



Broiler Economics

By Dr. Paul Aho

TRADE TENSIONS CONTINUE

After a huge harvest in the US, grain prices reached a harvest low in November and have moved somewhat higher in the last month. Nevertheless, prices are not expected to move significantly higher in 2019 barring weather problems. Reports from South America indicate a robust harvest that will start in just a few weeks. A wild card is the trade tensions between the US and China. Soybean prices are likely to remain low for those allowed to purchase US grain without a tariff while higher prices will prevail in China.

With the Chinese 25% tariff in place, the production and trade of soybeans is shifting. Production will increase in South America and decrease in the US. US farmers will shift some production from soybeans to corn thereby reducing the price of corn. After a period of unusually low soybean prices over the next year, soybean prices are likely to rise worldwide.

Despite the current beneficial grain price climate for most 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 up. Corn may move up in this crop year even as soybean continue 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.

Corn

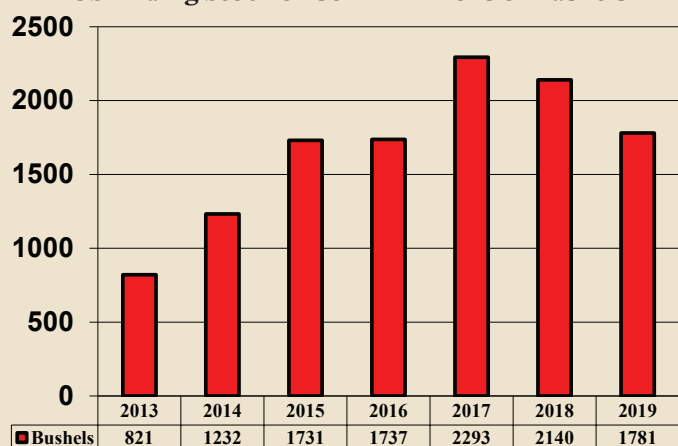
The December, the USDA World Agricultural Supply and Demand Estimates (WASDE) report projects a lower US and world ending corn stock in 2019. Falling world stocks normally signal the end of a period of low prices. However, the beginning of the next bull market may be delayed because of a possible slowdown in the world economy and the effects of the trade war. With farmers in the US shifting from soybeans to corn next year, corn prices may increase slowly, if at all, this crop year and next.

The USDA numbers for world ending corn stock for the last several years changed significantly after adjustments were made to the numbers from China. Hopefully, the adjusted numbers from China are now accurate since China is so important in the world ending stock numbers.

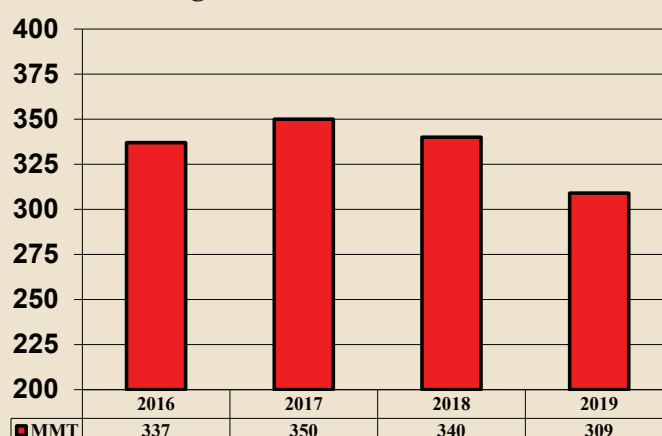
US Corn Supply and Demand – December USDA Billions of Bushels

	2016-17	2017-18	2018-19
Harvest	15.148	14.604	14,626
Supply Total	16.942	16.934	16,811
Ethanol	5.432	5.605	5,600
Exports	2.294	2.438	2,450
Feed	5.470	5.298	5,500
Total Use	14.649	14.793	15,030
Ending Inventory	2.293	2.140	1,781
Farm Price	\$3.36	\$3.36	\$3.60

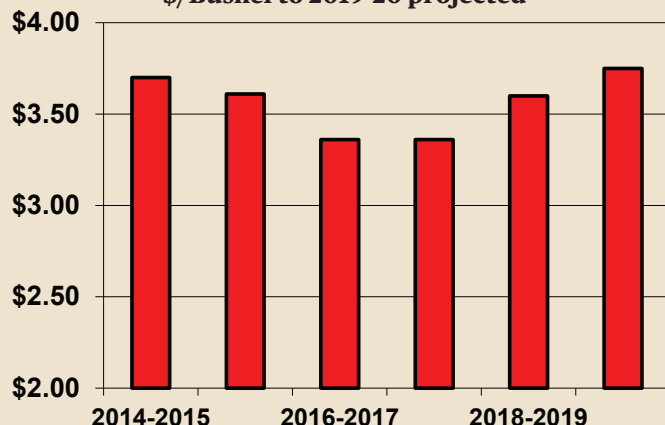
US Ending Stock of Corn - Millions of Bushels



World Ending Stock of Corn - Million Metric Tons



Average Farm Price of Corn \$/Bushel to 2019-20 projected



Soybeans

Ending stocks of soybeans are rising not falling. The December USDA WASDE report shows that both US and world soybean stocks are rising. Soybean meal prices rose last crop 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 worldwide.

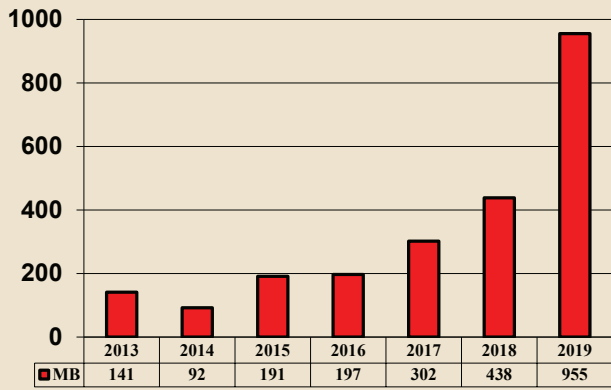
With increased demand from China for South American soybeans this crop year and good weather, production will increase rapidly in that part of the world. US production is likely to fall in 2019-2020 as farmers shift from soybeans to corn. Soybean meal prices probably reached their lowest point with the harvest low this fall. However, prices will rise slowly from this point as soybeans, like corn, enter into a new long-term cycle of rising prices.

US ending stocks rose an unusual amount due to the trade war with China. The effect of that increase is already reflected in the market price. Yet to be determined are the trade politics of 2019. China may purchase some US soybeans next year.

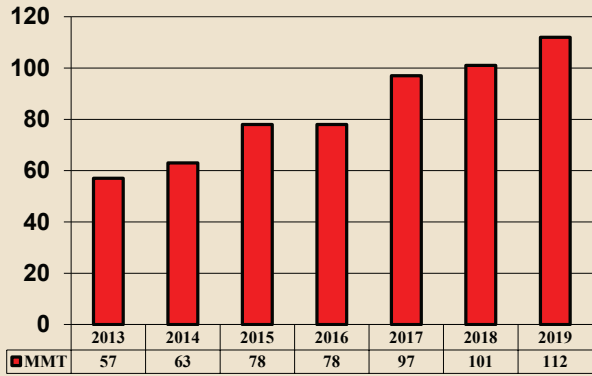
US Soybeans – USDA - December – Billions of Bushels

	2016-17	2017-18	2018-19
Harvest	4.296	4.411	4.600
Export	2.166	2.129	1.900
Total Use	4.214	4.296	4.107
Ending Inventory	302	438	955
Meal Price short ton	\$317	\$345	\$310

US Ending Stock of Soybeans in Millions of Bushels



World Ending Stock of Soybeans in MMT



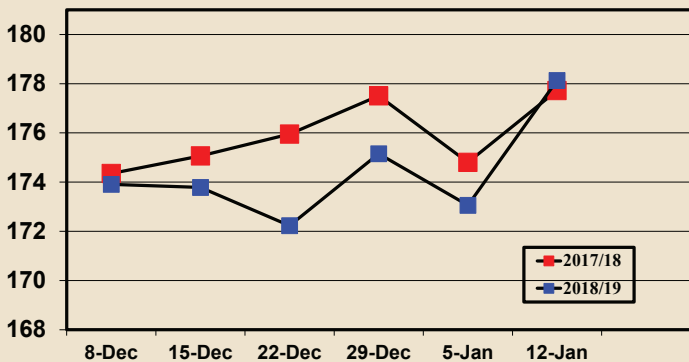
US Chicken Industry

The domestic supply of meat in the US rose by 2.5 billion pounds in 2018, an amount that exceeded demand. A billion pounds of that was additional chicken production. The result for the chicken industry was a substantial drop in prices. After years of profitable production, the chicken industry is now operating at a loss that will continue at least through the winter and could last all next year.

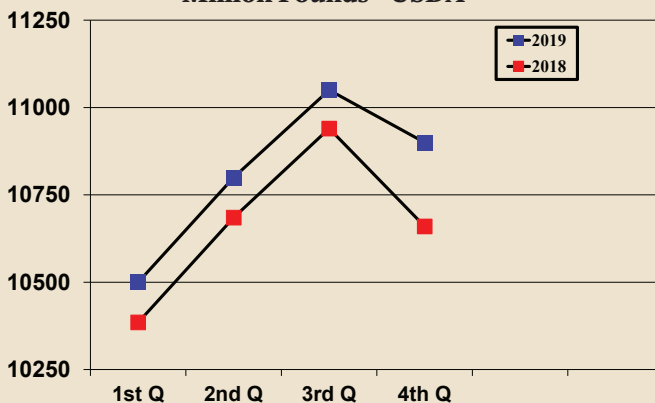
Chicken production rose 2.6% in 2018 and the USDA expects production to rise by 1.5% next year. Given the recent severe price drop, the USDA estimate may be too high for next year. Production may not rise at all next year. How could that be possible since six new plants are expected to open next year? The answer to that puzzle is there may be at least one plant closed for every new plant opened. There are some aging processing plants in the US that are ripe for retirement.

A clue to future supply can be found in the number of chicks being placed by the industry. The recent numbers clearly show that the industry has tapped the brakes on production. Current numbers of chicks placed are lower than year earlier numbers.

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



US Quarterly Broiler Production Million Pounds - USDA

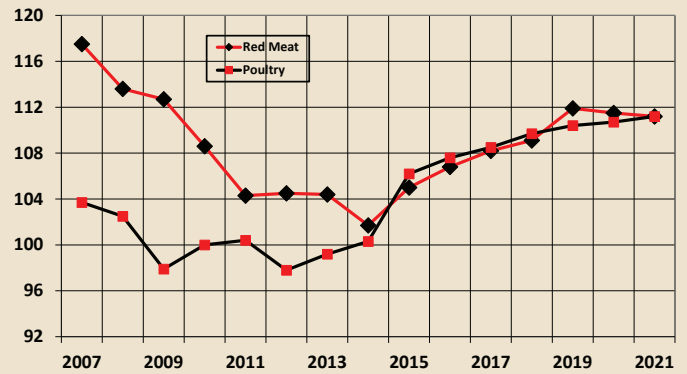


Falling grain prices this year helped the chicken industry but not enough to counteract the effects of an oversupply of chicken and increased competition from red meat. Total per capita red meat consumption has recently been rising faster than poultry consumption. This is logical given three factors; 1) low grain prices help poor feed converting animals; 2) rising median income and 3) the time lag for increased red meat production. As all of these factors reverse in the coming years, 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 expected to exceed 220 pounds once again in 2019. That may be too much to sell profitably.

With a 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 nearly one billion pounds of leg quarters per year.

US Per Capita Consumption of Red Meat and Poultry - Pounds



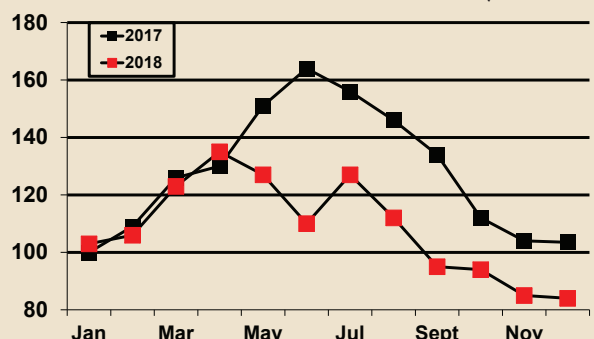
Per Capita Consumption in Pounds - US

Year	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	51	57	92	16	219
2019	52	58	93	16	222

Deboned Breast

The seasonal peak for skinless boneless breast (SBB) came early this year and was disappointing. Now SBB has fallen to just 80 cents per pound (Northeast Price). The issue appears to be too much SBB and red meat combined with a surprising lack of food service demand. The price has dropped so much recently that it has fallen below the world price. For decades, US SBB was much higher than world prices, sometimes double world prices; now it is lower. Such a price for SBB combined with unusually low prices for leg quarters results in heavy losses for the US chicken industry.

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



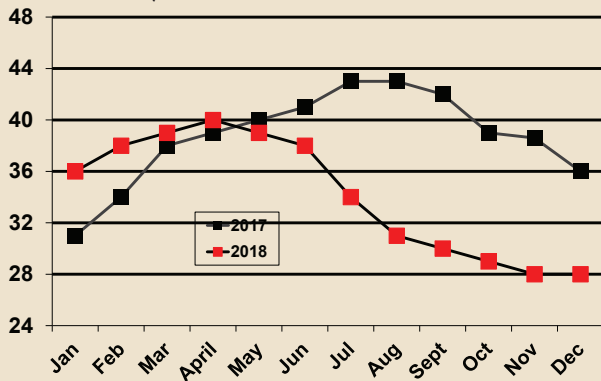
Leg Quarters

Leg quarter prices have also been falling recently and are now just 28 cents USDA Northeast Price (There is a range in prices for leg quarters with many leg quarters sold at a price even 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. Current leg quarter prices are as low as they have ever been when adjusted for inflation.

Counterintuitively, the extremely low price of US leg quarters is a deterrent to exports. When US leg quarters are priced far below the price of chicken in other countries there is pressure from local industries to restrict imports. A higher leg quarter price would better encourage trade.

Given the extraordinary situation of low leg quarter prices and low SBB prices, production will eventually be rationalized and prices will return to a more normal level.

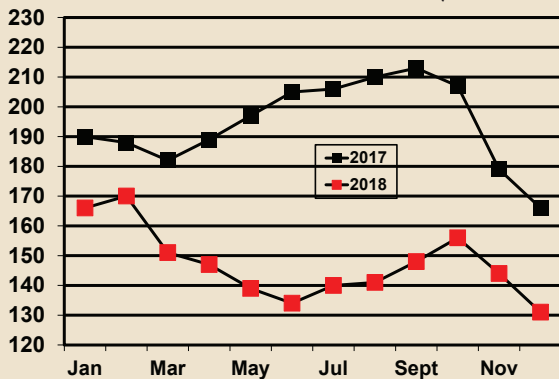
Leg Quarter Price - 2017-2018
Cents/Pound - USDA Northeast Price



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. Prices are now at the lowest levels of the last two years at \$1.30 per pound Northeast Price.

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



The production of chicken in the US was highly profitable last year but profitability fell in 2018. At the moment, production is highly unprofitable and is likely to remain unprofitable for months if not all of next year.

December 2018

Leg Quarters	\$ 0.28 per pound
Deboned Breast	\$ 0.84 per pound
Wings	\$ 1.31
Chicago Corn	\$ 3.76 per bushel
Soybean Meal	\$312/Ton
Total Cost of Eviscerated Chicken	\$ 0.75
Revenue	\$ 0.65
Gain (Loss) per pound	(\$ 0.10)

March 2019

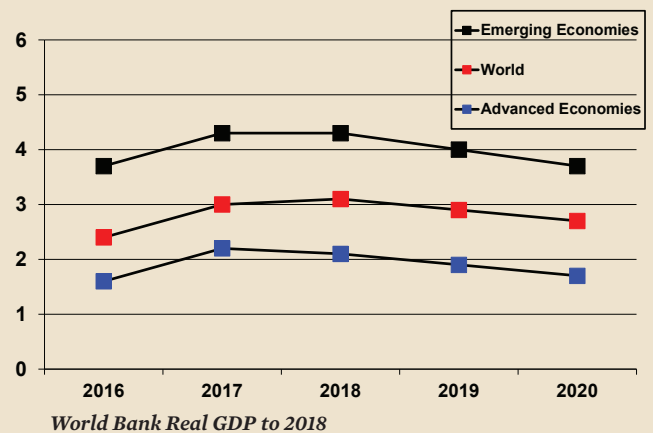
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Gain (Loss) per pound	(\$ 0.09)

World Chicken Growth Rate

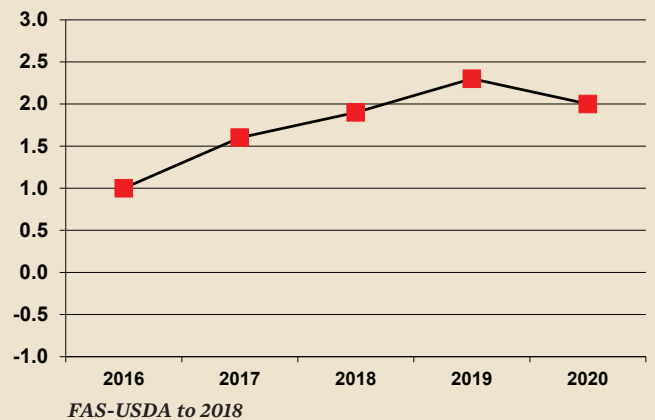
World economic growth and per capita income were both rising recently. Along with that increase in world growth, world chicken production increased as well. However, it is becoming more likely that world economic growth will decline in the next few years. Declining world economic growth would eventually 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 Chicken Growth Rate in %



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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.

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