IOWA STATE UNIVERSITY
Extension and Outreach

Iowa Farm Outlook

Department of Economics
February 2017 Ames, Iowa Econ. Info. 2082

Livestock Market Adjustments and Opportunities

Fed cattle prices are off to a good start in 2017. USDA AMS report LM_CT167 shows Iowa/Minnesota prices rose to $121.66 per cwt during the week ending Sunday, January 22. That was the highest weekly average fed cattle price since the first week of July 2016. It also represents a 27% increase since mid-October, when 2016 prices bottomed at $95.93 per cwt. Concurrently, the February, April and June 2017 live cattle futures contracts gained over $18 per cwt, or 19%, on average.

Iowa feedlots moved cattle aggressively in 2016, especially from April through the end of the year. In those months, feedlot marketings exceeded placements by 17% resulting in net feedlot outflow of 128,000 head, thus leading to the smaller year-over-year feedlot inventories at the beginning of 2017. January 1 feedlot inventories were 82% of last year for feedlots with less than 1,000 head capacity, 97% of last year for feedlots with 1,000+ head capacity, and 89% of last year overall. Smaller inventories set up a tighter than expected first-half 2017 finished cattle supply.

First-half profit prospects improve in cattle feeding

The main implication of this is that expected cattle feeding returns have strengthened notably. Estimates of closeout returns offered in ISU's Estimated Livestock Return Series (http://www2.econ.iastate.edu/estimated-returns/) indicate the return in December for finishing yearling steers was a $3.86 profit per head (Table 1). This is a welcome development as sale prices have not covered cost of production, as calculated by Iowa State University, in 20 of the last 24 months. Plus, the picture continues to improve.

Table 1. Recent and Projected Iowa Finishing Yearling Steer Returns (as of 1/27/17)

Place Mo-Yr	Closeout Mo-Yr	Net Return*	FCOG**	Fed Price	Feeder Price	Breakeven FCOG**	Breakeven Fed Price	Breakeven Feeder Price
Jul-16	**Dec-16**	**3.86**	**68.74**	**112.89**	**144.75**	**69.44**	**112.59**	**145.27**
Aug-16	Jan-17	26.25	68.83	118.63	151.65	73.60	116.61	155.15
Sep-16	Feb-17	94.17	69.24	117.85	140.94	86.36	110.60	153.49
Oct-16	Mar-17	171.27	70.36	119.18	132.14	101.50	106.01	154.98
Nov-16	Apr-17	210.84	71.74	119.65	126.66	110.07	103.43	154.78
Dec-16	May-17	47.44	73.33	112.56	135.00	81.95	108.91	141.33
Jan-17	Jun-17	5.86	74.65	109.53	134.33	75.72	109.08	135.11
Feb-17	Jul-17	-46.46	75.97	103.10	129.19	67.53	106.68	122.99
Mar-17	Aug-17	-46.98	76.81	102.76	128.05	68.26	106.37	121.79
Apr-17	Sep-17	-102.36	78.12	99.90	129.53	59.51	107.78	115.88
May-17	Oct-17	-99.08	78.62	99.77	128.49	60.61	107.39	115.27
Jun-17	Nov-17	-45.15	78.52	101.49	124.35	70.31	104.96	118.33
Jul-17	Dec-17	-85.87	78.48	101.66	130.10	62.87	108.26	118.66

Source: Iowa State University. Projected using basis adjusted futures prices. * Net return is $/head and all other values are $/cwt. ** FCOG = Feeding cost of gain.

Recognize that the ISU series mimics a cash market situation without price risk management. In using a cash strategy, a cattle feeder paid cash for 750 pound feeder steers based on what the market was in July, paid the cash price for corn and other feedstuffs over the feeding period, and received the cash market price for 1,300 pound fed cattle in December. Anyone who locked in corn, feeder cattle, and/or fed cattle prices would have a different result, maybe better or maybe worse.

For the first six months of 2017, the average projected profit is $92.64 per head. The best month currently projected is April 2017 steer closeouts (profit of $210.84 per head) where April fed cattle prices on January 27 are estimated at $119.65 per cwt which is substantially higher than the $99.77 to $112.56 per cwt range estimated for the remainder of 2017 scheduled closeouts.

Compared to a year ago, lower feeder cattle prices and feedstuff costs have significantly decreased estimated breakeven sales prices for coming months. Using all economic costs (including the cost of the feeder animal, and interest), for a typical Iowa commercial feeding situation breakeven sales prices for steers placed into a feedlot during October, November and December of 2016 (entering the feedlot at about 750-pounds) were calculated by Iowa State University to be in the $103 to $109 per cwt. range. If realized, those would be the lowest since the first quarter of 2011.

Second-half losses likely in cattle feeding

Unfortunately losses are projected for July through December 2017 closeouts, averaging -$70.98 per head. However, the margin for error given variation across operations in cost of gain is easily a $50 per head movement either way, which makes the situation a potential breakeven or better for some operations. Producers should carefully compare their own costs and prices with those reported here to make their own profit projections.

Possible profits to start the year in hog finishing

Lean hog prices were extremely depressed in the final quarter of 2016 when prices averaged about $47 per cwt. The lowest prices were in mid-November, dipping below $41 per cwt. Recovery came quickly with prices rising to the lower $50s by the end of the year. USDA AMS report LM_HG204 shows Iowa/Minnesota prices rose to $63.29 per cwt during the week ending Friday, January 20.

Table 2. Recent and Projected Iowa Wean to Finish Returns (as of 1/27/17)

Place Mo-Yr	Closeout Mo-Yr	Net Return*	FCOG**	Lean Hog Price	Wean Pig Price	Breakeven FCOG**	Breakeven Lean Hog Price	Breakeven Wean Pig Price
	2013	4.77	54.86	90.41	36.78	56.71	88.06	41.55
	2014	39.48	46.53	105.89	54.90	61.83	86.39	94.38
	2015	-14.32	40.48	68.61	48.83	34.93	75.69	34.51
Jan-Mar	2016	-5.76	37.84	60.41	30.46	35.61	63.25	24.70
Apr-Jun	2016	9.31	38.60	73.08	39.09	42.21	68.48	48.40
Jul-Sep	2016	-19.23	38.97	63.62	47.51	31.51	73.11	28.28
Oct-Dec	2016	-36.73	37.27	46.77	35.28	23.04	64.91	-1.45
	2016	-13.10	38.17	60.97	38.08	33.09	67.44	24.98
Jan-Mar	2017	0.26	37.94	62.69	28.82	38.04	62.57	29.08
Apr-Jun	2017	5.35	39.82	70.13	33.93	41.89	67.49	39.28
Jul-Sep	2017	-3.12	41.58	72.08	41.80	40.38	73.62	38.68
Oct-Dec	2017	-15.15	41.04	62.19	35.19	35.17	69.66	20.05
	2017	-3.16	40.09	66.77	34.94	38.87	68.33	31.77

Source: Iowa State University. Projected using basis adjusted futures prices. 10 to 12-pound pig price forecasts consist of 50% of the 5-month out lean hog futures price. * Net return is $/head and all other values are $/cwt. ** FCOG = Feeding cost of gain.

Iowa/Minnesota lean hog prices are forecasted to be about $67 in 2017, almost $6 higher than in 2016. Prices are forecasted to average $63 in the first quarter, $70 to $72 in the second and the third quarters, and $62 in the final quarter of 2017 (Table 2).

Feed cost of gain for wean to finish production in Iowa is forecasted to be around $40 per cwt in 2017 based on current feed price expectations. This compares to around $38 per cwt in 2016. As such, the cost to grow a purchased 10 to 12-pound pig to slaughter weight hasn't changed much. Buyers are forecasted to pay around $3 less per pig for hogs finished in 2017.

With hog prices in the mid $40s last fall, estimated losses averaged almost $37 per head. Returns in the first quarter of 2017 are projected to be about breakeven. Profits that are more moderate look to return in the second quarter. By the third quarter, returns could turn negative again and intensify in the final quarter. For the year 2016, estimated losses were about $13 per head and for 2017, projected losses are at $3 per head.

Take advantage of opportunities

Opportunities appear and disappear as markets continue to adjust and producers should look for chances to take advantage of those opportunities. When profitable margins present themselves, careful consideration should be paid to locking-in those profits. Remember the goal of price risk management is to minimize risk by limiting losses and increasing the probability of profit.

Lee Schulz

A Little Brighter Outlook, For Now

Over the past three years, the crop markets have faced the same situations over and over again. Many of the issues surrounding the crop markets in 2014-16 remain. Large crop supplies have been produced globally. Crop demands have reached record levels, but crop stocks continue to build. And prices have, for the most part, held below production costs. Projections for the upcoming crop year show that there are plenty of acres available for corn and soybean production this year as other crops cannot seem to compete. Combined, this would give us plenty of reasons to feel 2017 could be just as challenging.

However, a few things have changed and they are contributing to a somewhat brighter outlook. Export demand for crops and meat has accelerated over the past year. Global protein demand is driving livestock herd expansion, both here in the U.S. and around the world. That protein push is raising livestock demand (for the meat) and crop demand (feed for the livestock to create the meat). And the strength of the protein demand is currently overwhelming the impacts of the higher U.S. dollar, which would normally slow exports. USDA's current projections for 2017 indicate the export expansion should continue through the year (barring shifts in trade policy). The futures markets are trading higher now than they were a year ago, despite the record-breaking crops this past fall, reflecting the possibility that crop demand could grow enough to catch up to supplies.

Corn demand remains very consistent. Livestock feed demand slowly worked higher. Meanwhile, ethanol has held at record levels. The surge in exports put all three major demand sectors in a positive position. For feed demand, the trend is for continued growth. All sectors of the livestock industry remain in expansion mode. With meat exports expanding for poultry, pork, and beef, the U.S. meat production is set to top 100 billion pounds in 2017.

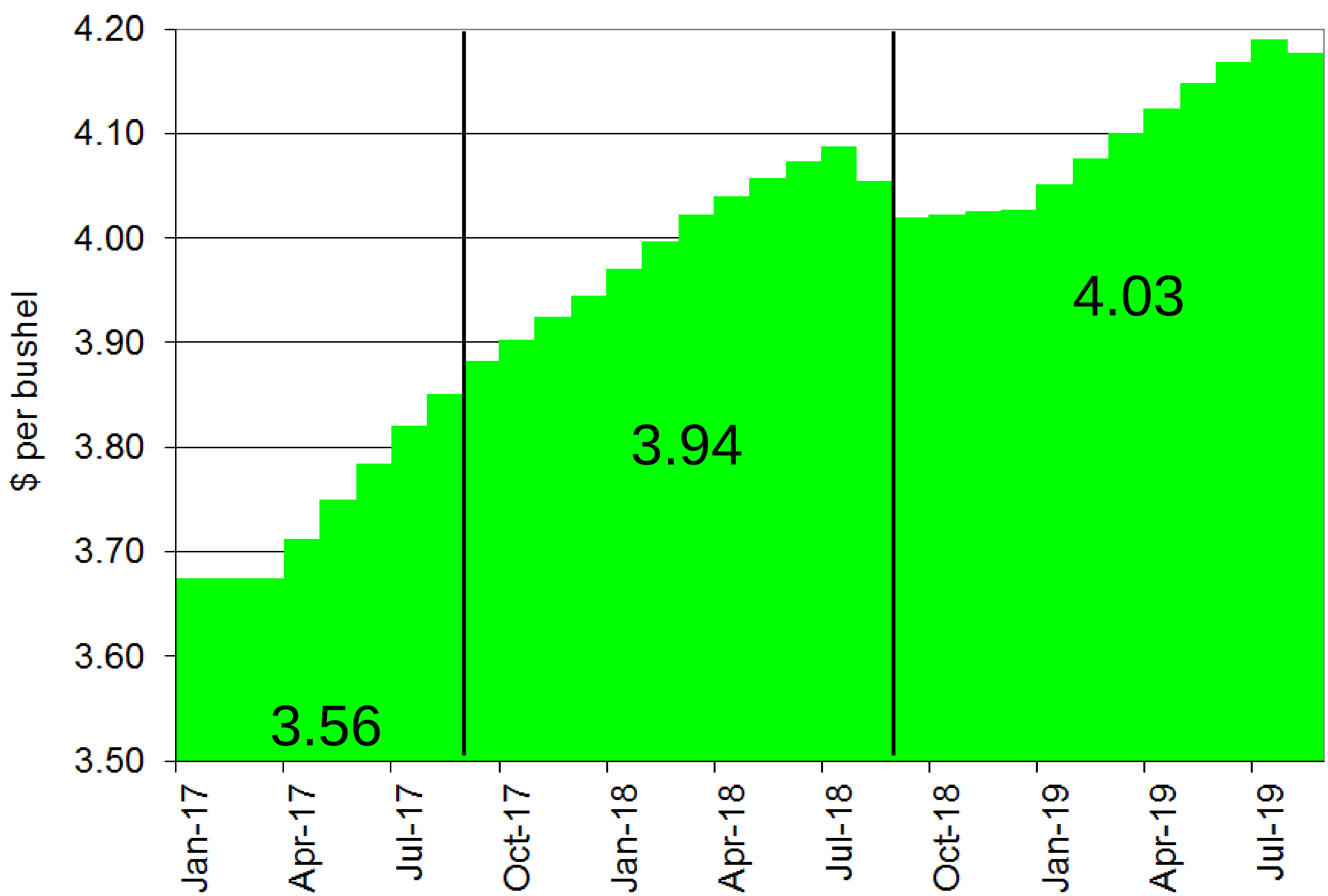
Ethanol production remains on a record pace. Throughout 2016, weekly corn usage for ethanol production exceeded 100 million bushels a vast majority of the year. While there are significant questions about the future of the Renewable Fuels Standard under the Trump administration, the key for the ethanol industry will remain with its ability to compete in the fuel market. Ethanol prices continue to be competitive with gasoline. And US consumers are driving more and have more ethanol options available to them via the introduction of E15 and blender gas pumps. Ethanol exports have strengthened as well over the past year.

Corn export growth has broad support. All of the top 6 corn export markets (Mexico, Japan, South Korea, Colombia, Taiwan, and Peru) have purchased more corn. Export sales are running over 60% ahead of last year. With USDA projecting exports to exceed 2.2 billion bushels, this is the strongest export market we have seen since 2007. Thus far, the political rhetoric on trade policy changes and trade agreement renegotiations has not impacted the flow of corn.

The soybean use picture is much like corn's. The growth in domestic crush demand is linked to the growing livestock industry. The feeding of additional cattle, hogs, chickens, and turkeys means more need for soybean meal. Soybean exports had hit record levels for the last few years, and the pace thus far suggests another record is coming. China's appetite for soybean continues to expand to the delight of the soybean market. Compared to last year, China has already purchased 300 million more bushels of soybeans (that's well over half of Iowa's total soybean production).

No other crops (wheat, cotton, rice, sorghum, etc.) are calling for increased production. Winter wheat plantings declined again this fall, opening up even more land for corn and soybeans. With the lack of alternatives, many producers will stick the crops they've recently grown (and grown well). The record corn and soybean crops of 2016 will likely be followed by substantial acreage planted to both crops this year. In fact, the markets are expected a record amount of area to be devoted to soybeans, with estimates hovering between 87-89 million acres. While corn may lose some acres, the crop will still be planted on over 90 million acres. So another round of great crops could be on the way.

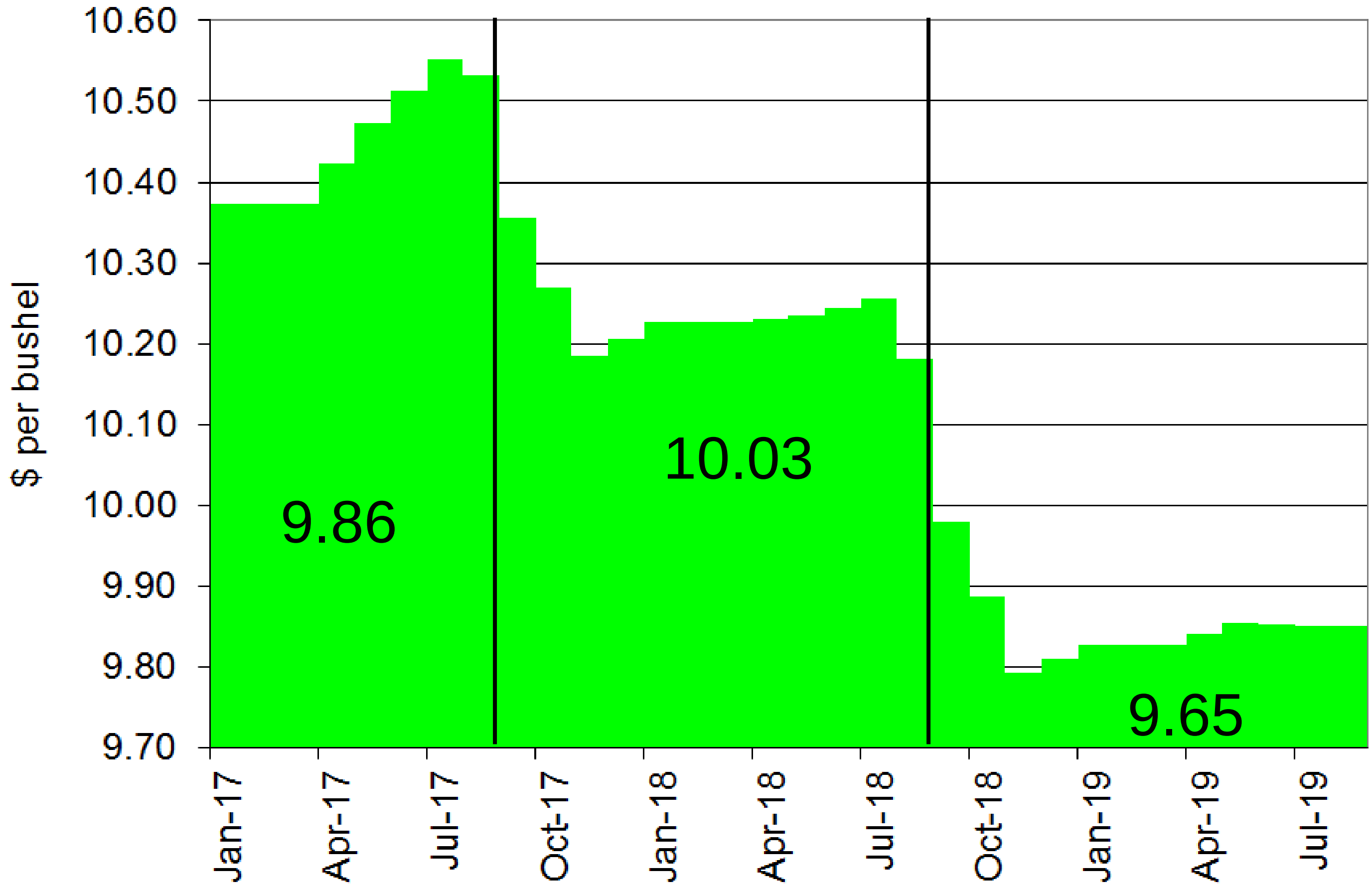
Figure 1. Corn Prices.



Looking at projected crop prices in Iowa for the 2017 and 2018 crops, the profit outlook is looking better than in previous years. Prices have improved and production costs have diminished enough that some profit opportunities exist. Compared to last year, corn futures prices are running 20-25 cents higher. And futures prices for corn are showing price improvement as we move through the next couple of years. Based on those futures prices, average cash prices in Iowa are projected to be in the $3.90 per bushel range for the 2017 corn crop. Looking further out in the future, average cash corn prices for the 2018 crop are projected in the $4 per bushel range.

But soybeans have seen the largest price improvement. Futures prices are roughly $1.50 per bushel higher than this time last year. And while basis has widened significantly, cash prices are still $1.00 per bushel higher. ISU estimated production costs have fallen below $10 per bushel. Meanwhile, current futures suggest a 2017 average soybean prices just above $10. However, the market seems to be preparing for a couple of years of global soybean production expansion, as prices for 2018 are lining up to be lower.

Figure 2. Soybean Prices.



As was true last year (and every year), the key to knowing when you have a good price in front of you is knowing your production costs. It's hard to figure a profit if you don't know your costs. And there are some profitable prices on the board today. We will still need to control costs and conserve working capital, but 2017 is offering some earlier opportunities to lock in positive cash flow. In 2015 and 2016, the markets ran higher in the late spring time based on strong demand and the possibility of slowing production, providing some good marketing windows. This year, it looks like the window opened a lot earlier.

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