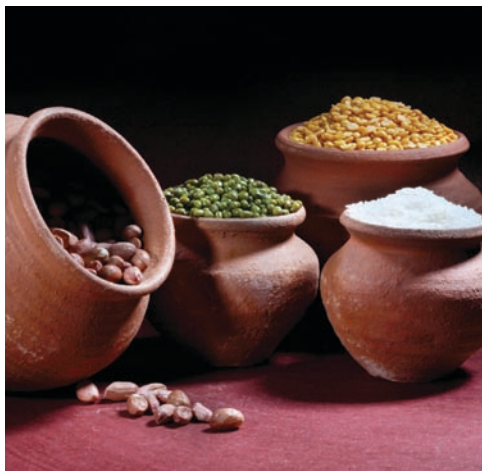


# PORTFOLIO



## Uncertain Alternatives

Some nontraditional investments can provide valuable diversification in a portfolio. But choose wisely.  
By Craig L. Israelsen

Some people see the investment universe as divided into just two classes of assets: core investments and alternative investments. Others prefer to view the asset allocation world as having three categories: core assets, diversifiers and alternatives.

Diversifiers are not traditional equity or fixed-income asset classes, but they have a long-term record of performance showing them to be valuable in a well-diversified portfolio. Among alternative assets, the jury is still out. Yet there are signs that these asset classes might be used selectively as satellite positions around a diversified core portfolio.

Most portfolios that include equities use large-cap U.S. stocks – most commonly represented by the S&P 500 – as a starting point. From there, a portfolio might typically add small-cap U.S. stocks (represented by the Russell 2000) and non-U.S. developed market stocks (the MSCI EAFE Index).

These three equity asset classes are available in most 401(k) menus. Mid-

cap U.S. stocks would probably also be considered a core asset class. So what would be the diversifiers to these four core equity asset classes?

### COMPARING PERFORMANCE

The Equities table on the next page shows the 15-year performance and volatility of these four core equity asset classes and four diversifying asset classes: commodities, non-U.S. emerging market stocks, real estate and natural resources. Some advisors and investors may classify the latter four as alternatives, but for the sake of this analysis, these four will be treated as diversifiers within the equity portion of a multi-asset portfolio.

Among these diversifying classes, commodities had the best performance from 1998 through 2012 – more than double the return of the S&P 500. The volatility of commodities, as measured by the standard deviation of annual returns, was comparable with REITs and non-U.S. developed market stocks.

The Fixed Income table outlines

the 15-year performance and volatility of two core fixed-income asset classes, U.S. aggregate bonds and cash, with two fixed-income diversifiers: Treasury inflation-protected securities and non-U.S. bonds. TIPS had the best performance among these four fixed-income asset classes over the past 15 years.

Finally, the Alternatives table shows the 15-year performance and volatility of six fairly well-known alternative asset class indexes: master limited partnerships, convertible arbitrage, managed futures, risk arbitrage, merger arbitrage and a buy-write/covered call index.

In terms of raw performance, the Alerian MLP index dominated the other five alternative asset classes, but at a considerably higher level of volatility. Only the managed futures index provided genuine protection during 2008, a disastrously bad year for investors. In addition, risk and merger arbitrage experienced much smaller losses in 2008 than any of the eight equity and diversifier assets in the first table.

## EQUITIES

PERFORMANCE OVER 15 YEARS, 1998–2012

Asset Classification	Asset Class	Representative Index	15-Year Average Annualized % Return	15-Year Std. Dev. of Annual Returns	% Performance in 2008
Diversifier	Commodities	Deutsche Bank Liquid Commodity Index (Optimum Yield)	11.30	22.6	-30.94
Diversifier	Non-U.S. Emerging Market Equity	MSCI Emerging Markets	9.24	37.9	-53.18
Core	U.S. Mid-Cap Equity	S&P Mid Cap 400	9.14	18.8	-36.23
Diversifier	Real Estate	Dow Jones U.S. Select REIT	9.03	22.6	-39.20
Diversifier	Natural Resources	S&P North American Natural Resources Sector	7.82	24.4	-42.55
Core	U.S. Small-Cap Value Equity	Russell 2000 Value	7.19	19.3	-28.92
Core	U.S. Large-Cap Equity	S&P 500	4.47	19.2	-37.00
Core	Non-U.S. Developed Market Equity	MSCI EAFE Net Dividend	4.38	23.3	-43.38

## FIXED INCOME

PERFORMANCE OVER 15 YEARS, 1998–2012

Asset Classification	Asset Class	Representative Index	15-Year Average Annualized % Return	15-Year Std. Dev. of Annual Returns	% Performance in 2008
Diversifier	Inflation-Protected Bonds	Barclays U.S. TIPS	7.32	5.3	-2.35
Core	U.S. Aggregate Bonds	Barclays U.S. Aggregate Bond	5.96	3.2	5.24
Diversifier	International Bonds	Barclays Global Treasury ex-U.S.	5.85	9.2	9.43
Core	Cash	U.S. Treasury Bills 3 Months	2.45	2.1	1.40

## ALTERNATIVES

PERFORMANCE OVER 15 YEARS, 1998–2012

Asset Classification	Asset Class	Representative Index	15-Year Average Annualized % Return	15-Year Std. Dev. of Annual Returns	% Performance in 2008
Alternative	MLP	Alerian Master Limited Partnership	15.17	27.9	-36.91
Alternative	Convertible Arbitrage	Dow Jones Credit Suisse Convertible Arbitrage Hedge Fund	6.83	16.9	-31.59
Alternative	Managed Futures	Dow Jones Credit Suisse Managed Futures Hedge Fund	5.66	9.1	18.33
Alternative	Risk Arbitrage	Dow Jones Credit Suisse ED Risk Arbitrage Hedge Fund	5.47	5.5	-3.27
Alternative	Merger Arbitrage	Credit Suisse Merger Arbitrage Liquid Index (Net)	5.44	6.4	-8.16
Alternative	Covered Calls	CBOE S&P 500 BuyWrite Index (BXM)	5.37	13.8	-28.65

Sources: Lipper and author

### ADD-ON ASSETS

The performance of alternatives in isolation is not relevant because they would typically be used as an add-on asset class within a diversified core portfolio.

In that spirit, the performance reported in the Core and Satellite

table (p. 86) reflects an 80% allocation to the 7Twelve master portfolio index, which itself represents 12 indexes: the eight equity and diversifier indexes shown in Equities and the four fixed-income indexes shown in Fixed Income. Each of the 12 indexes

is weighted equally, at 8.33%, and the portfolio is rebalanced annually.

The first configuration in Core and Satellite was 80% 7Twelve and 20% Alerian MLP. Compared with the core 7Twelve master index, the 15-year average annualized return increased

## CORE AND SATELLITE: USING ALTERNATIVES WITH A DIVERSIFIED PORTFOLIO

PERFORMANCE OVER 15 YEARS, 1998–2012

Asset Classification	Representative Index	15-Year Average Annualized % Return	15-Year Std. Dev. of Annual Returns	% Performance in 2008
Diversified Core Portfolio	7Twelve Portfolio Index: 12 equally weighted equity, diversifier and fixed-income indexes	8.12	13.0	-24.81
80% Core 20% Satellite	80% Diversified Core 20% Alerian Master Limited Partnership	9.81	14.6	-27.23
80% Core 20% Satellite	80% Diversified Core 20% Dow Jones Credit Suisse Convertible Arbitrage Hedge Fund	7.95	13.0	-26.16
80% Core 20% Satellite	80% Diversified Core 20% Dow Jones Credit Suisse Managed Futures Hedge Fund	7.90	9.8	-16.18
80% Core 20% Satellite	80% Diversified Core 20% Dow Jones Credit Suisse E.D. Risk Arbitrage Hedge Fund	7.68	11.1	-20.50
80% Core 20% Satellite	80% Diversified Core 20% Credit Suisse Merger Arbitrage Liquid Index (Net)	7.67	11.2	-21.48
80% Core 20% Satellite	80% Diversified Core 20% CBOE S&P 500 BuyWrite Index (BXM)	7.61	12.8	-25.58

Source: Lipper and author

to 9.81% from 8.12% (nearly a 21% increase in return), with only a 12.3% increase in volatility.

The performance of that 80/20 mix did not, however, improve the results in 2008. In fact, adding the 20% MLP allocation caused the overall portfolio loss in 2008 to worsen to 27.23% from 24.81%. Nevertheless, the Alerian MLP Index significantly enhanced the performance of the overall portfolio during the 15-year period.

The second Core and Satellite configuration was 80% 7Twelve and 20% convertible arbitrage. Performance slipped below the core portfolio, risk was unchanged and 2008 performance was slightly worse. On the whole, using convertible arbitrage as the alternative asset class with the diversified core portfolio was not beneficial over this particular 15-year period.

Managed futures were the most beneficial alternative asset when combined with the 7Twelve portfolio – at least in terms of risk and return. The 15-year performance of the 80/20 mix

was only slightly lower than the core model by itself, but volatility declined by nearly 25%. Moreover, the performance in 2008 improved considerably; it was a loss of 16.18%, rather than 24.81%.

The remaining three alternative asset classes (risk arbitrage, merger arbitrage and buy-write/covered call) were not significantly helpful in terms of raw performance. Nevertheless, they each reduced volatility of the 80/20 mix by modest amounts and, in two cases, they slightly improved the performance of the overall portfolio in 2008.

### CHECKING CORRELATIONS

Of course, it is impossible to know whether these particular alternative asset classes will continue to interact with a core diversified portfolio in the same manner as they have during the past 15 years. Nevertheless, one possible insight into the future might be the correlation between these six alternative asset classes and the core 12-asset

portfolio. Over the past 15 years, only managed futures have had a negative correlation (-0.37) with the performance of the core model. The other five have had correlations with the 7Twelve portfolio ranging from 0.63 to 0.84. Within a portfolio, the lower the correlation, the better.

On the basis of historical correlation, managed futures may be a helpful alternative asset class when used as a satellite allocation within a core diversified portfolio. For planners hoping to enhance return – and were willing to endure greater volatility – adding a 20% dose of MLP as a satellite to the core portfolio paid off over the past 15 years. **FP**

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