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### Demand Destruction

The price of energy and grains dropped significantly in the last few weeks bringing some relief to the poultry industry. Oil fell nearly \$25 per barrel and corn dropped by \$2.50 a bushel or \$100 per metric ton. These are big moves, unprecedented downward drops. What can account for this sudden plunge and what is in store for the rest of the year?

To understand why prices dropped so quickly it is important to understand how they rose so high. The demand for both energy and grain is relatively inelastic in the short run. In other words, consumers are slow to reduce consumption of energy and grain in the face of much higher prices. Because of this reluctance, this inelasticity, it takes time for demand to soften. Nevertheless, given high enough prices and a long enough time, demand will be destroyed by high prices. When demand is destroyed the price will fall.

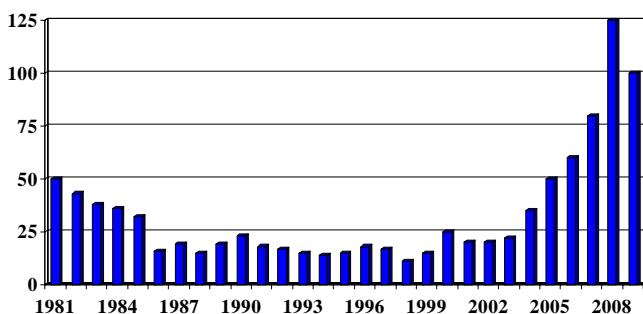
Demand destruction for energy was evident this year in the grounding of jets, fewer miles driven by motorists and the sudden unpopularity of giant SUV's. The upside of demand destruction is lower prices; the downside is the potential for a severe economic recession as the economy shuts down. On the grain side, demand destruction was evident in the temporary halt to production at some ethanol plants and lower world consumption of grain for meat and for direct consumption by people. The poorest of the poor starve as their contribution to demand destruction.

#### Supply is Inelastic as Well

Unfortunately the supply of energy and grain is also inelastic in the short run. In other words producers have been slow to increase supply despite the incentive of much higher prices. The world has not yet been able to increase the production of oil despite higher prices. Production will undoubtedly increase somewhat in the next few years; however, there are doubts about the long term ability of the world to increase oil production.

Thanks to demand destruction, oil prices are likely to fall to an average of \$100 next year. That will seem like a bargain.

**AVERAGE YEARLY OIL PRICE PER BARREL**



The supply of grain is also proving to be inelastic in the short run. Poor weather and bad policy in many countries have made it difficult to increase production. In addition, the aggressive subsidy of corn ethanol production in the US has linked the energy in food grains to the world petroleum price. To make matters worse, the current corn crop in the US will be significantly lower than last year. It is too early to make any definitive statement about the US crop. All that can be said for sure about the harvest this year is that it will be less than last year's record of 12.9 billion bushels and almost certainly less than 12 billion bushels. The harvest will be somewhere between 11 and 12 billion bushels. All will depend on heat damage this summer and whether or not there is an early frost this fall. The wet spring gave the crop a shallow root system which will not support any extended heat without regular rain.

The corn crop is behind schedule. As can be seen on the following chart of percent silking, about 81% of corn should be at the silking stage by now and this year only 59% are silking. Corn that is behind schedule is vulnerable to summer heat and early frost.

**CORN: PERCENT SILKING IN SELECTED STATES\***

STATE	WEEK ENDING			'03 - '07 AVG
	27 JULY, 2008	20 JULY, 2008	27 JULY, 2007	
<b>PERCENT</b>				
CO	57	34	56	48
IL	79	55	98	95
IN	68	38	91	84
IA	45	14	85	81
KS	88	64	96	94
KY	82	68	90	88
MI	68	82	70	61
MN	34	7	96	85
MO	76	52	92	93
NE	72	46	88	86
NC	100	95	97	97
ND	18	3	77	61
OH	62	31	86	81
PA	65	42	71	63
SD	20	2	60	45
TN	96	88	98	98
TX	91	78	95	94
WI	32	7	70	51
<b>TOTAL AVG</b>	59	34	87	81

\*These 18 states planted 91% of last year's corn acreage.

Although grain prices are likely to be volatile in the short run as news and rumors about the current crop year affect the market, it can be expected that grain prices in general and corn prices specifically will fall in crop year 2009-2010.

The Case for Lower Corn Prices in Crop Year 2009-2010

**Supply**

Crop year 2008-2009 is likely to be characterized by both lower than trend yield and lower harvested areas. If only by the mathematical odds of reverting to the mean, in crop year 2009-2010 corn production will have an increased yield over 2008-2009. In addition, land is likely to be converted from Conservation Reserve Program to active production and production will increase in other countries. The impact of four years of steadily increasing grain prices is bound to produce a supply response in the rest of the world. World production should increase robustly by 2009-2010.

**Demand**

Demand for feed grains has been growing rapidly in some portions of the world where economic growth is strong. However, a general cooling of economic growth worldwide will tend to reduce the demand for feed grains. In addition, demand destruction from high grain prices will be working through the system. By crop year 2009-2010, production of both beef and pork worldwide will be reduced. The increase in the use of corn for ethanol is also likely to finally slow down in the next crop year as the emphasis shifts from corn based ethanol to imported sugar based ethanol and non-corn based domestic ethanol production.

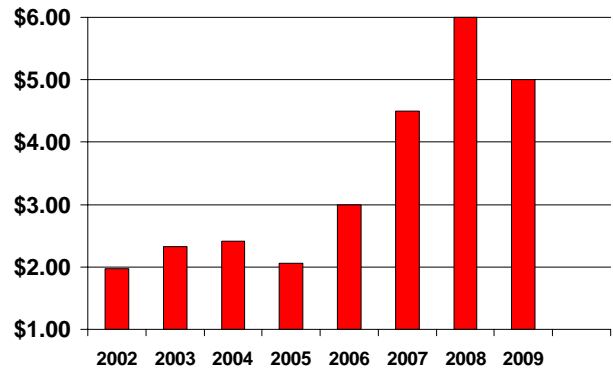
Crop Year 2008-2009

Lower prices are in the future. For the coming crop year the balance sheet for corn is distressing, ending inventory is dangerously low and total use will have to decline. The rationing of corn will, as always, be accomplished by higher prices. Since ethanol use is increasing, most of the reduction will have to be accomplished by exports and the domestic animal feeding industry. In other words, it is the world animal industry which will have to use less US corn this coming crop year. Note that in the table below of USDA estimates, both other domestic use (other than ethanol) and exports are expected to decline in the coming crop year even with the relatively optimistic 11.7 billion bushels of corn. A smaller crop would require an even more severe reduction of exports and non-ethanol use. I would consider the farm price of \$6 per bushel on the farm (\$240 MT) now predicted by the USDA to be the best case scenario. The poultry industry will have to wait until the following crop year to get \$5 per bushel (\$200 MT) prices at the farm level in the US.

**CORN – USDA – BILLIONS OF BUSHELS**

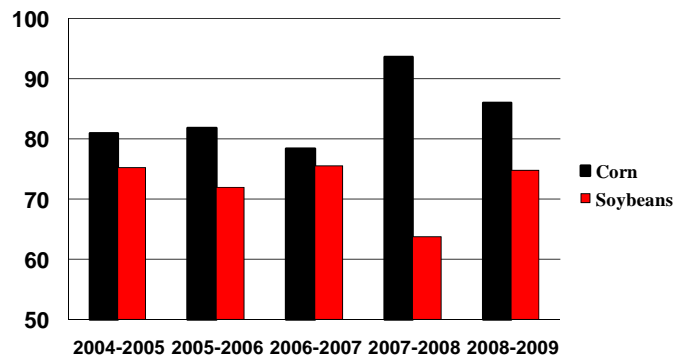
	2005-2006	2006-2007	2007-2008	2008-2009
Harvest	11.1	10.5	13.1	11.7
Ethanol	1.6	2.1	3.2	3.9
Other Domestic	7.5	6.9	7.4	6.5
Exports	2.1	2.1	2.5	2.0
Ending Inventory	1.9	1.3	1.4	0.8
Price on the Farm	\$ 2.00	\$ 3.04	\$ 4.50	\$6.00

**FARM CORN PRICES - \$/BUSHEL – CROP YEARS**

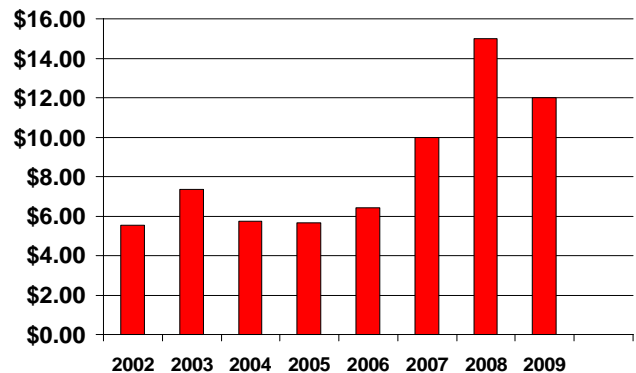


Soybean acres are more numerous this year, 75 million acres up from only 63 million acres last year. The increase in soybean acres is logical after the shift from corn last year. It turned out to be a one year fix that did not solve the corn problem while creating a soybean problem. With higher soybean production this year, soybeans should be relatively plentiful. However, the price of soybeans will move in sympathy with corn reaching a likely farm level price of \$14 next crop year. After the corn fever breaks, soybeans are likely to drift down to \$12 per bushel (2.4 times \$5.00 corn) in crop year 2009-2010.

**CORN AND SOYBEAN PLANTINGS MILLIONS OF ACRES**



**FARM SOYBEAN PRICE - \$/BUSHEL**



The World Chicken Industry

Given the likelihood of continued high grain prices next crop year, the world chicken industry is facing the prospect of a period of high costs in the next several months. In most countries it will be hard to pass increased costs along to consumers. In the US for example, the chicken industry is currently losing 5 cents per pound or 11 cents per kilo of eviscerated whole chicken despite historically high prices for leg quarters.

Prospects for the world chicken industry are much brighter in crop year 2009-2010. As mentioned earlier, there should be relief from grain prices in that crop year. In addition, the competing meats, which take longer to adjust to higher grain prices, are likely to have much higher retail prices by that time. In comparison to beef and pork, chicken will be a bargain a year from now. At that point I would expect the profitability of the world chicken industry to improve significantly.