

# BROILER ECONOMICS

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## REPORTS SEND SOYBEANS LOWER

On March 31st every year there are two news releases by the USDA that have the potential of moving the grain market. One is the grain stocks report and the other is the planting intentions report. More often than not, prices in Chicago move up or down sharply on any given March 31st. This year the reports showed less corn and more soybean planting. The reaction in the market was for corn to rise slightly while soybean prices fell.

### Soybeans

Higher soybean stocks compared to last year suggest that ending soybean stocks in the US will be higher. Stocks started higher on December 1 and continued to be higher by March 1 despite heavy exports. Exports will drop now as the South American harvest gets into full gear. Ending stocks can be expected to be twice as high as last year, a significant bearish sign.

### Soybean Stocks in Billions of Bushels

	2015-16	2016-17
December 1	2.715	2.898
March 1	1.530	1.734
June 1	0.872	
September 1	0.196	0.445 est.

The price of old crop soybeans fell somewhat in response to the confirmation of higher stock. However, much of the potential price decline had already been reflected in the falling market recently. It now appears likely that old crop soybean meal will be around \$300 per short ton. Soybean meal users will be paying close to \$300 for the rest of this crop year and in all likelihood next crop year as well which is all good news for the poultry industry.

Good news also came from the planting intentions report. The number of acres planted to soybeans is expected to increase by 6 million acres this year to 89.5 million acres, a record number.

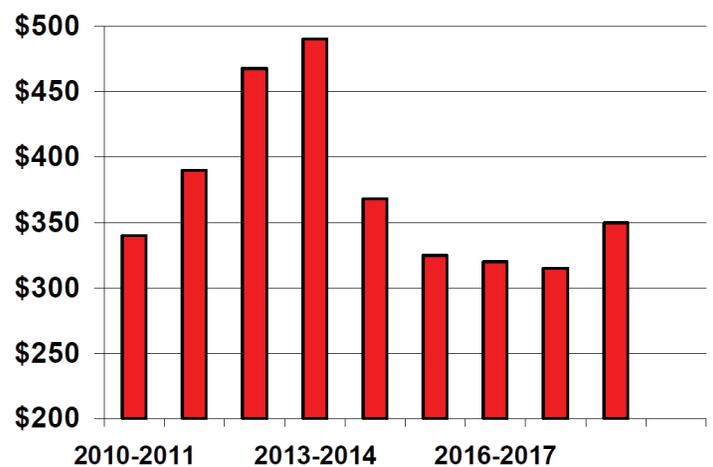
Last year there were nearly 10 million more acres of corn planted than soybeans. This year the planting intentions are nearly identical. Given the recent higher prices of soybeans compared to corn, the shift is logical. In addition, a narrowing of the difference in numbers of acres planted to corn and soybeans marks a swing back to a more normal rotation after years in which many farmers planted corn after corn and failed to rotate crops.

### Planted Acreage - USDA Crop Intentions

	2015	2016	2017
Corn	88.0	94.0	90.0
Soybeans	82.6	83.4	89.5

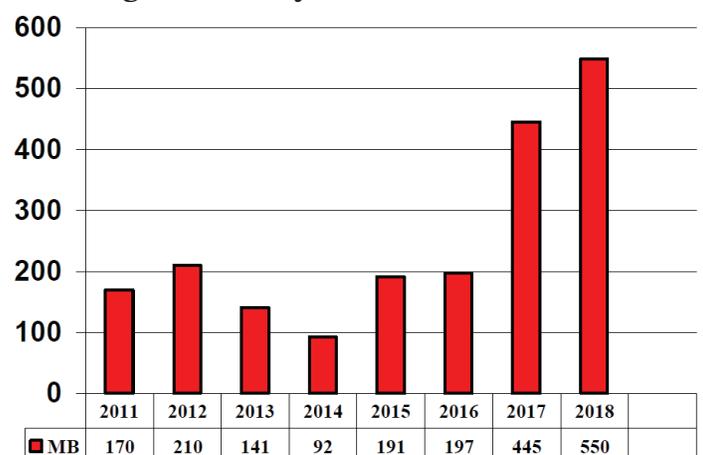
The average cost of soybean meal for this crop year, 2016-2017, should be similar to that of next crop year, 2017-2018 barring a drought. The next rise in prices may start in 2018-2019.

Average Crop Year Price of Soybean Meal  
2018-2019 projected

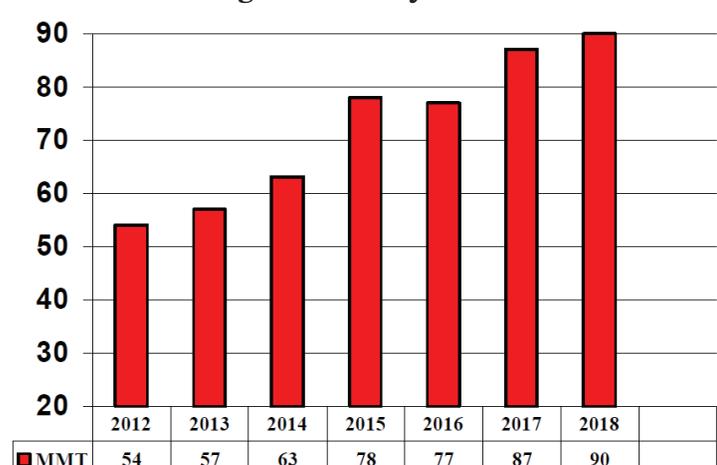


The world ending supply of soybeans is high. The US and world ending stock are both expected to rise this crop year and next. The bottom of the soybean market may therefore be at least a year away.

### US Ending Stock of Soybeans in Millions of Bushels



### World Ending Stock of Soybeans in MMT



**US Soybeans - April USDA - Billions of Bushels**

	2014-15	2015-16	2016-17
Harvest	3.927	3.926	4.307
Export	1.843	1.886	1,940
Total Use	3.862	3.944	4.083
Ending Inventory	191	197	445
Meal Price short ton	\$368	\$325	\$320

**Corn**

The stocks report showed corn up by 10% over last year, inline with expectations. Ending stocks in September will be higher than last year. This has been known for some time and was responsible for the relatively low prices for corn compared to soybeans last calendar year.

**Corn Stocks in Billions of Bushels**

	2015-16	2016-17
December 1	11.238	12.385
March 1	7.822	8.616
June 1	4.711	
September 1	1.737	2.320 est.

With only 90 million acres projected to be planted, a trend line yield would reduce production enough to lower the ending stock in 2018 versus 2017 by a few hundred million bushels. The weather, as always, remains an important consideration. Recent heavy rain may slow planting but could help yields.

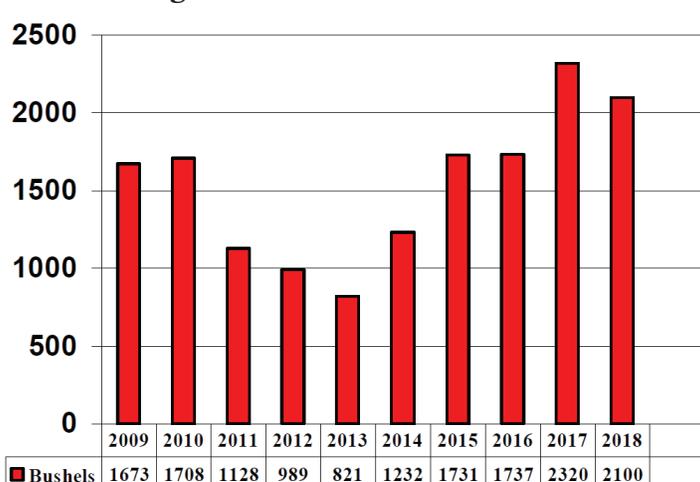
Conditions appear generally favorable in South America. As an abundant harvest of corn and soybeans from South America comes on to the world market, poultry producers should continue to enjoy relatively low prices. It is, nevertheless, important to remember that grain prices and in particular, corn prices may be close to a long term bottom.

The April USDA World Agricultural Supply and Demand Estimates (WASDE report) projects that ending US corn stock will rise once again in 2017. However, 2018 could see the beginning of a decline in ending inventory both in the US and for the world as a whole.

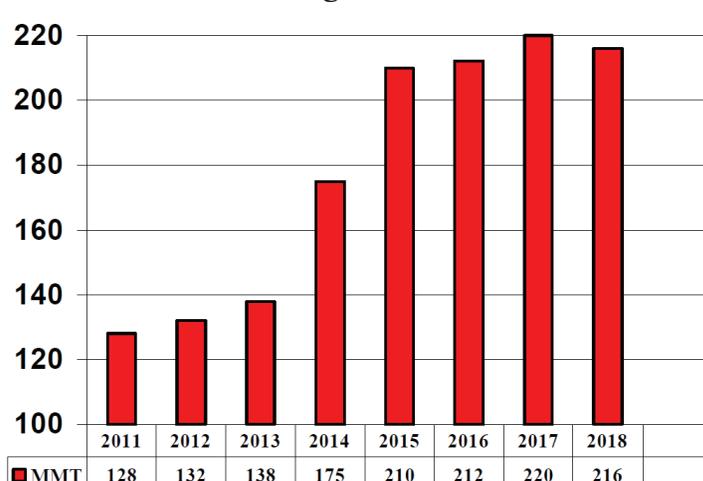
**US Corn Supply and Demand – April USDA Billions of Bushels**

	2014-15	2015-16	2016-17
Harvest	14.216	13.602	15.148
Supply Total	15.479	15.401	16.940
Ethanol	5.209	5.206	5.500
Exports	1.864	1.898	2.225
Feed	5.314	5.131	5.500
Total Use	13.748	13.662	14.620
Ending Inventory	1.731	1.737	2.320
Farm Price	\$3.70	\$3.61	\$3.40

**US Ending Stock of Corn in Millions of Bushels**

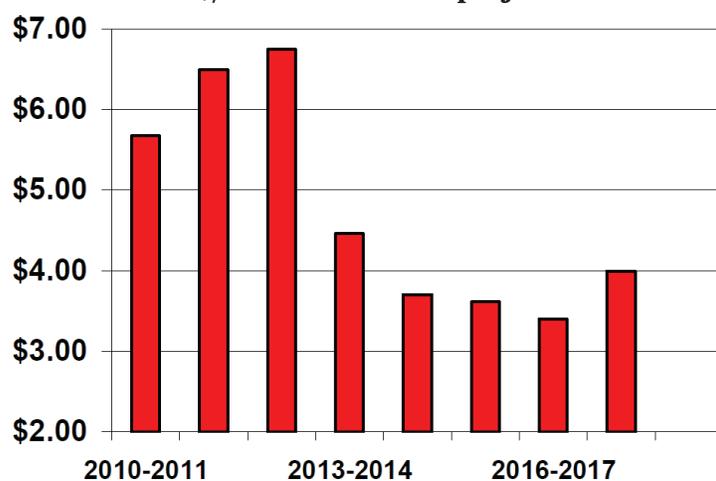


**World Ending Stock of Corn MMT**



For the short term, prices are likely to have little ability to rise barring a weather problem. However, in crop year 2017-2018 prices could be rising again in part due to the shift of millions of acres this year from corn to soybeans in the US.

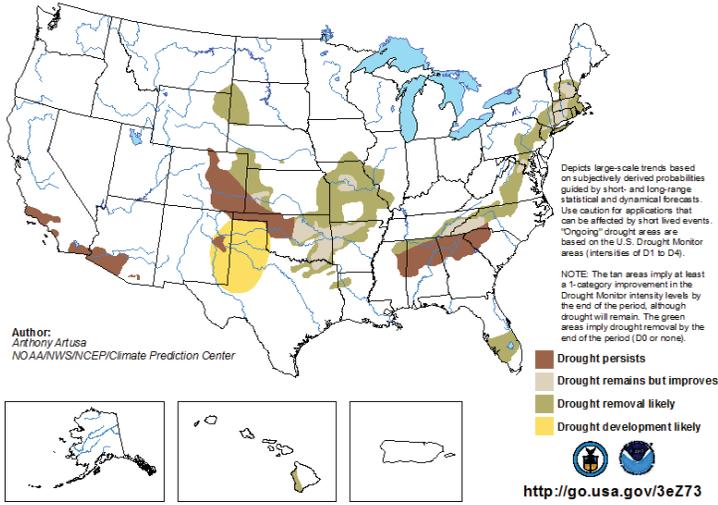
**Average Farm Price of Corn \$/Bushel to 2017-18 proj.**



The remaining unknown is the weather this crop year. The US Seasonal Drought Outlook is not (yet) calling for a drought in the Corn Belt.

**U.S. Seasonal Drought Outlook**  
Drought Tendency During the Valid Period

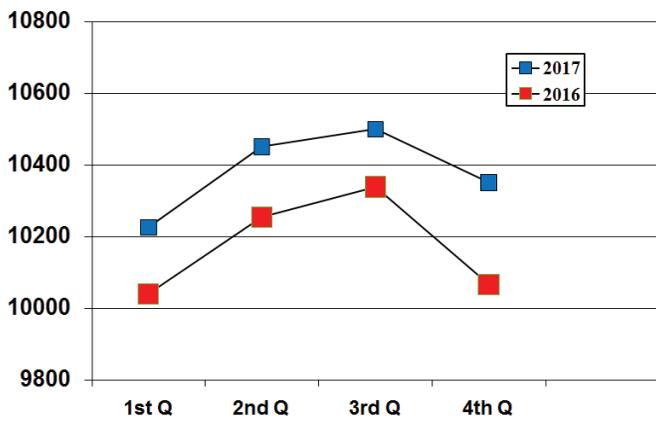
Valid for March 16 - June 30, 2017  
Released March 16, 2017



**Chicken Industry Production**

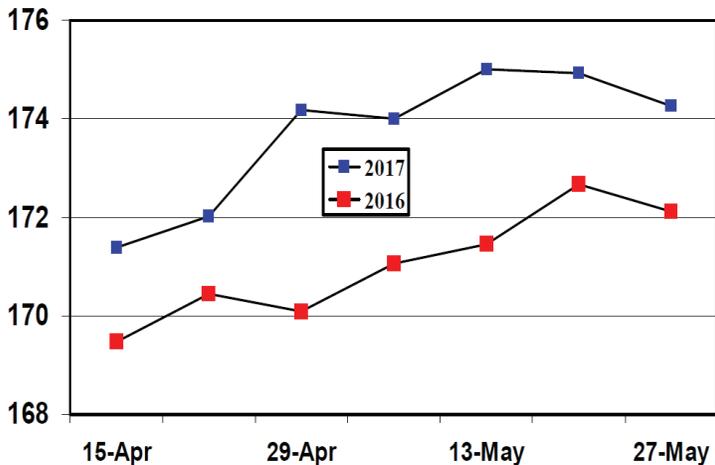
The USDA now expects US production of chicken meat to increase just 2.0% this year, only slightly higher than the 1.6% of 2016. Such a small increase would suggest a profitable year.

**US Quarterly Broiler Production USDA**  
Million Pounds



The graph below shows weekly chick placement in millions moved forward 7 weeks to estimate chickens processed. Using this method of estimation, processing numbers are running a little less than 2% over last year. This increase is in alignment with the predictions of increased production of 2%. It appears that the increase in production is taking place mostly with bird numbers, with a small increase in bird weight.

**Weekly Chick Placement - Millions**  
7 Weeks Forward - 2017 versus 2016

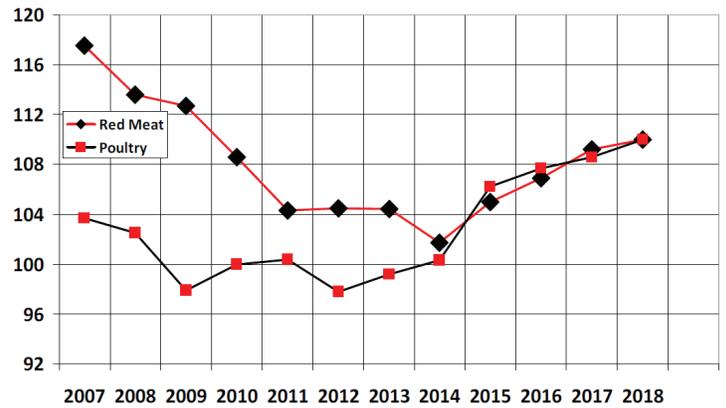


Chicken availability per capita within the US will increase less than one pound this year due to increased exports and a relatively slow increase in production. Low grain prices will help sustain profitability but a black swan event such as bird flu or a trade dispute with Mexico is always possible. Mexico is the number one destination for US chicken exports, buying more than one billion pounds of leg quarter per year. Any disruption in trade with Mexico would have severe consequences for the US chicken industry. In the last two months, the possibility of a trade war with Mexico appears to have diminished.

Chicken prices will be under pressure from increased production of red meats. In 2017 there will be an additional 1.4 billion pounds of red meat available for domestic use. Red meat production is (temporarily) rising faster than poultry. This is due to unusually low grain prices combined with rising median income. When grain prices start rising again and/or the growth in median income once again slows down or drops, poultry will once again surpass red meat consumption.

It is interesting to note that total per capita meat consumption in 2018 may finally return to the levels of 2006. It took 12 years to return to the meat consumption levels prior to the recession.

**US Per Capita Consumption of Red Meat and Poultry (lbs)**

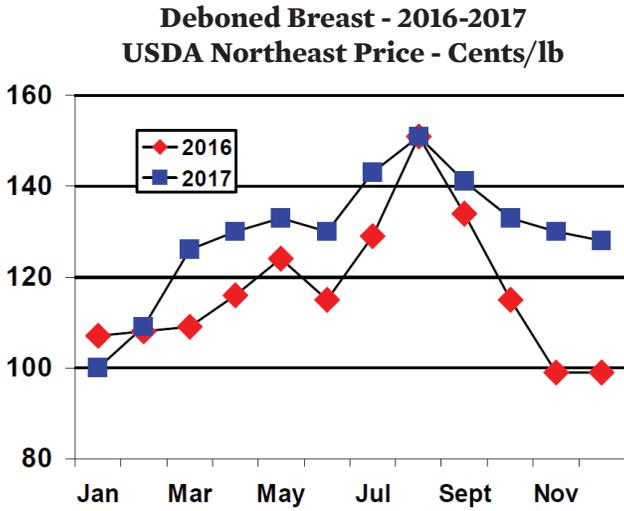


**Per Capita Consumption Per Capita in Pounds - US**

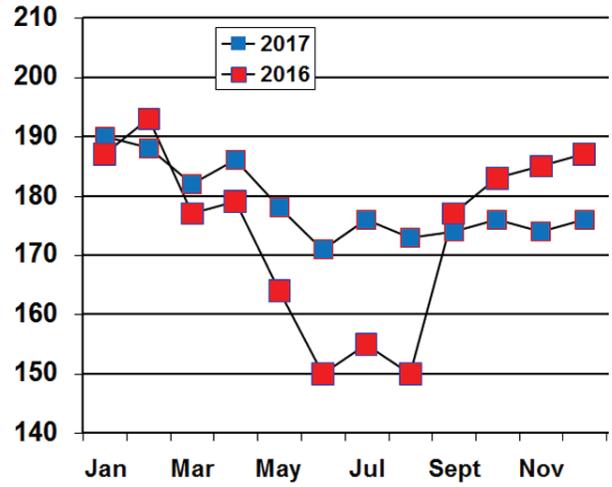
	Pork	Beef	Chicken	Turkey	Total
2006	49	66	87	18	220
2007	51	65	85	18	219
2008	59	63	83	18	213
2009	50	61	80	17	208
2010	48	60	82	16	206
2011	46	57	83	16	205
2012	46	57	80	16	202
2013	47	56	82	16	201
2014	46	54	83	16	202
2015	50	56	89	16	211
2016	50	56	90	17	215
2017	51	57	90	17	218
2018	51	58	91	17	220

**Deboned Breast**

Prices for breast meat this year can be expected to be higher on average than that of last year. In addition, grain prices are lower, an ideal combination.



**Whole Wing Prices - 2016-2017  
USDA Northeast Price - Cents/lb**



The US Chicken industry is profitable and is likely to remain profitable due to low grain prices and relatively high chicken prices.

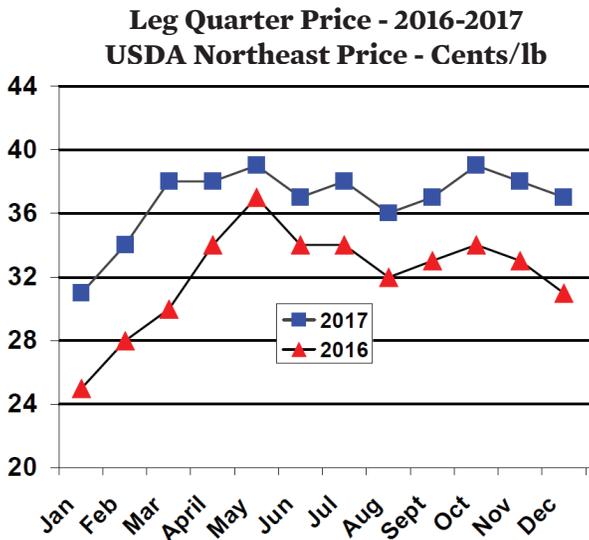
**Leg Quarters**

The highest price for leg quarters last year was reached in May at 37 cents (Northeast Price). It is important to note that there is a wide range in prices for leg quarters with many leg quarters sold at a price lower than the published Northeast price.

For 2017, trade policy with Mexico will be a key factor. If a trade war with Mexico can be avoided, leg quarter prices should remain at around current levels. Trade tensions with Mexico have eased in the last few weeks and the Mexican Peso has recovered indicating that the market expects little or no change in trade policy.

**April 2017**

Leg Quarters	\$ 0.37 per pound
Deboned Breast	\$ 1.29 per pound
Wings	\$ 1.89
Chicago Corn	\$ 3.70 per bushel
Soybean Meal	\$ 312/Ton
Total Cost of Eviscerated Chicken	\$ 0.67
Revenue	\$ 0.77
Gain (Loss) per pound	\$ 0.10



**August 2017**

Leg Quarters	\$ 0.36 per pound
Deboned Breast	\$ 1.40 per pound
Wings	\$ 1.75
Chicago Corn	\$ 3.80 per bushel
Soybean Meal	\$ 310/Ton
Total Cost of Eviscerated Chicken	\$ 0.67
Revenue	\$ 0.78
Gain (Loss) per pound	\$ 0.11

**Wings**

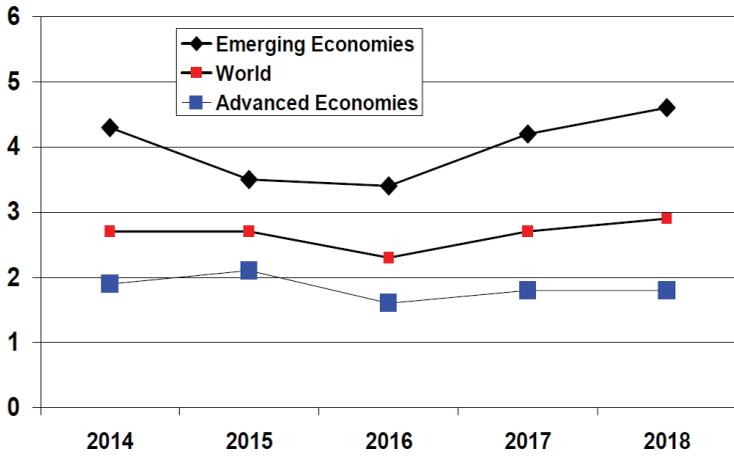
Wings are a bright spot for the US chicken industry most of the time. Demand for wings is phenomenal and highly inelastic. Only a significant increase in supply would send prices lower, an increase that does not appear likely this year.

**World Chicken Growth Rate**

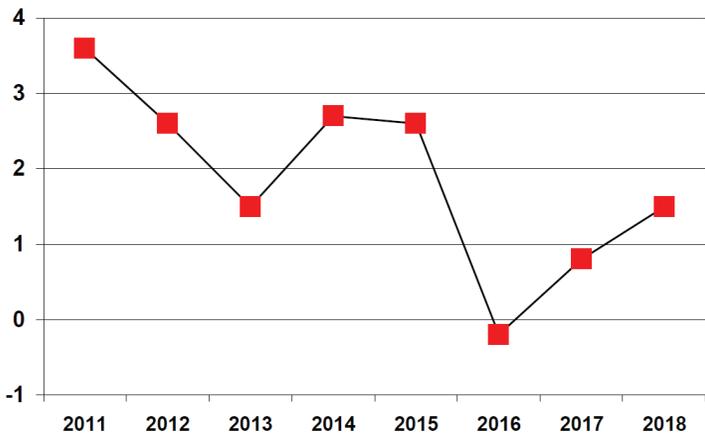
The consequences of slower world economic growth in the last few years combined with a rapid drop in production in China dropped the world chicken growth rate to a highly unusual negative 0.2% last year. Production in China dropped 8% in 2016 and will drop 11% in 2017 due to their struggles with avian influenza and lack of breeders.

Chicken production is likely to turn around this year and begin to grow faster than 1% per year starting in 2018. The growth rate of the world economy is accelerating and China will eventually solve their production difficulties.

### Economic Growth Rate



### World Chicken Growth Rate



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