

Iowa Farm Outlook

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Strong Prices with Large Slaughter Suggest Firm Meat Demand

USDA gathers and reports a plethora of slaughter data that can provide insight into immediate and longer-term cattle and hog market trends.

The data indicate cattle and hog industries in general, and finishers in particular, are doing a good job managing growing supplies. If producers keep marketings current, they can do much to minimize pressure on prices from larger slaughter numbers ahead. With rising production, the key for price trends will be domestic and export demand. Let's hope it stays strong.

Every afternoon, USDA estimates that day's federally inspected slaughter along with the week to date total (Agricultural Marketing Service Market News Code SJ_LS710). Revisions often occur. Still, market participants closely watch daily and weekly slaughter for an indication if packers are caught short and need to chase supplies.

On Thursday, almost two weeks later, USDA releases actual slaughter data on a weekly basis, along with a breakdown by type of animal, average live weight and dressed weight (Market News Code SJ_LS711). The report covers steers, heifers, cows and bulls and barrows/gilts, sows and boars/stags for hogs.

The weekly actual slaughter data are the most helpful for identifying seasonal turning points in weights and slaughter and inventory dynamics, i.e., signals of expansion and contraction. View these supply numbers in the broader context of supply flows, rather than as individual data points. Number of slaughter days in a week or month varies, so look past the daily or weekly change to understand true supply availability.

FI cattle slaughter for the week ending May 20th was 612,258 head, 4% higher than one year ago. The majority of the rise came from higher heifer and cow slaughter. Heifer slaughter was up 10% (up 13,685 head) year over year. Cow slaughter was up 7% (up 7,061 head) from last year. Most of the rise was beef cow slaughter (referred to as other cows in the report). Beef cow slaughter was up 11% (up 5,521 head), while dairy cow slaughter was up 3% (up 1,540 head). Bull slaughter is up 18% (up 1,764 head), but accounts for only about 2% of total FI cattle slaughter.

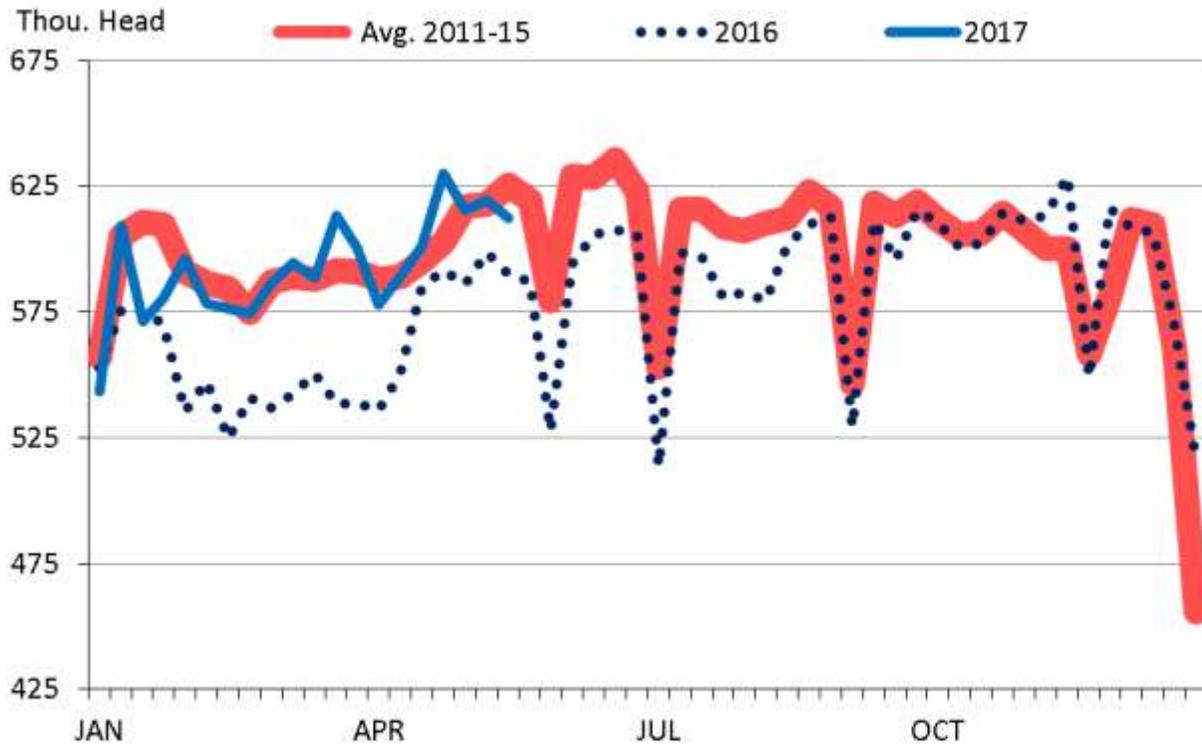
Through May 20th, cattle slaughter is up 6% (up 690,966 head) compared to a year ago (figure 1). Steer slaughter has not pulled back and is up 5% (up 279,941 head). Beef packer margins remain good. As long as margins stay strong, packers have incentives to maximize slaughter.

Some of the best prices in years give cattle feeders incentives to maintain marketings. Plus large discounts in deferred live cattle futures for much of the year and historically strong fed cattle basis levels provide little incentive to hold slaughter ready animals in hopes of higher prices. Pulling cattle ahead now will moderate a seasonally large summer slaughter.

Heifer slaughter is up 10% (up 276,510 head) and beef cow slaughter up 9% (or up 86,746 head) in 2017. View the notable rise in females coming to market in the context of the overall rise in the beef herd. Female slaughter is up for several reasons. First heifer and beef cow slaughter is being compared to 2016 when heifers and beef cows made up the smallest proportion of total cattle slaughter in decades due to rapid herd expansion. Lower cow-calf margins are likely starting to push aging cows out of production and tempering heifer retention. Spring

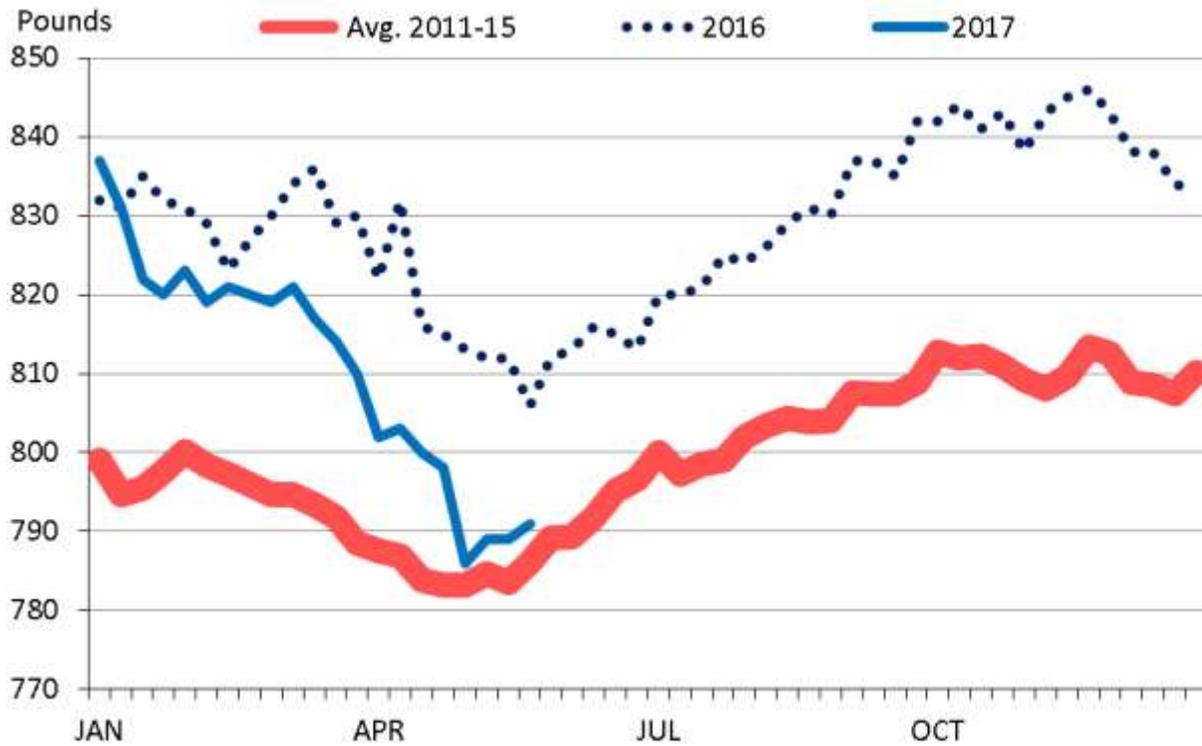
2017 cattle finishing margins were some of the highest since 2003, prompting producers to place more heifers on feed.

Figure 1. Cattle Slaughter, Federally Inspected, Weekly



Data Source: USDA-AMS & USDA-NASS. Livestock Marketing Information Center

Figure 2. Cattle Dressed Weight, Federally Inspected, Weekly



Data Source: USDA-AMS & USDA-NASS. Livestock Marketing Information Center

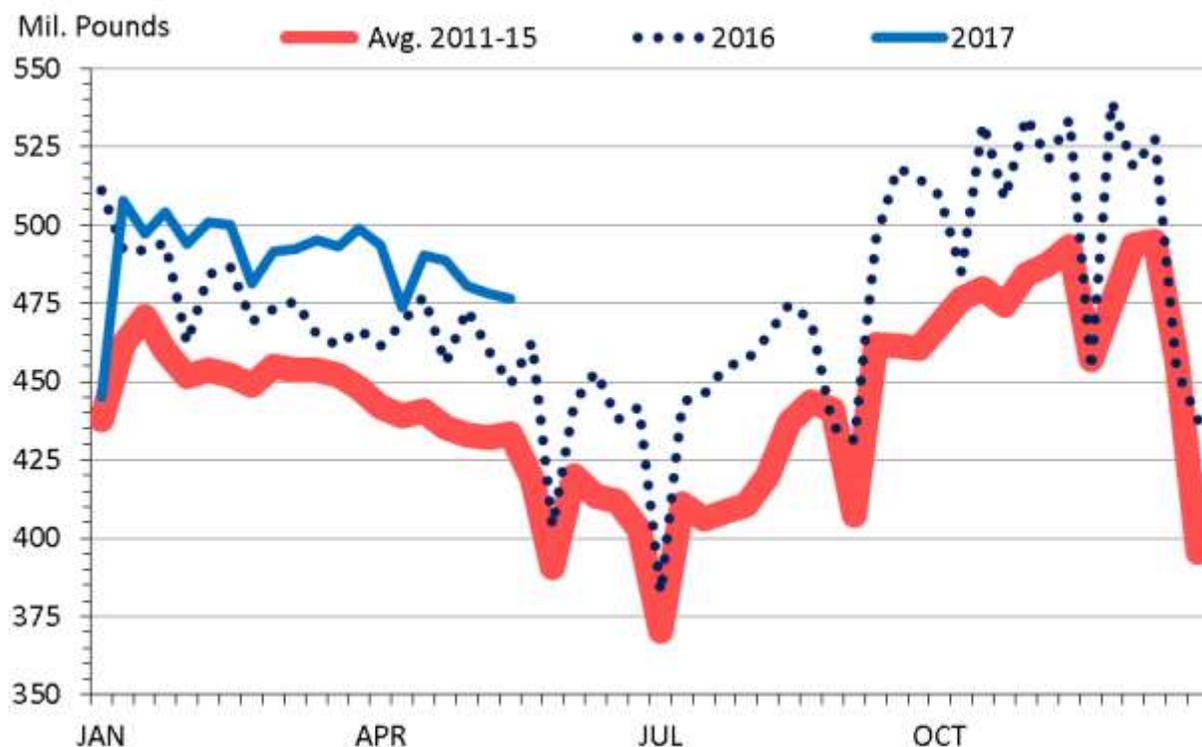
On the weights side, average steer dressed weight for the week ending May 20th was 836 pounds, 26 pounds below year ago. Heifer average dressed weight was 770 pounds, also 26 pounds below year ago. Since the beginning of the year, average dressed weights plummeted 69 and 66 pounds for steers and heifers,

respectively. This has been the largest 20-week decline in steer and heifer dressed weights in more than 30 years. Cattle dressed weights (including steers, heifers, cows, and bulls) have averaged 14 pounds lighter than last year and are currently 23 pounds below this same time last year.

The implication of the lower weights is both direct and indirect. Lower weights will reduce beef production. While cattle slaughter for the week ending May 20th was 4% higher than the previous year, beef production for the week rose by less than 1% from the previous year. And with robust exports and less imports coming in, the amount of beef available to the domestic user likely was less than a year ago. The indirect implication of the cattle weights has to do with the supply conditions in the feedlot. The sharp decline in weights indicates that feedlots are much more current than a year ago and also more current than normal. Currentness gives feedlot operators courage to attempt to leverage packers higher on prices.

As with cattle packer margins, hog margins remain quite strong, giving packers incentives to slaughter hogs as heavy as possible to capitalize on robust demand. Hog supplies are also plentiful. Hog slaughter for the week ending May 20th was 2.264 million head, up 7% (up 149,396 head) from a year ago. Barrow and gilt slaughter was up 7% (up 142,575 head). Barrows and gilts made up 97% of the total hog slaughter. Sow slaughter was up 10% (up 5,169 head). Sow slaughter has risen in the last six months, but a larger breeding herd also makes more cull sows available. The current sow slaughter pace does not suggest contraction in my view. Projected farrow to finish margins are still profitable for 2017 and 2018.

Figure 3. Pork Production, Federally Inspected, Weekly



Data Source: USDA-AMS & USDA-NASS. Livestock Marketing Information Center

Hog carcass weights have been trending lower and are now under last year's levels. USDA reports hog carcass weights with a two week lag, like cattle, but the data from Mandatory Price Reporting is consistent and much more timely, so I tend to look at that report (Market News Code LM_HG201) to assess the pork complex situation. The latest data for all barrows and gilts show an average dressed weight of 211.3 pounds, lower than 213.4 pounds a year ago.

Slaughter weights of packer owned hogs are falling faster than producer owned hogs. Average weight of packer owned hogs is down 1.9% (down 4.1 pounds) from last year, whereas producer owned hogs are down 0.3% (down 0.7 pounds). Why? The best guess is good margins lure packers to draw on their own supply first, rather

than raising bids to secure hogs from producers. Weights of packer owned hogs impact pork supply since packer owned hogs make up roughly 30% of all hogs slaughtered.

Lower carcass weights moderate the impact of higher slaughter numbers. For the week ending May 20th, pork production was up 6% from a year ago compared to a 7% rise in slaughter.

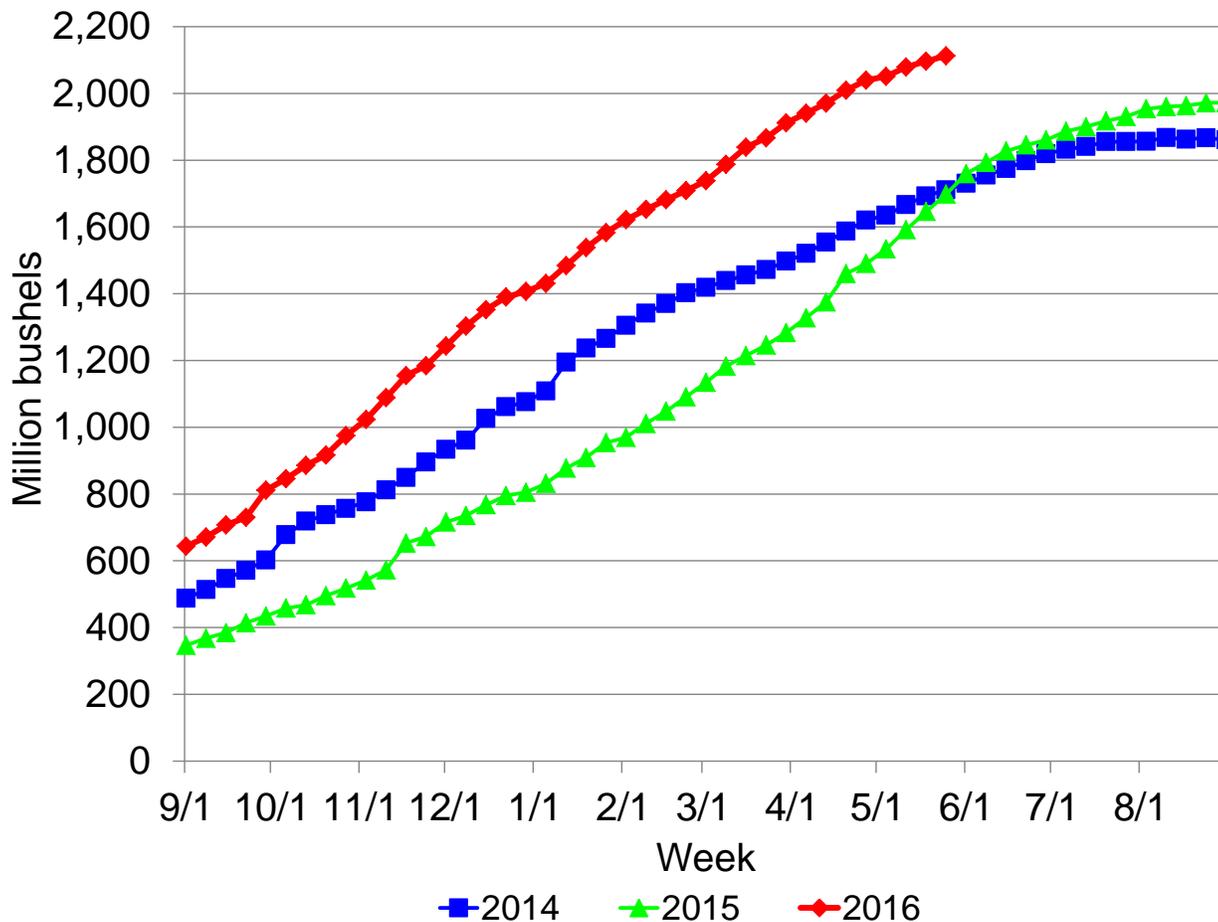
Lee Schulz

The Challenge of a Global Market

For a few years in a row, U.S. agricultural markets have dealt with dueling records. Demand for crops and livestock has been strong, but agricultural supplies have been even stronger. The results of these ongoing records have been a drop in agricultural prices and incomes that continues on today. It has been said many times that the cure for low prices is low prices. While I believe the fundamentals behind that statement are true (lower prices encourage producers to shift to other higher valued crops, leading to reduced production and higher prices in the future), the timing and the dynamics have changed. The surge in agricultural prices over the past 10 years created not only a drive for U.S. producers to increase production, but also a drive for agricultural producers around the globe to do so. So global production is on the rise. But simultaneously, a substantial portion of the demand strength has come from the export markets. Global agricultural markets are providing more opportunities for increased sales and prices. But at the same time, U.S. producers are facing increased competition to capture those sales and realize the potential for higher prices.

U.S. export sales for many agricultural commodities have been on an exceptional pace for 2016 and 2017. Meat exports have grown dramatically over the past couple of years and projections are for that to continue in

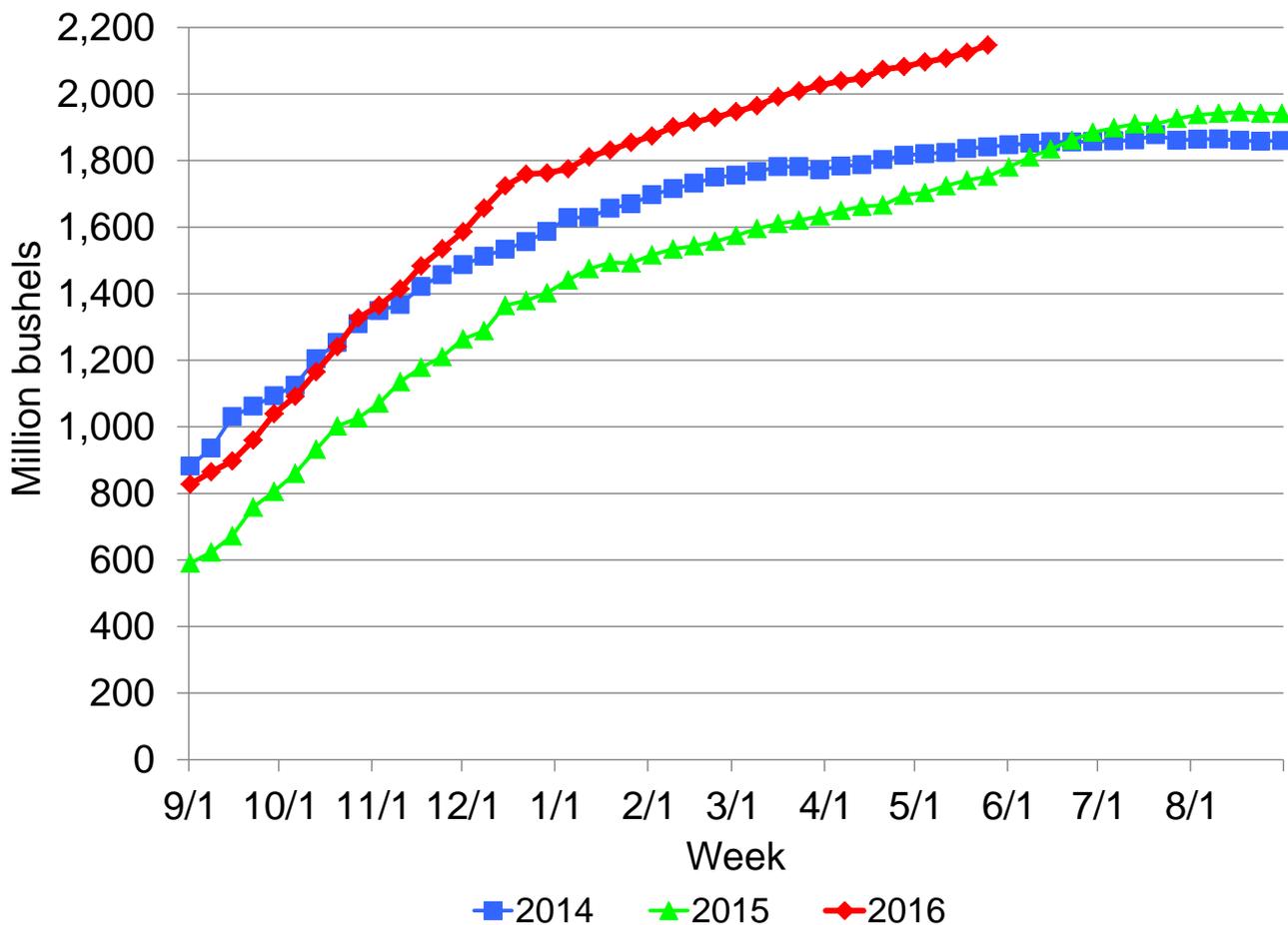
Figure 1. U.S. corn export sales (Source: USDA-FAS).



2018. The increase in global meat consumption has also provided a spark for crop exports as other countries look to expand livestock production. You have to feed the livestock to produce the meat. The corn market has definitely felt that pull this marketing year. Corn export sales began the year roughly 300 million bushels ahead of last year. That gap quickly expanded to nearly 700 million bushels during the winter. And while the sales boost has declined somewhat over the past few weeks, U.S. corn exports will end the marketing year with the 2nd most sales in history.

Soybean exports have been on a phenomenal multiyear run, setting a record in each of the last 4 years. And USDA projections for the 2017 soybean crop continue that trend. Roughly half of the U.S. soybean crop is exported to other countries. While we have solid domestic demand bases for corn and soybeans (livestock feed, biofuels, and other crushing/processing facilities), international demand is a major key to supply-demand balance and crop prices.

Figure 2. U.S. soybean export sales (Source: USDA-FAS).



Taking a somewhat longer-term view of historical global agriculture, as shown in Figures 3 and 4, world production and consumption of corn and soybeans tends to balance out fairly closely. From 1960 to the early 2000s, both agricultural production and consumption grew roughly in proportion with population. However, since then, agricultural production and consumption have outpaced the world's population.

On production side, we can point to increases in global crop area, the development of improved crop varieties, and the adoption of those varieties across many countries as explanatory factors. On the consumption side, we can point to expansions of international markets, the ability to move agricultural products quickly and safely around the globe, and the innovations around biorenewable products, from food and feed to fuel and fiber. Two of the larger events driving the consumption growth were the development of the biofuel industry in the U.S. and the expansion of the Chinese soybean market.

Figure 3. World corn production, consumption, and population (Sources: USDA-FAS and Census).

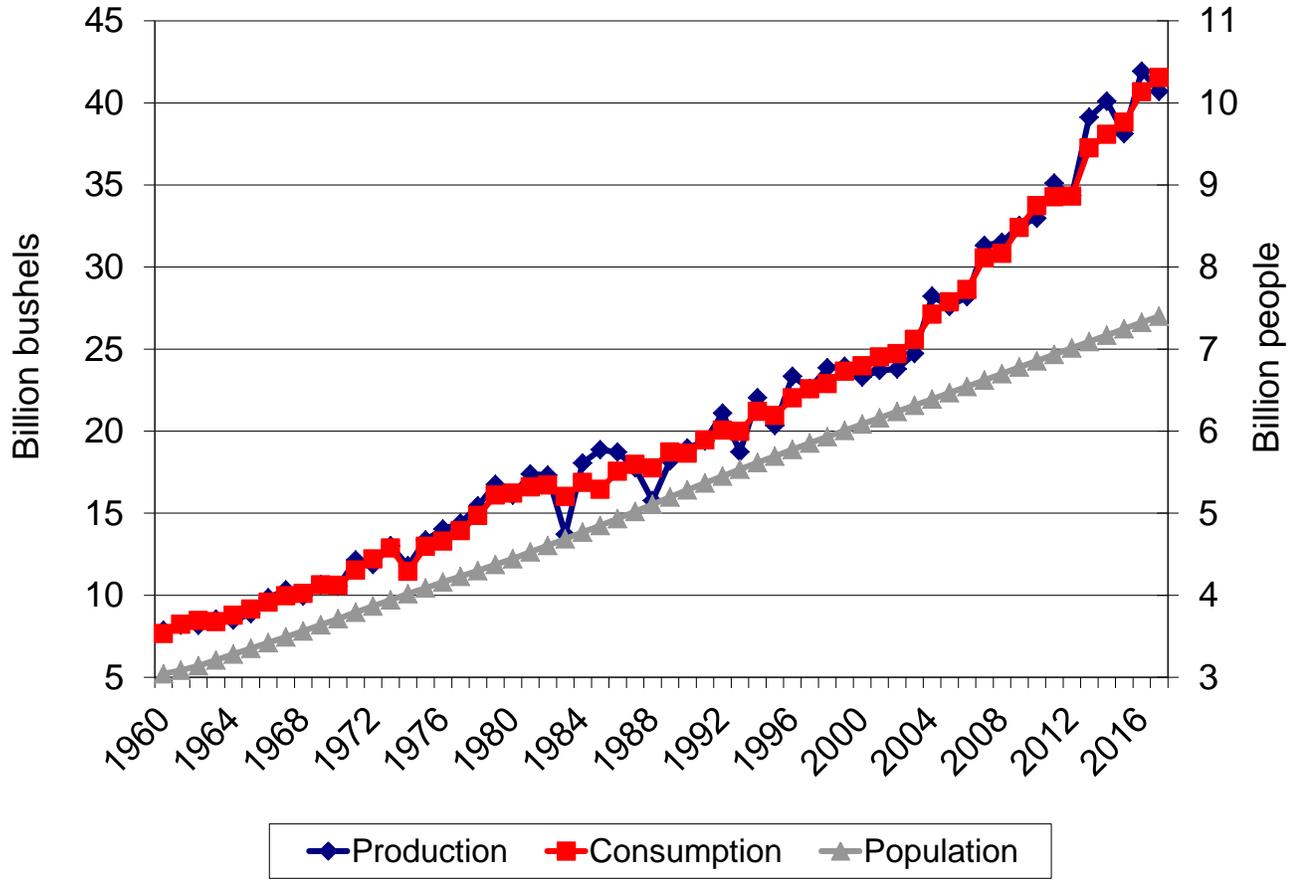
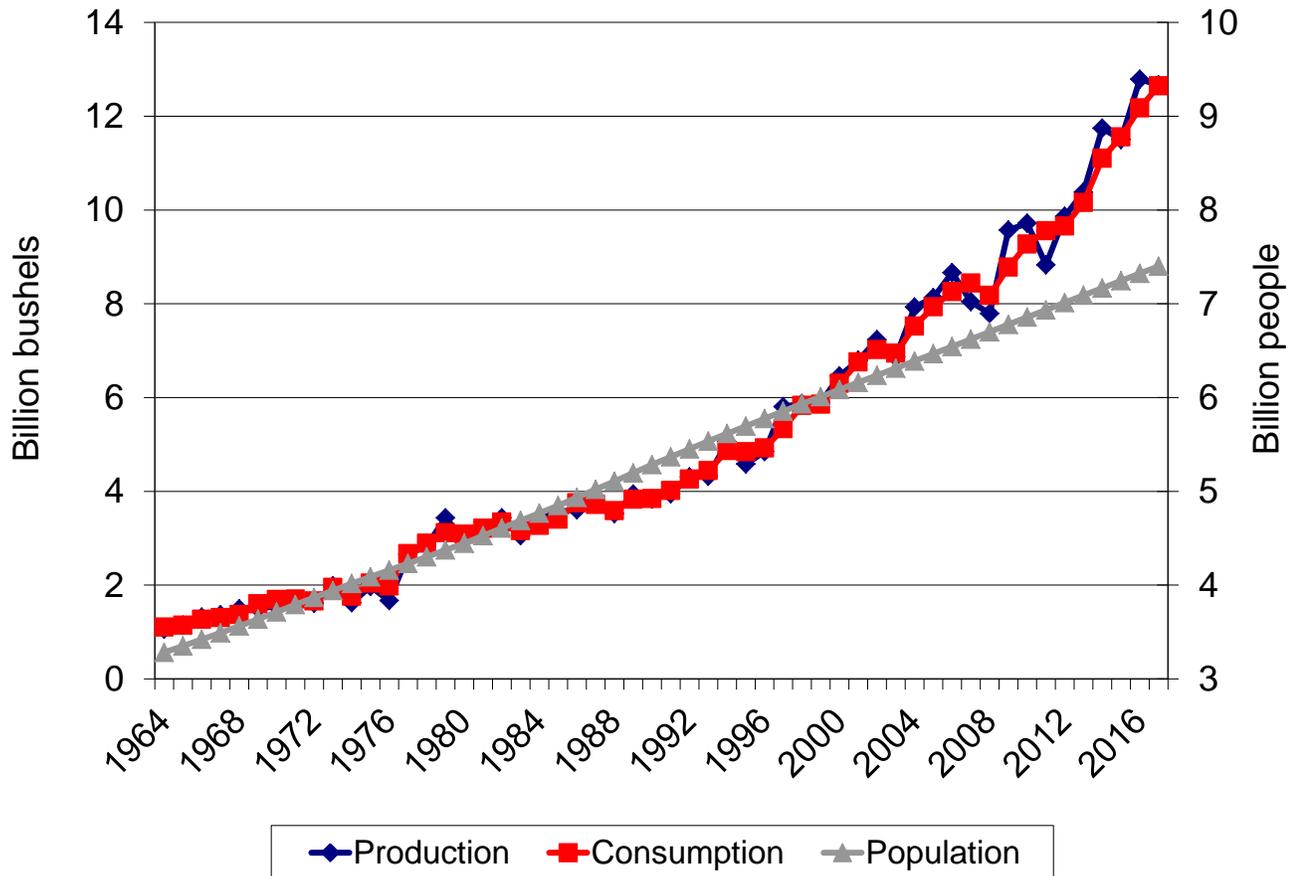


Figure 4. World soybean production, consumption, and population (Source: USDA-FAS and Census).



Over the past 10 years, world corn production and consumption have grown by roughly 35%. At the same time, world soybean production and consumption have grown by approximately 60%. The U.S. represents about one-third of global corn and soybean production. And while U.S. growth closely matches global growth in soybeans, U.S. corn has actually grown at a slower rate than the rest of the world.

In many cases, we are seeing crop expansion in countries that compete with the U.S. in export markets. Tables 1 and 2 detail corn and soybean production in the top 10 producing countries/regions of the world, the percentage of the crop exported in 2016, and the growth in both production and exports over the past ten years. The data shows that while the U.S. has expanded production to fill global demand. Other countries have responded as well, and in several cases, their response exceeds ours.

For corn, the U.S. growth (or in this case, decline) is somewhat misleading. As I mentioned earlier, the 2016 marketing year will be the 2nd strongest export year for U.S. corn. But the strongest year was ten years ago, 2007 (hence, the decline). Out of the corn top 10, Brazil, Argentina, Ukraine, and Russia export a larger percentage of their crop to other countries. And each of those countries has experienced exceptional growth in their corn exports over the past 10 years. While the U.S. is still the dominant corn producer in the world, we face significant competition in the global market from both South America and the Black Sea region.

Table 1. Top 10 corn producing countries/regions (Source: USDA-FAS)

	Production in 2016 (billion bushels)	% growth in production, 2007 to 2016	% of crop exported in 2016	% growth in exports, 2007 to 2016
United States	15.148	16%	15%	-9%
China	8.643	44%	0%	-96%
Brazil	3.779	64%	35%	336%
European Union	2.390	23%	3%	294%
Argentina	1.575	82%	69%	86%
Ukraine	1.102	277%	68%	816%
Mexico	1.063	14%	3%	634%
India	1.024	37%	2%	-87%
Russia	0.603	303%	35%	10716%
South Africa	0.602	16%	13%	-7%
World	41.931	34%		

Table 2. Top 10 soybean producing countries/regions (Source: USDA-FAS)

	Production in 2016 (billion bushels)	% growth in production, 2007 to 2016	% of crop exported in 2016	% growth in exports, 2007 to 2016
United States	4.307	61%	48%	77%
Brazil	4.101	83%	55%	144%
Argentina	2.094	23%	16%	-35%
China	0.474	1%	1%	-67%
India	0.423	21%	2%	1567%
Paraguay	0.378	73%	61%	54%
Canada	0.241	144%	67%	151%
Ukraine	0.157	492%	68%	1426%
Uruguay	0.125	303%	90%	275%
Russia	0.115	419%	11%	6900%
World	12.788	59%		

For soybeans, the U.S., Brazil, and Argentina dominate production. But many countries produce soybeans specifically for the export market. For Paraguay, Canada, Ukraine, and Uruguay, over 60% of their soybean crops are shipped elsewhere. Both tables highlight the production and export expansions for the Black Sea countries.

These shifts in production and export patterns put greater emphasis on non-U.S. crop production in establishing prices. For example, the current strength of U.S. corn and soybean exports historically would have propelled prices higher. But now, that news has been overshadowed by the sheer number of bushels being produced in the rest of the world and the competition those bushels represent for future U.S. exports. So even if lower prices here would induce smaller plantings in the U.S., the result may not be a recovery of prices or, at least, not a quick recovery. The speed now depends on the response of crop producers in the rest of the world as well.

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