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UPDATED HOG PRODUCTION ESTIMATED RETURNS

The Iowa State University Extension Estimated Livestock Returns have provided a barometer of profitability for the Iowa cattle and hog sector since the early 1970s. The model incorporates changes in prices for feed, interest rates, feeder animals, and market animals each month and projects a cost of production and net return over total costs to an Iowa farm that is slightly above average. The production variables are held constant each month, but updated periodically to reflect changes in industry standards for efficiency.

The monthly estimate is not meant to represent any specific hog operation, and due to the variability in operations, certainly doesn't represent all operations. It does, however, provide a general indicator of profitability for the sector on a month-to-month basis (http://www.econ.iastate.edu/faculty/lawrence/EstRet/Index.html).

The hog enterprise (farrow to finish, producing feeder pigs, finishing feeder pigs) estimates have been updated. The changes in assumptions and results are described below. These assumptions are based on the 1999 ISU Swine Business Records summarized by Dr. Tom Baas, Department of Animal Science, and industry estimates for recent construction costs. The new estimates are also compared with the old series for 1996-2000 to help merge the series.

The new series reflects a heavier market weight, improved feed efficiency, and greater facility throughput. Another key difference is that the new series assumes commercial rates for feed preparation and delivery and manure hauling whereas the old series assumed that the enterprise owned this equipment and provided the power unit and labor. Facility costs are annualized at 14% of new cost (8% for depreciation, 5% for interest, 1% for taxes and insurance). The two series differ in how replacement gilts are handled and are reflected in the "Change in sow value" line of the budget. The new series calculates a genetic cost for purchased gilts at \$100 over market value at 230 pounds compared with a 40% over market premium earlier series.

Table 1. ISU Estimated Returns, Farrow to Finish Assumptions.

	Old	New
Market weight	250	260
Corn (bu/hd)	13.2	13.0
Protein Supplement (#/hd)	189	185
Percent of feed in finisher	71.2%	76.6%
Pigs weaned/litter	8.40	8.80
Market hogs/litter	8.20	8.35
Feed costs (\$/hd)	62.43	61.15
Nonfeed variable costs (\$/hd)	20.37	24.43
Fixed costs (\$/hd)	26.86	23.42
Total costs (\$/hd)	109.66	109.00
Total cost (\$/cwt)	43.86	41.92
Estimated return (\$/hd)	-4.34	.53
Change in sow value (\$/hd)	.59	-2.43
Return after sow value	-3.75	-1.90

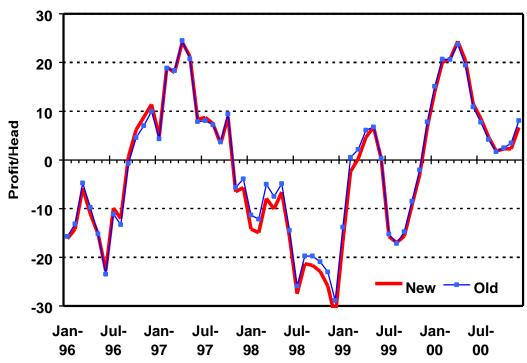
The new series has approximately \$2-3 lower total costs (per cwt or head for feeder pig production) in each enterprise (Table 2). The new series has lower fixed costs than the old one for all three enterprises. The farrow to finish and feeder pig production enterprise had slightly higher variable costs than the old series on a per head basis.

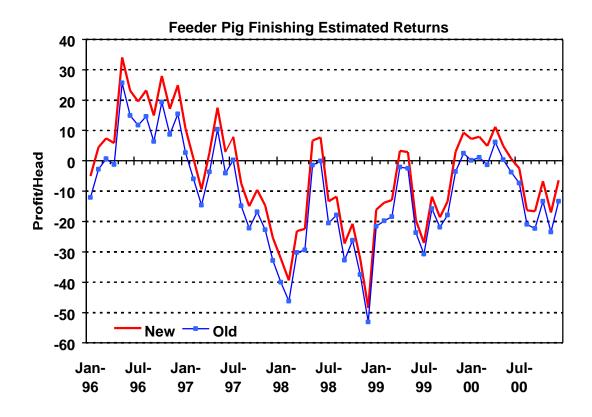
Table 2. Average Costs and Returns 1996-2000.

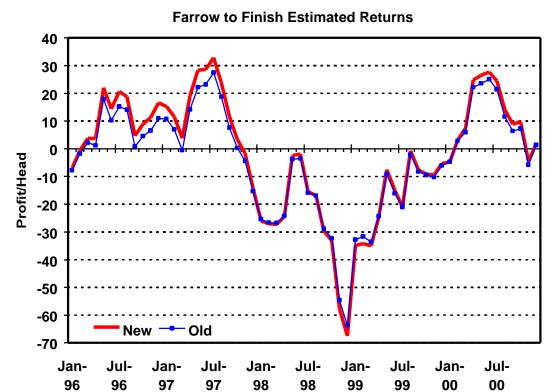
	Farrow to Finish	Feeder Pig Production	Feeder Pig Finishing		
	Variable Cost (\$/Head)				
New	85.58	29.32	99.65		
Old	82.80	27.83	101.30		
	Fixed Costs (\$/Head)				
New	23.42	11.37	12.05		
Old	26.86	15.71	12.89		
	Total Cost (\$/Head)				
New	109.00	40.69	111.70		
Old	109.66	43.54	114.19		
	Total Cost (\$/cwt)				
New	41.92	81.37	42.96		
Old	43.86	87.08	45.68		
	Net Return (\$/Head)				
New	-1.90	-1.89	-4.04		
Old	-3.75	-1.27	-10.55		

As shown in Table 2, it has not been a prosperous five years for pork producers. On average all three enterprises failed to cover total costs. The three figures graphically compare the new and old estimated returns for each enterprise. In general they track each other very closely, but with slightly more variation, higher highs and lower lows.









USDA REFLECTS WEAKER CORN EXPORT PROSPECTS

Lagging U.S. corn exports to major Far East markets and increased foreign soybean competition are likely to keep corn and soybean prices in a narrow range for the next several weeks. Slight to modest strength in cash prices for both crops appears likely during the April-May period, with greater potential in corn than soybeans. Spring new- and old-crop prices will be modestly sensitive to weather developments due partly to low subsoil moisture in western Iowa and parts of neighboring states. However, subsoil moisture in the eastern Corn Belt appears to be much better than last year, and will be partially offsetting. The mid-February USDA/NOAA Palmer Drought Index map is shown at the following web site: http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif.

In its February 8 U.S. and World Supply-Demand report, USDA lowered its projected 2000-01 U.S. corn exports to 2.05 billion bushels, 113 million or 6 % above last year, but down 100 million bushels from last month. Export inspections from September 1, 2000 through February 8 were down 12 % or 106 million bushels from a year earlier. To reach the current projection, U.S. corn exports for the remainder of the current marketing year will need to average 23% above the same period last season. Based on export market conditions during the first 5 months of the marketing year, that looks highly optimistic. Accordingly, in our balance sheet, we have used a 150 million bushel lower export figure than USDA. Reports from China indicate its corn exports are likely to continue until at least midyear despite an estimated sharp decline in its 2000 corn crop. And buyers in Japan and South Korea are continuing to restrain purchases because of Starlink® concerns. For soybeans, the USDA reports showed increases from last month and last year in South American soybean production to be harvested this spring, and reduced U.S. export and crush prospects for the balance of the current marketing year.

Cumulative U.S. soybean exports from last September 1 through February 8 totaled 566 million bushels, up only one million bushels from a year earlier because of a slow start to exports last fall. However, combined exports to date and outstanding unshipped exports were up 16% from a year earlier due to increased world demand for soybean meal resulting from the EU 6-month meat meal-feeding ban. Totals for soybean meal and oil were up 4% and down 9%, respectively. To reach current USDA projections of U.S. soybean exports, shipments from now through August 31 will need to drop 3% from a year earlier. A sharp seasonal decline in U.S. exports is anticipated from late May onward when new-crop South American exports begin moving in world markets in large volumes. While some harvesting is already occurring there, the main harvest usually is from mid-March to mid-April. A time lag is required to get the beans into international markets.

South American Soybeans

Rainfall maps for this month and last month for Brazil and Argentina are available from this Global Weather Service site: http://news.bridge.com/gws/wpages/w2frame.htm. January rainfall was below normal in a sizable part of Brazil, although optimum rainfall for soybeans is modestly below normal. For Brazil for the first half of February, and for the past six weeks in nearly all of Argentina's Corn/Soybean Belt, rainfall has been above normal. USDA's Foreign Agricultural Service estimates Argentine soybean plantings this season to be up 14% from last year, along with no change in *Brazil*. The increase in Argentina reflects a 3% rise in harvested wheat acreage, extensive double cropping of soybeans after wheat, and a 3.5 million-acre estimated decline in sunflower acreage. Reduced sunflower acreage will bring some offsetting increase in demand for soybeans, especially soybean oil. Brazil's soybean production is forecast to be up 85 million bushels from last year due to slightly higher yields. Neighboring Paraguay is estimated to have a 9% increase in its soybean plantings and a 10 million bushel increase in soybean production. Argentina's crop is forecast to be up 130 million bushels, with yields holding near last year's level. The combined increase projected for these three countries is equivalent to 7% of last year's U.S. soybean production. South American trade sources indicate these yield and production forecasts may be a little low if recent weather patterns continue for another month and harvesting weather is favorable. These expansions are occurring despite extremely low world soybean prices. The *projected increase* in production from last year likely would be slightly more than enough to fill an increase in soybean meal demand resulting from the EU's 6-month meat meal-feeding ban. If the ban is extended to 12 months and normal long-term world demand growth continues, modestly increased production from the U.S. and/or other countries would be needed to hold carryover stocks constant. At least one major European feed firm expects the ban to be extended.

Southern Hemisphere Feed Grains

For Southern Hemisphere corn and other feed grains, the picture is the opposite from soybeans. South Africa's corn plantings are reported to be the lowest in 60 years, down 15% from last year. Its total production is forecast to be down 24% or approximately 100 million bushels from the spring of 2000. Argentina's combined feed grain production (mainly corn and sorghum) is forecast to be down 12% or 100 million bushels from last spring, but is partially offset by an

estimated 19 million bushel increase in Australia's crop. These are the three main Southern Hemisphere feed grain producers and their supplies will be sources of competition from late May through October. While their combined production is down, the EU's combined wheat and feed grain production in 2000 is estimated to have increased about 524 million bushels. Bushel estimates given here are in corn equivalent. Increased production in EU reduces its import needs, and increases its potential exports of grain to markets normally supplied by the Southern Hemisphere. EU this year is being required to sharply reduce the volume of grain it subsidizes into export markets, because of previously negotiated international trade agreements. It has exported some grain to drought-stricken Eastern Europe, where it can ship grain without subsidies.

Corn Export Sales by Destination

USDA's February 15 export sales report indicates combined U.S. corn exports since last September 1 and outstanding unshipped export sales through February 8 were down 7% from a year earlier. That's a modest improvement from the last several weeks, but is still quite disappointing to the grain trade. While the largest bushel decline was concentrated in our top two corn export markets (Japan and South Korea), exports and sales to several other countries also were down, as shown in red below. Millions of bushels of exports and unshipped sales through February 8, 2001, percentage changes from a year ago, and 1998-99 marketing year totals for these and other market destinations were as follows in the February 15 report:

USDA's February 15 export sales report.

		2/08/01	1998-99
	Mil. Bu.	Percent Chg.	Marketing yr.
	2/08/01	vs. year ago	totals
Japan	360	-09%	605
S.Korea	63	-39	255
Taiwan	109	-04	177
Mexico	122	+12	206
Egypt	88	+03	145
Morocco	10	-01	23
Algeria	26	+49	37
Tunisia	10	-06	16
Iran*	10	-75	00
Iraq*	1	N.A.	00
Philippines	2	-72	02
Canada	27	+435	16
Former Soviet Union	4	+07	17
Other Latin America	138	-19	272
Other Asia & Oceania	76	-25	122
Others	43	-15	42
Total	1,089	-07	1,953

^{*}Reflects recent sanctions lifting; N.A.=Not Applicable

Based on foreign food and feed regulations and Far East trade reports, it seems clear that StarLink^R problems have been a major factor in this season's decline in U.S. corn exports to Japan and South Korea. To what extent StarLink^R has been a factor in reduced exports to the other destinations shown in red above is less clear. *Based on USDA's World Agricultural Outlook Board estimates showing a 15% or 1.24 billion bushel (corn equivalent) decline in 2000 feed grain production of other exporting countries (including China), much stronger U.S. corn export demand had been expected. In addition, Eastern Europe's 2000 feed grain production is estimated to have declined 740 million bushels from the previous year.* Some East European countries had exported grain in recent years, but are unable to do so this season because of drought-reduced 2000 harvests.

Supply-Demand Projections

Our latest supply-demand projections for corn and soybeans are shown at the following web site, along with comparisons for recent years. http://www.econ.iastate.edu/faculty/wisner/.

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