# **Inflation And Food Prices**

Ever since the United States decided it would be good policy to feed 40 percent of its corn crop to yeast to make low-grade motor fuel the world has seen some food price spikes reminiscent of the bad old days of the 1970s. The usual crowd of fear-mongers took particular joy in forecasting mass starvation. Their solution was the same as that offered three decades later by the global-warming crowd: After they flew all over the world to attend conferences on the subject, you would be invited to fork over some hard-earned cash in the form of taxes, price controls, subsidies and mandates to assuage their fears and giver them more power, not necessarily in that order.

Would it be impolite to note the world's population was in the three billion-plus range then as opposed to current readings over seven billion, and no one was holding conferences on the rising tide of obesity, now recognized as a serious public health concern?

Of course, a confluence of events back in the day did create a sense rising food and later rising energy prices, those trivial categories we exclude from the Consumer Price index to arrive at the fiction of "core inflation," drove overall inflation. Some were natural events, including bad harvests in the former Soviet Union, El Niño-related shrinkage of the Peruvian anchovetta catch and a series of jaw-dropping inept decisions by the Nixon administration such as the imposition of an export ban on soybeans and domestic price controls.

Facts, however, are funny things, include the simple one of constant-dollar prices for key foodstuffs such as corn, wheat and soybeans have been declining at the rates shown in the chart legend since the aftermath of World War II. The world's population has tripled and diets worldwide have climbed to include more high-cost proteins since that time. This suggests the intensive use of fertilizers, pesticides and developments in plant genetics have contributed, all criticisms of their environmental costs acknowledged, to a massive supply response. It also suggests short-term dislocations in the supply/demand balance and concomitant increases in price are temporary detours in a long-term secular trend. Finally, the notion food price spikes are an artifact of monetary incontinence is not supported by the data (see "More Money Does Not Mean Less Grain," July 2012).



## Constant-Dollar Grain Prices Have Declined Since World War II

#### Life Is Short-Term

Let's take a look at three measures of agricultural price pressures, all of which had surges in the first half of 2008 and again in late 2010-early 2011, the Dow Jones-UBS agricultural index on both a spot and a total return basis, and the United Nations' Food & Agriculture Organization's index of global food prices. All of these indices can be compared against a measure of relative food price inflation, which is nothing more than the excess year-over-year changes in the Consumer Price index for food relative to the CPI Ex-Food.

The DJ-UBS total return index, as the name suggests, measures the total return on an index of futures contracts on coffee, corn, cotton, soybeans, soybean oil, sugar and wheat. It extends back to January 1991; over the past two decades it has led the relative rate of food inflation by nine months on average. As agricultural futures generally trade in a carry structure, the total return index underperforms the spot index rather substantially; this is to be expected as rolling futures contracts forward in a carry market creates a negative return component to the trade. As we shall see below, agricultural futures have left much to be desired as an investment.

One of the more interesting aspects of the relationship between these indices is how much more quickly and completely changes in agricultural futures are transmitted to relative food price inflation now than prior to the widespread acceptance of long-only futures investments and commodity-linked ETFs in the 2004-2005 period. A rather pronounced grain rally in 1995-1996 did not lead to a significant relative jump in the food price index; moreover, a significant jump in the food prices index in 2001 occurred during the midst of a decline in the DJ-UBS index.



#### Agricultural Futures Not Strong Indicator Of Relative Food CPI

The FAO index measures global prices on 55 different food-related commodities; it goes back to January 1990 and leads the relative food price inflation number by eleven months on average. Here the historic connection seems a little closer to relative food inflation than is for the DJ-UBS indices, which suggests the deformations natural to agricultural futures markets such as old crop / new crop spreads and switches between carry and inversion makes the futures markets a less sensitive barometer of what is going on in agricultural markets than cash markets are.

#### FAO World Food Index Leads U.S. Relative Food Price Inflation



# Food As An Investment

The acceptance of commodity index investments has been one of the major developments in futures markets over the past half-century, perhaps ranking up there only with the adoption of financial futures in the 1970s. While much of the discussion centers on whether higher prices are "good" or "bad," a misplaced argument if ever there was one since higher prices are better for the seller and lower ones are better for the buyer and no valued judgment is necessary, this argument misses the points entirely. Futures markets exist for three reasons: To facilitate commerce via mechanisms such as fixing the prices for purchase or sale independently from the underlying physical transaction, to provide for risk management and to facilitate price discovery. Nowhere in this group of reasons is an argument stating, "The purpose of a futures market is for a group of buyers to hold contracts independently of their price expectations and do it in size sufficient to exhaust short-side liquidity and for those contracts to be rolled forward ad infinitum and in apparent disregard of the costs of said roll."

Not that the author has an opinion on the matter.

In the case of the DJ-UBS index, the argument can be augmented by the simple statement, "This is a poor investment." The average annual return on the DJ-UBS index since January 1991 has been 2.24%. Comparable returns displayed in the chart below for the Russell 3000 index, 7-10 year Treasury notes and for investment-grade and high-yield corporate bonds, respectively, have been 9.34%, 7.15%, 7.28% and 9.46%. The DJ-UBS index' passive strategy has outperformed the Barclay Agricultural CTA index' average annual return of 4.01% over the same January 1991-onward period. The Barclay index, like all such indices similarly constructed, has a very strong survivor bias. Whether active or passive, the chief advantage of any foray into long-term agricultural investment appears to be diversification.

## Agricultural Returns Still Trail Financial Returns Badly



Diversification? To paraphrase an old baseball cliché about homerun hitters driving Cadillacs while singles hitters drove Chevies, no one becomes head of sales by selling diversification; returns are a different story.

# **The Political Consequences**

One of the problems with the whole concept of food prices is the Bureau of Labor Statistics and other official sources like to pretend they do not count. Food and energy are classified as "non-core," on the reasonable assertion many of their price increases result from supply disruptions and therefore are not attributable to monetary policy. Regardless of this argument's merits, the simple fact of the matter is all consumers eat and therefore are affected by rising food prices. The money spent on non-core items is money unavailable for other goods and services and therefore contribute to a gnawing sense of lower living standards.

Governments throughout history have tumbled and fallen on this issue; the Pharaoh sought Joseph's counsel on issues of food supplies and the security thereof; nothing in Genesis 41 quibbles about issues of core versus non-core expenditures. As a result, all governments react to rising food prices by some combination of price controls, export controls and blaming someone. For example, Russian banned wheat exports in 2010, China slapped price controls on various foodstuffs in 2011 and everyone blames commodity speculators, a class that might include you, dear reader, for higher prices. History also shows governments lose legitimacy after a short period of such policies as no fear is as primal as a loss of food.

While higher food prices may be a short-term phenomenon, they do have long-term consequences. We all die eventually as individuals, as Keynes noted so inarguably, but if we want our society to survive and thrive, we had best do everything possible to allow food markets to work and return us to those long-term constant-dollar price declines.