Gold Stocks And The Cost Of Hedging

One of the great shared beliefs – "myths" may be too harsh of a word – of the futures industry is hedging is somehow virtuous. After all, no one ever has erected a statue in the town square proclaiming: "To a really great speculator!" As hedgers are, by definition, purchasing insurance against adverse events, something almost each and every one of us does in the course of our lives and ostensibly are not trying to take others' money in a gamble, we imbue them with the aura of righteousness.

What nonsense; the very act of hedging implies as much of a price bet as involved in any speculation. Those who sell gold forward, the subject of our discussion below, are stating in their *behavior* they do not believe gold will rise in price; this is often quite separate from their *attitude*, which may still be quite bullish still. Once that forward sale is made, the hedger abandons all further claims to price increases in exchange for the avoided loss of a price decrease. In a market with lognormal distribution of returns, the expected gains and avoided losses for given percentage moves higher and lower should lead to a distribution of expected economic gains virtually identical to the gains and losses of an unhedged position. Restated, the very act of a fixed-price forward sale transforms the external risk of the market into the internal risk the trader has guessed the future price path correctly.

The equation can be altered by substituting put options for short futures, which transforms the linear profit profile of the unhedged position into the truncated profit profile of a synthetic call option, but most commercial hedgers are loath to incur the upfront cost of put options without financing it in all or part by selling call options in a collaring strategy and, once again, they surrender price increases over the call option's strike.

Gold Miners' Hedges

Should an investor in a gold mining company want that company to hedge and give away the upside in doing so? The common answer is, "no." As many investors in gold miners use the firms as a proxy investment for gold itself, a dubious proposition as gold mining stocks are still stocks and therefore are subject to forces unrelated to the price of gold, managements should assume their shareholders are seeking direct exposure to gold prices and not to someone's hedging decision. It should be the investors' decisions whether to accept gold's risks; should they feel it is going to move lower, they can hedge the metal's price themselves or simply sell the stock.

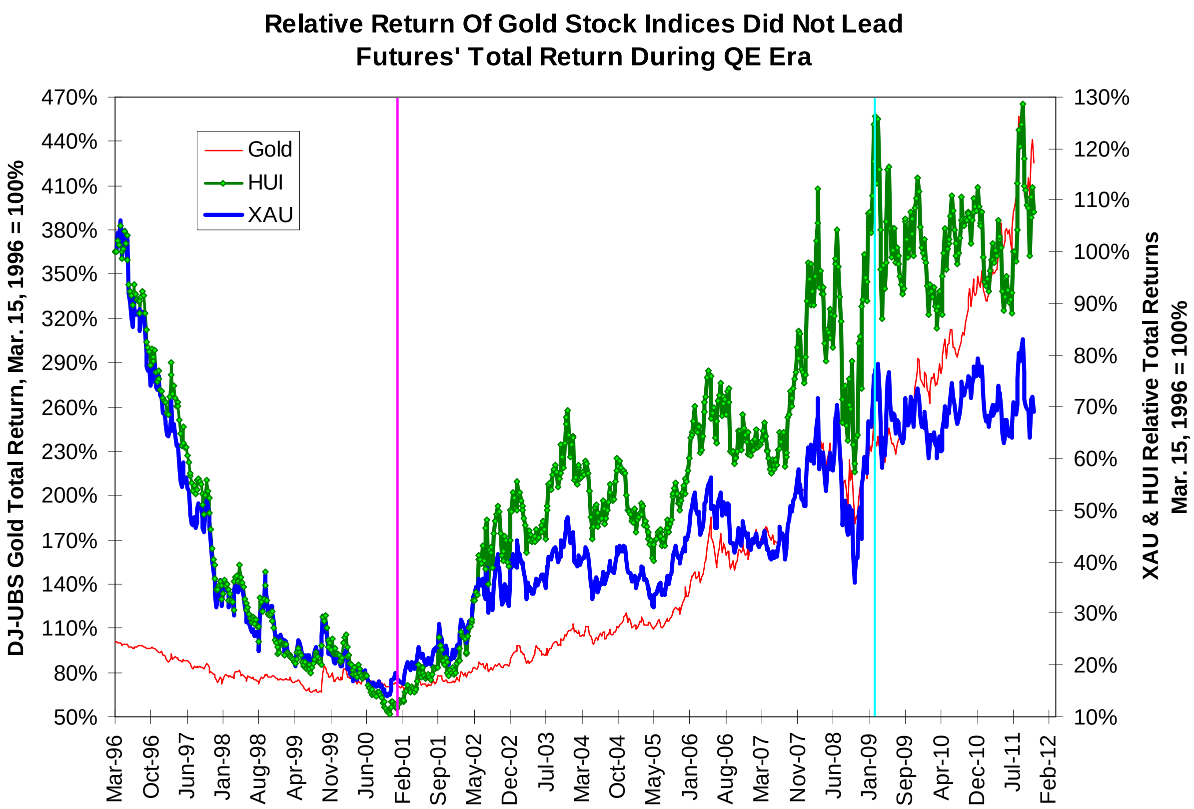
A second consideration relates to one of the futures industry's strengths, variation margining. A miner who is long the price of gold but short gold futures will be faced with margin calls during a rally. Yes, the gold is worth more, but that is an unrealized gain and does not produce a positive cash flow. As Ashanti Gold found out the hard way in September 1999, and as other firms in other industries have discovered, anyone who hedges with a short futures position suddenly acquires a perverse interest in their cash market moving lower.

For these reasons a significant group of gold miners has abandoned hedging or at least has restricted its scope to short-dated trades. This split between hedgers and non- or limited hedgers has give us two precious metals indices, the capitalization-weighted Philadelphia Gold & Silver index (XAU) and the equal-weighted NYSE Arca Gold BUGS index (HUI). Firms in the HUI do not hedge their production forward past 18 months. A table of their members is presented below; firms in both indices are highlighted with a turquoise background.

XAU	HUI
Agnico-Eagle Mines Ltd	Agnico-Eagle Mines Ltd
AngloGold Ashanti Ltd	AngloGold Ashanti Ltd
Barrick Gold Corp	Barrick Gold Corp
Cia de Minas Buenaventura SA	Cia de Minas Buenaventura SA
Freeport-McMoRan Copper & Gold Inc	Coeur d'Alene Mines Corp
Gold Fields Ltd	Eldorado Gold Corp
Goldcorp Inc	Gold Fields Ltd
Harmony Gold Mining Co Ltd	Goldcorp Inc
Kinross Gold Corp	Harmony Gold Mining Co Ltd
Newmont Mining Corp	Hecla Mining Co
Pan American Silver Corp	IAMGOLD Corp
Randgold Resources Ltd	Kinross Gold Corp
Royal Gold Inc	New Gold Inc
Silver Standard Resources Inc	Newmont Mining Corp
Silver Wheaton Corp	Randgold Resources Ltd
Yamana Gold Inc	Yamana Gold Inc

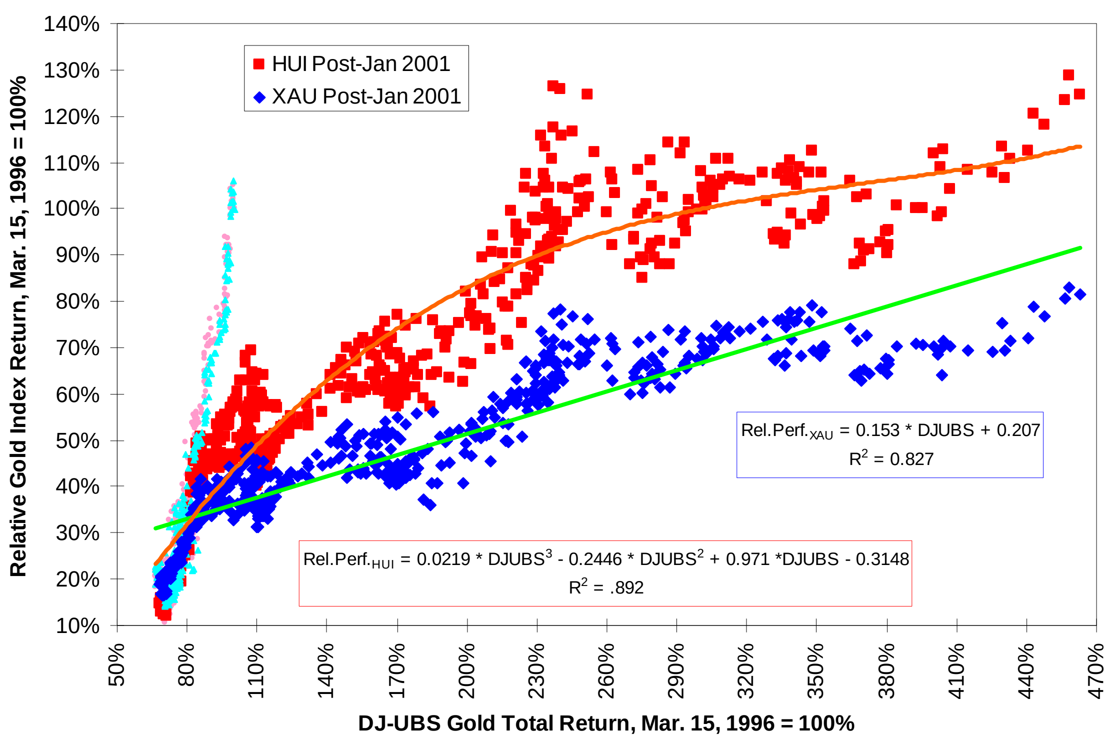
We can compare the total returns of the two gold indices to those of their appropriate S&P 500-based indices and overlay the total return for the Dow Jones-UBS gold sub-index. A magenta vertical line is added at the start of January 2001; this was the date when the Federal Reserve engaged in the first of what was to be a long series of "surprise" or inter-meeting rate cuts during both the 2000-2002 and 2007-2009 bear markets. The flood of money convinced early enthusiasts of gold the answer to every financial market crisis would be money-printing; they certainly got that one right.

A second, turquoise, line is added at the March 2009 start of QE1. Once the broad market jumped in response to excess liquidity, gold continued its surge but gold mining stocks became market underperformers. Why bother with specialized gold mining stocks when a diversified portfolio along with gold bullion, futures or ETFs would accomplish the same goal?



In accordance with the "do-not-hedge" precept, the relative performance of the HUI exceeded that of the XAU during gold's post-2001 bull market. No one should be particularly surprised. However, things sometimes are not as simple and conclusive as they may appear. Let's rearrange the data above into a scatter diagram of the two indices' relative total returns against the DJ-UBS gold sub-index' total return. We can split out the pre-January 2001 data points; they will be marked with pink and turquoise points for the HUI and XAU, respectively.

Investors Beginning To Penalize Lack Of Gold Hedging

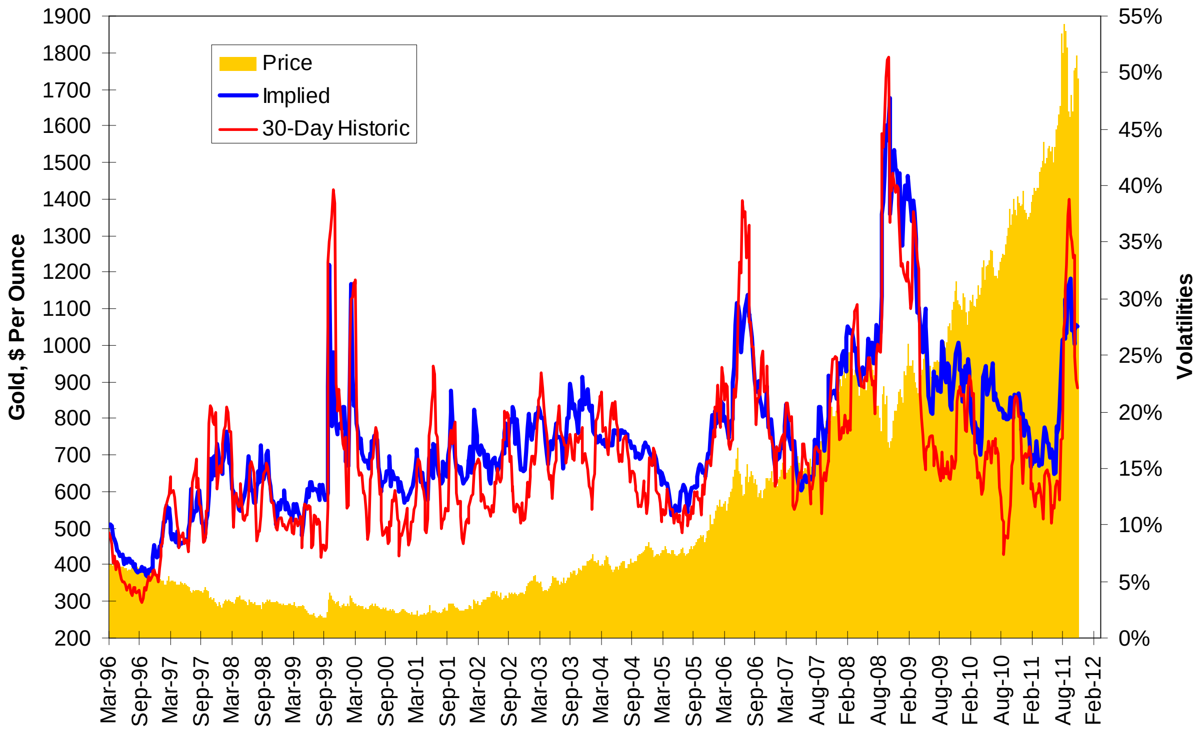


Now a different pattern emerges, one highlighted with the trends. The relative performance of the HUI is a cubic function of the DJ-UBS while that of the XAU is a linear function. These diminishing returns as a function of the commodity price is consistent with the notion gold investors were starting to get some serious altitude sickness by the time the printing presses really kicked into high gear. Restated, investors in unhedged gold were starting to act as if they were in fact short a call option on gold; they bid the price of the stocks down in accordance with their perceived rise in gold price risk.

Volatility

What is somewhat surprising about the emerging trend of the HUI underperforming as the prices of gold rise is neither the gold option market's implied volatility or the thirty-day actual volatility of gold futures increased along with gold's price until the August 2011 sovereign debt crisis. Indeed, with the prominent and expected jump in volatility during the 2008-2009 financial crisis, both measures of gold's volatility started to decline with the March 2008 local maximum in gold prices. Gold futures traders were not nervous about gold prices during its 2009-2010 rally; they were nervous, however, about the banking system becoming unhinged in 2011.

Gold Prices And Volatilities Largely Unrelated



Should gold traders pay attention to the tepid relative total return of the HUI? As the relative performance of the mining indices led bullion prices higher ten years ago, the answer would seem to be, "yes." One of the key differences between gold bullion and gold mining stocks is the stocks can look ahead to expected returns and all of the other factors extrinsic to bullion prices.

Finally, we should mention one of the key variables in managements' decisions to hedge gold. Peter Tufano at the Harvard Business School observed the propensity to sell gold forward was related to management's share holdings. If managements are invested heavily in the firm, they are more likely to hedge production forward. If management's holdings are small, they are content to let external shareholders assume the price risk, both higher and lower, of gold. Shareholders can be risk managers, too, whether they signed up for the deal or not.