December 2017

Iowa Farm Outlook

Department of Economics Ames, Iowa

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Stretch Run for Meat Markets

The holiday season is an important test for meat sales and demand. Retailers and foodservice operators have a bevy of proteins to pick from and feature into the holidays this year. Likewise, consumers have options for their holiday feasts. The Livestock Marketing Information Center reports 2.8% higher beef, pork, chicken, and turkey production in 2017 (figure 1). Beef and pork production have seen the largest year over increase.

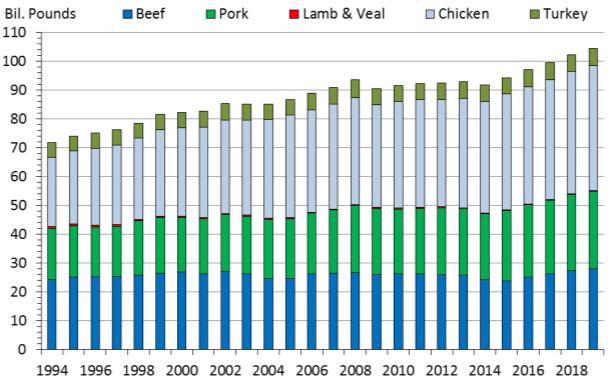


Figure 1. Commercial Meat & Poultry Production by Type of Meat, Annual

Data Source: USDA-NASS, Compiled & Forecasts by LMIC

Consumers are buying more meat at lower prices. The magnitude of the change indicates an increase in both beef and pork demand. The latest available data to calculate demand is from the third quarter of 2017. Per capita all fresh beef consumption increased 2.5% from the previous year while prices only decreased 1.9%. If beef demand would have remained flat, the price decline would have been larger. Pork consumption increased 3.3% while prices increased 1.4%. With consumers eating more pork and paying higher prices for those increased pounds, demand increased considerably.

Demand going into the holidays determines appropriate price levels. And, prices are higher suggesting demand is strong.

Fed cattle and boxed beef markets have rallied nicely the past couple of months. After a strong May and June, fed cattle prices dropped below \$105/cwt in September before the recent rally. Early November fed cattle prices pushed up to \$124/cwt and have now have settled in at \$119/cwt. Choice boxed beef prices have increased from a September low of \$191/cwt to \$207/cwt recently (figure 2). Currently, Choice boxed beef is 9% higher than the same time last year. The latest Select boxed beef weekly average is \$185/cwt, up 7% from one year ago.

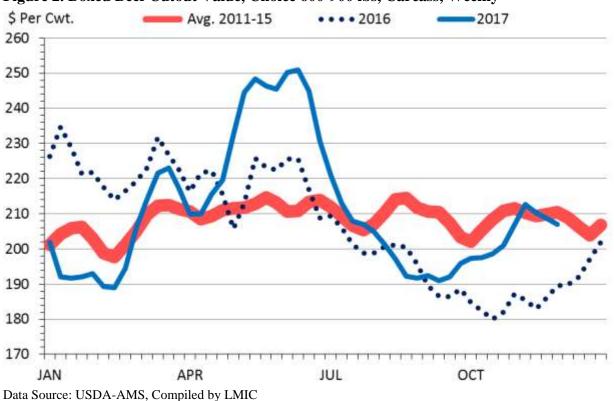


Figure 2. Boxed Beef Cutout Value, Choice 600-900 lbs, Carcass, Weekly

The Choice-Select spread has widened sharply in recent weeks, which is the typical seasonal tendency at this time of year. The latest boxed beef values increased the Choice-Select spread to \$21.45/cwt up from a low in early September of \$1.15/cwt.

What does the increase in both Choice and Select boxed beef values tell us about beef market conditions and, in particular, about beef demand?

Total beef production for the last twelve weeks is 2.7% above the same period last year. For the year to date, beef production is up 4.1%. Thus, higher boxed beef prices reflect increased beef demand. Continued improvement in beef demand will determine how much higher wholesale beef prices may go. If higher prices are realized, derived demand increases will further boost animal values.

Already advances in fed cattle prices have lifted feedlot margins. This is important as feedlots move into higher break-evens ahead due to higher prices paid for feeder cattle the last several months. Live cattle futures prices have pushed higher to levels that support current and near-term feeder prices for cattle finishing through next June as estimated by the Iowa State University yearling to finish crush margin calculation.

The increase in Choice relative to Select prices suggests stronger demand for high quality beef. This is borne out in the changing values of various wholesale cuts. At the current time, Choice wholesale values for Ribeye and Tenderloins are up 39% and 33% since September while Chucks and Rounds are up only 2% and less than 1%, respectively.

Pork demand has also performed quite well in recent weeks. Evidence of this is the performance of the pork cutout, which is at \$83/cwt, 12% or \$9 higher than one year ago (figure 3). And while the higher price of pork bellies has certainly contributed to the increase in the cutout, the gains have been broad based. The value of the pork butt primal is 14% higher than last year. The picnic primal is up 13% and the rib primal is up 17%. Much of the gains from other parts of the carcass have been offset by lower prices for hams. The ham primal is 18% lower than last year. The belly value has made much of the difference versus last year. The belly primal value is up 47%.



Figure 3. Contribution of Each Primal to Change in Value of the Pork Cutout

Data Source: USDA-AMS.

Given the increase in pork production recently, these higher prices are encouraging from a product clearance standpoint. Packers have not had to lower prices to increase buying. Pork production over the last twelve weeks has averaged 3.1% above last year.

The increase in supply has provided opportunities to feature meat prominently. Data from USDA's National Retail Report for the week ending December 7th indicates 71.7% of sampled stores featured beef in their weekly circular and 89.3% featured pork. No-price promotions (e.g., buy 1 get 1 free, etc.) have been popular as well.

The international market has also been key to keeping demand strong and boosting prices. Beef exports have increased year over year every month in 2017. September beef exports were up 14% over last year supporting the year to date increase of 14%. Pork exports have increased year over year every month in 2017, except July. Pork exports in 2017 are up 8% year to date.

Strong demand is key to allowing all sectors of the industry to have positive margins simultaneously and will be key as meat production continues to grow in 2018. All participants within their respective industry have a role, and vested interest, in further building and enhancing demand.

Lee Schulz

An Early Look at 2018

U.S. crop agriculture continues on an amazing productivity run. The last 5 corn crops are the 5 largest ever produced. The last 4 soybean crops are the 4 largest ever. This run is the result of a combination of improved seed genetics and mostly favorable weather conditions. And the question going forward for the crop markets is "Will this streak continue next year?" USDA has provided its first outlook for the 2018/19 crop year and the answer seems to be "Yes."

Of course, at this point, we do not know what weather patterns will appear or how crop usage might adjust over the next 18 months. So the USDA outlook is based on current trends in production and usage. But those current trends suggest the run of large crops is not over yet and price recovery may be still a ways off. Crop acreage continues to concentrate in corn and soybean production, as other crops still are not offering significant enough returns to pull farmland back to those other crops. As has been the case for the last few years, projected corn and soybean returns are not very attractive, but they are better than those offered by other crops.

The early estimate for corn acreage shows a slight increase in 2018, moving up to 91 million acres. With the national trendline yield set at 173.5 bushels per acre, that translates to corn production remaining above 14.5 billion bushels. In fact, the projected 2018 corn crop would be the 3rd largest ever, only behind the 2016 and 2017 crops. And as corn stocks have built over the past couple of years, total corn supply would exceed 17 billion bushels for the 1st time ever.

		2014	2015	2016	2017	2018
Area Planted	(mil. acres)	90.6	88.0	94.0	90.4	91.0
Yield	(bu./acre)	171.0	168.4	174.6	175.4	173.5
Production	(mil. bu.)	14,216	13,602	15,148	14,578	14,520
Beg. Stocks	(mil. bu.)	1,232	1,731	1,737	2,295	2,487
Imports	(mil. bu.)	32	67	57	50	50
Total Supply	(mil. bu.)	15,479	15,401	16,942	16,922	17,057
Feed & Residual	(mil. bu.)	5,280	5,120	5,463	5,575	5,550
Ethanol	(mil. bu.)	5,200	5,224	5,439	5,475	5,525
Food, Seed, & Other	(mil. bu.)	1,401	1,422	1,452	1,460	1,475
Exports	(mil. bu.)	1,867	1,898	2,293	1,925	1,900
Total Use	(mil. bu.)	13,748	13,664	14,647	14,435	14,450
Ending Stocks	(mil. bu.)	1,731	1,737	2,295	2,487	2,607
Season-Average Price	(\$/bu.)	3.70	3.61	3.36	3.20	3.30

Table 1. Corn supply and use (Source: USDA).

Corn usage is projected to remain strong as well, but it is still just below expected production. Feed and residual use is expected to decline slightly, which is probably more about residual usage than feed demand as livestock production is on the increase. Corn usage for ethanol is set to reach another record next year. Domestic use of E-15 is rising and ethanol exports have been robust. Food, seed, and other uses continue to rise. The weakest demand sector is export. With global supplies of not only corn, but also other feed grains, at extremely high levels, U.S. corn is facing a lot of competition in the international marketplace. USDA projects a slight decline in exports for 2018. But I would argue that exports are also the area of demand that could surprise in 2018, if the livestock sector is growing as quickly internationally as it is domestically. With total usage projected at nearly 14.5 billion bushels, corn demand is doing what it can to lift prices. But ending stocks

are expected to rise slightly, reaching 2.6 billion bushels, and corn prices are projected to stay lower. The initial estimate for the 2018/19 season-average prices is \$3.30 per bushel.

The projections for soybeans show that this year's run to beans was no one-year phenomena. USDA projects 91 million acres will be planted to soybeans in 2018, essentially tying with corn for the most acreage. The 2018 trend yield is 48.4 bushels per acre, which would result in 4.36 billion bushels of soybeans. That would be the 2^{nd} largest crop, behind this year. Paralleling corn, with the increase production of the last few years, ending stocks have grown and that will push total soybean supplies to 4.8 billion bushels, the highest total ever.

Table 2. Soybean supply and use (Source: OSDA).						
		2014	2015	2016	2017	2018
a Planted	(mil. acres)	83.3	82.7	83.4	90.2	91.0
d	(bu./acre)	47.5	48.0	52.0	49.5	48.4
duction	(mil. bu.)	3,927	3,926	4,296	4,425	4,360
. Stocks	(mil. bu.)	92	191	197	301	425
orts	(mil. bu.)	33	24	22	25	25
I Supply	(mil. bu.)	4,052	4,140	4,515	4,752	4,810
sh	(mil. bu.)	1,873	1,886	1,899	1,940	1,970
d & Residual	(mil. bu.)	146	122	141	136	140
orts	(mil. bu.)	1,842	1,936	2,174	2,250	2,325
ll Use	(mil. bu.)	3,862	3,944	4,214	4,326	4,435
ing Stocks	(mil. bu.)	191	197	301	425	376
son-Average Price	(\$/bu.)	10.10	8.95	9.47	9.30	9.40
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Table 2.	Sovbean	supply	and use	(Source:	USDA).
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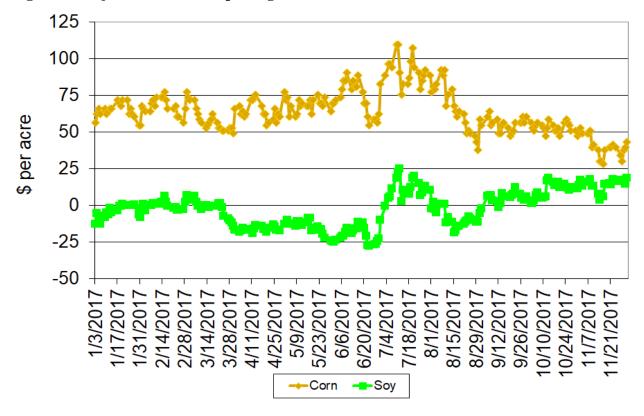
Soybean use has been trending higher the last several years, with records being set each succeeding year. The estimates for 2018 continue that run. Domestic crush is set 1.97 billion bushels, up 30 million from this year. This is being driven by soybean meal demand by livestock and soybean oil use in the biodiesel industry. The increase in acreage implies additional seed use, so seed and residual usage is raised slightly. But the big story remains exports. It's another year, another record as USDA estimates 2.325 billion bushels will leave the country. China remains the major destination.

And unlike the past couple of years, projected use is a bit higher than production. So 2018/19 ending stocks are expected to be nearly 50 million bushels lower. But the reduction is not seen as having a significant influence on prices as the 2018/19 season-average price is roughly in line with current prices.

Current futures prices for the 2018 crops are offering a somewhat better outlook. Current corn futures would normally translate to a 2018/19 season-average price around \$3.80 per bushel. Current soybean futures point to season-average prices in just under \$10 per bushel. Figure 1 shows projected 2018/19 crop margins, based on trend yields, average basis levels, and production costs staying at 2017 levels. Right now, futures have both crops projected in positive territory.

But those projections are likely misleading as the cash markets will maintain wider than normal basis levels. The larger stock levels are hampering basis improvement, which will not occur until some of the supplies are cleared from the market. Given current basis levels, projections for the 2018/19 crop margins would be slightly below breakeven for both crops. And that would continue another streak that is not as pleasant as the record production run. It is often said that the cure for low prices is low prices. But that cure has not taken affect yet and the USDA projections indicate that will at least be another year before it kicks in.

Figure 1. Projected 2018/19 crop margins.



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