



Gold & Silver: Portfolio Diversification, A Component of the Rally

James Steel & Tom Boustead

January 26, 2006

The precious metals rally is impressive not only in terms of outright price appreciation but also in terms of longevity, volume and the growing participation of an ever-widening variety of market players. This is the first in a series of reports, which will examine components of the gold rally; i.e., central bank activity, currency movements, mine supply, etc. This series will lean on recent financial and academic articles on the precious metals. In this report, we examine the role of gold and silver in portfolio diversification. An important change in the precious metals markets is the interest shown by portfolio managers in the precious metals. Portfolio managers provide a good example of the “new” class of investors moving into the precious metals and helping to push prices to multi-year highs. We draw heavily on a paper by Jonathan Phair of Washington University, entitled *Gold and Silver: The Changing Role of Precious Metals in Modern Portfolios*, to help explain why portfolio managers are interested in gold and silver. We make some observations of our own which reinforce the conclusions reached by Phair, but the vast bulk of analysis is derived from Phair’s paper.

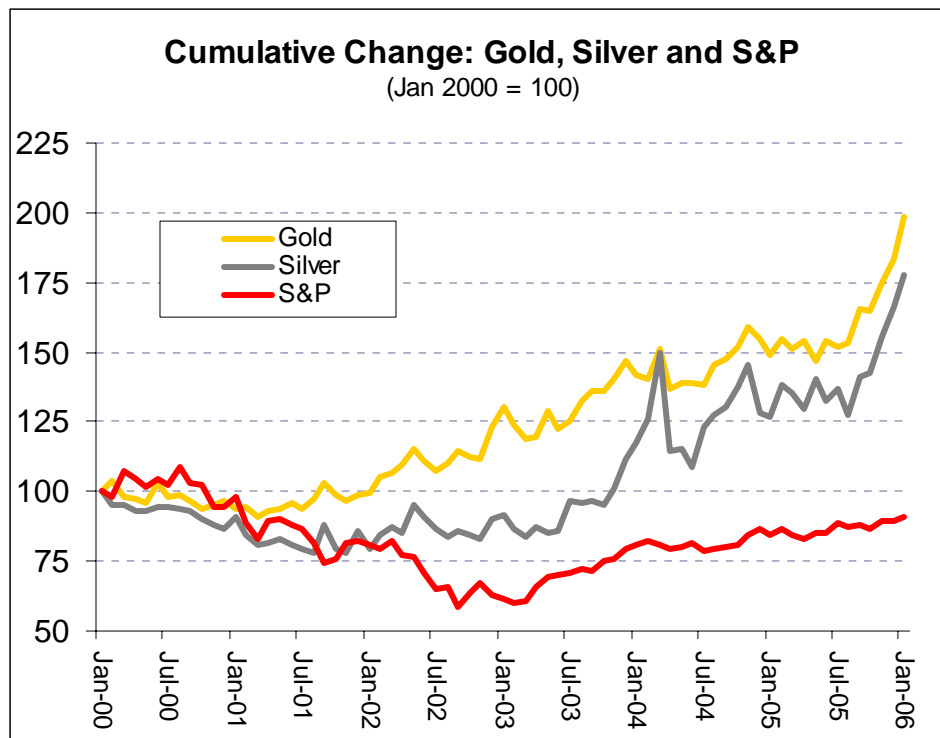
Certainly a theme of the precious metals rally is the renewed interest in the metals by the portfolio manager community. After being marginalized in the 1990’s due to falling global inflation, the strength of world equity markets, US dollar appreciation, the derivatives revolution (which rivaled gold as an inflation hedge and diversifier) and even the end of the cold war, the precious metals are back on the “radar screen” and non-traditional portfolio managers such as pension groups are increasingly favorable to the metals.

Modern portfolio theory tells us investors will be a) concerned about risk and that b) diversification can allow investors achieve a given level of returns with less risk. However, diversification utilizing only equities and bonds may prove ineffective in the case of a severe event, i.e. a systemic risk that may undermine the entire stock market. For example, it would have been virtually impossible to diversify against the declines in the Japanese Nikkei in the aftermath of the Livedoor scandal as trading systems became overloaded with panic sellers. The tragic events of 9/11 also spring to mind as similarly non-diversifiable. The problem in using equities for diversification lies in the fact that there are few stocks that are both truly counter-cyclical and also stable investments. With events in the Middle East and growing economic uncertainties with the emerging economies of Asia, not to mention the warnings of US deficits portfolio managers are facing more systemic risks than ever and need efficient diversifiers such as precious metals. Phair points out that even the instruments that are available to the market are usually short term and yield negative long-term returns—both of which may be unappetizing for portfolio managers. Gold and silver, however, are good alternatives for hedging market risk.

- Phair shows by statistical analysis the beta for gold and silver to the stock market is negative. That is to say gold and silver are *counter-cyclical assets* and will usually move inversely to the
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stock market. This is what gives them their value as hedge diversifier.

- The beta calculations done by Phair suggest gold and silver are excellent hedges for market risk.



Phair makes the interesting point that the vast bulk of financial literature fails to analyze the portfolio diversification merits of precious metals and their betas or to interpret their significance. While it is true that between 1985 and 2003 (the period studied by Phair) gold and silver did not perform well until after 2000 in terms of outright price appreciation; this only serves to reinforce their merits as diversifiers. The S&P soared in outperforming metals for much of that period. This is especially the case if interest rates are low and the stock market is strong. However the relatively flat performance of gold and silver implies gold and silver can be safe investments. Gold and silver move opposite to equities when unforeseen and dangerous occur. This is the insurance that gold and silver provide against market shocks—and what more portfolio managers are finding attractive.

The bulk of the economic/financial literature on gold concentrates on the relationship between gold and inflation. This aspect of gold is particularly powerful for the investing public if inflationary pressures are perceived to be building. Certainly high rates of unanticipated inflation can be damaging to equity portfolios in particular. Gold is seen as useful not only in offering some inflation protection as a hard asset but also gold prices are often used in inflation models—another use for portfolio managers. In an intriguing analysis, Phair argues using data in the post inflationary period after the 1970's and early 1980's that gold and silver are less useful as inflation hedges than is commonly perceived; it seems gold is more useful in periods of very high and unpredictable inflation—unlike the situation we have currently. Other academic financial work by Gosh, Levin Macmillan and Wright published before Phair determine that over the long-run gold is an effective inflation hedge. However, the point emphasized in the paper is that even if gold has a weaker than believed correlation to inflation that may not deter investors from buying gold as an effective portfolio hedge. Gold and silver does perform well in periods of *excessive* inflation and investors have other instruments to protect them from smaller inflationary increases.

What is more important regarding gold and silver as a hedge instrument is whether they are efficient and

predictable markets so that they may perform adequately in times of crisis. The precious metals may have some inefficiencies but they are not great enough to encourage adverse speculation or discourage portfolio diversification buying. The great asset of the precious metals is liquidity. Gold is regarded by a high percentage of the world's population as money. Gold is just about the most liquid of all investments worldwide; it can be sold quickly and easily with narrow spreads. This was evidenced by the mobilization of gold during the Asian crisis. In an era of rising interest rates and weak stock markets gold and silver offer the likelihood of good real returns. If gold and silver were inefficient markets they would not have a high utility for hedging. But the converse is also true, in periods of low interest rates and surging stock markets precious metals do not offer high real returns. However as Phair emphasizes, a hedge is not generally expected to earn market rates, but rather to protect against a downside risk. In any case gold would only be a small part of a portfolio and not earning high returns would not necessarily be important to managers.

Portfolio managers are faced with other problems in deciding to add gold and silver to a portfolio. There is considerable lack of understanding of gold supply and demand curves and the impact of central banks and other variables. This may make gold prices hard to predict but does not necessarily work against its value as a portfolio diversifier as at least some of these factors should be in the purchase price.

There is no doubt the role of gold and silver has changed quite remarkably over the past 30 years, as is shown by Phair. In the 1970's the global inflation scourge made owning gold and silver highly profitable. This was reinforced by the fact there were few financial instruments that provided an inflation hedge. Gold and silver fell under pressure for the next 20 years hindered by low interest rates, global equity market appreciation—especially in the United States and a move away from the old economy of which gold and silver were seen as vestiges. In this period the role of gold and silver as a stock market hedge was ignored. Instead investors shied away from the metals also burdened by low returns in an era of strong stock markets. It should be stressed, however, the role of gold and silver as a portfolio diversifier remained intact—as the stock market rallied, the precious metals fell.

Portfolio managers no longer count on ever-appreciating stock markets however and political and currency risk are mounting. It is these risks, which are reviving interest in gold. Given the sad reality these same risks are unlikely to recede any time soon—the precious metals will remain popular. A whole new range of investors seeking diversification is targeting commodities in general, including gold and silver. Their entrance into the market, especially their buy and hold mentality or “passive length,” is an important feature of this rally. This is a component of the market that will not necessarily “take profits” just because gold and silver prices are high. Rather they are likely to build or at least maintain metals holdings for as long as gold and silver prove to be good diversifiers. This growing component of the market argues for further price appreciation. Note the focus of this report is only to examine one component of the gold rally and is by no means exclusive. Others factors will be examined in the coming weeks with a view towards their sustainability and in the end to forecast a likely price range.