutral to the market.

The liquidation occurring in the industry can be seen in the market hog inventories. All weight classes are below year-earlier levels. Pigs weighing 180 pounds and over were estimated at 4.7% below 1998 levels, even though slaughter for the past 4 weeks has only been down 3.1%. The other weight categories shown in the table below were all 3.9 to 4.4% lower.

The September-November pig crop was estimated at 25.2 million pigs, down 2.7% from 1998. Sows farrowing during the September-November period were down 4.1%, while the pigs per litter increased from 8.66 in 1998 to 8.78 in 1999. Farrowing intentions for the December-February 2000 period are estimated to be down 2.8% and the March-May 2000 farrowing intentions are estimated to be down 5.2%. Table 1 shows the inventory levels, pig crop, and farrowing intentions for Iowa and the U.S.

Comparing the Iowa numbers with those of the U.S. shows that Iowa is liquidating its sow herd faster than the U.S., while all Iowa hog inventories are increasing compared with the decrease in the U.S. Table 2 shows inventory changes from December 1998 to December 1999. The market hog inventory in Iowa grew 1.4% compared with the 4.2% decline in the U.S. These numbers show the differences between Iowa and the U.S., but they are less pronounced than in recent years. Sows farrowing during Sept-Nov shows a smaller decline for Iowa and the Dec-Feb intentions for Iowa are projected to be up 2.1% compared with 2.8% lower for the U.S. Iowa's decrease in the breeding herd of 7.9% falls in the middle of the changes for the other large hog producing states.

Table 1. September USDA Hogs and Pigs Summary

	US		Iowa	
	1,000 Head	% Chg.	1,000 Head	% Chg.
All Hogs and Pigs	59,407	-4.5	15,400	0.7
Breeding Herd	6,244	-6.6	1,160	-7.9
Market Hogs	53,164	-4.2	14,240	1.4
Under 60 Pounds	19,298	-4.2	4,410	0.2
60–119 Pounds	13,106	-3.9	3,720	0.5
120–179 Pounds	11,073	-4.4	3,210	2.9
180#s and Over	9,687	-4.7	2,900	2.8
Sows Farrowing				
Sep–Nov	2,869	-4.1	500	-2.0
Dec–Feb Intentions	2,810	-2.8	490	2.1
Mar–May Intentions	2,832	-5.2	490	-5.8
Pig Crop				
Sep–Nov	25,192	-2.7	4,450	0.3
Pigs per Litter				
Sep–Nov	8.78	1.4	8.90	2.3

Table 2. Inventory Changes for the 10 Largest Hog Producing States (%).

	Breeding Herd	Market Hog
Colorado	+ 16.7	+ 1.4
Illinois	-20.8	-14.8
Indiana	-17.8	-20.0
Iowa	-7.9	+ 1.4
Minnesota	-9.7	-2.8
Missouri	+ 2.5	-5.5
Nebraska	-7.1	-12.4
N. Carolina	0.0	-2.3
Ohio	-15.0	-11.3
Oklahoma	+ 10.7	+ 18.9
U.S. Total	-6.6	-4.2

Price Forecast…

Forecast prices for the coming year are expected to be at profitable levels for the first time since November 1997. The expected decline in pork supplies, a strong economy, and a decrease in beef supplies starting in the second quarter will be supportive to hog prices. However, the driving factor behind current strength in hog prices and what the futures appear to have already factored into the market is ***demand***. The declining cold storage at a time of larger production confirms the increase in demand, which is very difficult to predict and often fickle. If demand remains as strong as we have seen in the fourth quarter, current futures quotes are likely under-priced. However, a weaker demand will weaken prices.

Table 3 shows the forecast prices based on the USDA report and moderate-to-strong demand continuing. Total cost of production is currently in the mid- to upper $30s for average producers. Although there are no farrowing intentions that would impact 2001 supplies, it is expected that the annual average price will remain in the low to mid-$40s.

Table 3. Forecast Price, Iowa-So. Minn. 51-52% Lean.

	Live	Carcass
Jan-Mar	$37-40	$50-54
Apr-Jun	$41-44	$55-60
Jul-Sep	$43-46	$58-62
Oct-Dec	$38-41	$51-55
2000 average	$40-43	$54-58
2001 average	$42-45	$57-61

Canadian hog imports for slaughter are expected to be steady or decline, as the Maple Leaf processing plant in Brandon, Manitoba comes on line. Latest reports indicated that it is ramping up ahead of schedule and should be at a full single shift (9,000/day) in March 2000.

Does the Hog Cycle Still Work???

This cycle is behaving similar to other cycles in the 1980s and 1990s. If it follows the pattern of the liquidations that started in December 1988 and 1994, prices would peak in late May 2000, and the next slaughter increase and lower prices would occur in the fourth quarter of 2001. For more analysis of previous hog cycles, go to: http://www.econ.iastate.edu/faculty/lawrence/

Cold Storage…

Monthly levels of pork in cold storage can be seen in Figure 1. The inventory of pork in cold storage totaled 411.7 million pounds as of November 30th. This is the first time pork in cold storage has been below year-earlier levels since February 1997. Inventories climbed to record levels during the fall of 1998 and continued to climb during the first four months of 1999. After falling during the summer months, inventories have remained stable and even declined 6.0% from October to November. Commercial hog slaughter for the month of November was 8.898 million head, 1.0% above the 8.809 head slaughter in November 1998. Increased demand for pork during the fall has allowed cold storage stocks to decrease, even with increased pork production.

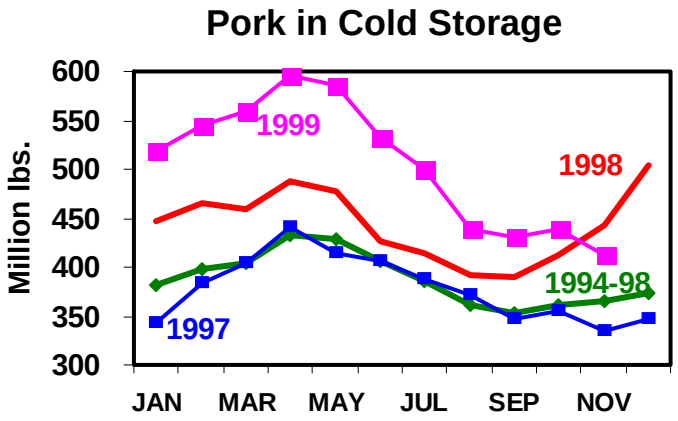

Figure 1

Canadian Live Hog Imports…

Canadian imports of live hogs are running at near 1998 levels. Estimated total Canadian live hog imports for Jan-Nov total 3.72 million head, down less than 1% from the same period in 1998. The major difference this year is the increase in imports of pigs weighing less than 110 lbs. Canadian imports of pigs weighing less than 110 lbs. for the Jan-Nov period have totaled 1.87 million head or just over 50% of the total imports. During the same period in 1998 the under 110 pound pig imports were 1.31 million head or only 35% of the total. This suggests that the number of pigs imported into the U.S. from Canada for slaughter has decreased, but assuming the feeder pig imports are eventually slaughtered in the U.S., the actual number of Canadian hogs slaughtered in the U.S. has not decreased. Figure 2 shows the Canadian hog imports.

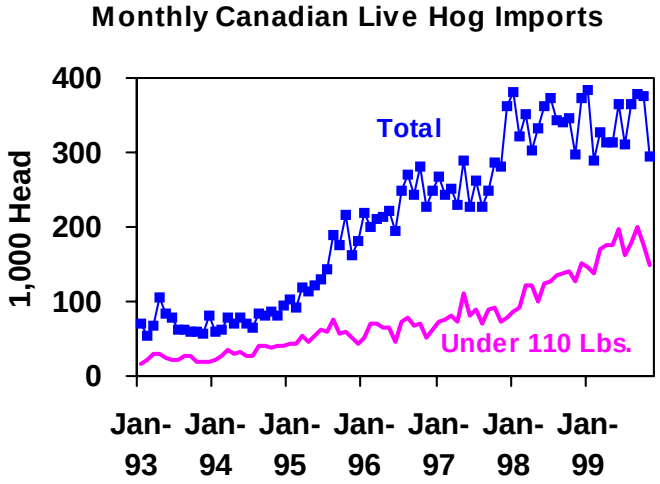

Figure 2

Slaughter Weights…

Iowa-Southern Minnesota weekly slaughter weights are shown in Figure 3. Weights for 1998, 1999, and the five-year average 1994-1998 are shown. Slaughter weights typically follow a seasonal pattern where they decline during the first month of the year, remain steady from February-May, decrease during the summer months, and then increase into the fall and early winter. Weights in 1998 started out the year fairly high, but then followed a typical seasonal pattern. Late in 1998 weights climbed to record levels as the industry experienced a slaughtering constraint. Weights throughout 1999 have been above 1998 levels for nearly all but the past 6 weeks. Weights have started to decline during the past 2-3 weeks and should continue to decline in the upcoming weeks.

Numbers of Operations…

The December USDA Hogs and Pigs Report also estimates the number of operations in the U.S. with hogs. Operations

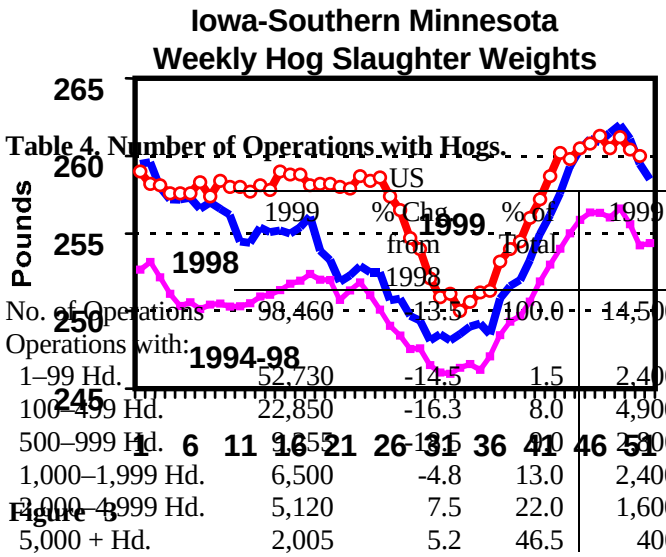

Figure 3

Table 4. Number of Operations with Hogs.

	US			Iowa		
	1999	% Chg. from 1998	% of Total	1999	% Chg. from 1998	% of Total
No. of Operations	98,460	-13.5	100.0	14,500	-17.1	100.0
Operations with:						
1–99 Hd.	52,730	-14.5	1.5	2,400	-17.2	0.3
100–499 Hd.	22,850	-16.3	8.0	4,900	-22.2	7.5
500–999 Hd.	9,155	-12.5	9.0	2,800	-31.7	11.2
1,000–1,999 Hd.	6,500	-4.8	13.0	2,400	-2.0	18.0
2,000–4,999 Hd.	5,120	7.5	22.0	1,600	11.9	28.0
5,000 + Hd.	2,005	5.2	46.5	400	25.0	35.0

with hogs in Iowa for 1999 are estimated at 14,500—down 17.1% from 17,500 operations in 1998. The total number of operations in the U.S. declined similarly by 13.5% to 98,460. Table 4 shows the number of operations by different size groups and the percent of inventory by size groups for Iowa and the U.S.

Alan Vontalge and John Lawrence

GRAIN MARKETS AWAIT USDA REPORTS, SOUTH AMERICAN WEATHER

Key influences on corn and soybean prices in the next 6 weeks will include USDA's January 12th U.S. and world production, stocks, and utilization reports, and South American weather. It would not be surprising to see a small increase in the U.S. corn production estimate, and a slight decrease in the soybean production number. U.S. December 1 stocks should show large domestic corn feeding, probably a little above last year because of increased livestock numbers. In Brazil, rainfall has been well below normal in its three southern provinces, which are major soybean producers. Further north, rainfall has been somewhat better. Private weather forecasts show near-normal rainfall for the next 30 days for much of Brazil's Soybean Belt, with areas of below normal rainfall in the 60-day forecast. The Argentine Corn-Soybean Belt appears to have had closer to normal rainfall in late Dec. and early Jan. than Brazil, but also will need timely rains through March to make good soybean yields. Corn yields there will be affected by weather through late April. Week-to-week variations in rainfall the rest of this month have the potential to move soybean prices in a 20 to 25 cent range either side of current futures prices. The range should be wider in February if this month's rainfall is below normal.

Export Sales Update…

U.S. exports so far this marketing year and outstanding unshipped export sales as of December 23 are shown below. The increase in corn exports and sales at the one-third point of the marketing year follows a 30% increase in the last marketing year. With the lifting of trade sanctions to northern Africa and Iran, the U.S. has sold about 24 million bushels of corn to Iran, for the first time in many years. Easing of sanctions to North Korea has not generated corn and soybean business there.

All Destinations (vs. year earlier)

Corn	+ 7%	Soybean oil	-65%
Soybeans	+ 8%	Soft red wheat	+ 118%
Soybean meal	-11%	Grain sorghum	+ 38%

Exports and outstanding U.S. Sales to EU:

Soybeans	-5%	Soybean oil	None
Soybean meal	-91%	Corn	None

Marketing Alternatives…

With low subsoil moisture across the Corn-Soybean-Wheat Belt, many farmers prefer to retain ownership of grain until the weather outlook becomes clearer. A strong La Niña weather pattern currently is present. Dr. Elwynn Taylor, ISU Climatologist, indicates this formation (which also was present last year) increases the risk of major U.S. drought in the Grain Belt. His recent assessments placed Corn Belt drought probabilities at about one-third, vs. a long-term average of about 20%. A University of Colorado study identified other back-to-back La Niña years as 1954-1955, 1973-74, and 1987-88. U.S. corn and soybean percent yield deviations from trend yields for these years are shown.

During the first year of La Niña, both corn and soybean yields deviated only very modestly from trends, as the crops utilized reserve soil moisture. In two of the second years identified by U of C., the pattern reflects damage to corn yields that was irreversible by late July, along with beneficial late summer rains that helped soybean yields. In 1974, both crops also suffered from extremely early killing frosts, and heavy spring rains delayed plantings. The Soybean Belt has expanded much further west now than in those years, with extensive plantings in Kansas, Nebraska, western Iowa, and the Dakotas. The Great Plains part of this region historically has been a high-risk area, weather-wise, and might produce greater soybean yield variability in a major drought than these years indicate.

Robert Wisner

	Corn	Soybeans		Corn	Soybeans
1954	-4	-1.3	1987	+8	-2.3
1955	-17	-1.5	1988	-25	-4.9
1973	+8	+0.6	1999	+2	-3.4
1974	-17	-3.8	2000	?	?