# Diversification of Traditional Portfolio:

## Benefits of Hedge Funds

by Kulwinder Banipal

Increased Investment by Pension Funds and Endowments in Hedge Funds

As popularity of hedge funds continues to increase, reflected by significant growth in investments in the hedge funds over last three years, many mutual funds managers are looking at allocating some share of funds under their management to the hedge fund pool. The pension funds and endowments are increasing their exposure to hedge funds. The top five pension funds on the reported list of pension funds that are allocating assets (non US funds are converted to US $) to hedge funds include:

1. GMAM: $ 7 Billion
2. The pension fund for Dutch healthcare (PGGM): $ 5 Billion
3. BT Pension Fund: $3 Billion
4. CALPER: $ 2 Billion
5. Massachusetts Pension Reserve Trust: $1.7 billion

In addition, many local county and state employee funds have shown increased interest in hedge fund strategies.

Investor Concern
However, there still exists a large number of investors who believe that hedge funds are more riskier than mutual funds and need information on the performance and benefits of hedge funds before allocating assets to hedge fund strategies. The multi million-dollar loss to investors due to fraudulent events at Bayou fund has further raised investor concerns about the risks involved with investments in hedge funds as compared to mutual funds. To answer some of the concerns of mutual fund mangers, a comprehensive report was prepared outlining the performance of hedge funds (measured by an index) as compared S&P 500, and NASDAQ. The report provides detailed information on the individual hedge fund strategies, the portfolio diversification (lower volatility) that can be achieved for a mutual fund portfolio by allocating optimal weight to hedge funds strategies and lists some of the best performing hedge funds of last five years. This article provides a brief overview of the findings covered in the report.

Wide Range of Investment Instruments
Hedge Funds are similar to other alternative investments including real estate, commodities, private equity and venture capital in the respect that investors use these vehicles to get higher risk adjusted returns as well as to get returns that are uncorrelated with traditional assets. Hedge Fund is an unregulated pool of investment and the instruments used include simple derivative products such as plain vanilla options, swaps as well as complex instruments including exotic options, foreign exchange, interest rate and credit default swaps. Many investment management firms have introduced volatility derivatives. The trading strategies used by hedge funds are more dynamic that the ones used by mutual funds and the market risk is hedged by taking both the long and a short position. In coming years as the trading volume of derivative products like insurance, weather and energy derivatives increases, it is expected that the opportunities of high returns for hedge funds will further increase.

Narrow Distribution of Returns for Hedge Funds
In addition to the higher average monthly returns, the hedge fund index returns are distributed over much smaller range. The minimum and maximum monthly percentage return for hedge fund index for data from Jan, 1994 to June, 2005 has been 7.55 to 8.83. For S&P 500, the range is from 14.63 to 8.53, for 10-year T-Note the range is from 15.22 to 21.03, for NASDAQ 100 the range is from 29 to 18.03 and for DJI range is from 17.83 to 9.59. The narrow range of distribution of the monthly rate of return for hedge fund index can be attributed to the following:

Absolute Return for Hedge Funds:
Majority of the hedge funds trade in the contracts such as futures, options and swaps that derive their value from the underlying assets and the associated variables like volatility, credit ratings etc. There are some studies that indicate the hedge fund returns may not be completely absolute. However, the effect of market conditions has been more profound on the stocks and bonds, as is reflected by the return of the

traditional benchmarks used to measure performance of these assets, than it has been on the hedge funds.

Diversification of Traditional Asset Portfolio

The benefit of hedge funds is not only limited to superior risk adjusted return by investing fully in the hedge funds alone but also the hedge funds can be added to portfolio of traditional assets such as stocks and bonds to increase risk adjusted returns of the new portfolio. Using two-fund separation theory, the expected return of a portfolio consisting of two funds is dependent on the weigh allocated to each fund and the return of each category of fund. However, the volatility of the portfolio in terms of standard deviation is dependent on the individual volatility of the fund as well as the correlation between the return for funds. If the returns for two funds are negatively correlated, the overall volatility of the portfolio will decrease. As majority of the hedge fund strategies have negative correlation with the S&P 500 and the NASDAQ 100, allocating assets to hedge fund strategy from the existing portfolio of S&P 500 or NASDAQ 100, has the potential of lowering volatility of the combined portfolio and the strategy has been successfully implemented to generate superior returns by some fund managers.

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The author is thankful to Charles Naparalla at MetLife and Allen Square at Bain and Company for their invaluable insights.

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