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The "Real" Value of Gold

From ancient Egypt into the 21st century, gold has excited human passions. Today, gold has once again become an object of desire—and of fierce debate. But investors considering gold as a defensive investment may be better served by other "real" assets.

Among investors, opinions regarding gold have always been strong and divided. At the one extreme are "gold bugs," who believe that gold is the ultimate store of real wealth and that paper currency without gold's backing is essentially worthless. At the other extreme are skeptics who consider gold to be a "barbarous relic" of ancient times whose perceived value is driven mostly by sentiment, and occasional mania.

This debate has recently become headline news. As *Display 1* shows, gold is approaching its highest levels, adjusted for inflation, since the modern-day record set in 1980. Some prominent investment professionals have given gold further luster by talking up their purchases. In addition, new investment vehicles such as exchange-traded funds (ETFs) have made trading in gold easier than ever before.

Display 1: The gold bulls are running again

Inflation-Adjusted Price of Gold, 2011 US Dollars

Past performance does not guarantee future results.
Through May 17, 2011
Real price of gold represented by gold spot price ($/oz.) in May 2011 US dollars, adjusted for inflation using US Consumer Price Index for All Urban Consumers, All Items
Source: Bloomberg, Federal Reserve and AllianceBernstein

Investment Products Offered • Are Not FDIC Insured • May Lose Value • Are Not Bank Guaranteed

Our research found the historical record of gold as an inflation hedge to be a mixed one.

A major driver of demand has been gold's reputation as the ultimate safe-haven investment. Many gold investors are worried about the possibility of severe inflation on the horizon. Others see a secular change in the demand for gold—typically based on concerns that the US dollar may not remain the global reserve currency. But despite the dramatic implications of such scenarios, it's important to remember that gold is a commodity, subject to the laws of supply and demand.

At AllianceBernstein, we have studied gold as part of our extensive research program on inflation and methods of protecting portfolios from it—particularly by building a portfolio of "real assets," defined as inflation-sensitive instruments such as commodities, real estate or inflation-linked bonds.[1] We examined fundamental supply-and-demand variables that drive the price of gold, using data back to the early 1970s, when the metal became de-linked from the dollar and a free market for gold came into existence. By analyzing these variables in a systematic fashion, we can compare the price of gold relative to its intrinsic value and make informed decisions about its role in a diversified portfolio.

Golden Rules

The demand for most commodities is driven primarily by market forces: Demand for copper, for example, is driven by industrial usage. But gold's unique status in history and in the popular imagination requires us to take into account alternative sources of demand. *Display 2* shows a framework for considering the forces that drive gold's supply and demand today. Notably, we have not included industrial uses or demand for jewelry, because our research shows that investment demand is the primary driver of gold price changes.

If we consider each variable in turn, it becomes clear why the price of gold has been rising. Let's consider supply first. When mining output drops below its long-term trend, supply decreases; this puts upward pressure on gold's price. By and large, this has been the case in recent years—although the current large gap between the price of gold and its cost of production suggests miners will eventually ramp up gold extraction.[2]

On the demand side, gold is widely seen as an alternative to the dollar as a store of value. Concern that the

[1]*Deflating Inflation: Redefining the Inflation-Resistant Portfolio*, October 2010.
[2]Although some gold analysts believe the world's supply may be approaching its limit—which would drive the cost of production dramatically higher—such "peak gold" theories are not widely accepted.

US dollar may ultimately lose its role as the global reserve currency has been a strong driver of demand lately. But even without such an extreme outcome, our research does show a fairly strong correlation[3] between a falling dollar and rising gold price since the early 1970s.

A related catalyst driving demand is the belief in some camps that the US economy is headed for a period of high inflation. Interestingly, our research found the historical record of gold as an inflation hedge to be a mixed one: After 1985, there is virtually no correlation between rising gold prices and rising inflation, but in the late 1970s, when inflation spiked, there was a very strong correlation. So gold appears to have value as a hedge against a sudden surge in inflation.

A third source of demand is change in consumer expectations. Our research shows a fairly strong correlation between rising gold prices and periods when the Index of Consumer Expectations[4] reflects a dour economic outlook. Intuitively, this relationship appears to reflect gold's reputation as a "safe haven" in times of economic distress. Indeed, gold's rise over the last decade has coincided with increasing consumer pessimism.

Pure Speculation

Economic factors aside, a number of theories about gold are driving speculative demand: One is that central banks will be buying more gold in years to come as they seek to diversify their reserves. Another is that the growing middle class in emerging markets will create a surge in demand for gold jewelry. Even the fact that gold investment is growing may feed upon itself: In other words, if investors increasingly use gold as a diversification and risk-hedging asset in their long-term strategic allocation, they may create an enduring new source of demand.

Given baseline expectations for these supply and demand factors, is the current price of gold (approximately US$1,500 an ounce as of May 2011) justified? We don't think so. The cost of producing gold is somewhere between US$400 and US$900 an ounce, depending on the producer and region. So to buy at this price, you have to believe strongly that one or more of the above scenarios will dramatically increase demand or reduce supply, or that the cost of gold extraction will rise. In general, our research does not support such views, at least for now.

Further, the price of gold tends to be very volatile. Should the global recovery continue and economic conditions return to a more normal state, gold's current pricing looks vulnerable.

However, as the recent credit crisis taught us, "tail risk"—the chance of extreme events taking place—should not be taken lightly. Given where we are today in the global recovery cycle, a sharp rise in global inflation is a distinct risk. If inflation does spike upward, the price of gold could very well go higher.

Yet there are other, more reliable hedges against inflation than gold. A diversified portfolio of real assets, such as real estate, commodities and the stocks of their producers, may provide attractive inflation-sensitive characteristics while at the same time potentially offering better risk-adjusted return prospects.

All That Glitters

In sum, the question for most investors should not be "Is gold a good investment?" but, perhaps, "Should I commit part of my portfolio to real assets?" The answer depends on the individual's investment goals and sensitivity to inflation.

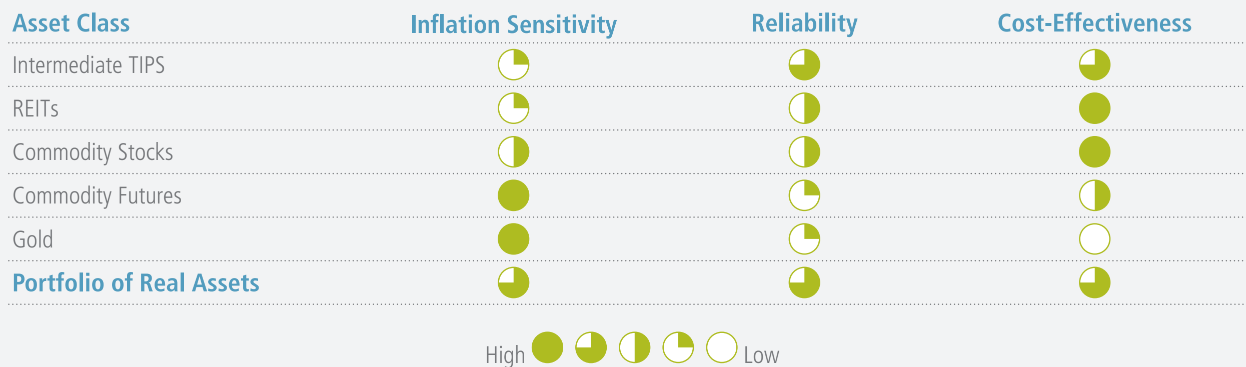
Inflation, and especially quickly rising inflation, is a pernicious force that robs traditional stock/bond portfolios of their purchasing power, even as the investor's cost of living is rising. Real assets, of which gold is one type, tend to rise with inflation, and thereby offer the potential to protect against inflationary spikes.

Unfortunately, there is no perfect inflation hedge. Even assets like Treasury inflation-protected securities (TIPS), which are marketed as protection against inflation, may do so only partially when there is a spike in inflation. This is because a rapid rise in inflation often dovetails with a rise in real interest rates, which damages the value of a fixed-income investment. In an inflationary environment, TIPS should outperform traditional bonds, but they are not a perfect hedge.

[3]Correlation is a statistical measure of the degree to which two or more variables show a tendency to vary together.
[4]The Index of Consumer Expectations is a subcomponent of the well-known University of Michigan Consumer Sentiment Index published monthly by the University of Michigan and Thomson Reuters.

Real assets tend to rise with inflation—offering the potential to protect against inflationary spikes. Unfortunately, there's no perfect inflation hedge.

Display 3: No single asset class provides a perfect inflation hedge



Asset Class	Inflation Sensitivity	Reliability	Cost-Effectiveness
Intermediate TIPS	◔	◕	◕
REITs	◔	◑	●
Commodity Stocks	◑	◑	●
Commodity Futures	●	◔	◑
Gold	●	◔	○
Portfolio of Real Assets	◕	◕	◕

High ● ◕ ◑ ◔ ○ Low

Current analysis does not guarantee future results.
As of December 31, 2009. An asset's inflation sensitivity is measured by quantifying the average impact of an increase in the inflation rate on the asset's total return. Reliability captures the consistency of the inflation hedge by measuring the percent of rising inflation years since 1965 when various categories of inflation-hedging assets posted positive returns. Cost-effectiveness is measured primarily by the expected return sacrifice relative to a traditional investment with similar volatility.
Source: AllianceBernstein

Every inflation-sensitive asset class involves some trade-offs relating to its degree of inflation sensitivity, its reliability as a hedge and its cost-effectiveness (*Display 3*):

- TIPS have only modest inflation sensitivity, but the limited protection they do offer is reliable and cost-effective.
- Real estate investment trusts (REITs) and commodity stocks are both very cost-effective, sacrificing less return relative to diversified equities, but they score only modestly well on inflation sensitivity and reliability.
- Commodity futures and gold are very sensitive to inflation, but, as discussed above, their reliability as inflation hedges is uncertain, and gold in particular is very costly, in our opinion.
- Finally, a diversified portfolio of real assets, actively managed to capitalize on opportunities in the market and manage risk, offers what we believe to be the optimal balance among the three factors. This portfolio should include gold, but only as one commodity among many.

Investors should recognize, however, that the potential benefits of an unmanaged portfolio of real assets may come with a cost: The investment returns should be expected to lag traditional stocks and bonds in noninflationary periods. But an actively managed portfolio of real assets (including gold) may prove valuable for clients who are especially sensitive to inflation risks.

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