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Broiler Economics

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HARVEST AND TRADE TENSIONS KEEP GRAIN PRICES DOWN

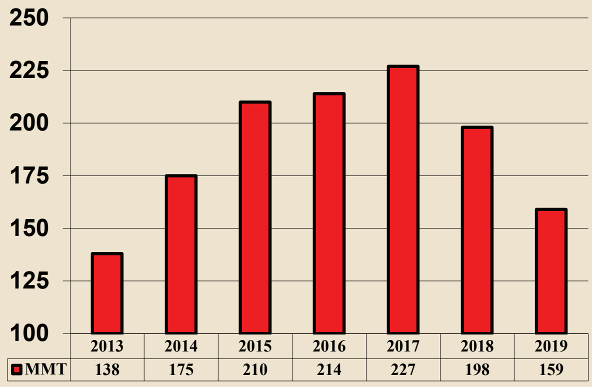
With a huge harvest in the US and no end in sight for the US-China trade war, corn and soybean prices are likely to remain unusually low for those allowed to purchase US grain without a tariff. Higher prices will prevail in China, of course, but with a spillover effect on those countries that supply China with soybeans, most notably, Brazil.

If the 25% tariff remains in place, there will be a shift in the production and trade of soybeans. Production will increase in South America and decrease in the United States. US farmers will shift some production from soybeans to corn. After a period of unusually low soybean prices over the next year, soybean prices are likely to rise worldwide. Corn is not as affected by trade wars (so far).

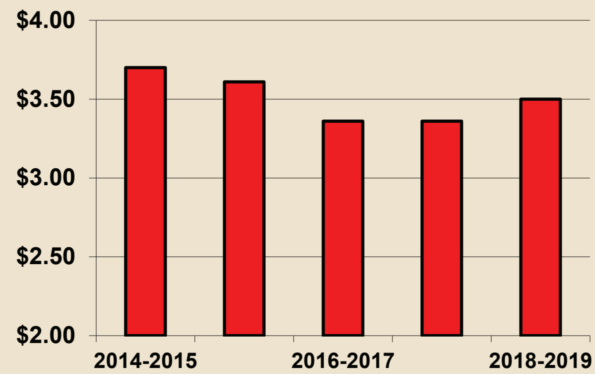
The weather in the US Corn Belt has been close to ideal, putting further pressure on grain prices and providing a windfall to poultry producers. The USDA now characterizes 68% of the corn crop as in 'Good' or 'Excellent' condition compared to 64% last year. Drought no longer can play a role this year.

Despite the current beneficial grain price climate for grain users, low prices will not last. Trade wars reduce efficiency and end up increasing prices in the long run not only for those behind a tariff wall but for all grain users. In addition, grain prices appear to be at the bottom of a long-term cycle. The next move is therefore more likely to be an upward one. Corn may move up in the coming crop year even as soybean continues to fall. However, by 2019-2020, it can be expected that both corn and soybean prices will be rising at the beginning of a long-term cycle upward in grain and commodity prices.

World Ending Stock of Corn - MMT



Average Farm Price of Corn
$/Bushel to 2018-2019 Projected



Corn

The October USDA World Agricultural Supply and Demand Estimates (WASDE) report projects a lower US and world ending corn stock in 2019. Falling world stocks normally signal the end of a period of low prices. Although the corn market may very well now be in a new long-term bull market, the price will not go up in a straight line. In the last two months, corn prices dropped in response to the trade wars and good weather in the US Corn Belt. With soybeans under pressure and increased corn production in the US next year, corn prices may increase very little this crop year despite the clear bullish signal from falling inventory.

US Corn Supply and Demand – October USDA Billions of Bushels

	2016-2017	2017-2018	2018-2019
Harvest	15.148	14.604	14,778
Supply Total	16.942	16.934	16,968
Ethanol	5.470	5.601	5,650
Exports	2.294	2.438	2,475
Feed	5.470	5.302	5,550
Total Use	14.649	14.793	15,155
Ending Inventory	2.293	2.140	1,813
Farm Price	$3.36	$3.36	$3.50

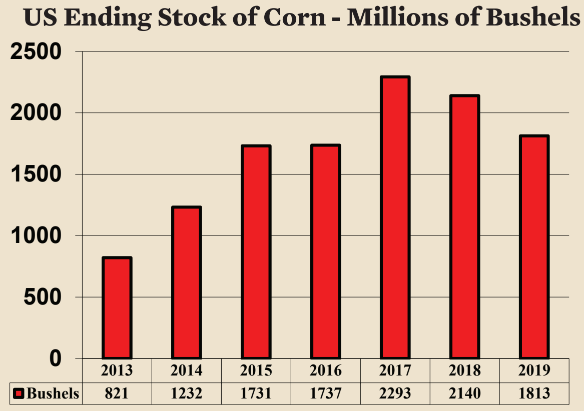
Soybeans

In marked contrast to corn, the October USDA WASDE report shows that both US and world soybean stocks are rising. Soybean meal prices rose substantially earlier this year due to the drought in Argentina and then plummeted because of the trade war between China and the US combined with clearly abundant supplies in North America. With increased demand from China for South American soybeans next year, expectations are that production will increase rapidly in that part of the world. Even with a projected reduction in total acres, US production is expected to increase due to rapidly rising yield. For the moment, the direction arrow is down for soybean meal prices with no clear indication of when prices will rebound. Eventually soybeans, like corn, will enter into a new long-term cycle of rising prices. However, with ending inventory rising the bottom of the cycle may be delayed.

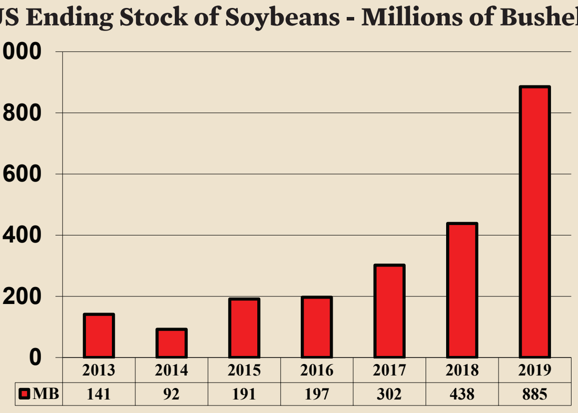
US Soybeans – USDA - October – Billions of Bushels

	2016-2017	2017-2018	2018-2019
Harvest	4.296	4.411	4,690
Export	2.166	2.129	2,060
Total Use	4.214	4.296	4,268
Ending Inventory	302	438	885
Meal Price short ton	$317	$345	$310

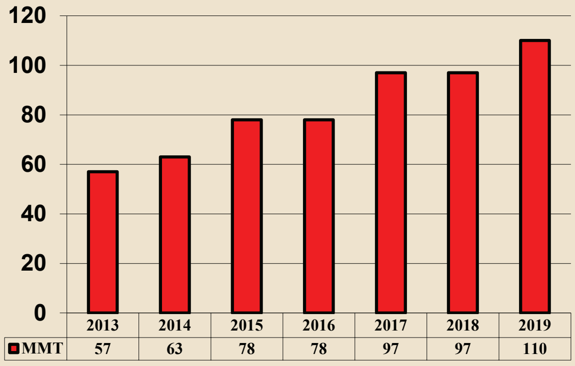
US Ending Stock of Corn - Millions of Bushels



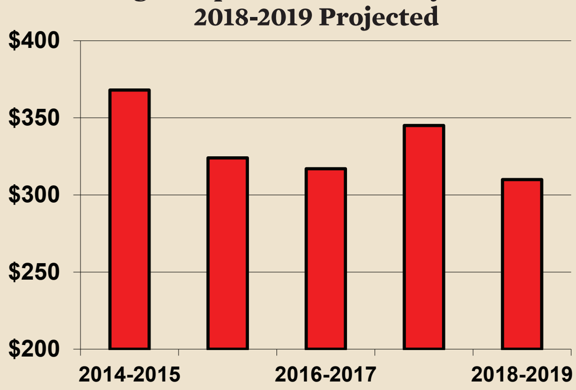
US Ending Stock of Soybeans - Millions of Bushels



World Ending Stock of Soybeans - MMT



Average Crop Year Price of Soybean Meal
2018-2019 Projected



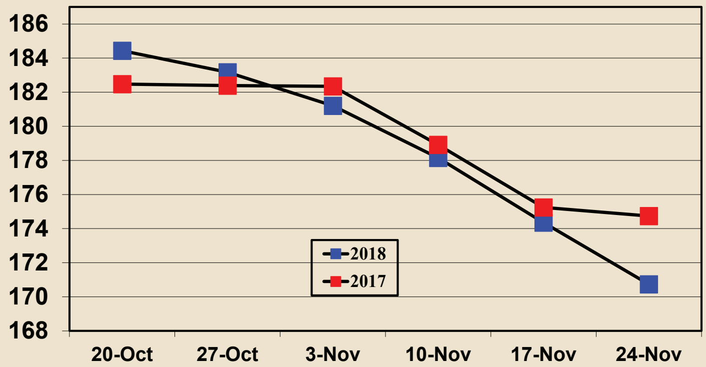
US Chicken Industry

The USDA expects US production of chicken meat to increase 2.2% this year. In contrast, red meat production is expected to rise 3.1% this year after increasing 3.3% in 2017. This rapid increase in red meat production put pressure on chicken prices. In addition, tariffs due to trade wars create a difficult environment for meat prices in general.

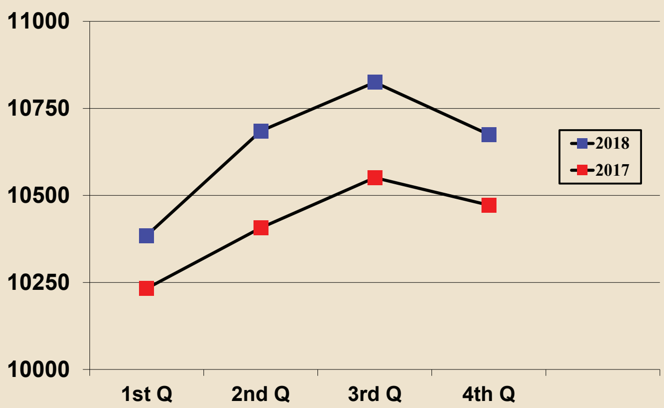
The graph below shows weekly chick placement in millions moved forward 7 weeks to estimate chickens processed. This is the time of the year when processing numbers normally decline but the decline may be greater than earlier expected in response to low chicken prices. As of November, processing numbers are likely to be below that of last year.

The chicken industry has announced plans to open six new plants in a short period of time. Given the current weakness in the chicken market, this flurry of construction may have a negative impact on prices if all of the construction does indeed take place.

Weekly Chick Placement - Millions
7 Weeks Forward - 2018 versus 2017



US Quarterly Broiler Production
Millions Pounds - USDA

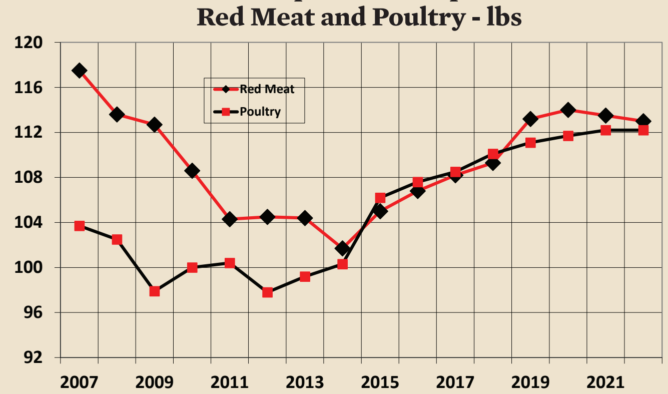


This year, falling grain prices are helping the poultry industry but not enough to counteract the effects of increased competition from red meat. Total per capita red meat consumption has recently been rising faster than poultry consumption. This is logical given three factors; 1) low grain prices help poor feed converting animals; 2) rising median income and 3) the time lag for increased red meat production. When these factors change, poultry consumption will, if history is a guide, once again outperform red meat consumption. "Outperform" may mean staying the same while red meat consumption falls.

The US meat industry as a whole may be reaching market saturation. Consumption reached 220 pounds in 2006 and is now approaching 220 again. It may again prove difficult to surpass 220 pounds (100 kilos).

There was good news in the last month with regards to trade with Mexico. With the preliminary agreement on a new trade deal in North America, US chicken leg quarter exports to that country appear safe for the moment. Mexico is the number one destination for US chicken exports buying more than one billion pounds of leg quarters per year.

US Per Capita Consumption of
Red Meat and Poultry - lbs



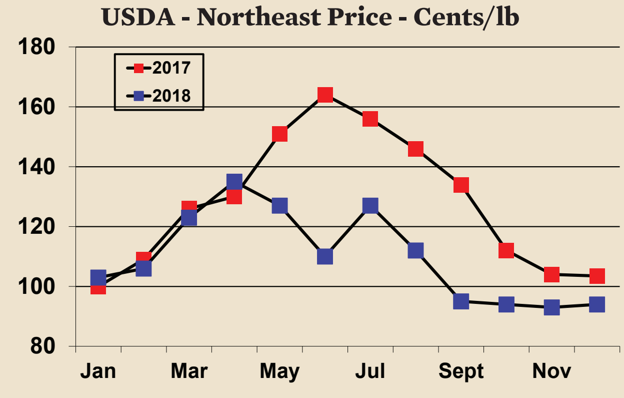
Per Capita Consumption in Pounds - US

	Pork	Beef	Chicken	Turkey	Total
2006	49	66	87	18	220
2007	51	65	85	18	219
2008	49	63	83	18	213
2009	50	61	80	17	208
2010	48	60	82	16	206
2011	46	57	83	16	205
2012	46	57	80	16	202
2013	47	56	82	16	201
2014	46	54	83	16	202
2015	50	54	89	16	211
2016	50	56	90	17	215
2017	50	57	91	16	217
2018	52	58	93	16	219
2019	**53**	**59**	**93**	**16**	**224**

Deboned Breast

The seasonal peak for boneless/skinless (B/S) breast meat came early and was disappointing this year. Now B/S breast has fallen below $1 per pound. The issue appears to be too much B/S breast and red meat combined with a lack of food service demand. The price has dropped so much recently that it has reached the world price level. For decades US B/S breast was much higher than world prices, sometimes double world prices; now it is the same. Such a price for B/S breast meat combined with unusually low prices for leg quarters is unsustainable in the long run.

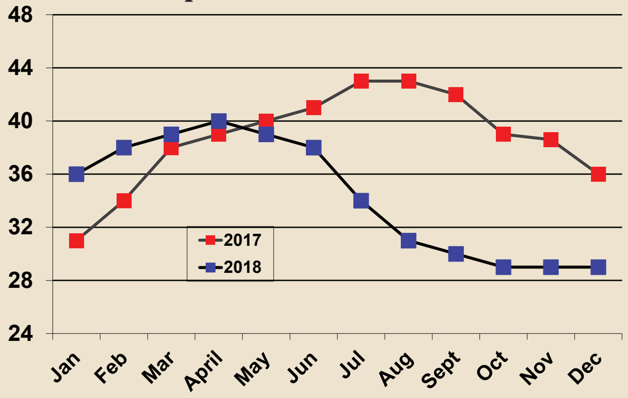
Deboned Breast - 2017-2018
USDA - Northeast Price - Cents/lb



Leg Quarters

Leg quarter prices have also been falling recently and are now below 30 cents USDA Northeast Price (There is a range in prices for leg quarters with many leg quarters sold at a price lower than the published Northeast price). Part of the reason for the fall in leg quarter prices is the strong dollar. All things being equal, the stronger dollar reduces the demand for US leg quarters.

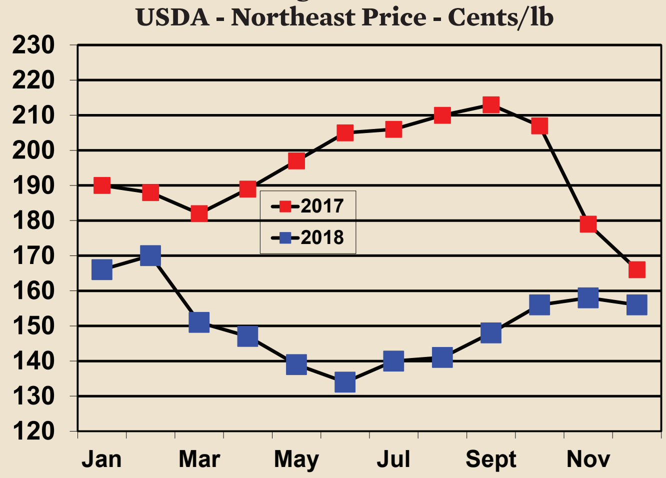
Leg Quarter Price - 2017-2018
Cents per Pound - USDA Northeast



Wings

The only bright spot for chicken producers is the price of wings. They rose counter seasonally in 2017 only to fall with the inevitable substitution of “boneless wings” (deboned breast meat) for bone-in wings. As that trend gathered speed, wing prices fell back down to earth. This year prices remained well below the highest levels of last year. However, wing prices are returning to normal patterns; the price is increasing this fall.

Whole Wing Prices - 2017-2018
USDA - Northeast Price - Cents/lb



The production of chicken in the US was highly profitable last year, but profitability fell in 2018 as competing meats and weak food service demand reduced prices despite help from lower grain prices. At the moment, production is unprofitable and is likely to remain unprofitable for the rest of the year.

October 2018

Leg Quarters	$ 0.29 per pound
Deboned Breast	$ 0.94 per pound
Wings	$ 1.56
Chicago Corn	$ 3.68 per bushel
Soybean Meal	$ 313/Ton
Total Cost of Eviscerated Chicken	$ 0.67
Revenue	$ 0.62
Gain (Loss) per pound	($ 0.05)

December 2018

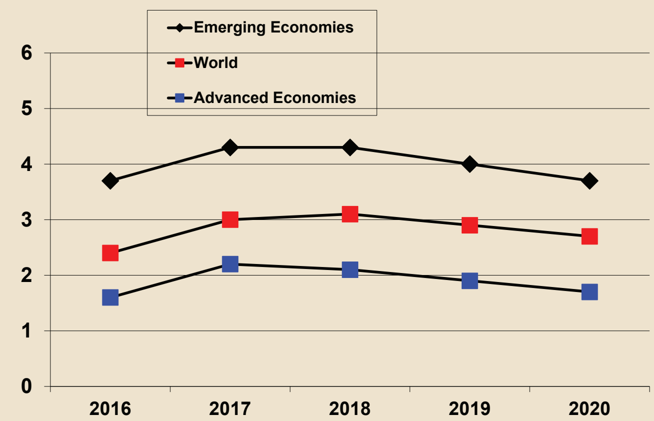
Leg Quarters	$ 0.29 per pound
Deboned Breast	$ 0.94 per pound
Wings	$ 1.56
Chicago Corn	$ 3.80 per bushel
Soybean Meal	$ 310/Ton
Total Cost of Eviscerated Chicken	$ 0.68
Revenue	$ 0.62
Gain (Loss) per pound	($ 0.06)

World Chicken Growth Rate

World economic growth and per capita income were both rising recently. Along with that increase in world growth, world chicken production increased at an increasing rate as well. However, it is increasingly likely that world economic growth will decline in the next few years. Declining world economic growth would eventually restrict the ability of the world chicken industry to grow.

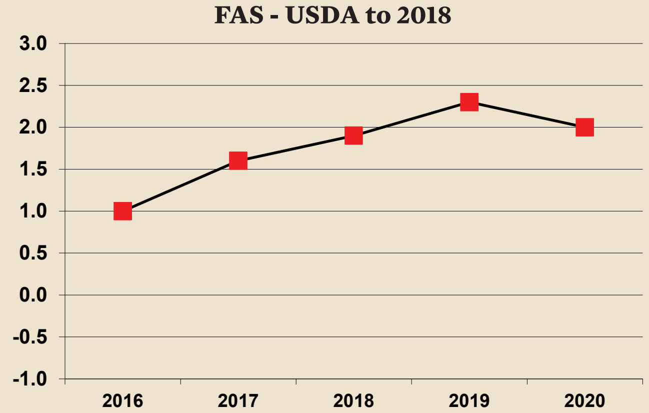
The long-term world chicken production growth appears to be 2%. The USDA expects world growth to slightly exceed 2% in 2019. However, if the world economy falters and/or grain prices increase the growth rate could decline somewhat in 2020.

Economic Growth Rate



World Bank Real GDP to 2018

World Chicken Growth Rate in %
FAS - USDA to 2018



FAS - USDA to 2018

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Dr. Paul Aho is an international agribusiness economist specializing in projects related to the poultry industry and has been a prolific writer in trade journals in both the United States and in Latin America. Dr. Aho now operates his own consulting company called “Poultry Perspective”. In this role he works around the world with poultry managers and government policy makers.