HOW MUCH DIVERSIFICATION DOES YOUR PORTFOLIO NEED?

By Maria Crawford Scott

Precious metals, real estate, and commodities are sometimes suggested as useful additions to your portfolio. But can they really bring more diversification, and is it possible to invest in them in a practical and useful fashion?

How much portfolio diversification do you really need?

The primary asset allocation categories are: stocks, bonds, and cash. But other categories are sometimes mentioned as possible candidates—in particular gold, real estate, and commodities.

For the most part, these assets are thought to provide portfolio protection from severe economic conditions. Gold is usually viewed as the asset of choice in times of total economic chaos. Precious metals, commodities, and real estate are viewed as hedges during highly inflationary time periods.

Can these other assets really bring another dimension of diversification to your portfolio? And if they can, is it possible for individuals to effectively invest in that asset?

GOLD AND PRECIOUS METALS

Table 1 provides some indication of how these "alternative" asset classes have performed in recent decades with somewhat different market environments—the inflationary '70s, and the bull markets of the 1980s and 1990s. It also provides the best, worst, and average returns since 1970 (since 1972 for REITs; data for prior years is not available).

If you examine returns based on the price of gold and silver (as a proxy for precious metals), the record is mixed. Gold and silver both did exceptionally well in the high-inflation '70s when other traditional investments suffered, but have performed miserably during other market environments. The average annual return for gold since 1970 has been a modest 7.7%, below long-term government bonds and only modestly above the long-term inflation rate of 5.3%. Silver hasn't even managed to outpace inflation, with an average annual return of only 4.3%.

Those modest returns, though, have come at a price of tremendous volatility. The best return for gold was a whopping 126.5% in 1979, while silver's return was even more glittering at 267.4%. However, the worst returns came just two years later in 1981—a loss of 31.6% for gold and a loss of 46.4% for silver. The 1970s have been the exception; both gold and silver have performed miserably during most other market environments.

Interestingly, if you take out the extraordinary returns of 1979, the average annual return since 1970 is only 4.8% for gold and –0.4% for silver. What a difference one year makes.

Both markets are affected not only by supply and demand factors from industries in which the metal is used, but also outside forces: political factors concerning the pricing of gold relative to currencies (in fact, the price of gold in the U.S. was fixed until 1968), as well as manipulations in the markets, such as the attempt by the Hunt Brothers to corner the silver market in 1979 and 1980. Did the manipulations occur too long ago to take seriously? Warren Buffett currently is busy accumulating a major portion of the world's silver supply for Berkshire Hathaway—déjà vu all over again.

Could individual investors actually have received these returns?

There are a number of ways to invest in gold and silver: bullion and bars, coins, mining and exploration stocks, and gold mutual funds. Some methods

Maria Crawford Scott is editor of the AAII Journal.

track the actual price of gold better than others.

Bullion and silver bars rise in value dollar-for-dollar with the price of the metal, but insurance and storage costs must be paid annually; commissions for purchases and sales will further cut into returns, and can be very high if the amounts purchased are small.

Gold and silver coins move with the metal, and they may also have value to collectors depending on the type and condition of the coins. However, dealer markups can be as high as 10%, and there are storage and insurance costs.

Lastly, holding the metal produces no income; instead, it must be held strictly for price appreciation.

Another route to precious metals is through the stock market, investing in companies that mine or explore for gold and other precious metals.

The returns on precious metals' stocks are affected by a number of factors other than simply the price of gold, including the geographical location of the company and the type of company, for instance mining or exploration. Mining is less risky than exploration, although exploration requires less capital and small exploration companies abound.

In addition, the stocks tend to be much more volatile than the metal itself. For these firms, gold reserves and operating costs per ounce rule, and small changes in the price of the metal can have a big impact on the earnings once costs have been covered. For example, if gold were to go from $400 to $500 per ounce, a 25% increase, the earnings of many gold mining firms could rise 100%.

And, because precious metals' stocks are stocks, they are affected by the overall actions in the stock market.

In sum, gold and precious metals appear to offer some protection during the severest economic storms, but it comes at a high cost in the form of much lower returns during relatively normal times. And it is difficult for individuals to invest in them in a relatively low-cost practical vehicle that will closely track the underlying asset.

REAL ESTATE

What about real estate? Many individuals form their opinions about real estate through their experience with their own houses. And many have been quite satisfied as they have sold homes at double or triple their original cost, although on an annualized basis, the return is often much lower than realized, particularly if the individual has owned the home for many years.

However, individuals don't really buy houses for investment purposes. A house is a consumption asset and would most likely not be liquidated to raise cash for spending needs.

Traditionally, investment real estate has been difficult for individual investors to enter in a practical fashion. Purchasing and managing a piece of property is expensive and time-consuming for an individual; amassing a diversified portfolio of properties is beyond the means and capabilities of most non-professionals.

Because there is no large public market for individual properties, there has been no real index or generalized measure for real estate performance. It is difficult, therefore, to get a handle on how a diversified group of individual properties has performed over time relative to other asset classes.

In more recent years, though, there

TABLE 1. HOW ALTERNATIVE ASSET CLASSES PERFORMED DURING DIFFERENT ENVIRONMENTS

	Annual Return for Decade (%)			Annual Return (%): 1970 through 1997		
	1970s	1980s	1990s	Average	Worst	Best
Gold	30.6	–2.4	–4.1	7.7	–31.6 (1981)	126.5 (1979)
Silver	28.3	–13.4	1.7	4.3	–46.4 (1981)	267.4 (1979)
REITs (NAREIT Index)	4.8*	12.5	14.1	10.5*	–42.2 (1974)	48.9 (1976)
Commodities (Spot Index)	9.6	–1.0	0.5	3.1	–11.8 (1981)	57.7 (1973)
S&P 500	5.9	17.5	16.6	13.0	–26.5 (1974)	37.4 (1995)
Small–Cap Stocks	11.5	15.8	16.5	14.4	–31.9 (1973)	57.4 (1976)
Long–Term Gov't Bonds	5.5	12.6	10.7	9.5	–7.8 (1994)	40.4 (1982)
Treasury Bills	6.3	8.9	4.9	6.8	2.9 (1993)	14.7 (1981)
Inflation	7.4	5.1	3.3	5.3	na	na

** Since 1972*
Source: Stocks, Bonds, Bills and Inflation –1998 Yearbook, Ibboston Associates, Chicago; and Chase Investment Performance Digest—1998 Edition, Chase Global Data & Research.

has been a fundamental shift in the way commercial real estate is financed. The major change has been the growth of real estate investment trusts (REITs), which are essentially portfolios of professionally managed real estate properties. Although REITs have been around since the early 1960s, they began to play a greatly expanded role in the 1990s as the industry's predominate vehicle for raising capital.

REITs are publicly traded securities, similar to closed-end funds, and trade on an exchange. They pool investors' money, using professional managers to acquire and manage the properties, and provide individual investors relatively easy access to the real estate market.

The majority of the industry's growth has occurred among equity-REITs, which invest directly in real property, receiving rental income and lease payments, and occasionally realizing capital gains from selling properties. Conversely, mortgage REITs make loans to real estate owners and collect interest payments; these trusts are sensitive to the credit quality of the borrower.

How have REITs performed?

Table 1 provides returns for the NAREIT index, which was started in 1972. Of course, the real growth in REITs has been in the 1990s, and it may be that the market has evolved substantially since the early 1970s. Nonetheless, the table indicates that REITs have proved to be an inflation hedge, with an average annual return since 1972 of 10.5%, compared to an inflation rate of 5.3% since 1970. On the other hand, REITs have tended to perform similar to common stocks: They fared least well during the inflationary '70s, and their worst return was a loss of 42.2% in 1974; stocks also suffered through the 1970s. The difference between the best and the worst REIT returns, as well as the variations in the yearly returns, indicates that they are more volatile than stocks.

REITs—and mutual funds that invest in REITs—offer the only real practical and low-cost approach for individuals to enter the real estate market. However, their structure is such that they will be affected by factors other than simply the overall real estate market, including the level of expertise of the REIT managers and the diversity of the properties (they may be concentrated geographically, and many are in specific industries, particularly health care). In addition, as publicly traded securities, they will be affected by the overall level of the stock market. For that reason, they are probably best viewed as adding a level of diversification to your stock portfolio, but retaining stock market risk.

COMMODITIES

Commodities are the components of most individuals' underlying necessities—food, shelter, and transportation. In theory, at least, investing in them will protect against major price increases in one's basic needs.

Although they are often discussed as if they were a single asset, the term in fact encompasses a wide variety of materials. The Commodity Spot Index used in Table 1 is based on 23 different commodities, including cattle, pork bellies, cocoa, heating oil, gold, copper, orange juice, lumber, and sugar.

However, returns based on the Commoditiy Spot Index indicate that they haven't really performed as advertised: although their best years were in the '70s, the returns for the decade were only a few percentage points above inflation, and the long-term average has been considerably below inflation—the worst performer of all asset classes in the table.

The returns don't appear to be volatile, but that is misleading because of the way commodities are actually traded, which is probably the greatest problem with this asset class as far as individual investors are concerned.

Commodities are traded in large units through futures contracts or on the spot market. Because the trading units are large, even a modest price change can have an enormous impact on the market value of a particular contract and, therefore, on investor returns or losses. That is one of the magnets that draws speculators to commodities. In addition, futures contracts are purchased on margin, providing even further leverage that magnifies gains—and losses. The leverage impact of futures contracts is not reflected in the spot index returns.

Commodity prices react to a unique set of economic, political, and international pressures, and even the weather. The level of expertise required to invest in commodities both on the spot market and the futures markets is beyond the abilities of most individual investors.

For that reason, some individuals turn to commodities funds that pool investor resources and hire outside experts to invest in commodities for them. However, because of the way they are invested, commodity funds are not really much of an investment in the underlying commodity.

Most commodities funds are organized as limited partnerships and have the ability to trade in all available futures and commodities, including financial instruments and foreign currencies in addition to commodities. They also have the ability to take both long and short positions—that is, they speculate on the direction of prices, up or down. A study of commodities funds done by Profs. Edwin Elton, Martin Gruber and Joel Rentzler ["The Risks and Returns of Commodity Funds," in the April 1987 *AAII Journal*] found that only 1% of their returns could be explained by the returns of either the commodity spot index or commodity futures index. The conclusion: Almost all of the return provided by a commodity fund will be the result of active management decisions on the part of the fund manager.

In short, commodities don't appear to add much value to a portfolio under any market environment, and you can't invest in them in practical terms, anyway.

If you want to invest in natural resources as a hedge against inflation, you may want to consider mutual funds that focus on natural resource stocks and energy stocks. These may capture some of the returns of the underlying assets, but they will also be affected by other factors similar to those affecting precious metals stocks, including the stock market.

THE COST OF INSURANCE

Most investors want portfolio protection for all kinds of market environments, even the most dire. But at some point you must decide whether protection is worth the costs.

The best way to protect against a major economic downturn that may last several years is through diversification among the major asset classes (stocks, bonds, and cash), within each asset class (for instance, small stocks, large-cap stocks, international stocks), and across time (being diversified over various market environments).

However, protecting against a severe economic environment or total collapse has more serious implications for your portfolio. The kinds of assets that do well in these environments do quite badly in more normal environments, and they are also difficult for individuals to invest in. You must judge for yourself whether the cost of protection is worth the price. If history is any guide, the risk of a total economic or market meltdown is quite small, but it is really a decision you must make based on your own outlook.

If you are considering any "alternative" asset classes, here are some questions you should answer to help determine whether it would be a useful addition to your portfolio:

- What are the returns of the asset class over many different market environments? To the extent that they differ from the traditional asset classes during different market environments, they may add a certain amount of diversification.
- Are there extreme differences between the worst and best returns, indicating exceptionally high volatility? The risks may be very high relative to the overall returns.
- How do the long-term returns compare to the other asset classes? If they are low, they will most likely hurt your overall portfolio return unless a disaster or crisis actually occurs—that is the cost of protection.
- Can you actually invest in the asset in a practical, low-cost fashion that will allow you to actually earn returns similar to that of the asset class? If you can't invest in the actual asset, your portfolio won't be getting the diversification benefits you expected. ✦