Platinum And The Gold Rush

Despite their overuse by management consultants, matrices have some bona fide uses. We can take that periodic table of elements from your high school chemistry class and reorganize it into a little two-by-two matrix along the dimensions of abundance and economic value. Some elements, like silicon or iron, are abundant, economically useful and widely distributed into places you might actually dare to visit some day. We could not have glass, concrete or all of the wonders of semiconductor technology without silicon, and we would be in a world of hurt without iron.

At the other extreme are metals such as gold. It is valued because it is yellow, shiny and largely useless, in whatever order you choose. We essentially mine it for no other purpose than to re-bury it in vaults where it serves as a constant reminder of our inability to create and maintain a functioning monetary system.

We can dismiss the elements that are rare but of little use or value and come to the last corner where we might find 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 platinum group includes platinum, palladium, osmium, iridium, ruthenium, and rhodium; only platinum and palladium are traded widely in financial markets.

Platinum And Gold

You would be hard-pressed to explain to a man from Mars why the platinum-gold spread has existed forever. In addition to the widely different utilities noted above, the two metals are substitutes only by taste in jewelry and are produced in vastly different ore beds. They should move independently of one another, but once a spread gets into traders' minds, it remains there like a barnacle on a favorite rock.

The platinum-gold spread has been recognized by the futures trading industry going back to the days when platinum traded on the NYMEX and gold on the COMEX when both exchanges shared trading pits on the same floor in the World Trade Center. The COMEX now is part of the NYMEX, which in turn is part of the CME Group. The spread of 2 platinum contracts against 1 gold contract receives a 50% margin offset from the CME.

As we can see in Chart 1, the gold-platinum spread during the financial crisis of 2008-2009 followed the price of platinum so closely you would think gold and platinum were direct substitutes for each other. Platinum underperformed prior to the crisis in anticipation of a recession and outperformed after the crisis as the prospects for rising industrial demand pulled platinum higher relative to gold.



Chart 1: Platinum-Gold Spread Became Highly Directional In Financial Crisis

Platinum And Automobile Manufacturing

While platinum is an industrial metal, its link to industrial demand is a little harder to discern than you might think. While the refining and petrochemical industries are major users of platinum-based catalysts, their catalyst trays are regenerated constantly. This means the big variations in demand should come from catalytic converters for automobiles. Even here, the relationship is complex: Much of the metal used is recycled out of junkyards, but the overall trend in demand has to rise as the world's auto fleet grows.

If we look at the relationship between the constant-dollar price of platinum and U.S. vehicle assembly in Chart 2, we find it is not only hard to discern, but it was inverted between 2000 and 2008. This is highlighted with a green rectangle. Real platinum prices increased while U.S. vehicle assembly fell during this period. After the crisis' depth in 2009, the relationship reversed to a direct one in 2009-2010.





As fundamental economic relationships are not supposed to reverse on a whim, this suggests one of two things. First, platinum prices between 2000 and 2008 might have increased without any increase in physical demand, say under the weight of financial speculation. Second, global industrial demand might have increased without any help whatsoever from the U.S. automobile industry. As the auto industry in the U.S. has been struggling for years under the weight of import competition and longer-lasting cars, we might think this to be the more likely answer. After all, speculators can *push* the price of anything over its market-clearing value, but it is hard for speculators to *maintain* anything over its market-clearing price. Were only this simple wisdom embraced by Washington regulators.

However, a parallel analysis for Japan, seen in Chart 3, while indicating a more direct relationship than we saw for the U.S., does not provide us with the proverbial smoking gun. The monthly automobile production data, either raw or smoothed with a 12-month average, looks to have been only a minor contributor to platinum prices prior to the 2009 low.

Chart 3: Constant-Dollar Platinum Prices Not Direct Function Of Japanese Automobile Manufacture



Platinum And Paper

Can we or should we turn to the favorite villain, speculators, in this situation? It is, as insinuated above, a difficult case to make. Platinum is not part of either the Dow Jones-UBS or S&P-GSCI commodity indices. There are exchange-traded notes such as the iPath Dow Jones-UBS Platinum Sub-Index and the E-TRACS UBS Long and Short Platinum notes, but these do not take physical metal off the market the way ETFs such as the SPDR Gold Trust or iShares Silver Trust do (see "Can You Create A Corporate Bond Bubble?," February 2010).

As platinum is very rare – all the platinum ever mined is equivalent to the volume of blood in an elephant, or about 25 cubic feet – we should assume much of the metal "invested in" is done the old-fashioned way, by someone hoarding it in a vault. Newer physically settled ETFs, such as ETFS Platinum Trust or ETFS Palladium Trust, have yet to sequester a significant quantity of the metals. For this we should be grateful: If platinum ETFs took physical platinum in delivery, the price of platinum would be pushed toward infinity. Refiners might still buy it at that price.

From Refiners To Miners

We have focused up until now on platinum-using industries. What about the platinum miners; is there any evidence their equities either lead the price of the metal or afford you as an investor with a suitable proxy for participating in platinum rallies?

Miners of all stripes generally outperform the broad market during the early phases of a bull market in the underlying commodities and to gradually start underperforming the broad market as production costs rise. No such embedded optionality or lead/lag relationship exists. If we map in Chart 4 the HSBC Global Mining Platinum index' performance relative to the Dow Jones World index since the end of October 1993, we can see the relationship's strength: The r^2 , or percentage of variance explained, of 0.898 is very high for this sort of analysis.

Chart 4: Platinum Miners Have Captured Metal's Gain Reasonably Well



We are left with an odd mix for platinum: It trades well as a spread to gold even though the two metals are unrelated except in some minor jewelry applications. It is spectacularly useful in industrial applications, but does not appear to be strongly linked to marginal demand in the automobile industry either in the U.S. or in Japan. It seems driven by speculative demand, but has no real speculative instruments comparable to those available for other commodities. Platinum mining equities neither outperform the world index either on the way up or on the way down in price.

At the end of it all, we are left with a conclusion certainly satisfying to die-hard technicians and frustrating to fundamental analysts; and that is the best way to trade platinum is with a simple technical trading system. The trend can be you friend here; nothing else seems willing to be.