Classical Insights

Global Investment Analysis Based on the Classical Economic Model

Classical Insights Afternoon Bullet Points August 29, 2005

A divergence has developed within the industrial commodity sectors. Commodities that are dug straight out of the ground (copper, iron, oil, gas, molybdenum, nickel) are doing much better than processed "near" commodities (carbon steel, aluminum & plastics). We didn't foresee this split, but it's clearly happening – and the dichotomy has become more pronounced than ever in recent weeks. Equity prices, meanwhile, do not appear to be fully reflecting this divergence of fortunes. Nearly all industrial commodity stocks have been trading down over the past two weeks, and as a result we see several pockets of value, especially in iron, copper and some of the consumers of steel and aluminum.

Points:

1) As the table below shows, crude oil is trading at more than twice its monetary equilibrium point, and natural gas isn't far behind.

Monetary equilibrium prices for selected commodities

	current price	equilibrium (w/gold at $439/oz.)	**upside to monetary EQ**
Crude oil (NYMEX)	69.50	32.93	**-53%**
Copper *	1.77	1.29	**-27%**
Aluminum	0.87	0.90	**4%**
Coal (eastern blend)	49.67	51.29	**3%**
Nat gas	11.84	6.27	**-47%**
Corn	2.04	3.22	**58%**
Lumber	312	436	**40%**
Oriented strand board	263	284	**8%**

** This is the 1990s EQ for copper. The pre-1971 EQ for copper was much higher.*

"Pure" commodities have gained more than twice as much as processed commodities over the past 3 to 4 years. Copper is up nearly 200% from its 2002 low, while nickel is up 250% and molybdenum is up 900%. The average raw industrial commodity has more than tripled since the 2001/2002 low, while the average processed commodity has less than doubled.

(Table follows on next page.)

Commodities: Price changes from 2001/2002 lows

Pure commodities	*measure*	*low*	*current*	*change*
Coal (metallurgical)	$/ton	42	100	138%
Coal (utility)	$/ton	27.00	49.67	84%
Copper	$/lb.	0.62	1.77	185%
Crude oil (NYMEX)	$/bbl.	14	69	393%
Iron	$/ton	27	57	111%
Molybdenum	$/lb.	3	30	900%
Natural gas	$/mcf	2.7	11	307%
Nickel	$/tonne	4300	14700	242%
Alumina	$/tonne	600	1800	200%
Zinc	$/lb.	0.35	0.62	78%
Average gain (after eliminating highest and lowest readings)				**208%**

Processed "near" commodities	*measure*	*low*	*current*	*change*
Aluminum	$/lb.	0.61	0.87	43%
Oriented strand board	$/mbf	150	263	75%
Polyethylene	$/lb.	0.21	0.53	150%
Steel (hot-rolled coil)	$/ton	220	425	93%
Average gain (after eliminating highest and lowest readings)				**84%**

2) This divergence is forcing us to re-think our assumptions on how monetary reflation rolls through the price stream. We'd been assuming that pricing power would ooze upward through the value-added chain in an orderly manner (i.e. first the pure commodity producers would get pricing, then the processors would get it in equal measure). However, it's not happening quite that way. In many instances (such as natural gas) the commodity producers are hogging nearly *all* the pricing power, leaving little for the processors (especially chemical makers).

We can think of a number of reasons why this might be happening:

a) Conceptually, miners and energy firms have a totally different relationship to their assets than do processors (steel, aluminum, chemicals) because miners and energy firms "eat up" their assets while processors do not. If you build a copper mine, it will eventually be exhausted and abandoned. If you drill an oil well, it will eventually run dry. A steel mill, though, will never consume itself. Nor will an aluminum plant or a chemical facility.
b) It takes longer to start up a new mine than it does to build a new mill. We see steel and aluminum companies slapping up new mills in 12-18 months (ex. Century Aluminum's Nordural expansion in Iceland). However, mining firms tend to need 3-6 years to start new mines. Mines are far bigger productions than are mills, and they carry greater environmental implications.
c) China – the source of most of the world's new steel capacity – has an easier time building new steel mills than opening new mines, partly for the simple reason that it *doesn't have* sufficient deposits of iron and metallurgical coal. This geological quirk is a big positive for global iron and metallurgical coal producers, but it's a negative for steel companies.
d) It's harder to increase production at an existing mine or well than it is at an existing mill. A steel mill's production can be increased just by adding a graveyard shift, but an oil well cannot be made to pump faster without causing long-term damage to the oil pool (via water incursion). Coal-company managements have been trying their best to boost production for two years, but are consistently coming up short of targets. By contrast, many steel producers have excess capacity on hand.
e) Labor strikes seem to be a bigger problem for mining firms than for processors now, perhaps because most mines are running at 100% capacity at a time when prices are at

all-time highs, providing miners' unions with leverage that steel and aluminum unions don't necessarily have. Strikes have hit copper and iron firms throughout the Americas.

f) Transportation bottlenecks seem to be a bigger problem for raw commodities, probably because mines tend to be in more out-of-the-way locations than mills (which usually are sited on waterways).

g) Anecdotally, we have heard numerous reports of shortages of mining personnel and equipment (particularly in Australia) but we haven't heard the same complaint from processing firms.

3) Recent anecdotes suggest iron stocks Cleveland Cliffs (CLF) and Vale do Rio Doce (RIO) are particularly attractive here:

- In Friday's Financial Times, Anglo-Dutch steelmaker Corus said it will be looking for ways to control supplies of iron and coal to forestall shortages of its key inputs. The firm currently has no coal or iron assets. We've heard similar statements by other steelmakers over the past year. Cleveland Cliffs is an obvious takeover target given its small market cap ($1.5 billion) relative to other mining giants as well as its clean balance sheet and huge cash flow;
- China's iron imports rose 32% YoY for the first seven months of 2005, according to American Metal Market;
- On Thursday, Brazilian iron miner Vale do Rio Doce said in a conference call that it did not have enough capacity to meet booming demand, and that an iron-ore price increase for 2006 was a distinct possibility. Management also noted that plunging ocean freight rates have offset higher iron prices for its overseas customers.

4) Scrap steel producers such as Schnitzer (SCHN) and perhaps Commercial Metals (CMC) also should benefit from strength in iron-ore prices. Scrap steel has more in common with dig-it-out-of-the-ground commodities than with processed commodities because it's a substitute for iron ore. Global scrap demand has risen sharply due to the construction of a plethora of new electric-arc furnaces (mini-mills) in India, China and elsewhere in Southeast Asia. Meanwhile, generation of new scrap is probably rising more slowly than is steel production.

5) Copper stocks are logical buys now, too. Shares of Southern Peru Copper (PCU) and Phelps Dodge (PD) are both down about 10% from their mid-August highs, yet spot copper remains basically right where it was two weeks ago, at $1.79/lb. Of equal importance, the December 2006 copper future continues to climb and is now at $1.39/lb. That is significant because the consensus Wall Street copper estimate for 2006 (and especially 2007) remains well below $1.39/lb.

Our copper forecast for 2006-2007 is $1.45/lb. Assuming this price prevails next year, we have a price target for PCU of $67, and a price target on PD of $132. We're not raising our copper forecast at this time, but the cushion in the existing forecast certainly is growing. Spot copper is now $0.34/lb. above our 2006 forecast, and the December 2006 future is just $0.06/lb. below our 2006 forecast. Other possibilities in copper include Grupo Mexico, Boliden, Amerigo and perhaps Falconbridge (which is a diversified miner).

5) Another group that is appealing in the wake of the recent market downturn is *consumers* of commodity steel. Benchmark hot-rolled coil prices have been meandering in the low-mid $400s, and slab prices have not been doing much, either. Nor have aluminum prices. Meanwhile, share prices for consumers of steel and aluminum have fallen:

Processors *of already-processed commodities* are appealing

	Aug peak	Current	**change**	
A.M. Castle (CAS)	17.42	14.89	**-15%**	Distributes high value-added metals
Aleris (ARS)	24.64	22.96	**-7%**	Buys finished & scrap aluminum
Insteel Industries (IIIN)	15.60	13.45	**-14%**	Buys Chinese slab
Terex (TEX)	51.87	47.25	**-9%**	Buys sheet and structural steel

Bottom line: The last weeks of August are often characterized by low trading volumes which exacerbate price movements and create valuation inefficiencies. There appear to be pockets of relative value now in two places: a) miners and b) consumers of processed commodities. The top risks to the bull case would be a) a sharp decline in the gold price (which would pull down the monetary equilibrium point for all commodities, and b) some sort of global fiscal shock, such as huge tax-rate increases in key economies like China or the U.S.

The Classical Insights portfolio holds all names mentioned in this report except Corus.

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