

Platinum Group Metals: Catalysts For Recovery

Consultants love matrices, but they have actual uses anyway. Remember the periodic table of elements from your high school chemistry class? We can reorganize elements into a little two-by-two matrix along the dimensions of abundance and economic value. Some elements, like silicon, are both abundant and economically useful. No silicon, no silicon chips. No silicon chips, no tech stocks. No tech stocks, no 90% losses. Can't live without silicon.

Gold, on the other hand, is rare and of limited use. Off in another corner of the matrix are the platinum group metals. These are far scarcer than gold and are of such great economic value that approximately 20% of the goods in the modern economy have one of the platinum group catalysts involved somewhere in their manufacture.

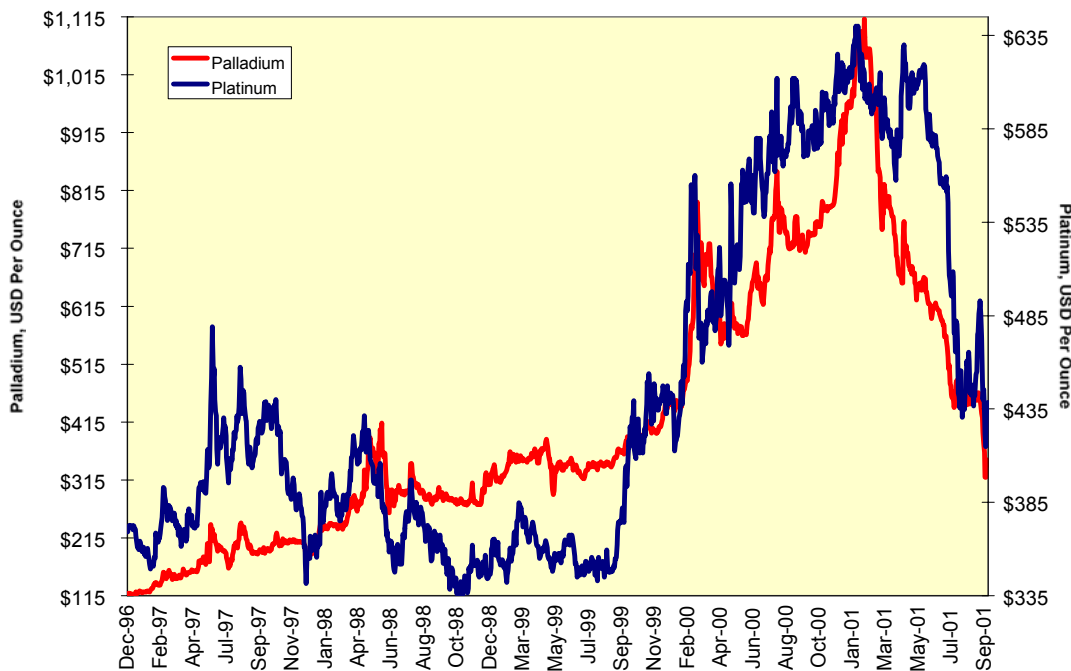
The precious metals have been emitting inflationary warnings, (see "All That Glitters Isn't Gold," Aug. 15, 2001) and the base industrial metals have been stuck in a recessionary gear (see "Commodity Prices," October 3, 2001). What can we learn from the platinum group, which includes platinum, palladium, osmium, iridium, ruthenium, and rhodium (an element crucial to *Mary Tyler Moore* reruns)?

From Russia With Shove

Just like crude oil is found in such awful locales as the deserts of Arabia, the jungles of Indonesia, the trackless wastes of north Alaska and in Los Angeles, the platinum group is found in such garden spots as South Africa, western Australia and the Canadian shield country. The world's incremental supplies have come from mines in northern Siberia, which leads to two questions: 1) Why did God put them there, and 2) Who found them there once He did?

A series of production disruptions in Russia – and our newfound allies in the fight against global terrorism mysteriously get victimized by disruptions when whatever they produce enters a bull market – led to some Nasdaq-like price jumps in the metals' prices between late 1999 and early 2001. That bubble has burst as all commodity price bubbles do. Higher prices stimulate new production and lead to demand conservation.

The Catalyst Bubble Deflates



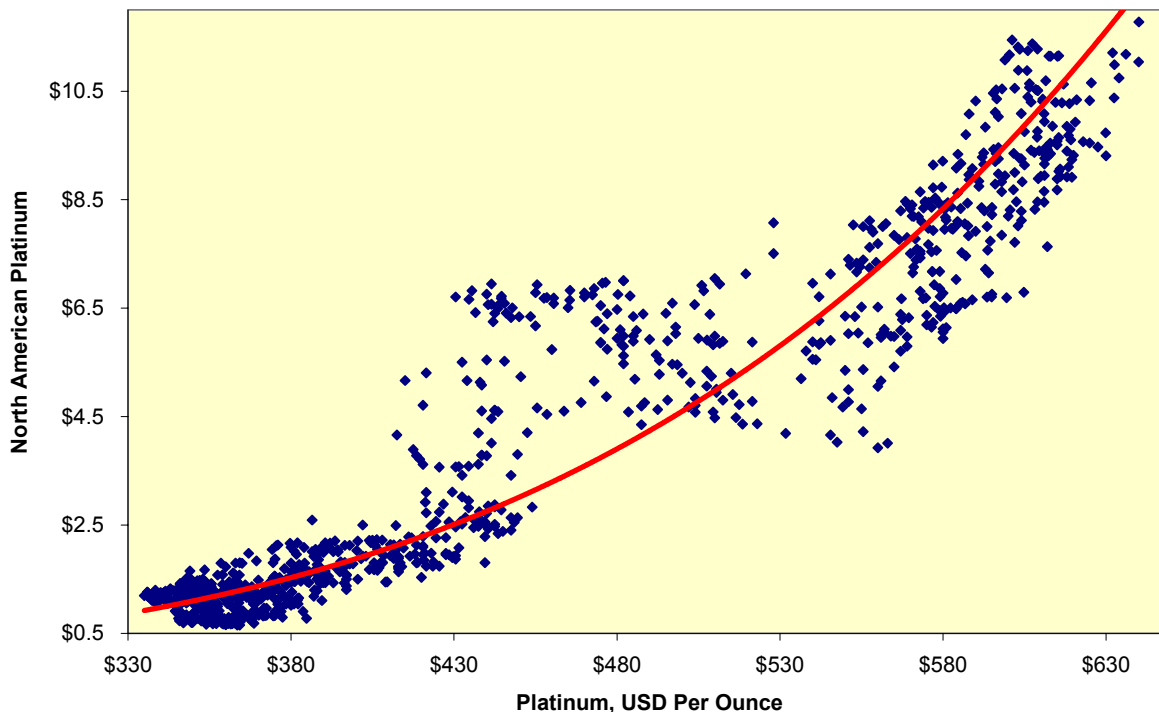
The severity of this price collapse reflects, by definition, a supply/demand imbalance. Supply remains strong as exporters strapped for hard currency maintain production even as prices fall. Demand has weakened as a function of

the downturn in global manufacturing. Are there any signals from the equities of platinum miners this cycle is about to break?

Stocks And Commodities

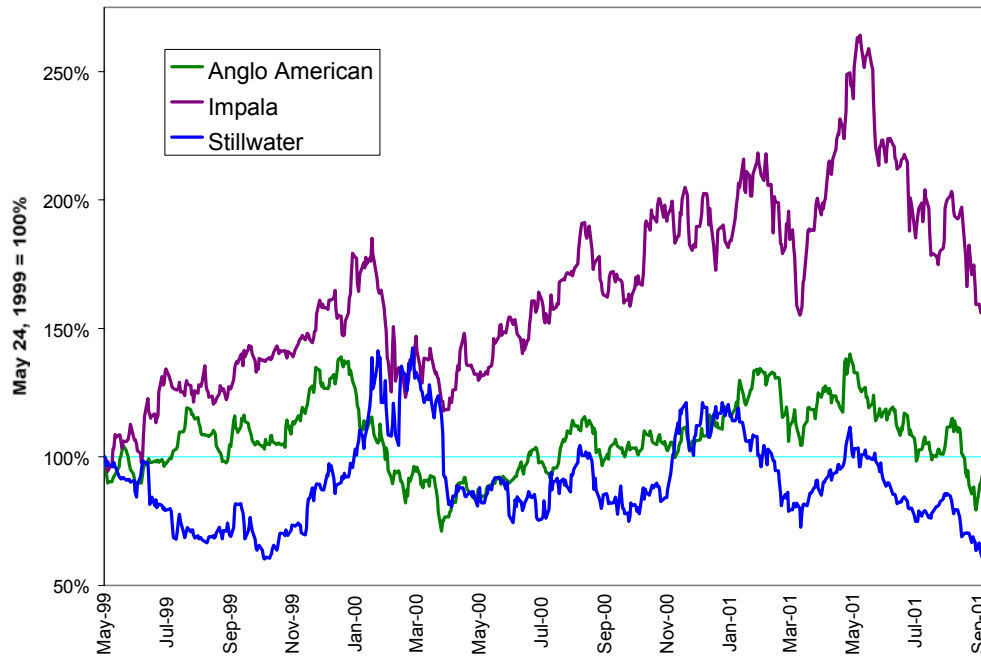
Share prices for commodity producers tend to rise earlier and more quickly than do the prices of the underlying commodity. In fact, this relationship tends to resemble the profit profile of a call option; the firm's profits increase exponentially with commodity prices, but the damage can be contained on the downside by reducing production and operating costs. We can illustrate this with a Canadian firm, North American Palladium, whose price jumped 15-fold between early 1999 and late 2000.

North American Palladium As A Function of Platinum Prices



Given this relationship, we should expect the share prices of platinum miners to be rising and rising rapidly if the market perceived firmer prices in the future. This does not appear to be the case. While a reliable long-term price history of the principal Russian miner, Norilsk Metals, isn't available; let's note its dollar price fell from \$17.20 on August 27, 2001 to \$10.00 this past Friday. But we can extract good long-term price histories for a British firm, Anglo American Mining, a South African firm, Impala (also known as Implats), and an American firm, Stillwater Mining. All prices will be converted to U.S. dollars for purposes of comparison. North American Palladium is excluded from the chart below in the interests of preserving the chart's scale.

Relative Prices Of Platinum Group Miners, USD Basis



The share prices of Stillwater, Impala, and North American have continued to fall; Anglo American has caught a bid recently but is mired still in a downtrend. We can use this to conclude that platinum group miners' profits will remain soft relative to other investment opportunities, which implies that platinum group metals prices will remain under pressure.

The implication here is the same one reached last week from the base metals prices: If an economic recovery, or at least a manufacturing recovery, is imminent, it's news to metals buyers.