

Economic Soft Patches Meet Commodity Hard Assets

Market analysts are as much a slave to fashion as the sleekest runway models; which group best understands supply and demand will be left unanswered in the present space. The rotation of which economic indicator holds the secrets to universal market understand is aided and abetted by leading policymakers. Caroline Baum, the very able bond market commentator for *Bloomberg* referred to Alan Greenspan's "MacGuffin" habit. The term MacGuffin was used by Alfred Hitchcock to describe a device that sets the plot in motion but is otherwise incidental to the storyline.

Grab the audience's attention and go. Does anyone remember previous Greenspan favorites such as the employee quit rate, the stock market wealth effect, or P*, a model between the long-term relationship between money and prices? Of course not; all have faded into justifiable obscurity.

So it will be with the Baltic Dry Freight Index, the subject of an article here in May. Like all market indicators it seems destined to go through a life cycle of obscure correlation followed by discovery by those such as your humble correspondent, publication, widespread adoption, misuse and then finally, abandonment to the economists' dung heap. The Baltic Dry Freight Index is somewhere between the widespread adoption and misuse phases. Somewhere along the line, those late to the analytic party forgot you can build more ships. Supply matters, and the 42% drop in the shipping index during the first half of the year proves it.

Growth And The Conundrum

One of the connections made by bond traders for years has been weak growth leads to both weak inflation and to lower interest rates. This connection persists despite the stagflation of the 1970s and the combination of strong economic growth and declining inflation during the Reagan deficits of the 1980s, during the Clinton surpluses of the 1990s, and during the present combination of slow growth and rising federal deficits.

Bond yields fell globally throughout the first half of 2005. That they did so even as the Federal Reserve raised short-term rates steadily, no inflation appeared on the horizon and growth remained steady if unspectacular was dubbed a "conundrum" by none other than the aforementioned Alan Greenspan. But, given bond traders' proclivities and misplaced understandings of what actually drives their market, it was only natural for them to search for evidence of economic weakness to explain the drop in yields.

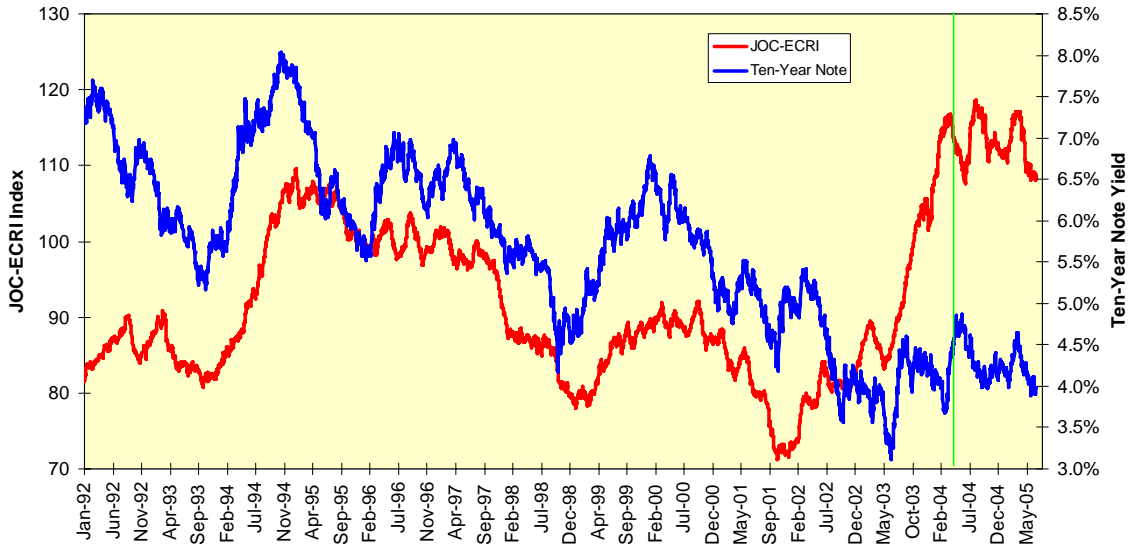
Industrial Commodities

Let's use the Journal of Commerce-Economic Cycle Research Institute index of industrial commodities as the basis of comparison. This index includes commodities such as tallow, benzene, red oak, polyester and burlap that measure real economic activity, not the impassioned *amore* of futures traders. It also contains exchange-traded crude oil and cotton and the London Metals Exchange's six-pack of base metals: Copper, aluminum, nickel, lead, tin and zinc, a group to which we shall return shortly.

The JOC-ECRI index' rate of change was designed to parallel that of the Producer Price Index, which along with its basis of inclusion being economic utility and not the accident of whether its components support exchange-traded futures, makes it particularly valuable as an analytic tool. But here's a surprise: The JOC-ECRI index follows bond yields, not vice-versa. Bond yields rose in 1994 and again in 1999, and well ahead of increases in the JOC-ECRI index in both cases.

As further evidence of who leads whom, the large jump in the JOC-ECRI index between 2002 and 2004 occurred within a trading range for ten-year note yields. Once the JOC-ECRI index hit its "left-shoulder" peak in early 2004, marked on the chart below, note yields did not fall out of economic weakness. The moral of the story is clear: Yields are not the prisoner of an industrial commodity index any more than they are the prisoner of the dollar, stock prices or any of the other MacGuffins tossed about by those who have a need to explain every tick in the market.

Chart 1: JOC-ECRI Index And Note Yields



As useful as the JOC-ECRI index may be as a market indicator, try making copper wire or galvanized steel plate from it. Each of the constituent commodities should be treated as a separate entity. This is true even for the six LME base metals referenced above. We may assume all six rise and fall together in reflection of global economic activity, but this assumption falls apart at the first statistical test. If we examine the correlation of daily returns on the LME's three-month forwards since 1992, a data sample of 3,500 days, we find only copper and aluminum have a correlation of returns greater than .50.

Table 1: Correlation Of Returns: LME 3-Month Forwards, 1992 - 2005

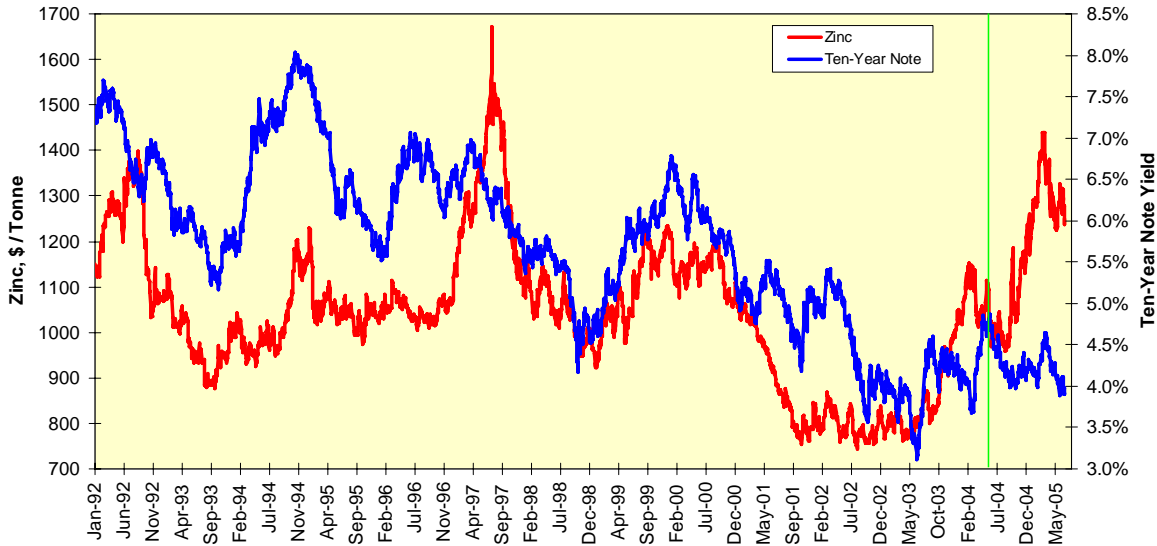
	ZN	HG	AL	NI	PB	SN
Zinc	1.000					
Copper	0.497	1.000				
Aluminum	0.483	0.581	1.000			
Nickel	0.432	0.474	0.457	1.000		
Lead	0.508	0.447	0.424	0.393	1.000	
Tin	0.332	0.354	0.353	0.373	0.340	1.000

Pedal To The Metals

Do any of these metals provide useful information for financial markets? Over long periods of time, yes, and in ways we might not expect. Too many bond traders want to explain low ten-year note yields with economic weakness and are eager to seize on any confirming evidence from industrial metals prices as evidence thereof.

No industrial metal has matched or led the movement of ten-year note yields more than zinc, a metal used in the manufacture of brass and to galvanize steel. Only once prior to 2004, in the months immediately prior to the Asian crisis of 1997, did zinc get it wrong as a directional predictor of yields. The second period of mismatch began when the Federal Reserve began its rate-hike campaign in June 2004. The metal's price rose steadily thereafter, but yields on ten-year notes barely budged. If impending global weakness produced low yields, it has not yet been evident from zinc prices.

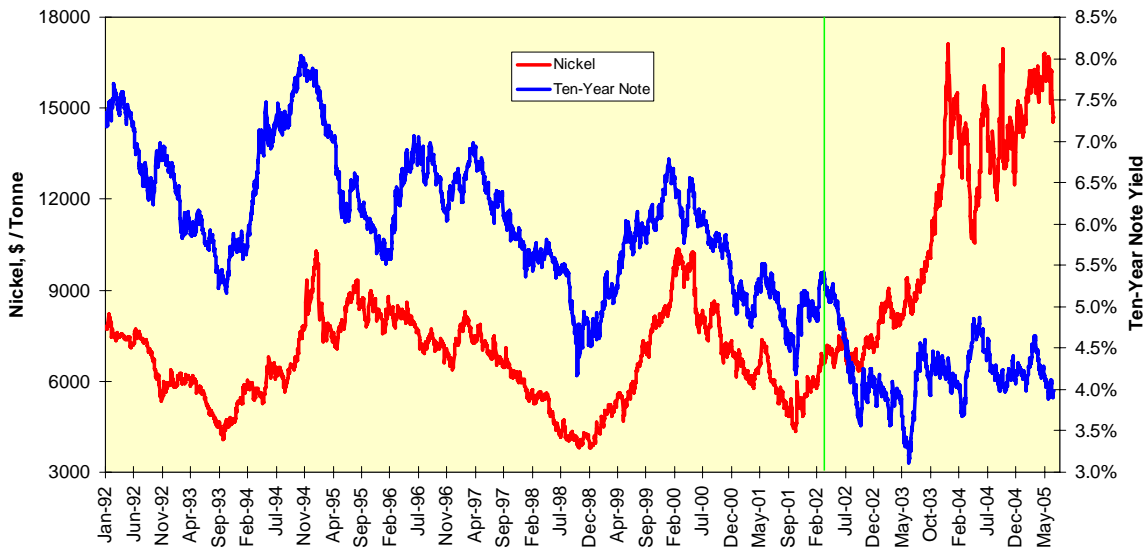
Chart 2: Zinc And Notes Diverge



If zinc does not give bond traders the answer they want, will nickel? This metal, essential to the production of stainless steel, is a very expensive industrial metal and traditionally has been the most volatile. As a little digression, nickel is abundant in meteors and in the earth's core. But on the earth's crust, it is found mostly in so-called cratonic deposits, those from the most ancient cores of continental plates. That means Canada, Australia, South Africa and northern Russia. The Russians, excellent capitalists when it comes to commodities trading, have been known to manipulate the supplies of metals such as nickel, palladium and vanadium via unscheduled production disruptions.

Nickel diverged from note yields at the depth of the 2002 financial downturn; it started heading higher at the very point when corporate credit spreads began to narrow and stock prices began to bottom. Once again, anyone looking to an industrial metals price, here nickel, for evidence of economic weakness and for an explanation of low ten-year note yields is going to be disappointed.

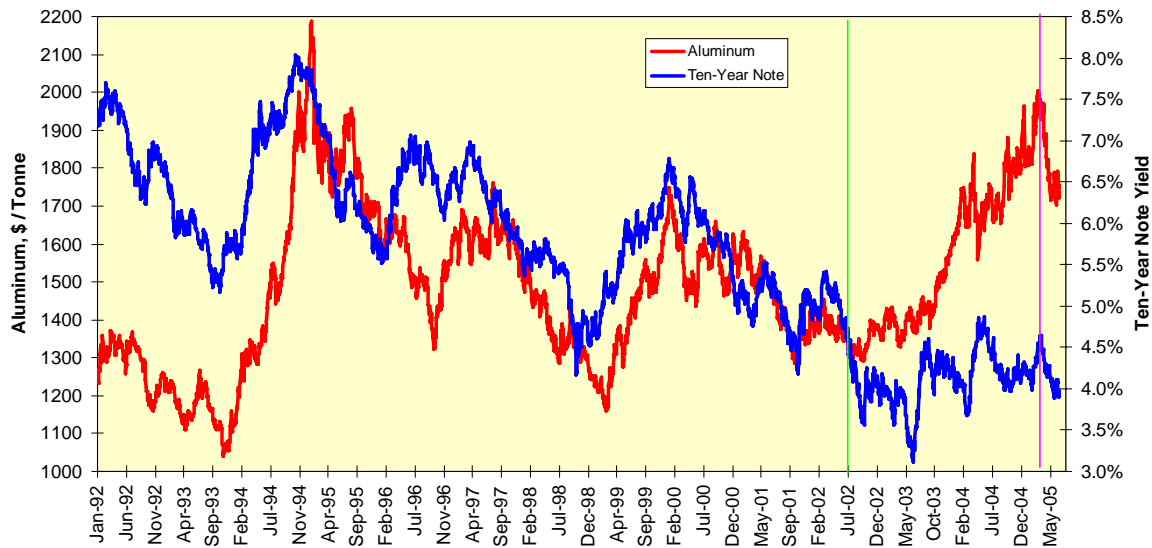
Chart 3: Nickel And Notes Diverge



What about aluminum? This metal is used in the production of beer cans, softball bats and miscellaneous items such as aircraft. The correlation between aluminum prices and note yields between 1995 and mid-2002 was tight, which is why cannot be so quick to dismiss a connection between declining bond yields and declining aluminum prices that began in early 2005. Either that or we have to recognize a central reality of commodities: If the price goes up, so too will supply. Aluminum is the fourth most abundant element in the earth's crust by weight, so we are unlikely to

exhaust the resource base anytime soon. Given the lack of confirming evidence of industrial weakness from the zinc and nickel markets, the supply response explanation for lower aluminum prices appears to be the best.

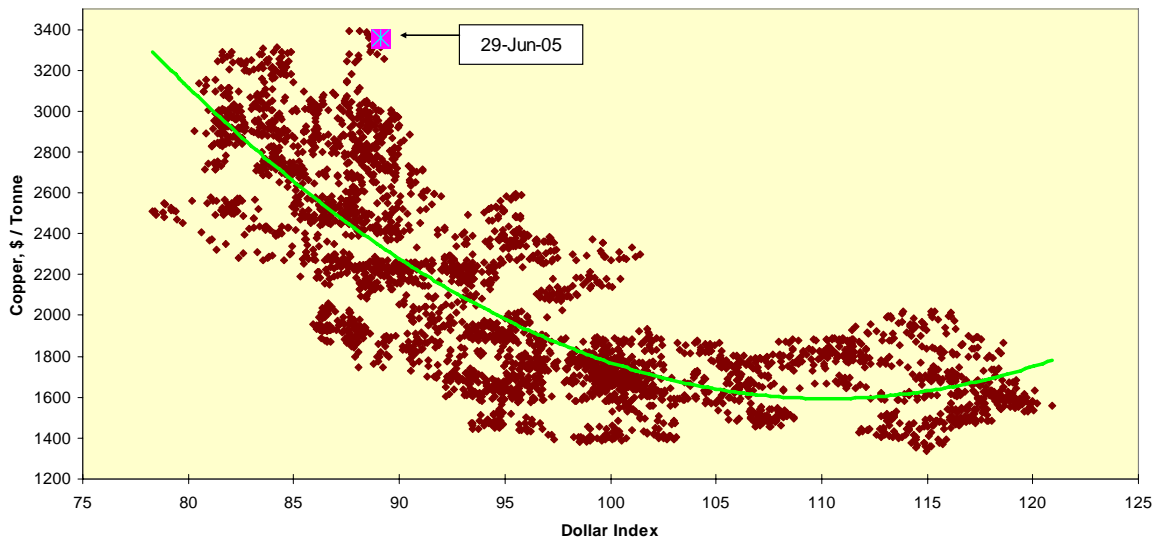
Chart 4: Aluminum And Notes Diverge



Making Bucks With Pennies

The relationship between metals markets and financial markets involves more than just evidence of growth rates and interest rates. As is the case with all physical commodities priced in dollars, a weaker dollar should boost the dollar price of a commodity, all else held equal. Nowhere in the world of base metals is this easier to demonstrate than with copper. As the dollar weakens, the price of copper not only increases but increases quadratically. Interestingly enough, a very strong dollar produces the same effect but on a smaller scale; the dollar often strengthens when the U.S. economy is strong and when the Federal Reserve is tightening credit.

Chart 5: Copper Prices Rise Quadratically With Respect To Dollar



Indicators are not roadmaps, they are clues. It would be nice if industrial materials prices served as a perfect barometer for the global economy, and if the global economy served as a perfect predictor of credit demands, inflation and interest rates. None of this is true. All we can do is piece these fragments of information into the jigsaw puzzle and hope they give us better understanding of the long-term market environment in which we must trade.