"Back To The '70s?"

How Higher Commodity Prices Are Leading to the Return of Food Price Inflation

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Summary

Food price inflation, which has been benign for the last 25 years, increased sharply in 2007, and will likely continue to increase over the next five years. It is a situation reminiscent of the 1970s. Like then, the prices of key commodities have begun to move to a new plateau. This time the price movement is largely led by increased corn demand for ethanol.

To put this in perspective, for the past 25 years food price inflation has been limited at both the consumer and wholesale levels. Holding inflation in check during this period were productivity gains in food manufacturing and delivery, gains in labor costs, and steady commodity prices. What increases in commodity prices that did occur were short-term and were willingly absorbed by manufacturers and restaurants in a bid prevent losses in market share.

The trend of low food price inflation and short-term commodity price increases was broken in 2007. Commodity price increases have been sustained in 2007, driving food inflation to rates not seen since 1980. The CPI-Food rose at an annual rate of 5.4 percent during the first ten months of 2007. The overall rise in food input costs is likely to make 2007 the first of a multi-year period of higher rates of inflation for food manufacturers, grocery stores, restaurants, and consumers. In response to rising food input prices, the U.S. food industry is beginning to pass its increased costs to consumers by raising prices.

Key Findings

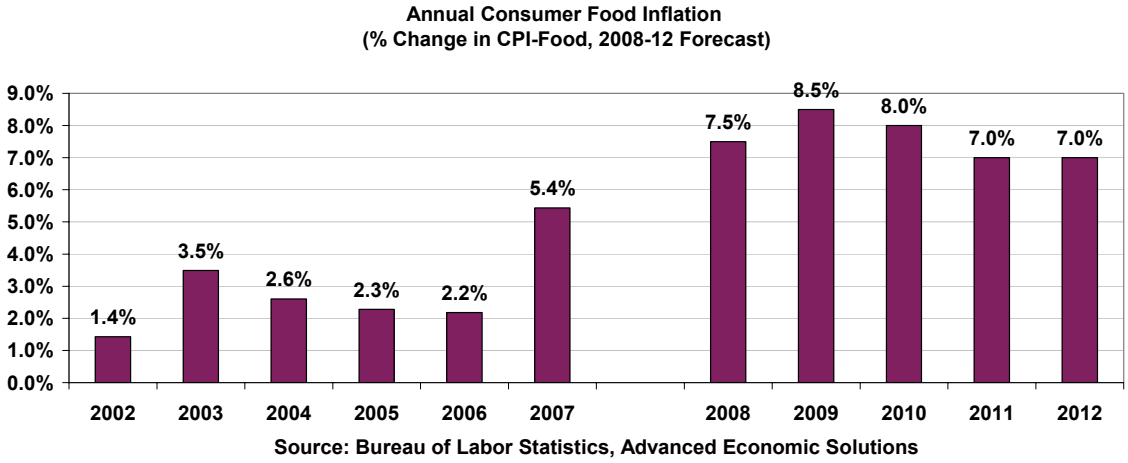
1. *Food inflation has been benign for the past 25 years but is poised to rise during the next five years.*
2. *This parallels the experience of the1970s when surging commodity prices led to food inflation rising by more than eight percent.*
3. *Major commodity food inputs (such as corn, wheat soyoil and milk) have been driven sharply higher as a result of increased global demand for food, but also due to a sharp increase in the use of corn for the production of ethanol.*
4. *During the next five years, food inflation is forecast to increase by an average of 7.5 percent, well above the 2.3 percent average of the past 10 years.*
5. *The price of major commodity food inputs are already well on their way to a new plateau, 50-80 percent above levels seen during the past 25 years. However, with any weather disruptions, commodity prices have the potential to rise by an additional 50 percent, resulting in even higher rates of food inflation in the coming years.*

A number of macro-economic factors are driving commodity prices higher, including agricultural commodities such as corn. As the ethanol industry, in part, drives the demand for corn higher, more acreage devoted to corn is required to produce adequate supplies. The result carries ripple effects as corn takes acreage from other row crops, which drives the supply of those crops down and the prices up. Additionally, higher corn prices translate to higher prices for products derived from animals whose primary feed is corn.

The U.S. experienced a similar period of rising commodity prices and food inflation in the 1970s. Commodity prices doubled during the early 1970s, and this ultimately resulted in food price inflation from 1972 to 1981 averaging 8.2 percent. Underlying the rise in commodity prices was a confluence of global macro-economic factors. The recent run-up in commodity prices, similar to the experience of the early 1970s, is a good indicator of what can be expected in the next five years in food price inflation.

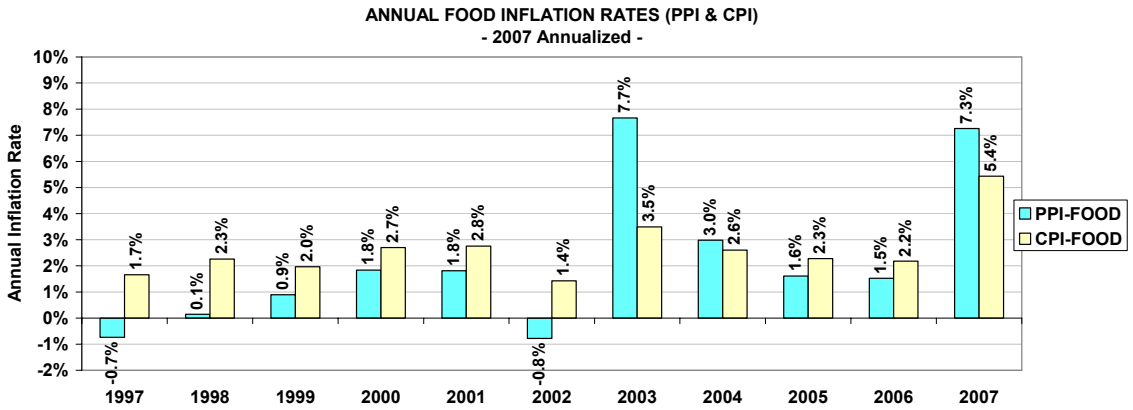
The price of commodities such as corn, wheat, soyoil and milk, have already begun to permanently move to a new plateau, due to the aforementioned broad-based macro-economic factors. The increase in prices will be passed on to consumers, and, therefore, are expected to result in consumer food inflation rising to an average of 7.5 percent during 2008-12.

Much as experienced during the 1970s, food price inflation rates are moving higher during the next five years as a result of sharply higher commodity input prices. While the precise yearly levels of food inflation are difficult to predict, increased commodity prices clearly suggest that food prices will be rising more dramatically during the next five years.



Recent History of Food Inflation (1997-2006)

Food price inflation has been a non-issue for most of the past 25 years, particularly during the past 10 years. Between 1997 and 2006, food price inflation at the consumer level (CPI-Food[1]) has averaged 2.3 percent, ranging from +1.4 percent (2002) to +3.5 percent (2003). Over that same period, food price inflation at the wholesale level (PPI-Food[2]) has averaged a meager 1.7 percent, ranging from -0.8 percent (2002) to +7.7 percent (2003).



These low rates of food price inflation are paralleled by the low overall rates of inflation in the United States– the total CPI rose at an annual rate of 2.5 percent between 1997 and 2006, while the total PPI rose at an annual rate of 2.0 percent. For an extended period of time, inflation in food costs has, for the most part, been an after-thought for manufacturers, restaurants, consumers and policy-makers.

The low rates of food inflation have been the result of several factors – continual productivity gains in the manufacture and delivery of food, modest gains in labor costs, and no sustained increase in underlying commodity prices.

Note that over the past 25 years (and especially during the past 10 years), the U.S. consumer has been shielded from most short-term spikes in commodity prices -- manufacturers and restaurants have been willing to absorb any short-term increases in commodity costs, rather than risk loss of market share to competitors. With the expectation that commodity prices would retreat from any historically high levels, the increase in costs have not translated into higher consumer prices.

[1] The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services. Each month, data collectors record the prices of about 80,000 items. For food, the CPI collects data on the price of cereal, milk, coffee, proteins, etc. The CPI-Food represents 15 percent of the overall CPI.

[2] The Producer Price Index is a family of indexes that measures the average change over time in the selling prices received by domestic producers of goods and services. The price collected for an item included in the PPI is the revenue received by its producer; each month approximately 100,000 prices are collected from 30,000 reporters.. For food, the PPI collects data for finished consumer goods, including the wholesale price of fruits and vegetables, eggs, dairy products, proteins, etc. The PPI-Food represents 21.5 percent of the overall PPI.

In 2007, the impact of a sustained increase in commodity prices has begun to translate into higher food price inflation rates. During the first ten months of 2007, the CPI-Food rose at an annualized rate of 5.4 percent, while the PPI-Food rose at an annualized rate of 7.3 percent.

The food price inflation rates in 2007 are approaching levels that have not been seen since 1980, and the trend in underlying commodity prices suggests that the current higher rates of food price inflation will remain for some time. The U.S. food industry, in the midst of the "Food vs. Fuel" debate, is raising prices to consumers to offset the sharp and sustained increase in the price of a wide variety of inputs. The table below shows the current price of a number of inputs that have moved sharply higher:

	Nov 2007	Year Ago	% Change	L-T Price	% Change
Corn ($/Bu)	$3.79	$3.43	+10%	$2.40	+58%
Wheat ($/Bu)	$7.77	$5.09	+53%	$3.60	+115%
Soyoil ($/Lb)	$0.45	$0.28	+61%	$0.23	+96%
Eggs ($/Dzn)	$1.56	$1.07	+46%	$0.83	+88%
Cheese ($/Lb)	$2.08	$1.41	+48%	$1.41	+48%

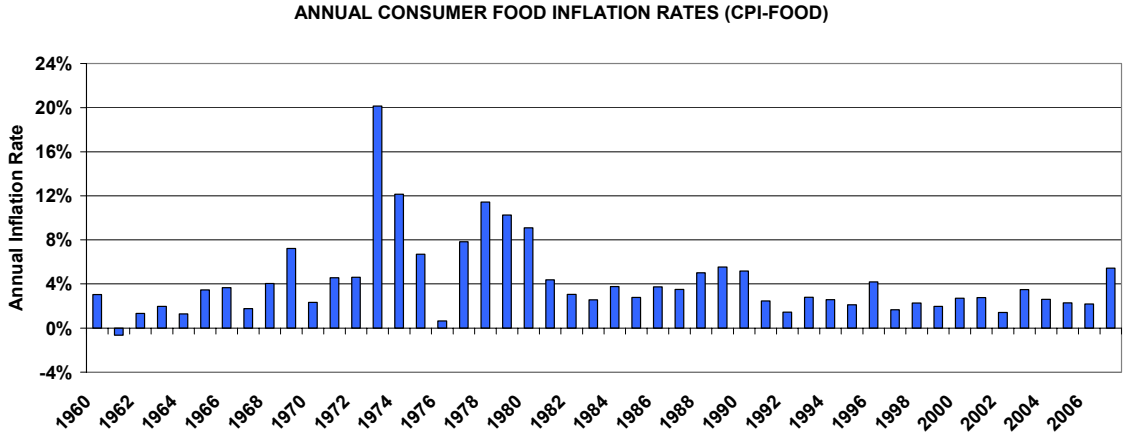
While corn is not directly used to produce many food inputs (with the notable exception of corn sweeteners), it is an underlying driver of most agricultural input prices. For wheat and soyoil, corn drives these prices higher by "stealing" acreage to meet growing corn demand. For milk, eggs, and proteins, corn is the primary feed used, and thus, has a direct impact on the cost of production of those items. "Corn is King," and when demand for corn surges (due largely to ethanol) corn prices move higher, which suggests that other inputs are likely to follow.

The long period of low food price inflation rates prior to 2007 has passed. With the dramatic rise in food input costs, 2007 is likely the first of a multi-year period of higher rates of inflation for food manufacturers, grocery stores, restaurants and consumers. This mirrors the experience of the 1970s, when the U.S. had a dramatic shift from low rates of food inflation to an extended period of higher rates of food inflation. While many would like to suggest the consumer impact will be minimal, a look back at the 1970s tells us that this is probably no more than wishful thinking.

The Experience of the '70s: What Should be Learned from the Last Bout with Food Inflation

For the past 25 years (since 1982), increases in the price of food, both at the consumer level and wholesale level, have been relatively benign. Adverse weather events have led to short-term price spikes, but input prices returned to "normal" levels within 12-18 months. In short, there has been no significant broad-based increase in food inflation since 1981, even with short-term increases in food input costs.

It was not always this way, as anyone who remembers the 1970s can attest. Not only did Americans have to live through other unique aspects of that decade[3], Americans also experienced extremely high rates of food price inflation. Between 1972 and 1981 the average rate of consumer food price inflation (CPI-Food) inflation was 8.2 percent per year. This compares to a modest rate of food price inflation (both CPI and PPI) of less than 3 percent during the previous 12 years, as well as during the 25 years that followed. Over the past 46 years, seven of the eight highest rates of food price inflation occurred between 1972 and 1981.

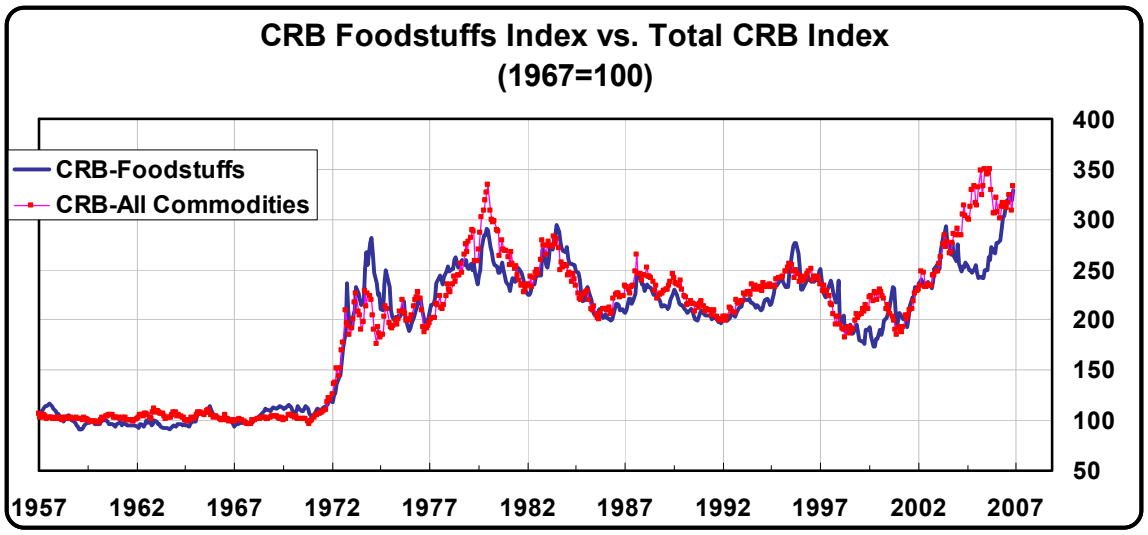


It is no coincidence that this is the same period of time when Americans experienced a broad-based jump in commodity prices – both agricultural and non-agricultural. The Commodity Research Bureau (CRB) index for food commodities doubled during the early 1970s, but also the overall CRB index (including a broader base of commodities) also doubled during the 1970s. Crude oil prices rose nearly 10-fold from $3.67 in 1972 to $34 in 1981. Other commodity prices, including silver and gold, multiplied during the 1970s as well. The rise in commodity prices was broad-based in the 1970s, much as it is today, resulting in prices moving to a new plateau during the early 1970s.

A number of macro-economic issues helped to set the stage for the extended period of rising commodity prices and higher rates of food inflation during the 1970s[4]. While these are not

[3] One can choose among many (such as poor taste in clothing and the disco phenomenon), but the author's dishonorable mention goes to poor monetary and economic policy employed by the Federal Reserve and the three White House administrations during the decade of the 1970s.

[4] For a more detailed and thorough review of the tumultuous economic changes seen in the early 1970s, see The Commanding Heights by Daniel Yergin and Joseph Stanislaw



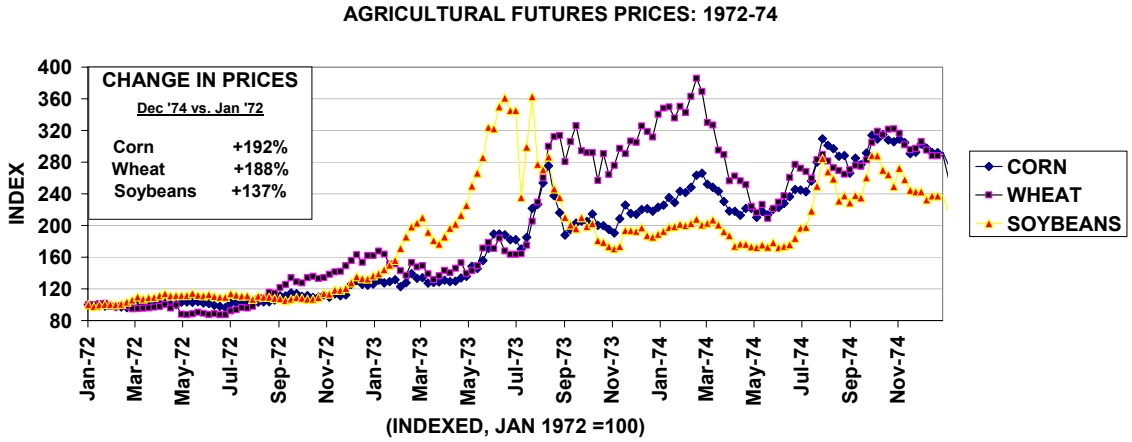
precisely the same factors driving the rise in commodity prices today, there are many parallels. Evidence suggests that a sustained rise in commodity prices and higher rates of food price inflation cannot occur without one or more significant macro-economic dynamics. The drivers we saw during the 1970s included:

- The move away from the gold standard and fixed exchange rates in August of 1971. This came in the face of mounting balance of payment deficit with foreign governments. No longer were dollars exchangeable at a fixed rate for an ounce of gold, and with this the value of the U.S. dollar declined sharply.
- A government-mandated freeze of most consumer prices between August 1971 and April 1974 was imposed to reduce inflationary expectations, as well as to allay the Nixon administration's fears of price-gouging.
- A period of strong global economic growth, with world real GDP rising at an annual rate of 5.1 percent between 1962 and 1971.
- Crude oil prices tripling between 1972 and 1977, which ultimately threw the U.S. into recession. The rise in energy prices began in large part due to the Arab oil embargo (imposed in October 1973), but prices continued to rise before peaking in 1981.

In recent years, the rise in commodity prices has also been the result of a number of global dynamics and imbalances. The U.S. balance of payment deficit is extremely wide, and a consequence of this has been a sharp decline in the value of the U.S. dollar. Economic growth on a global basis since 2002 has been increasing at one of the fastest rates on record. Importantly, the global economic growth is being driven in large part by the emergence of China as an economic power. Underscoring the macro-economic environment are the geo-political tensions in the Middle East, resulting in great uncertainty about the reliability of global energy supplies. Based upon the current mix of economic dynamics, there should be no surprise that we are in the midst of an increase in commodity prices similar to the one experienced during the 1970s.

Today's Rising Agricultural Commodities Also Parallel the '70s Experience

During the early 1970s, the price of agricultural commodities experienced the same price increases as other non-agricultural commodities. After nearly 30 years of limited volatility, corn futures tripled between January 1972 and September 1974, from $1.20 to over $3.50 per bushel. During the same time period, wheat futures rose from $1.60 to over $6 per bushel. Weather problems and strong import demand from the Soviet Union helped fuel the rise, and were both critical elements to understanding that, behind the increasing prices, was the need for more acreage (globally and in the United States) to meet strong world demand[5].



Today's situation parallels the sharp run-up in prices experienced during the early 1970s. The CRB index of commodity prices has risen 75 percent between January 2002 and October 2007. The rise was initially led by energy prices, but more recently has been driven by a surge in virtually every food and agricultural commodity.

Until recently, one could count on corn prices as being a mean-reverting commodity, gravitating back to around $2.40 for most of the past 25 years. The same could be said for nearly every major food input price.

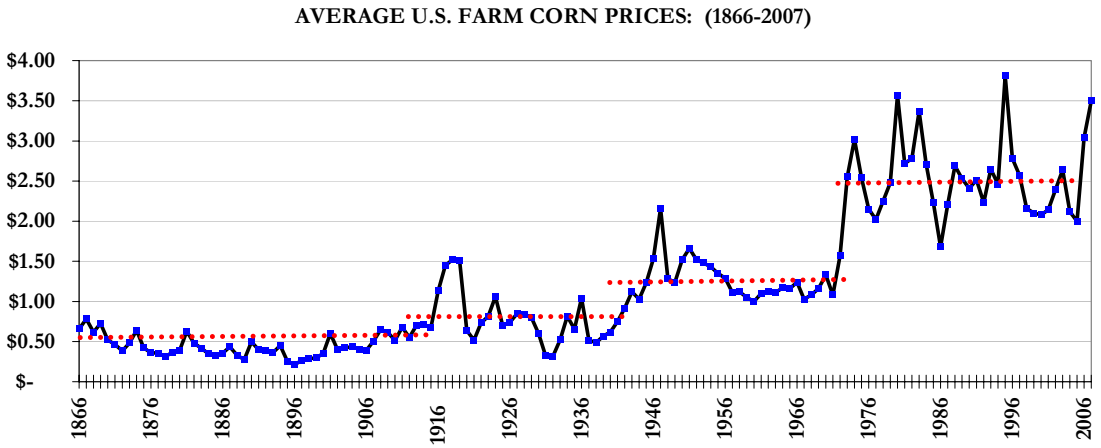
However since late 2006, as a result of growing demand, corn prices have moved substantially higher. From a previous "norm" of $2.40, corn prices have moved toward $4.00, and appear able to sustain this increase. As other crops battle for their share of acreage, the price of crops such as wheat and soybeans have also risen sharply. Dairy, egg, and proteins (which use corn as their primary feed) have also moved sharply higher.

During the next 5 years (2008-12), corn futures prices are forecast to average $4.00, more than 50 percent higher than the historic norm. The vagaries of weather will often drive year-to-year variations, but the stage is set for corn and other food inputs to remain at elevated levels.

[5] Supply management programs that idled cropland were largely eliminated in the early 1970s after then-U.S. Agriculture Secretary Earl Butz exhorted farmers to plant "fencerow to fencerow," resulting in an additional 41 million acres of cropland entering production between 1972 and 1976.

Corn Is King – The Relevance of Corn to Other Agricultural Commodity Prices

Corn prices[6] have averaged roughly $2.40 over the past 32 years (through the 2005/06 crop year), ranging from a low of $1.61 (1986/87) to $3.68 (1995/96). This compares to an average of $1.27 between 1943 and 1972 (with a range of $1.00 to $2.16). As the long-term chart of corn prices below shows, the price of commodities tend to be "mean-reverting" for several decades, before vaulting to a new level. As discussed in the previous section, the drivers shifting the prices to a new plateau are broad-based and reflect the impact of big-picture macro-economic drivers.



Just as was observed in the early 1970s (and twice before in the past century), corn and other food input costs have permanently moved to a new plateau. As adequate acreage is found to meet the growing demand for crops and competition for acreage, the price of corn and other commodities will find a new "mean-reverting level" around which prices will stabilize. This not only includes grains competing for acreage (corn, wheat, soybeans), but other commodities that are produced using corn as a primary feed (such as milk, proteins, and eggs).

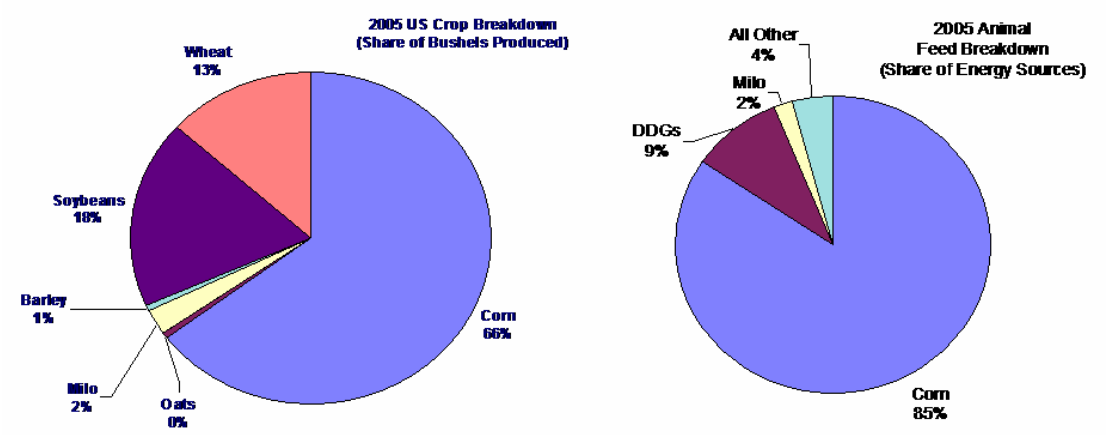
Global demand for grains has been rising in recent years due to the strong global economic environment. However the primary catalyst for the rise in the price of corn (as well as other food inputs) has been ethanol production. Corn used for ethanol in the U.S. has doubled during the past two years, and now accounts for 25 percent of total corn utilization. The surge in the use of corn to produce fuel led to a 20 percent increase in the number of corn acres in 2007, and created what is likely an on-going "acreage battle" in the coming years. This environment has led to reduced stocks of all grains, and consequently not only higher but much more volatile prices.

Higher corn prices are critical to the outlook for other commodities and, ultimately, to food inflation. Among row crops, corn dominates in terms of the total bushels produced. Of the major crops, corn typically accounts for two-thirds of all bushels produced. The significance

[6] USDA/NASS average farm price

here is that when corn prices are “attractive,” higher corn acreage leads to a decline in other crops, most notably soybeans. The dramatic surge in corn prices over the past year has led soybean prices over $10, while wheat prices (with added impact from weather problems) have moved to record levels, as well.

The other significant impact of increased corn prices is on the livestock sector. Corn is the primary feed source – among major sources of energy in feed rations, corn accounts for about 85 percent of the total utilized to produce beef, pork, poultry, dairy products, and eggs. Since corn typically represents a large share of the total cost of production, livestock output tends to (over time) respond to rising or declining corn prices. It is not possible to have a dramatic increase in the cost of corn without eventually impacting livestock margins, production and ultimately livestock prices.



During 2008-12, corn prices (futures) are forecast to average $4.00, versus a 2002-06 average of $2.37. To compete for acreage, the price of other grains and oilseeds will also need to rise by nearly 50 percent in the coming years. Wheat futures are forecast to average $6.50, while the price of rice is forecast to average $10. Soybean and soyoil prices are also forecast to rise substantially ($10.00 and $.40, respectively) during 2008-12.

With rising costs of production (both corn and soymeal), the price of proteins, milk, and eggs should also be expected to increase. Ultimately, the producers of these food inputs will require a higher price in order to offset the increased cost of feed. Excluding fruits and vegetables, rising corn prices means higher prices for most food inputs, including both grains and livestock. The timing and extent to which these dramatic increases in food input costs are passed on to consumers will be the ultimate driver of consumer food inflation during the next five years.

The Relationship Between Food Input Costs and Consumer Prices

Because of the competitive nature of the U.S. food system, the sustained rise in input costs we are experiencing will be passed on to consumers in the form of higher prices. Thus, as has been observed already in 2007, a sustained rise in food inputs will result in higher rates of food price inflation for some period of time.

The USDA estimates that the cost of food inputs represent 19 percent of the overall share of each dollar a consumer spends on food[7]. With the extended period of low food inflation, the share of consumer price represented by the food input costs has declined over the past 25 years. However during the early 1970s, the cost of food inputs as a share of consumer expenditures increased by 6 points as a result of rising commodity prices. With the rise in costs already underway, an increase in the share is likely again in the coming years.

The impact of rising food input costs will vary dramatically across the different products consumed. Items with limited "value added" (such as livestock and dairy items) will see a much greater impact from higher corn prices, while items with more "value added" (such as bread or cereal) will to see a more limited impact from higher food input costs.

Further, the analysis utilized by the USDA employs a mix of USDA farm prices and a BLS index of finished goods prices. Anecdotal evidence suggests that the impact of a rising input cost is being under-stated by the USDA, but further research is needed to affirm how much higher the impact actually is. Similar to the experience of the 1970s, input costs are expected to increase as a percent of retail prices, similar to the 6 point gain seen during the early 1970s. The table below shows the assumption used to derive the impact of higher input costs upon consumer prices[8]:

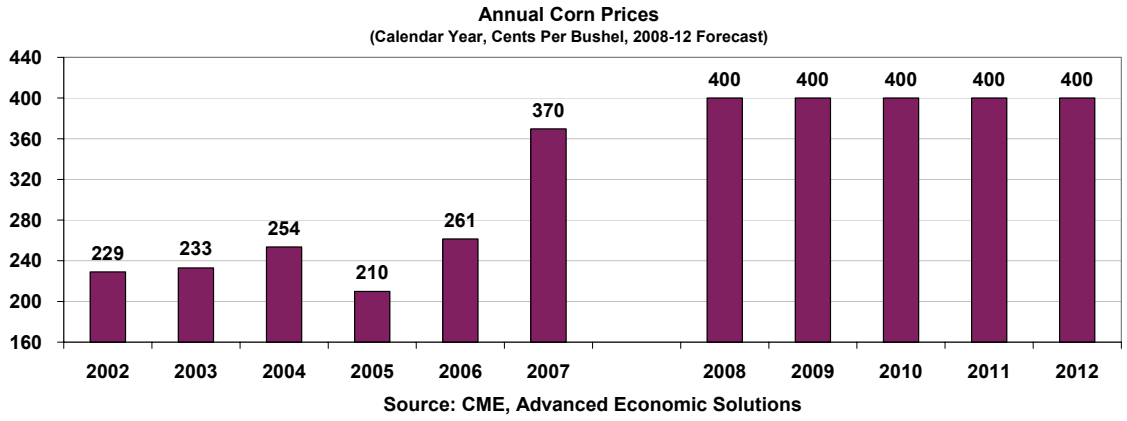
	Share of At-Home Food Outlays	Input Costs as a % of Retail Price
Cereal/Bakery Items	13.1%	11.7%
Beef	7.0%	63.0%
Pork	4.6%	49.0%
Chicken	4.1%	53.0%
Dairy Products	10.8%	44.0%
Eggs	1.1%	72.0%
Fruits/Vegetables	17.3%	26.0%
Sweets	3.7%	36.0%
Fats/Oils	2.5%	26.0%
All Other	35.9%	26.0%
TOTAL	**100.0%**	**31.7% (weighted average)**

[7] USDA Economic Research Service
[8] Bureau of Labor Statistics Consumer Expenditure Survey, USDA Economic Research Service, private trade estimates

Conclusions and Forecasts for Commodity Prices and Food Inflation Rates: 2008-2012

The prices of a broad range of food inputs have moved sharply higher in 2007, with corn being a primary catalyst for the increases. Corn futures prices averaged $3.70 per bushel during 2007, compared to an average price of $2.37 during the previous five years. The most notable change in the grain markets has been the surge in corn used to produce ethanol, doubling over the past two years and now accounting for 1/4th of total U.S. corn demand. Tight supply/demand conditions for corn in 2007 resulted in prices rising to over $4 per bushel and acreage increasing to the highest level since 1944.

The strong demand for corn is likely to continue, and consequently corn prices are likely to remain well above previous "normal" levels in the coming years. During 2008-12, corn futures prices are forecast to average $4.00, 60 percent above the 2002-06 average. There are many dynamics that could alter this forecast, most notably the weather. A short-fall in US corn yields during any of the next five years has the potential to push corn prices to $5 or higher.



The price of corn will directly impact nearly all other food input prices during the next five years[9]. Competition for a limited amount of acreage will result in other grain and oilseed prices rising along with corn. As with corn, weather events (in the U.S. and around the world) will be the primary unknown affecting prices of other grains and oilseeds, and has the potential to lead to a spike in prices. During 2008-12, wheat prices are projected to average $6.50 per bushel, soybeans $10 per bushel, and rice $10/hundredweight.

For dairy, protein, and egg markets, the price patterns are expected to be responsive to the higher feed costs, but the timing and extent of producers' response to higher feed costs is less clear. The longer cycles of expansion and contraction for dairy, protein, and egg producers will likely create more volatility in producers' margins, but ultimately prices will move higher to compensate for increases in feed costs. This includes significant increases in prices (vs. 2002-06) for pork (+69 percent), chicken (+64 percent), eggs (+58 percent), milk (+43 percent) and beef (+43 percent).

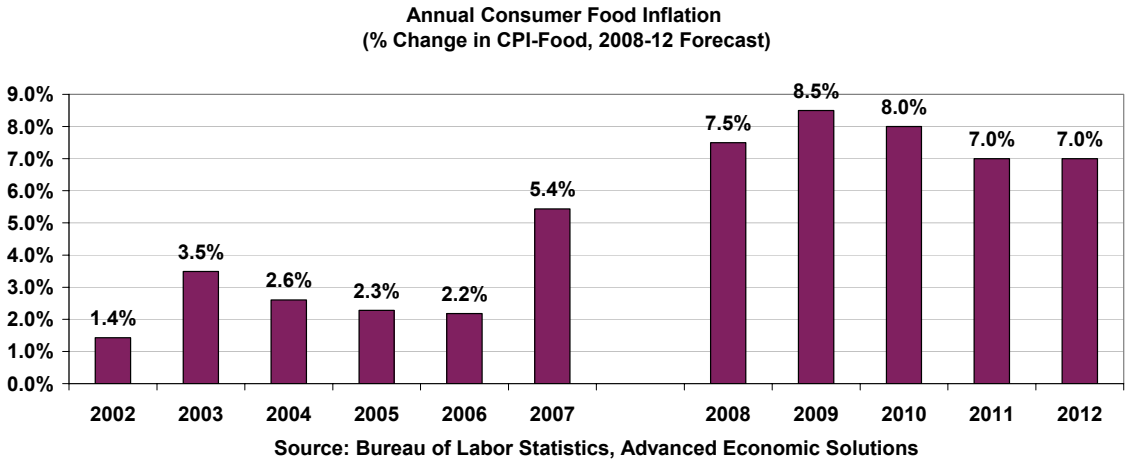
[9] The notable exception is the price of fruits and vegetables, which have historically had little correlation with the price of corn or other food inputs.

Commodity Price Outlook: 2008-12						% Change
		1990-2001	2002-06	2007	2008-12	08-12 vs. 02-26
Corn	$/Bu	2.52	2.37	3.70	*4.00*	*68%*
Wheat	$/Bu	3.36	3.46	6.09	*6.50*	*88%*
Rice	$/CWT	7.88	7.00	10.57	*10.00*	*43%*
Soyoil	$/Lb	0.22	0.23	0.35	*0.40*	*73%*
Milk	$/CWT	12.80	12.60	17.80	*18.00*	*43%*
Eggs	$/Dzn	0.81	0.79	1.13	*1.25*	*58%*
Pork	$/Lb	0.58	0.59	0.68	*1.00*	*69%*
Chicken	$/Lb	0.62	0.61	0.71	*1.00*	*64%*
Beef	$/Lb	1.17	1.40	1.53	*2.00*	*43%*
Crude Oil	$/BB	25	43	70	*55*	*28%*
Source: Advanced Economic Solutions, Dept of Energy,USDA, Urner-Barry						

Commodity prices will be supported by a number of fundamentals: strong global economic growth, tight US and world grains and oilseed stocks, and rapid growth in the use of corn to produce ethanol. However, the key unknown for food inflation forecasts in the coming years will be weather - particularly its impact upon yields for the U.S. corn, wheat, and soybean crops.

Weather events are key price drivers for agricultural commodities, and a yield-related crop shortfall of 10 percent or more in any year would drive prices at least 50 percent or more above these projected average levels. Yields for major crops have been 10 percent or more below trend roughly one in four years (23 percent of the time). With U.S. and world stocks already at minimal levels, such an event would have a dramatic impact upon commodity prices and ultimately upon consumer food prices. While hard to predict the impact of weather events, it is likely that the end result would be consumer food inflation rates of close to 10 percent for one or more years

The higher price of inputs, as well as increases due to non-commodity related factors, will ultimately be passed on to consumers. During 2008-12, this analysis utilizes the BLS estimate of the share of consumer outlays for the different foods inputs. Based upon the higher food input prices, food inflation at the consumer level will accelerate to an average of 7.5 percent during 2008-12. This compares to an average rate of consumer food inflation of 2.4 percent during 2002-06, and an annualized increase of 5.4 percent during 2007.



The wholesale cost of food (PPI-Food) has historically risen at a rate modestly slower (0.5-1.0 percent) than consumer food prices, and has been much more volatile. During 2007, wholesale food costs have risen more sharply than consumer food prices (7.3 percent vs. 5.4 percent), and consequently narrowing margins. As wholesale food prices continue to rise, pressure will mount for participants in the U.S. food industry to increase prices at the consumer level in order to maintain traditional margin levels. Over the next five years, higher commodity prices are likely to result in high levels of volatility in the PPI-Food, but with the overall rate of increase will probably match the forecast increase of 7.5 percent during 2008-12.

While an overall rate of food inflation of 7.5 percent is forecast for 2008-12, price increases for different foods will vary significantly. This reflects different levels of increase in the price of the underlying food inputs, as well as how closely the input costs are tied to the consumer price. Consumer prices for proteins and dairy prices are expected to increase by an annual rate of more than 8 percent during 2008-12, while the consumer price of eggs is expected rise by an average of 13.4 percent.

Much as we observed during the 1970s, food inflation rates are moving higher during the next five years as a result of sharply higher commodity input prices. While the precise yearly levels of food inflation are difficult to predict, the rising commodity prices clearly imply that food prices will be rising more dramatically during the next five years.

Appendix Table 1. Annual Commodity Prices, 1960-2007

Year	Corn Farm Price Mktg Yr	Wheat Farm Price Mktg Yr	Oats Farm Price Mktg Yr	Soybeans Farm Price Mktg Yr	Milk Farm Price Cal Yr	Table Egg Farm Price Cal Yr	Broilers 12-City Ave Cal Yr	Hogs Live Equiv. Cal Yr	Cattle Neb Steers Cal Yr
	$/Bu	$/Bu	$/Bu	$/Bu	$/CWT	Cents/Lb.	Cents/Lb.	Cents/Lb.	Cents/Lb.
1960	1.00	1.74	0.60	2.43		36.18	28.66		
1961	1.10	1.83	0.64	2.24		35.42	23.89		
1962	1.12	2.04	0.62	2.54		33.68	25.88		
1963	1.11	1.85	0.62	2.43		34.40	24.89		
1964	1.17	1.37	0.63	2.63		33.72	24.20		
1965	1.16	1.35	0.62	2.78		33.66	25.50		
1966	1.24	1.63	0.67	2.65		39.07	26.01		
1967	1.03	1.39	0.66	2.47		31.18	22.68		
1968	1.08	1.24	0.60	2.39		34.07	24.03		
1969	1.16	1.25	0.58	2.44		39.98	25.88		
1970	1.33	1.33	0.62	2.90	5.72	37.68	22.89	22.50	29.32
1971	1.08	1.34	0.61	3.28	5.87	31.08	23.39	18.57	32.54
1972	1.57	1.76	0.73	6.49	6.09	31.63	24.24	26.85	35.72
1973	2.55	3.95	1.18	6.27	7.20	54.13	41.14	40.61	44.43
1974	3.02	4.09	1.53	5.85	8.34	52.96	37.03	35.51	42.12
1975	2.54	3.55	1.46	5.18	8.78	52.76	44.60	49.12	45.32
1976	2.15	2.73	1.56	7.14	9.66	58.83	39.31	43.83	39.29
1977	2.02	2.33	1.10	6.18	9.71	54.13	39.94	41.30	40.63
1978	2.25	2.97	1.20	6.92	10.58	52.78	46.35	48.46	53.01
1979	2.52	3.80	1.36	6.57	12.03	58.14	46.36	45.05	68.56
1980	3.11	3.99	1.79	7.57	13.05	56.65	49.06	42.49	67.64
1981	2.50	3.69	1.89	6.07	13.76	62.19	48.65	47.08	64.42
1982	2.55	3.45	1.49	5.71	13.59	58.49	46.41	58.78	65.34
1983	3.21	3.51	1.67	7.83	13.57	63.08	50.39	50.78	63.63
1984	2.63	3.39	1.70	5.84	13.45	70.28	55.55	51.91	66.79
1985	2.23	3.08	1.19	5.05	12.73	57.39	50.82	47.82	59.75
1986	1.50	2.42	1.26	4.78	12.52	61.20	56.90	54.46	59.25
1987	1.94	2.57	1.64	5.88	12.49	53.06	47.37	54.81	66.28
1988	2.54	3.72	2.48	7.42	12.22	53.32	56.30	46.07	71.19
1989	2.36	3.72	1.49	5.69	13.56	70.04	58.99	46.75	73.86
1990	2.28	2.61	1.15	5.74	13.68	70.42	54.77	57.75	78.56
1991	2.37	3.00	1.26	5.58	12.24	66.04	52.03	51.79	74.21
1992	2.07	3.24	1.37	5.56	13.09	56.39	52.57	44.87	75.35
1993	2.50	3.26	1.39	6.40	12.80	62.90	55.18	48.17	76.36
1994	2.26	3.45	1.25	5.48	12.97	60.88	55.71	42.00	68.84
1995	3.24	4.55	1.67	6.72	12.74	63.92	56.35	44.62	66.26
1996	2.71	4.30	1.96	7.35	14.88	75.96	61.25	56.53	65.05
1997	2.43	3.38	1.60	6.47	13.34	69.85	58.81	54.30	66.32
1998	1.94	2.65	1.10	4.93	15.50	66.48	63.01	34.72	61.47
1999	1.82	2.48	1.12	4.63	14.35	60.83	58.07	34.00	65.56
2000	1.85	2.62	1.10	4.54	12.31	63.48	56.16	44.69	69.65
2001	1.97	2.78	1.59	4.38	14.97	61.10	59.11	45.81	72.71
2002	2.32	3.56	1.81	5.53	12.11	60.65	55.52	34.91	67.04
2003	2.42	3.40	1.48	7.34	12.52	74.60	61.97	39.45	84.69
2004	2.06	3.40	1.48	5.74	16.04	69.75	74.12	52.50	84.75
2005	2.00	3.42	1.63	5.66	0.00	65.50	73.40	50.05	87.28
2006	3.04	3.46	1.87	6.34	12.90	72.00	64.40	47.26	85.41
2007	3.50	6.10	2.40	9.00	19.00	109.00	76.10	46.98	91.61

Source: USDA ERS

Appendix Table 2. Annual Food Inflation Rates, 1960-2007

YEAR	CPI-FOOD Total	CPI-FOOD Meat, Poultry, Fish, Eggs	CPI-FOOD Fruits & Vegetables	CPI-FOOD Sugar and Sweets	CPI-FOOD Fats & Oils	CPI-FOOD Cereals & Bakery Items	CPI-FOOD Dairy Products	PPI-FOOD Total
1960	3.0		1.0	(0.1)		3.1	2.3	5.2
1961	(0.7)		(2.3)	(0.4)		1.3	0.3	(1.9)
1962	1.3		0.3	0.9		1.6	(1.7)	0.6
1963	2.0		9.2	14.8		0.3	1.1	(1.7)
1964	1.3		4.4	(4.0)		1.6	0.6	0.6
1965	3.5		(3.3)	(1.5)		1.3	0.6	9.3
1966	3.7	(1.0)	3.1	2.0		4.9	9.6	1.0
1967	1.8	1.5	4.5	2.7	(1.7)	(0.3)	1.5	-
1968	4.0	4.7	5.8	5.2	(1.1)	1.5	3.7	4.6
1969	7.2	12.7	4.6	3.9	1.5	3.8	4.1	8.1
1970	2.3	(3.1)	(1.6)	5.4	9.5	5.3	3.9	(2.5)
1971	4.6	3.9	12.7	2.2	6.6	1.0	2.2	6.3
1972	4.6	10.6	2.6	0.9	(2.1)	1.8	1.9	7.9
1973	20.1	27.3	14.2	13.6	6.9	27.8	22.6	21.9
1974	12.1	(1.9)	11.2	98.9	45.2	21.4	7.1	13.1
1975	6.7	14.5	7.0	(19.6)	(12.6)	(1.7)	6.6	5.7
1976	0.6	(8.1)	1.3	(5.9)	(4.6)	(1.6)	3.5	(2.5)
1977	7.8	3.5	9.6	12.8	10.7	5.1	3.2	6.8
1978	11.4	20.2	8.9	8.2	10.9	8.8	11.0	11.6
1979	10.3	8.6	10.3	6.2	7.1	10.2	10.4	7.7
1980	10.3	9.1	10.6	33.3	8.1	10.4	9.8	7.9
1981	4.4	(1.0)	8.8	(6.7)	3.7	5.6	3.1	1.6
1982	3.0	2.9	0.4	2.1	(0.9)	2.3	0.9	2.0
1983	2.4	(1.1)	5.0	1.7	7.6	3.2	0.8	2.2
1984	3.9	2.8	6.3	3.1	5.5	3.6	3.4	3.2
1985	2.7	1.5	4.6	2.0	(1.2)	3.0	(0.6)	0.5
1986	3.8	6.7	0.5	1.6	(1.4)	2.4	2.1	3.0
1987	3.3	1.1	12.5	0.6	1.7	3.5	1.7	(0.2)
1988	5.2	5.3	5.8	4.0	10.0	7.2	4.4	6.0
1989	5.5	6.7	4.1	3.3	2.6	6.4	10.3	5.3
1990	5.3	8.2	6.4	4.4	7.8	4.7	3.0	2.4
1991	1.8	(1.6)	4.2	3.5	(1.2)	3.5	0.7	(1.5)
1992	1.3	0.2	0.8	1.1	(0.6)	4.1	1.8	1.5
1993	2.9	3.6	6.4	1.0	0.8	3.6	0.9	2.2
1994	2.8	(0.5)	7.6	1.0	3.7	3.3	1.1	0.9
1995	2.1	4.0	(1.0)	2.9	2.4	3.2	2.6	1.8
1996	4.3	5.6	5.4	4.5	2.2	3.6	10.1	3.3
1997	1.5	(1.0)	2.5	2.2	(0.4)	1.5	(0.5)	(0.7)
1998	2.3	(0.6)	4.9	1.5	8.2	2.2	6.6	0.1
1999	1.9	1.8	1.5	1.4	(4.5)	2.1	2.3	0.9
2000	2.7	4.6	4.9	0.8	3.6	2.7	(0.2)	1.8
2001	2.8	3.4	(0.7)	1.8	4.6	2.5	5.7	1.8
2002	1.4	0.1	4.6	2.0	(2.5)	1.0	(2.1)	(0.8)
2003	3.6	11.5	3.2	1.2	3.4	2.9	3.4	7.7
2004	2.6	1.2	7.7	0.2	6.3	1.7	4.1	3.0
2005	2.3	1.4	0.6	4.1	(1.2)	0.9	1.8	1.6
2006	2.1	1.5	1.9	2.7	1.0	3.1	(1.2)	1.5
2007	5.4	5.6	0.8	2.7	4.1	4.7	12.8	7.3

Source: Bureau of Labor Statistics

Appendix Table 3. Estimated Consumer Food Expenditures

	Estimated 2007 Per Capita At-Home Outlays	Share of At-Home Food Spend	Est. 2008-12 Per Capita At-Home Outlays	Average Food Inflation Rate 2008-12
Source	Bureau of Labor Statistics, AES	Bureau of Labor Statistics		Advanced Economic Solutions
Cereal / Bakery Items	$446	13.1%	$544	6.8%
Beef	$238	7.0%	$301	8.2%
Pork	$157	4.6%	$211	10.4%
Chicken	$141	4.1%	$188	10.0%
Dairy Products	$368	10.8%	$460	7.7%
Eggs	$37	1.1%	$54	13.6%
Fruits / Vegetables	$592	17.3%	$692	5.3%
Sweets	$125	3.7%	$152	6.8%
Fats / Oils	$86	2.5%	$108	7.9%
Other	$1,227	35.9%	$1,534	7.7%
TOTAL	$3,417	100%	$4,244	7.5%

About AES


Bill Lapp

Advanced Economic Solutions is dedicated to providing high quality economic and commodity analysis for a broad array of food companies. Advanced Economic Solutions provides forecasts and analysis for procurement, investment and risk management decisions in order to help these companies in their decision-making processes and strategic thinking.

Beyond providing typical economic analysis, Advanced Economic Solutions provides clients with unique perspectives and intelligence to support their individual needs. This includes timely risk management advice, access to an extremely broad historical database, insights on the impact of government policy on various food inputs, and an understanding of futures markets. Clients of Advanced Economic Solutions are provided with the opportunity to tap into experience from participation in virtually every aspect of the food chain.

Bill Lapp is the principal of Advanced Economic Solutions. Mr. Lapp has over 25 years of experience in analyzing and forecasting economic conditions and commodity markets. He has a wealth of experience in providing comprehensive economic analysis of grain, livestock, and dairy markets. Mr. Lapp has been a featured speaker at numerous national forums, including the restaurant industry's semi-annual Hospitality Supply Management conference, the USDA Annual Outlook conference, and the National Chicken Council.

Prior to forming Advanced Economic Solutions, Mr. Lapp was Chief Economist for ConAgra Foods. He currently serves on numerous boards, including the Kansas City Federal Reserve Board's Center for the Study of Rural America, the Farm Foundation, and the Food and Agriculture Committee of the Omaha Chamber of Commerce. In addition, Mr. Lapp is a member of USDA's National Agricultural Statistics Service Advisory Board, and participates on the Harvard Business Industrial Economists' Round-Table.

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