

CAPITAL IDEAS

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Demystifying Commodities: Using Them to Manage Risk in a Portfolio

OVERVIEW

Commodities have a reputation for being complex and risky, and many investors do not feel qualified to invest in them. When specialized jargon such as “margin call” and “futures contract” is par for the course with commodities, it’s not surprising that many investors skip them in favor of more familiar portfolio holdings such as stocks and bonds. However, when you add an appropriate commodity mutual fund to a portfolio, it can reduce the overall risk of the portfolio because commodities usually react differently to market and economic changes than the rest of the portfolio’s holdings.

For a variety of reasons, not every investor will be comfortable assigning a portion of his or her investment portfolio to commodities. This article discusses three topics to help you understand under what circumstances your investment advisor might feel it is appropriate to include them in your portfolio: 1) an introduction to commodities, 2) the advantages and disadvantages of having commodities in an investment portfolio, and 3) when commodities are appropriate, why our preference is to choose a mutual fund that tracks a commodities index.

What Are Commodities ... What Are They Not?

Commodities are generally defined as the products of mining or agriculture before they have undergone extensive processing. Divided into five major sectors including energy, grains, food and fiber, metals, and livestock, commodities are tangible products, which separate them from other financial assets such as stocks and bonds.

An investment in commodities is not the same as an investment in stocks and bonds and a commodity is *not* the same as the stock of a company that produces commodities. The value of a commodity is based on supply and demand, while the value of a financial asset is based on a combination of market and company-specific risks. The stock price of a large oil company might drop if news breaks that the company’s CEO has been involved in illegal activities, but the price of oil will not be affected by that company’s woes. A sudden reduction in oil production will affect the price of a barrel of oil, but may not affect the stock price of the large oil company. In short, the price of oil and the stock price of an oil company do not move in tandem. This means that an investment in the stock of a commodity producer (such as a large oil company) is not a substitute for a more direct investment in commodities. In short, because the stocks of commodity producers act more like equities than commodities, they are not a preferred method of investing in commodities to reduce risk.

How Do Commodities Compare to Stocks, Bonds and Inflation?

Investors should be aware that adding commodities to a portfolio does not necessarily improve returns. Rather, one of the most beneficial aspects of holding commodities in a portfolio is the manner in which they correlate with inflation and the other assets in the portfolio.

Commodities react to market and economic changes differently than stocks and bonds. The degree to which one security or asset class (commodities) follows another security, asset class (stocks and bonds), or inflation is called “correlation.” For example, commodity prices are positively correlated with inflation; bonds are negatively correlated with inflation, meaning that bonds perform poorly during periods of high inflation while commodity prices perform favorably. Despite the conventional belief that equities provide a hedge against inflation, equities actually have a slightly negative correlation with inflation, especially *unexpected* inflation.

Adverse events tend to cause sudden supply disruptions rather than generate supply increases. This is referred to as “**event risk**.” When adverse events occur, commodities tend to provide positive returns at the same time financial markets are providing negative returns. For example, unexpected events like wars, oil supply disruption, political instability or even a particularly cold winter, can increase the price of energy-related commodities, while negatively affecting the economy and stock prices. Holding commodities in a portfolio can offset negative returns from stocks and bonds.

Effectively, owning commodities can serve to “hedge,” or protect, your portfolio against the negative impact of inflation and to diversify some of the risks of owning both stocks and bonds. The rising prices of physical commodities (such as oil) are an underlying source of inflation — one reason that commodity prices usually rise along with inflation. Finally, different commodities have low correlation with each other; for example, you could safely assume that the price of wheat will rarely have any impact on the price of oil.

What Should Investors Consider Before Holding Commodities?

Until now, we have been discussing commodities generally by defining them and comparing them to stocks, bonds and inflation. This section outlines some of the unique attributes that accompany commodities investing and how they may affect you, the investor.

Tracking Error – If you add commodities to your portfolio, you may face the psychological risk known as tracking error. Adding commodities to a portfolio will make it highly likely that the portfolio’s returns will not track those of either the equity or bond markets. Concern about tracking error usually sets in when a portfolio’s returns are lower than portfolios without commodities. Of course, the degree of tracking error depends on what percentage of the portfolio is allocated to commodities.

Volatility – Commodities are more volatile than most assets. It is common for a commodities fund to produce high returns one year and low returns the next year. During such periods, however, the equity and/or fixed income portions of a portfolio would be expected to perform in an opposite direction. Because of the negative correlation with stocks and bonds, including commodities in a portfolio should reduce *portfolio* volatility.

Staying the Course – It is essential that investors in commodities be of a *highly disciplined and patient nature*. If investors abandon the strategy inappropriately (after a short period of negative returns), they can cause their portfolio more harm than if they had not included commodities to begin with.

Rebalancing – To take advantage of the negative correlations and the volatility of commodities, investors must be prepared to rebalance their portfolios on a regular basis. This can be difficult when an investor is asked to buy more of a fund that has produced poor returns for longer periods of time, or selling a fund when it seems to be rising dramatically.

Tax Considerations – Commodities funds can be highly tax inefficient. Investors should have an understanding of the consequences of such inefficiency and generally plan on using tax-free or tax-deferred accounts to hold these funds.

How Do You Invest in Commodities?

If commodities are appropriate for a portfolio, our preference is to hold them via mutual funds that invest in commodities futures.¹ Specifically, the fund should mimic a commodities index, providing exposure to a broad range of commodities. Two examples of indices are the Goldman Sachs Commodities Index (GSCI)

and the Dow Jones-AIG Index (DJAIG). Both indices have produced negative correlations to stocks and bonds, evidence that both the GSCI and DJAIG have served as effective diversifiers.

The GSCI is world-production weighted, currently heavily tilted toward oil and natural gas. As of February 3, 2004, the GSCI had energy 66.3 percent, industrial metals 7.8 percent, precious metals 2.4 percent, agriculture 17.5 percent and livestock 6.3 percent. The DJAIG is a broad-based index and no group of commodities can constitute more than 33 percent of the index. Its 2003 weightings were: petroleum 22 percent, grains 19 percent, industrial metals 17 percent, soft commodities (coffee, cotton, cocoa, and sugar) 11 percent, livestock 10 percent, natural gas 10 percent, precious metals 9 percent and vegetable oils 2 percent.

In addition to considering the index tracked by the fund, investors should consider other factors, including costs, structure and fund history. Having a professional advisor is often crucial for investors to properly understand these factors. There are three issues that we consider of particular importance:

Funds are managed in a passive rather than active style.²

Funds are no load and have a low expense ratio.

Fund policies include investing any collateral only in bonds with the highest credit quality and no prepayment risk (as opposed to junk bonds or mortgage-backed securities).

Currently, we are unaware of any fund that matches all of the above criteria, however, we prefer that the fund have as many of these characteristics as possible.

Conclusion

Commodities can be a solution for a disciplined long-term investor seeking a hedge against inflation and the risks of stocks and bonds. Before making the decision to hold commodities, you should be familiar with all the traits associated with commodities, such as event risk, tracking error and volatility, and understand that the primary reason to invest in commodities is to manage risk in your portfolio not seek increased returns. As always, a good financial advisor can help investors sort through these complex issues.

¹ Futures contracts are agreements to deliver a quantity of goods, generally commodities, at a specified price at a certain time in the future. Investors who are pursuing a passive strategy can gain commodity exposure by constructing a passively managed portfolio of long positions in futures contracts that are traded on the Chicago Mercantile Exchange (www.cme.com). Futures contracts require collateral, typically invested in the form of U.S. Treasury bills. Unlike a passively managed equity portfolio, a passive futures portfolio requires regular transactions, since futures contracts expire. Thus, contracts must be continually rolled over to the next maturity.

² Active management attempts to uncover securities the market has either under- or overvalued; also the attempt to time investment decisions in order to be more heavily invested when the market is rising or less so when the market is falling. Passive management is a buy-and-hold investment strategy, specifically contrary to active management. Characteristics of the passive management approach include: lower portfolio turnover, lower operating expenses and transactions costs, greater tax efficiency, fully invested at all times, and a long-term perspective.

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