

# Broiler Economics

By Dr. Paul Aho

## SOFT LANDING?

After a year of soaring inflation in goods and services including corn and soybeans, there finally appears to be light at the end of the tunnel. The US Federal Reserve, after waiting perhaps too long to increase interest rates, has been increasing them this year at an unprecedented rate. The outcome of this credit tightening in the best-case scenario would be slower growth accompanied by a reduction in inflation. The worst-case scenario would be that the medicine of higher interest rates takes the world economy into a recession. In a recession, inflation would be defeated but the side effect would be much higher unemployment. It is too early to tell if there will be a soft landing or a crash, but the ride is bumpy and the passengers are nervous.

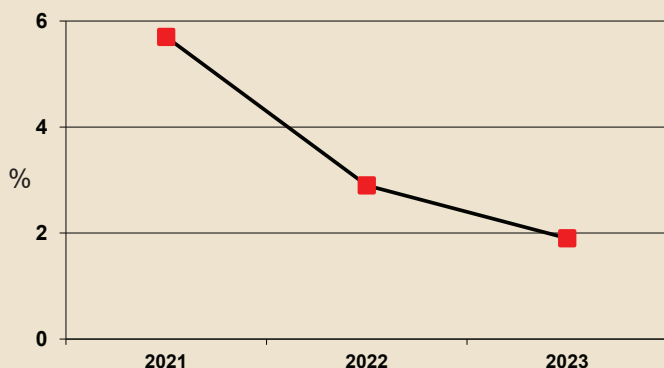
Corn prices are down only slightly from their highs this year of \$8 per bushel (\$320 per ton). The causes are familiar, principally the war in Ukraine and weather problems in both Europe and some parts of North America. Some ships have been allowed to leave the Ukraine which helped to alleviate grain shortages, but the final harvest in Europe and the US might be lower than expected.

This bull market in grain could be characterized as supply driven. Nervousness about just how much grain will be harvested in the US and worldwide this fall are keeping prices high. There is a good chance that prices will peak during harvest and decline somewhat after harvest. However, the beginning of a full-fledged bear market may have to wait for a while.

Whether it be crude or corn, bull markets do not last forever because high prices stimulate additional production and discourage use. That potent combination eventually brings a bull market to its knees.

An eventual bear market in grain could come about in part due to falling demand. The world economy is slowing down. In 2021 world growth was a robust 5.7%. Growth could slow to just 2% next year. The US and the EU are both in the process of raising interest rates to tame inflation. If they are successful, inflation will indeed be tamed but the world economy is likely to slow worldwide.

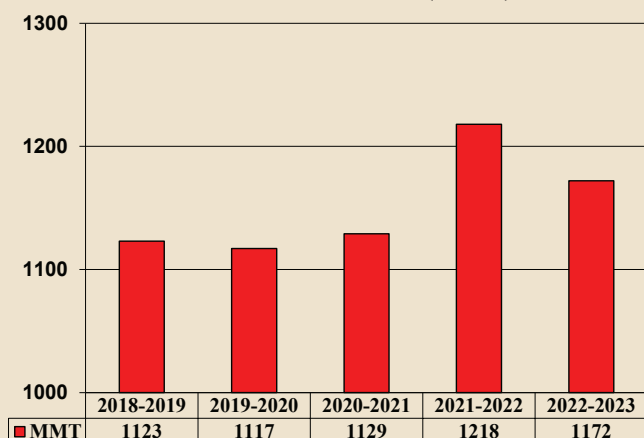
World Economic Growth - World Bank to 2022



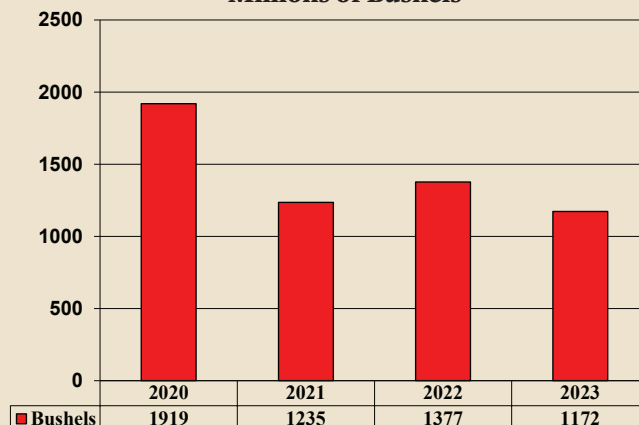
### Corn

Corn production rose substantially last crop year but is expected to fall somewhat this crop year (crop years run from September to August) This crop year is expected to show an increase in production in Argentina and Brazil and a decrease in the US, Ukraine, and Europe in general. Overall world production will be lower. Projections of ending world and US corn inventory numbers for next year are also down.

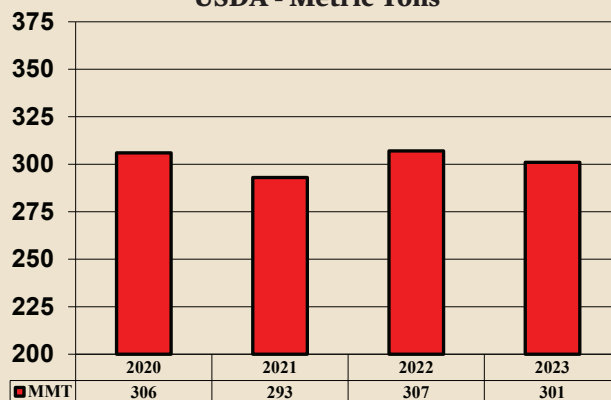
World Production of Corn  
Million Metric Tons (MMT)



US Ending Stock of Corn  
Millions of Bushels



World Ending Stock of Corn  
USDA - Metric Tons



Argentina Corn Supply and Demand  
WASDE October 2022 Metric Tons

	2020-2021	2021-2022	2022-2023
Harvest	52	53	55
Imports	0	0	0
Exports	41	39	41
Ending Inventory	1	1	1

Brazil Corn Supply and Demand  
WASDE October 2022 Metric Tons

	2020-2021	2021-2022	2022-2023
Harvest	87	116	126
Imports	4	2	1
Exports	21	45	47
Ending Inventory	5	5	8

Ukraine Corn Supply and Demand  
WASDE October 2022 Metric Tons

	2020-2021	2021-2022	2022-2023
Harvest	30	42	31
Imports	0	0	0
Exports	24	25	12
Ending Inventory	1	6	10

**China Corn Supply and Demand  
WASDE October 2022 Metric Tons**

	2020-2021	2021-2022	2022-2023
Harvest	260	273	274
Imports	30	23	18
Exports	0	0	0
Ending Inventory	206	210	207

**Argentina Soybean Supply and Demand  
WASDE October 2022 Metric Tons**

	2020-2021	2021-2022	2022-2023
Harvest	46	43	51
Imports	5	3	5
Exports Beans + Meal	33	31	35
Ending Inventory	26	21	24

**US Corn Supply and Demand  
WASDE October 2022 - Millions of Bushels**

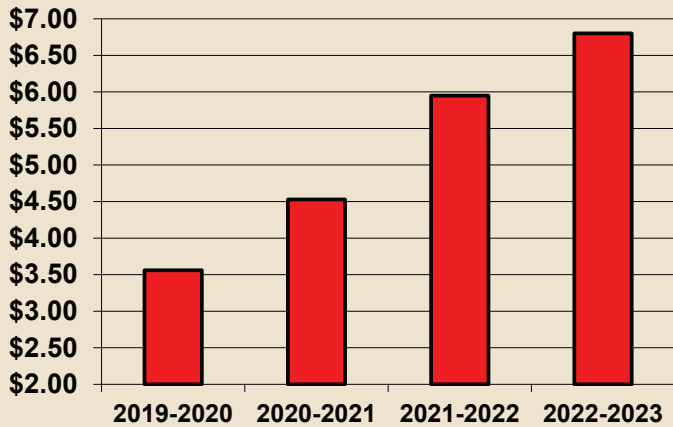
	2019-2020	2020-2021	2021-2022	2022-2023
Harvest	13,620	14,111	15,074	13,895
Supply Total	15,883	16,055	16,333	15,322
Ethanol	4,852	5,033	5,328	5,275
Exports	1,778	2,753	2,471	2,150
Feed	5,903	5,598	5,715	5,275
Total Use	13,963	14,821	14,956	14,150
Ending Inventory	1,919	1,235	1,377	1,172
Farm Price	\$3.56	\$4.53	\$6.00	\$6.80

**Brazil Soybean Supply and Demand  
WASDE October 2022 Metric Tons**

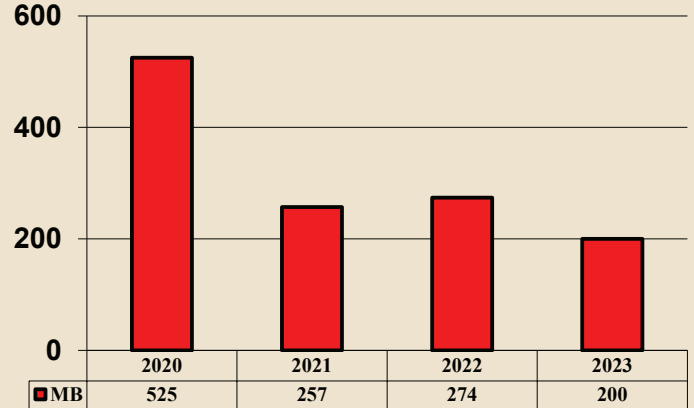
	2020-2021	2021-2022	2022-2023
Harvest	137	125	152
Imports	1	1	1
Exports Beans + Meal	97	100	109
Ending Inventory	27	21	31

US ending stock is expected to fall this crop year, however, world ending stocks will be rising. It is important to note that what happens to the crop in Brazil and Argentina is now far more important than what happens to the crop in the US. With rising world ending inventory, the prices of soybean meal can be expected to fall.

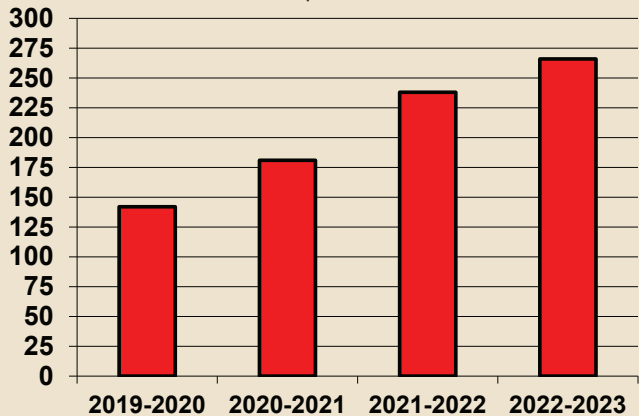
**Average US Farm Price of Corn  
USDA - \$/Bushel**



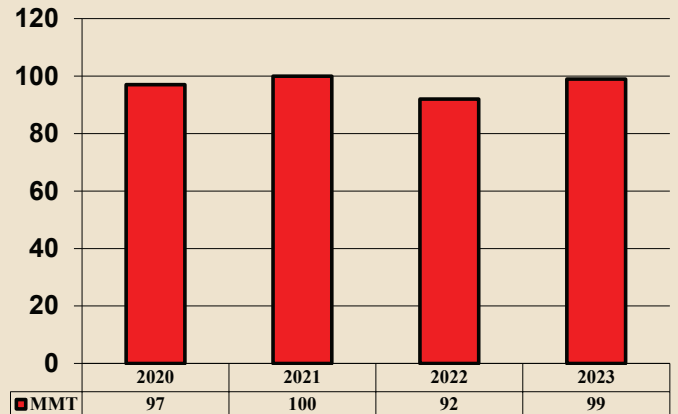
**US Ending Stock of Soybeans  
USDA - Millions of Bushels**



**Average US Farm Price of Corn  
USDA - \$/Metric Ton**



**World Ending Stock of Soybeans  
USDA - MMT**



Although the average price this crop year in the US is projected to be higher than last crop year, prices are likely to start high and end lower. The stage will be set for possibly lower average prices in 2023-2024.

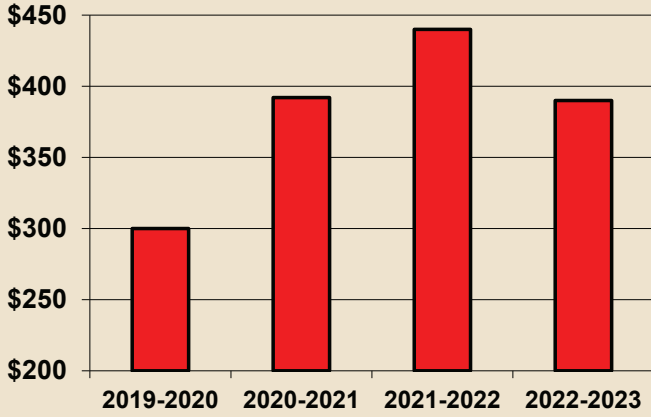
**Soybeans**

Soybean prices were less affected by the war and more affected by drought and floods in Argentina and Brazil. For last crop year, South America was once expected to produce 206 MMT. However, drought in some areas and floods in other areas reduced that number by 30 MMT. This crop year, production is expected to bounce back to over 200 MMT. The enormous capacity for Brazil to increase soybean production puts a cap on prices in the future.

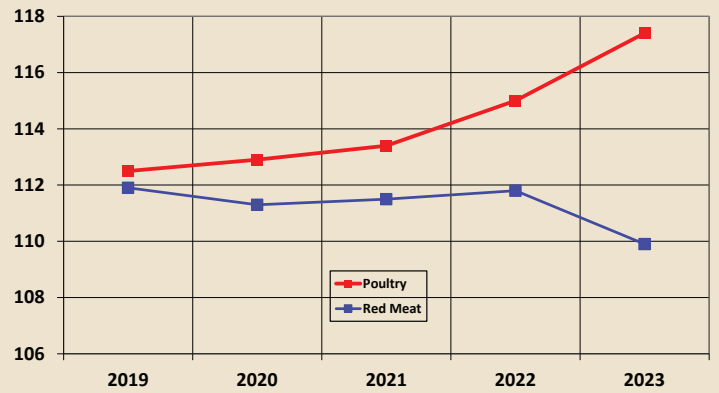
**US Soybeans – WASDE October 2022  
USDA - Millions of Bushels**

	2020-2021	2021-2022	2022-2023
Harvest	4,216	4,465	4,313
Total Supply	4,761	4,738	4,602
Export	2,265	2,158	2,045
Total Use	4,505	4,465	4,402
Ending Stock Inventory	257	274	200
Meal Price short ton	\$392	\$440	\$390

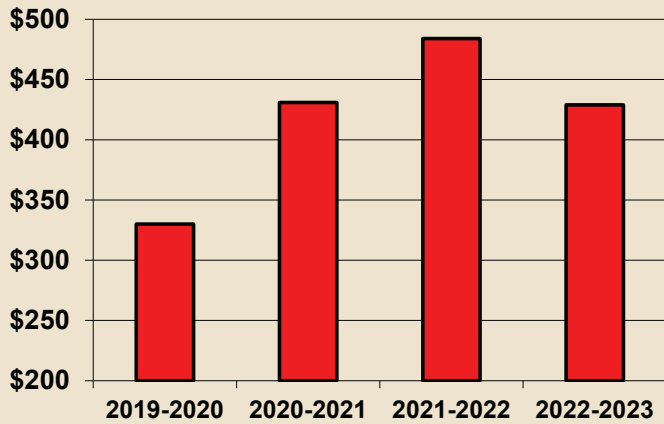
**Average US Crop Year Price of Soybean Meal  
USDA - Short Ton**



**US Per Capita Consumption of Red Meat and Poultry  
USDA to 2023 - Pounds**



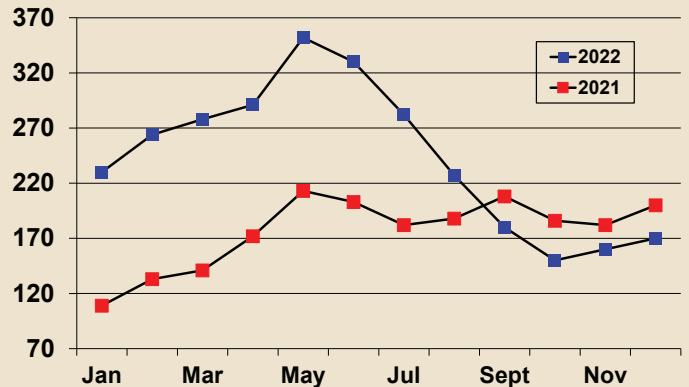
**Average US Crop Year Price of Soybean Meal  
USDA - Metric Ton**



Deboned Breast

Deboned breast meat prices were much higher earlier this year compared to last but fell sharply to below the prices of last year. Prices are now at \$1.50 per pound (\$3.30 per kilo) down from \$3.50 per pound (\$7.70 per kilo) just five months ago. Prices dropped as the economy weakened and more supply became available (in particular more deboning). Prices can be expected to be below that of 2021 for the rest of this year.

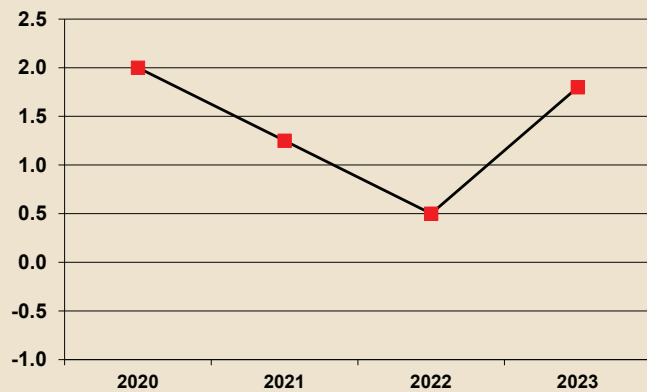
**Deboned Breast - 2021-2022  
USDA National Price - Cents/lb**



**Chicken Industry**

The world chicken industry expanded just 0.5% this year but production is expected to accelerate to 1.8% in 2023. Production is likely to accelerate despite high energy and grain prices due to the high price of competing meats. In the US, the acceleration is already evident; production is projected to rise 2.2% this year compared to just 0.5% last year. Most of that increase will take place in the last half of the year. This recent increase in production is sending the industry deep into the red as high grain prices and lower chicken prices combine to eliminate profitability.

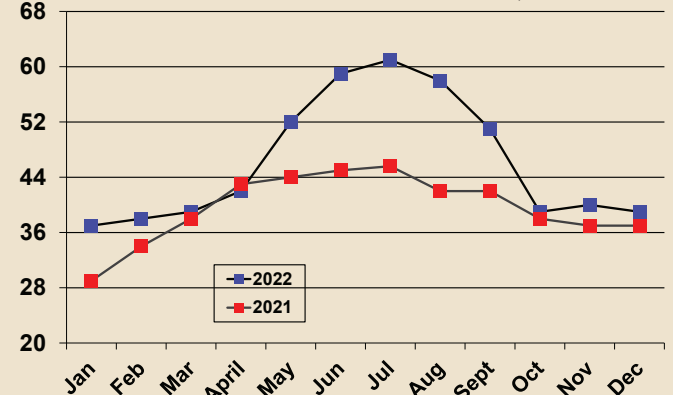
**Increase in World Broiler Chicken Production - %**



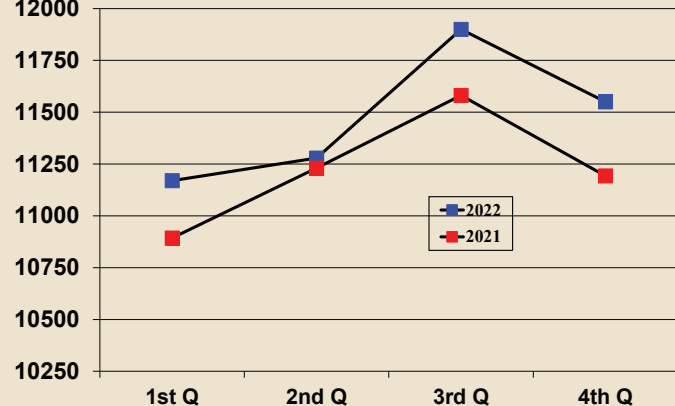
Leg Quarters

Leg quarter prices also increased substantially this year and then fell back to earth. From just 36 cents per pound in January (80 cents per kilo) the price rose to 60 cents in July (\$1.30 per kilo) only to fall back to 39 cents recently (85 cents per kilo). The higher value of the dollar contributed to the erosion of the price recently.

**Leg Quarter Price - 2021-2022  
USDA National Price - Cents/lb**



**US Quarterly Broiler Production  
USDA - Million Pounds**

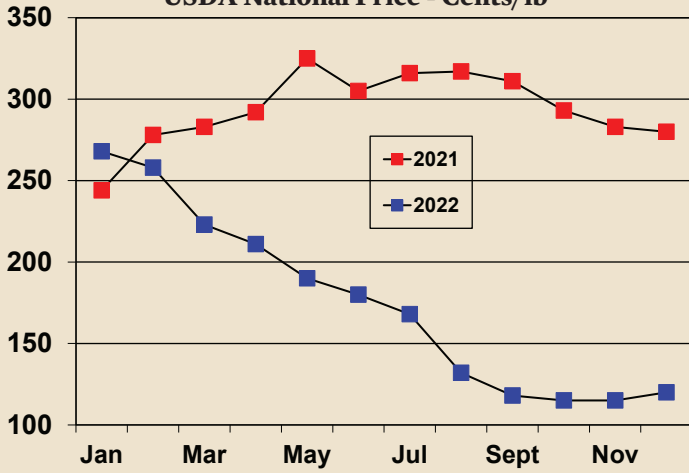


Wings

The falling price of wings earlier this year was a harbinger of declines in the other chicken parts that came later. The extremely high price of wings last year contributed to demand destruction this year. The wholesale price is now less than 40% of what it was a year ago. At this point, the price of wings is likely to stabilize and perhaps even increase during the fall sports season.

Since 2019 while poultry per capita consumption increased, red meat per capita consumption stayed the same. This divergence is expected to accelerate next year with red meat per capita consumption expected to fall significantly while poultry consumption rises.

**Whole Wing Prices - 2021-2022**  
**USDA National Price - Cents/lb**



Chicken production in the US is now unprofitable thanks to continued high feed cost and lower product prices. The industry should return to profitability with seasonal strength in prices next spring.

**October 2022 US Measure**

Leg Quarters	\$0.39 per pound
Deboned Breast	\$1.50 per pound
Wings	\$1.11 per pound
Chicago Corn	\$7.00 per bushel
Soybean Meal	\$413/Short Ton
Total Wholesale Cost per pound	\$1.07
Revenue per pound	\$0.91
Gain (Loss) per pound	\$(0.15)

**October 2022 Metric Measure**

Leg Quarters	\$0.86 per kilo
Deboned Breast	\$3.30 per kilo
Wings	\$2.44 per kilo
Chicago Corn	\$275 per ton
Soybean Meal	\$455 per ton
Total Wholesale Cost per kilo	\$2.34
Revenue per kilo	\$2.01
Gain (Loss) per kilo	\$(0.34)

**About the Author** - Paul W. Aho, Ph.D.  
 email: PaulAho@PaulAho.com

*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.*

.....  
 Aviagen® and the Aviagen logo are trademarks of Aviagen in the US and other countries. All other brands and trademarks are the trademarks of their respective owners.