

Primer

DIVERSIFYING YOUR PORTFOLIO WITH HEDGE FUND STRATEGIES

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The most "certain" observation that one can make regarding the capital markets during the past couple of years is the degree of "uncertainty" that has prevailed, and which continues to hover over the investment landscape. Starting with the eruption of the global financial crisis that hit with a vengeance in 2008, investors have been confronted with a myriad of challenges to their portfolios, such as increased volatility, high public equity market correlations, credit market impairment, an epic recession, the specter of inflation/ deflation, and dramatically increased sovereign risk levels in the developed countries.

Against this canvas, investors are seeking ways to buffer their portfolios from increased risk and to improve their odds of enhancing overall performance – even in the most uncertain of times. In this regard, investors have actively considered diversifying a traditional, long-only stock-bond portfolio by integrating a variety of hedge strategies which have the potential to increase the overall investment opportunity set, while permitting a level of customization to address very specific portfolio goals and objectives. Even if the market appears to be on the path to a period of sustained recovery consistent with the most optimistic views, there is still the fear that economic fragility exists that stands to threaten a portfolio at any time. Thus, it is appropriate that investors consider new strategies that will enable them to gain downside protection while participating in upside growth or select market opportunities, in essence, to ensure that they are optimally positioned, regardless of the scenario that may unfold.

In this paper, we will initially provide a brief introduction to the opportunity set for hedge fund strategies, along with related market data. We will then discuss the potential benefits that could result by adding hedge funds to a traditional stock-bond portfolio, as well as some important cautionary considerations. The paper will then offer several hedge fund model portfolios, corresponding to specific investor risk/return preferences, and conclude with a description of Rogerscasey's readily implementable hedge fund investment program that allows for individual portfolio customization while providing access to top tier managers.

BACKGROUND: HEDGE FUND STRATEGIES AND MARKET SNAPSHOT

A common perception is that the term "hedge fund" describes a distinct investment strategy. However, it would be more apt to define a hedge fund as a "structure" or vehicle for managing a private, unregistered investment portfolio across a broad range of strategies. Whatever the definition applied, the investment fundamentals remain consistent: assets are purchased when there is a belief that the price will increase, they are sold short in the case of an anticipated decline, or arbitrage is employed to take advantage of a perceived mispricing between assets.

• Structure: Most private hedge funds use limited partnerships which are exempt from SEC registration under two provisions of the Investment Company Act of 1940: Section 3(c)(1) which limits participation to "accredited" investors and Section 3(c)(7), targeted to "qualified purchasers." Limited liability companies incorporated in Delaware, as well as vehicles domiciled in select offshore jurisdictions, offer U.S. taxable and tax exempt

beta to the broad market which will make them more volatile.

Equity long/short is considered one of the earliest hedge strategies. Alfred Winslow Jones launched a fund in the 1940's that combined leveraged long stock holdings with a portfolio of short positions. Equity long/short or equity hedge, combines long positions in equities considered undervalued with the short sale of securities determined to be overvalued, along with equity-related options. Equity long/short managers can either be fundamental or quantitative in their approach, and can specialize by sector and geography or invest as generalists. The strategy attempts to capture equity-like returns over a market cycle with one-half of the volatility.

Event-driven captures mispricing associated with capital market transactions and specific "events" including mergers and acquisitions, corporate spin-offs, and reorganizations or bankruptcy. Event-driven managers attempt to move with alacrity while other investors are interpreting information related to a transaction, in order to capture a pricing premium. One of the sub-strategies, "merger (or risk) arbitrage," invests in mergers by buying the stock of the target company (which tends to trade at a discount to announced merger price) and shorting the stock of the acquiring company, thereby attempting to capture the spread between the bid price and market price of the target, while hedging market risk. Another sub-strategy, "distressed investing," focuses on the opportunity created by bankruptcies, liquidations, and reorganizations by purchasing securities (bonds) at a deep discount to anticipated recovery value. Eventdriven strategies are expected to display some lack of correlation with the broader market, because it is directed at mispricing related to specific transactions, as opposed to betting on market direction.

Relative value invests in "spread trades," which is the simultaneous purchase of one security considered "cheap" and the sale of another considered "expensive," when the economic relationship between the two becomes mispriced. The strategy is called "relative value arbitrage" because the price of one security is determined "relative" to the price of a second. Examples of substrategies include "convertible arbitrage," which involves going long or purchasing a convertible bond while shorting the same issuer's common stock, to capture the mispricing between the two securities and hedge the equity component of the bond. Another sub-strategy, "equity market neutral," holds equal long and short positions, usually in companies in the same industry to neutralize market risk. Thus, relative value managers do not have much market exposure as they focus on security mispricing as opposed to taking directional bets. However, since spreads can sometimes be narrow, relative value managers will at times employ increased leverage to maximize returns.

Tactical trading managers make leveraged long and short bets on anticipated price movements of stock markets, interest rates, foreign exchange, and physical commodities. There are two principal sub-strategies: "global macro," which employs fundamental security and market research, and holds positions that reflect bets on both individual companies and sectors, as well as on countries or regions, currencies and commodities, and managed futures managers – also known as "CTA's" – which are described as "trend followers" or "systematic" investors who use sophisticated price momentum models to identify investment opportunities. Tactical trading strategies tend to be less correlated to other hedge fund strategies.

According to the Hedge Fund Research (HFR) indices, from January 1, 1990 through December 31, 2010, the volatility of hedge fund returns over the long term has

potentially, buffer a portfolio from market uncertainty, and was premised on fundamental stock research. Global macro was favored, initially, due to the attraction of the "global focus" across asset classes and geographies that represented a broader opportunity set, along with the prospects of low correlations with traditional equity markets. Today, although equity hedge remains the largest of allocated strategies, it has declined as a percentage of the total, while global macro has gone from the largest percentage in 1990, to the smallest, currently. Event-driven and relative value combined, which now represent over 50% of assets under management, have gained steadily in popularity as investors seek greater diversity and non-directionality in their hedge strategy option set.

One of the primary factors that remain when considering whether to introduce hedge fund strategies into a traditional long-only portfolio as a diversifying element is the potential contribution to overall returns they may deliver. While past performance is no guarantee of future results, we examined the comparative performance of the four primary hedge fund strategies, comparing them

to each other and to the broad market indices, over the last five years. This represents the period of time just prior to the global financial crisis, during the brunt of the dislocation and the immediate recovery thereafter. Figure 4 shows that the while the HFRI Fund Weighted Composite Index lagged the S&P 500 for the one-year ending December 31, 2010, due to a variety of factors, including the adverse impact of the market recovery on short sellers and the effects of a highly correlated equity market on fundamental long/short stock pickers, it did outperform the S&P 500 over three and five years by 5.3% and 3.6%, respectively. The index also exceeded the MSCI World Index by 6.7% and 2.9%, during the same three and five year period.

The argument for diversification among strategies consistent with individual risk/return objectives is supported by the variability of the relative ranking of returns over different periods, and the lack of predictability or persistency. For example, global macro turned in the best results among all strategies for three and five years, and was the only positive performer with a 4.8% return in a very difficult 2008, when all strategies posted

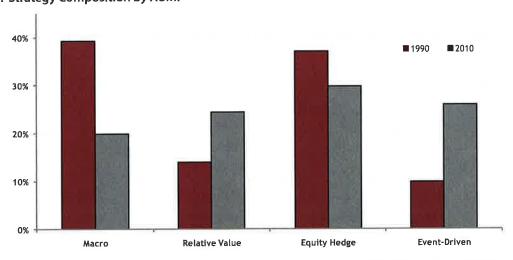


Figure 3: Strategy Composition by AUM.

Source: Hedge Fund Research (HFR)

- Accessing attractive relative and absolute returns
- Gaining downside protection against falling equities

However, one must keep in mind that hedge fund investing is a form of taking risk and must therefore be subject to investment, operational, and other considerations before investing.

Figure 5 illustrates that hedge fund strategies produce returns that cannot be entirely explained by the behavior of the equity and bond markets.

The HFRI Macro Index recorded the highest beta measure to the bond markets over the course of the last 21 years, while the HFRI Equity Hedge Index posted the highest beta measures relative to the equity markets. However,

in the case of the HFRI Macro Index, the analysis explains less than 60% of the driving forces behind the returns while the HFRI Equity Index returns are driven less than 50% by the results of the equity markets. As many institutional investors' portfolios derive the bulk of their returns from capital markets increasing in value, this analysis shows the effectiveness of hedge funds in accessing additional sources of return, not relying on the rise in capital markets to produce appreciation.

The diversification benefits are best illustrated by examining the correlations between the individual hedge fund strategies and traditional asset classes. Over the past 21 years, equities and bonds have a correlation of less than 0.15. Additional correlation relationships are outlined in Figure 6.

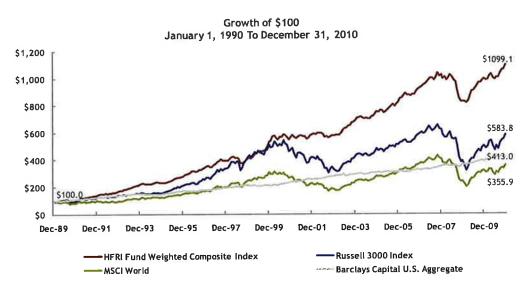
Figure 5: Beta Analysis.

	HFRI Equity	HFRI Event-	HFRI	HFRI Macro
	Hedge	Driven	Relative	Index
	Index	Index	Value Index	
Barclays Capital U.S. Aggregate	0.19	0.13	0.12	0.58
Russell 3000 Index	0.45	0.33	0.15	0.18
MSCI World Index	0.42	0.30	0.15	0.18

Figure 6: Correlation Analysis.

	HFRI Equity Hedge Index	HFRI Event- Driven Index	HFRI Relative Value Index	HFRI Macro Index	Barclays Capital U.S. Aggregate	Russell 3000 Index	MSCI World Index
HFRI Equity Hedge Index	1.00						
HFRI Event Driven Index	0.83	1.00					
HFRI Relative Value Index	0.66	0.74	1.00				
HFRI Macro Index	0.57	0,51	0.33	1.00			
Barclays Capital U.S. Aggregate	0.08	0,07	0.10	0.29	1.00		
Russell 3000 Index	0.76	0.73	0.52	0.37	0.14	1.00	
MSCI World Index	0.71	0.68	0.52	0.37	0.13	0.90	1.00

Figure 8: Compound Growth.



in excess of 50%. Figure 9 shows how hedge funds have performed over time relative to equity markets, broken down between positive and negative return environments.

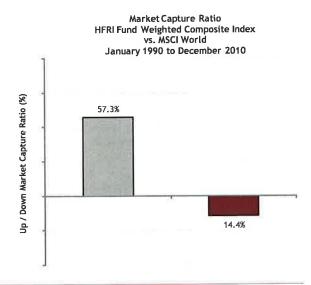
During positively trending markets, the HFRI Fund Weighted Composite Index captured close to 60% of the gains of the MSCI World. However, the hedge fund composite only captured 14.4% of the losses exhibited by the MSCI World Index since January 1990 through December 2010, speaking to the hedging benefits and downside protection of hedge funds during the falling equity markets.

To summarize the benefits of hedge funds, investing in long-only equities surely has potential upside, but the level of risk associated with these investments can also be material. Bonds, on the other hand, exhibit much lower levels of risk but also provide much lower expected returns. Statistically, hedge funds are a very suitable investment while looking to capture much of the upside

of equities while maintaining a low capture ratio on the downside, providing for volatility patterns closer to bonds rather than equities.

However, there are a number of risks and issues, both investment-related and operational, which need to be

Figure 9: Market Capture.



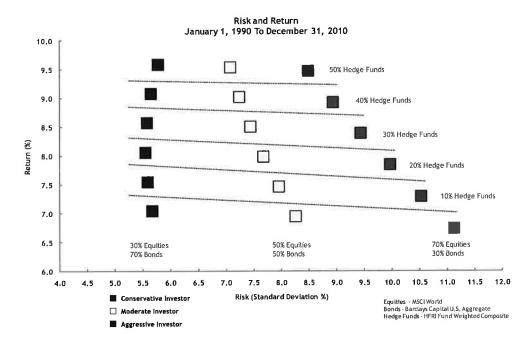
investors, both by their approach to traditional equity/bond investing and the characteristics they might be looking for from a hedge fund allocation. These are shown in Figure 10.

The conservative investor is primarily looking for income generation with a high priority placed on capital preservation. For purposes of illustration, this type of investor is shown as holding a portfolio that is 70% bonds and 30% equities. For their hedge fund allocation, they are primarily looking for low correlation to their existing portfolio with an emphasis on fixed income- and credit-related strategies rather than equity-related strategies. A moderate investor has a portfolio evenly split between equities and bonds. They are looking for moderate returns with some upside potential though still with a focus on capital appreciation. Such an investor will want broad exposure to all the main hedge fund strategies, looking to diversify their overall portfolio. Finally, the

aggressive investor is focused on equity-like returns to generate capital appreciation and has the bulk of their portfolio in equities. This investor will favor equityfocused hedge fund strategies with less focus on arbitrage strategies.

Figure 11 plots several efficient frontiers based on the returns of the MSCI World Index, the Barclays Capital Aggregate Index, and the HFRI Fund Weighted Composite Index (a broad hedge fund index) for the period from January 1, 1990 to December 31, 2010. The black boxes represent a conservative investor, grey represents a moderate investor, and red an aggressive investor. The bottom points have no hedge fund allocation, with the hedge fund allocation increasing in 10% increments moving up each column. In contrast to typical capital market assumptions, this period of 21 years, or more than two decades, saw bonds outperform global equities for the period as a whole.





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Figure 13: Strategy Allocation Examples.

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Investor Objective	Equity Hedge	Event-Driven	Relative Value	Global Macro	Return	Risk	Ratio
Credit/Rates Focused	-	40%	40%	20%			
	Capture arbitrage opportunities across credit spectrum				12.1%	5,2%	1,51
	Enhanced yield from stressed securities						
Broadly Diversified	25%	25%	25%	25%			
	 Exposure to all major hedge fund strategies 				12.8%	6,0%	1.43
	Reduce Volatility						
Equity Focused	60%	20%	-	20%			
	Limit reliance on positive markets (beta)				13.7%	7.7%	1.23
	Hedge downside equity risk						
Non-correlated/ Macro Focused		20%	20%	60%			
	Tactical/opportunistic allocations across fixed income, global				12.9%	5.9%	1.45
	equity ind	equity indices, currency, and commodities					,

and is for an investor who may be looking at a macro allocation as a form of portfolio insurance with the potential for positive returns in down, as well as up markets, as evidenced in 2008 when macro was the only positive strategy. While other hedge fund strategies seek to remove market exposure, macro is the only strategy, aside from pure short sellers, that can effectively bet on market declines and so make profits in up and down markets.

Looking at the returns and Sharpe ratios, the returns increase from conservative to moderate to aggressive but the Sharpe ratios decrease, reflecting the additional risk taken on in the search for higher returns. Nevertheless, the addition of a hedge fund allocation can help investors with different characteristics, and different risk tolerances, achieve their long-term investment objectives through an appropriate mix of hedge fund strategies.

ROGERSCASEY ALTERNATIVE INVESTMENTS STRATEGY SPECIFIC PROGRAM (RCAI): AN IMPLEMENTABLE ALTERNATIVE INVESTMENT SOLUTION

As we have observed in the previous three sections, hedge funds represent a diverse and potential portfolioenhancing investment option. However, the key question facing each investor, especially high net worth individuals and family offices, remains one of "implementation." More precisely, how can an investor efficiently and properly identify, perform due diligence, and surmount the fund investment minimums while gaining access to the more highly-regarded firms in an effort to construct a well-diversified or targeted portfolio of hedge funds? This is no small task given the strategic complexity of the asset class, and the relatively large universe of funds that populate it. For this reason, Rogerscasey developed the Strategy Specific Program (SSP) of hedge funds for qualified private investors and small institutions lacking the scale or resources to construct a hedge fund portfolio.

that can be customized to meet specific investment goals by providing:

- Access to institutional quality investment strategies at acceptable dollar minimums.
- *Due Diligence* that is based on independent, researchdriven, and institutional-quality manager selection, underwriting, and monitoring.
- Diversification options that allow investors to allocate capital across four strategic fund sleeves, containing at least four managers each, which tailor the exposure to address specific objectives while providing a measure of risk management.
- Operational Controls within Rogerscasey's responsibility which relieve the investor of the need to manage any legal, accounting, tax, and reporting requirements associated with building a diverse hedge fund investment program.

The SSP seeks to counter two of the more challenging aspects of hedge fund investing: the size of the investment minimums required by managers, and the resources and skill necessary to perform rigorous due diligence.

Minimums: Hedge funds typically have minimums of \$1 million or more, with some requiring up to \$20 million of invested capital. High minimums make it harder to construct a diversified hedge fund program for the private or small institutional investor. However, the SSP maintains a minimum investment of \$500,000 for each of the four RCAI funds in the program, which is allocated equally across the individual funds within that particular sleeve – a number of whom have minimums of \$5 million and \$10 million. Thus, for \$500,000 per RCAI fund or \$2 million across all four funds, the qualified investor can construct a well-diversified and customized hedge fund program consistent with their portfolio objectives. For example, a moderate-styled investor seeking maximum

exposure to all strategies while mitigating volatility, could allocate 25% across the four RCAI funds, while a more aggressive-styled investor targeting greater equity focus with downside protection, could allocate 50% or more of available capital to the RCAI Equity Long/Short Fund sleeve.

Investing in hedge funds requires Due Diligence: significant resources to conduct an in-depth evaluation of both manager and fund offerings, as well as postinvestment monitoring. This critical phase of the investment process has never been more essential given the complexity of the strategies employed by hedge funds, as well as the number of high profile manager failures occurring in recent years due to fraud, regulatory infractions, or poor investment decisions. institutional-quality due diligence is essential to constrain the risk of adverse manager selection and capital loss. An investor is able to leverage the deep hedge fund due expertise and proprietary diligence methodology of Rogerscasey through the SSP, as all managers selected for the platform must achieve a rating that reflects the highest conviction awarded, based upon investment skill and firm attributes.

The SSP provides an immediately implementable hedge fund investment solution for qualified investors attracted to the asset class as a return generator and portfolio diversifier, but confronted by the challenges of the large investment minimums required and experience needed to conduct critical due diligence and ongoing monitoring. Managers selected for the SSP have been fully vetted by Rogerscasey's proprietary institutional research process, and offer the investor access to a diverse set of highly regarded fund offerings. Rogerscasey closely monitors the funds installed on the platform to ensure that they perform and conduct their affairs consistent with expectations, and will actively eliminate or add managers to the platform accordingly. The SSP is a unique tool that

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ABOUT ROGERSCASEY

Rogerscasey is a global investment solutions firm serving institutional asset owners and financial services firms for more than 40 years. With clients worldwide, the firm provides a full array of services ranging from investment advisory to implemented solutions, all supported by a deep commitment to fundamental and strategic research. The Rogerscasey team of experienced industry professionals helps clients stay ahead of economic trends, delivering the insight needed to achieve maximum results.

For more information, please visit our website at www.rogerscasey.com.

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