Commodities And Interest Rates

Some traders live in a strange parallel universe populated by themselves, their positions and this permanent antagonist called the Federal Reserve. Not just the Federal Reserve, other central banks will do in a pinch. If we have learned anything in the modern world it should be not to make light of such people and their imaginary friends; how else can we explain so many religious wars?

But as one *RealMoney* reader queried in an "Ask Our Pros" e-mail, what is the relationship between commodities and interest rates? Why would higher short-term interest rates drive commodity prices lower? And, in a question unasked but implied, is the Federal Reserve and its confreres in the world's central banking community targeting commodity prices?

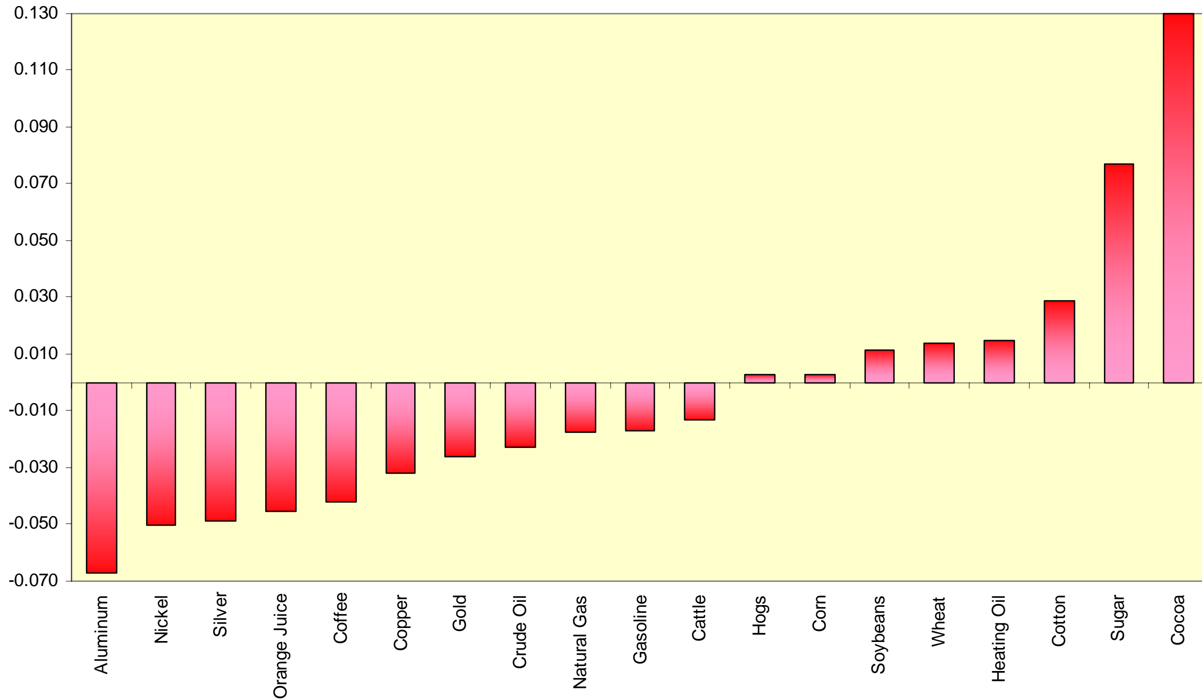
The answers are:

- There really is no direct relationship between commodities and interest rates;
- Higher short-term interest rates do not drive commodity prices lower; and
- The Federal Reserve has no explicit commodity rule to go along with its general lack of rules, but often acts as if it were following a commodity rule in tightening monetary policy

General Observations

First, let's offer the important caveat there really is no such asset class as "commodities," a point first raised here in May 2004 and revisited several times since. The correlation between individual commodities and between individual commodities and economic factors is too diverse to make any statements ascribing unified behavior of commodities.

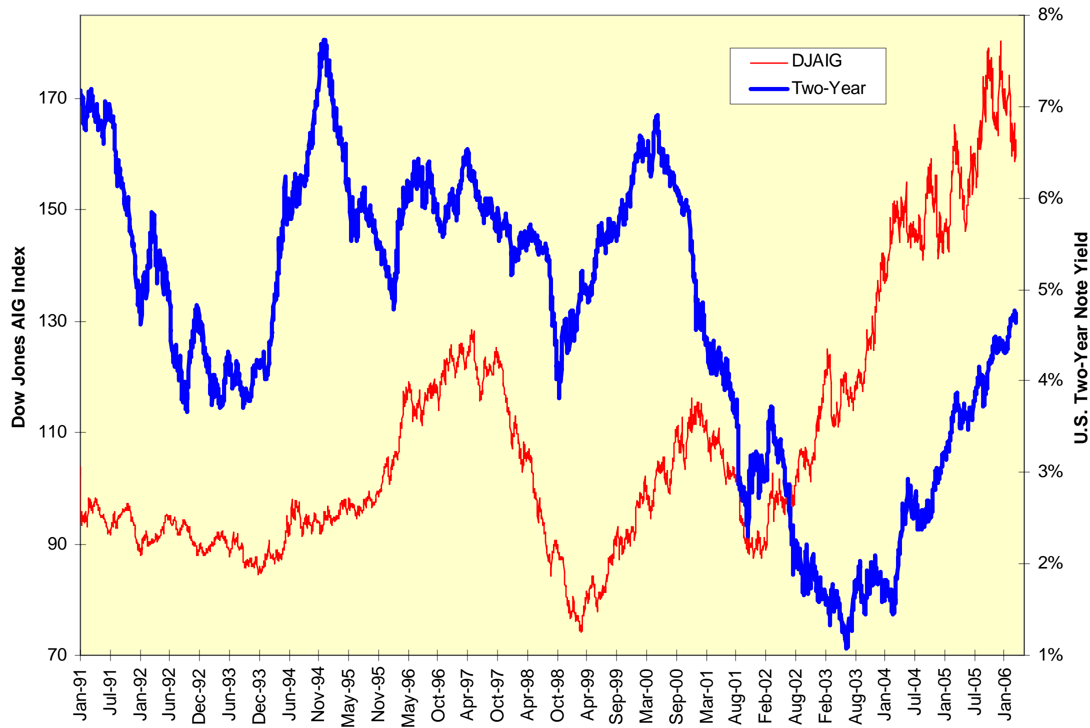
Let's illustrate this with seven years of daily returns for a variety of individual commodities against the returns on the U.S. ten-year Treasury note's price. The industrial metals such as aluminum, nickel, silver and copper have some of the most negative correlations; Treasuries fall when they rise and vice-versa. We can make a plausible argument this should be so. Can we make a similarly plausible argument for orange juice and coffee? And if orange juice and coffee are negatively correlated to Treasuries, why are other soft commodities such as cotton, sugar and cocoa positively correlated to Treasury prices?



But even if we were to persist in the indexed approach, it is very hard to divine a direct relationship between a commodity index such as the Dow Jones-AIG index and short-term interest rates such as those on the two-year note. Most observers want to believe cheap money manifests itself in higher commodity prices, and because they want to believe this relationship, they omit the step of actually looking at the numbers.

The simple fact is commodity prices have been on the rise almost continuously for seven years. The first leg of the rise occurred between Marcy 1999 and January 2001. Two-year note yields were on the rise from October 1998 to May 2000. Can we say higher interest rates were at the very minimum coincident with higher commodity prices? Yes, we can. A similar episode has been unfolding since August 2003; commodity prices have been rising in the face of higher short-term interest rates. The period between September 2000 and August 2003, in which two-year note yields plunged, saw only modest gains in the Dow Jones-AIG index. So much for interest rates statistically causing higher commodity prices.

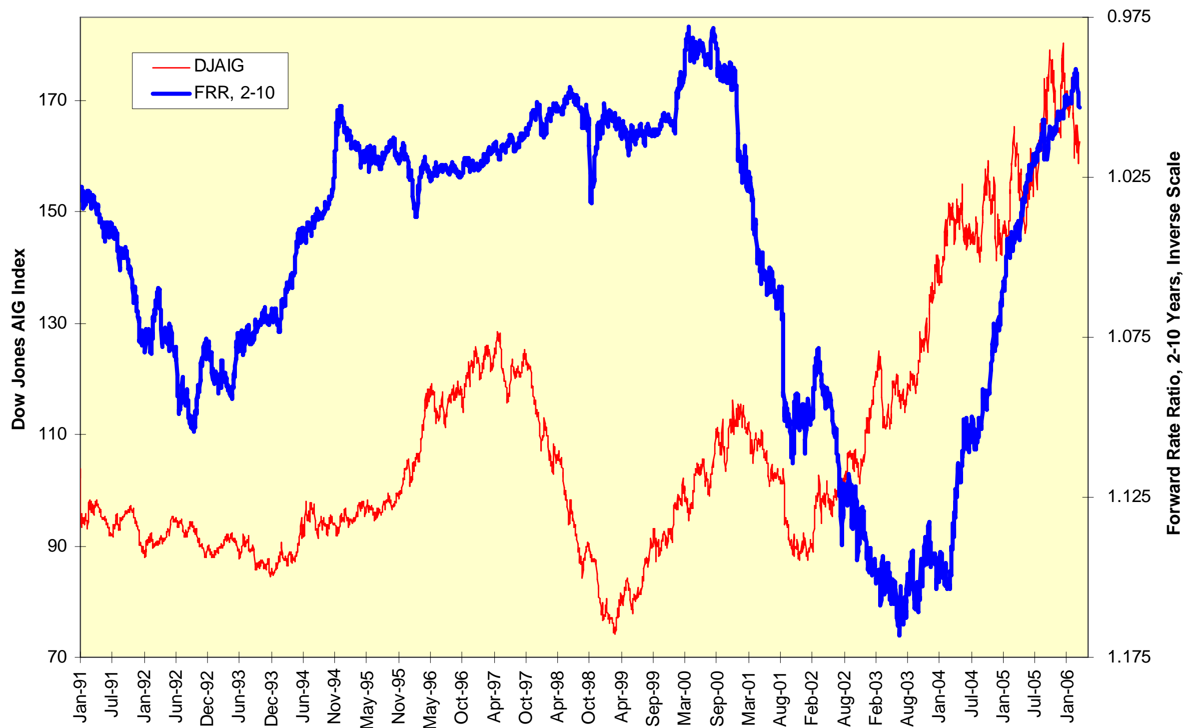
Is There A Causal Relationship Here?



The Yield Curve Connection

As discussed here last December, short-term interest rates themselves do not choke off economic growth and demand for commodities. We would need higher long-term interest rates. If the Federal Reserve is in fact trying to slow down the economy by raising short-term rates and hoping these somehow would spill over into higher long-term rates, they have been defeated by the yield curve.

If we measure the shape of the yield curve by the forward rate ratio between two and ten years, the rate at which we could lock in borrowing for eight years starting two years from now, divided by the ten-year rate itself, we do see how the yield curve has flattened since August 2003. The more this ratio exceeds 1.00, the steeper the yield curve. Was the observed flattening the result of a Federal Reserve tightening in response to higher commodity prices? Possibly; we do have to remember the 2001-2003 period was the era of the loosest monetary policy on record, and the Federal Reserve might have connected higher commodity prices with its own largesse.



But if we are to believe monetary policy is being set in response to commodity prices, we would have to ask, "Which commodity prices?" If gold prices are being pushed by gold ETFs, or if crude oil prices are being pushed higher by a combination of long-only commodity funds plus political uncertainty, or if sugar prices are being pushed higher by Brazilian ethanol production, how would higher short-term interest rates in the U.S. affect any of these developments without damaging the economy unduly? After all, we could raise the short-term cost of holding gold even further over expected inflation, but we might kill every lending institution in the process. This is a little like burning down the house to get rid of the mice.

At the end of the whole process, we might conclude the Federal Reserve could target commodities by targeting everything else. This is an inelegant approach. We might add that higher short-term interest rates raise the cost of holding inventories, but as we noted last week, the forward curves of storable commodities embed these financing costs into their carry structures; the net effect is marginal at best.

If you are exposed to commodity movements, focus on the internal dynamics of each market you are in. And stop looking over your shoulder with the idea the Federal Reserve is out to get you. They are not targeting commodities, they never really have target commodities, only inflation, and the various individual commodity markets in bull trends are not there by virtue of easy money. It is bad enough having imaginary friends running around the office, do not conjure imaginary enemies.