

Rothschild Larch Lane Management Company LLC

BUILDING EFFICIENT HEDGE FUND PORTFOLIOS

Investors typically allocate assets to hedge funds to access return, risk and diversification characteristics they can't get from other investments. The hedge fund universe includes a wide variety of strategies and styles that can help investors achieve this objective. Why then, do so many investors make significant allocations to hedge fund strategies that provide the least portfolio benefit? In this paper, we look to hedge fund data for evidence that investors are, in fact, missing out on the core benefits of hedge fund investing and we attempt to understand why.

returning strategies, thereby accepting greater risk or volatility in the portfolio, to achieve their goal. Allocators make these types of decisions every day.

By analyzing the assets under management and flows into specific hedge fund strategies, we can clearly see where investors are allocating their hedge fund investments (see Exhibit 1).

EXHIBIT 1: HEDGE FUND AUM BY STRATEGY

THE BASICS

Let's start with the assumption that an investor's asset allocation is fairly similar to the general investing population. That is, the portfolio is dominated by equities and equity-like risk.

Let's also assume that an investor's reason for allocating to hedge funds is to achieve a more efficient portfolio, i.e., higher return per unit of risk taken.

In order to make a portfolio more efficient, any allocation to hedge funds must include some combination of the following (relative to the overall portfolio):

- Higher return
- Lower volatility
- Lower correlation (i.e. the hedge fund holdings "zig" when the rest of the portfolio "zags")

THE GOAL

Identify return streams that deliver any or all of the three characteristics listed above.

In a perfect world, the best allocators would find return streams that accomplish all three of these goals - higher return, lower volatility, and lower correlation. In the real world, that is quite difficult to do. There are always trade-offs. In some cases, allocators accept tradeoffs to increase the probability of achieving specific objectives. For example, they may give up a bit of return to invest in a strategy with lower expected volatility and correlation, in order to improve overall portfolio efficiency via lower risk. Or, they might allocate to higher



Source: Evestment December 2015 monthly report via Wishire Associates.

The data shows that the largest allocation is to equity-related strategies, such as equity hedge and event driven, which suggests that investors' allocations are not increasing the efficiency of overall portfolios as much as they could. Below, we explore the reasons why allocators may make such sub-optimal decisions.

PORTFOLIO EFFICIENCY

If building more efficient portfolios is a primary motivation for investing in hedge funds, one may conclude that investors have been making sub-optimal allocation decisions for years. Exhibit 2 below illustrates the concept of return stream "efficiency." The table shows the correlation of each strategy to investors' biggest risk factor (the stock market) and each strategy's return-to-risk ratio, known as the Sharpe Ratio¹. The lower correlation a strategy has to the stock market and the higher its Sharpe Ratio, the more that strategy would improve a portfolio's efficiency.

EXHIBIT 2: MAJOR HEDGE FUND INDICES CORRELATION TO STOCK MARKET AND SHARPE RATIOS

	Stock Market Correlation	Sharpe Ratio
HFRI Equity Market Neutral	0.26	1.11
HFRI Macro (Total)	0.32	1.05
HFRI Systematic Diversified	0.39	0.92
HFRI Relative Value Fixed Income - Convertible Arbitrage	0.47	0.79
HFRI Merger Arbitrage	0.52	1.22
HFRI Distressed/ Restructuring	0.52	1.15
HFRI Relative Value Multi-Strategy	0.53	1.13
HFRI Relative Value Fixed Income Corporate	0.53	0.68
HFRI Emerging Markets	0.62	0.61
HFRI Event Driven (Total)	0.70	1.10
HFRI Equity Hedge	0.73	0.96
HFRI Fund Weighted Composite	0.74	1.03
HFRI Equity Quantitative Directional	0.79	0.68

While the various strategies have comparable Sharpe Ratios, their correlation benefits vary dramatically. Investors seeking to increase the efficiency of a "typical" portfolio (which would generally have significant equity risk), would be well-served to allocate to strategies with the lowest stock market correlations, such as market neutral, macro, and systematic diversified.

However, actual allocations show the opposite is true, as we saw in Exhibit 1. Investors have allocated the vast majority of hedge fund dollars to strategies with the highest correlation to the stock market, e.g., equity hedge and event driven. Long-biased, equity-related hedge fund strategies have captured a significant share of industry AUM, which means allocators are "doubling up" on equities – the risk factor to which they already have too much exposure.

Not surprisingly, equity hedge and event driven strategies depend more on a rising stock market to generate return. Even the HFRI Fund Weighted Composite Index, a widely used benchmark for hedge fund strategies, is very highly correlated to the stock market. From an efficiency standpoint, one might accept a high correlation if there were a significant increase in Sharpe Ratio, but there isn't, as indicated by Exhibit 2.

WHY DO INVESTORS BEHAVE THIS WAY?

One reason investors behave in such a counterproductive manner may be familiarity and comfort with equity strategies. Company news is at the center of the business press and everyone likes to talk about their favorite stocks. For professional investors, explaining these strategies is relatively simple due to the link between their performance and the performance of the stock market. Ultimately, the reasons are less important than the potential problem – overconcentration in stock-like risk.

OVERCOMING A PORTFOLIO SHORTCOMING

We are not suggesting that investors should sell equity-related strategies and allocate all of their risk to market neutral, global macro, and systematic strategies. The global equity market is an important source of alpha for any active manager and finding the most efficient means of harnessing that alpha is critical. However, we believe overconcentration is a significant risk. A more prudent approach may be to diversify the alpha opportunity set across a variety of asset classes and trading approaches. Such diversity should provide the best chance of attaining consistent performance across a wide variety of economic and market conditions.

HOW SHOULD AN INVESTOR ACHIEVE HEDGE FUND DIVERSIFICATION?

Portfolio construction usually begins with assumptions for targeted return, volatility, correlation, and liquidity. These assumptions vary by investor. For example, an investor's alternatives allocation may seek a return-to-risk ratio of 0.7 or higher, with little to no correlation to the stock market, and deep liquidity. Once individual portfolio assumptions are in place, an investor can begin to formulate a plan to achieve the goal. A variety of investment approaches can be used to execute the plan, and the manner in which one combines them is critical.

We believe diversification of investment style is a key component of hedge fund portfolio construction. Exhibit 2, which shows the wide disparity in correlations for various hedge fund strategies, supports this belief. However, having the majority of one's risk in different

Note

¹ Sharpe Ratio is a measure for calculating risk-adjusted return. It is calculated as the average annual return earned in excess of average annual return of the risk-free rate (3-month Treasury Bill Index) per unit of volatility.

strategies that essentially behave like a single style, results in a substantial, non-diversified bet on the risk that is over-represented in most investors' portfolios. To combat this, one should thoughtfully diversify among a broad and diverse set of investment styles.

Diversification can manifest itself in many ways, including the opportunity set or asset class the manager trades, the length of time the manager holds trades, the analytical process a manager applies to investment decisions (i.e. technical/quantitative/fundamental/ discretionary), or any combination of these factors. Ideally, a portfolio efficiently combines a set of dynamic, specialist strategies in a manner that seeks to avoid concentrated bets and diversify all bets across as many investment disciplines as possible.

Our hedge fund investing experience has taught us that there have been and will continue to be periods of outperformance and underperformance for each hedge fund strategy type. Because it is so difficult to predict when those periods will occur and for how long, we believe a disciplined approach to combining diversified strategies efficiently into a portfolio should lead to the most consistent performance across market cycles. This is why we believe that a riskbalanced approach is a prudent method for a portfolio construction and strategy allocation process. The goal of balancing the portfolio's risk budget among a wide variety of opportunities (represented by different asset classes, trading time horizons and investment

approaches) mitigates the temptation to make concentrated bets in certain strategies.

THE IMPORTANCE OF MANAGER DUE DILIGENCE

Dispersion of manager returns in the hedge fund universe is often greater than it is among traditional strategies, as illustrated in Exhibit 3.

The performance difference between the best and worst performing large-cap core manager is 390 basis points for the 10-year period ending December 2015. Compare that to the 1390 basis point difference between the best and worst performing global macro manager over the same time period! Clearly due diligence matters even more for hedge funds than for traditional long-only strategies.

Choosing talented managers with disciplined, repeatable processes is critical. For most advisors and investors, performing detailed analysis of hedge fund managers' specific investment strategies, portfolio construction philosophy, and risk oversight policies is impractical. This highlights the benefits of investing in products that are managed by professional advisors who perform appropriate due diligence and monitoring on an ongoing basis. With new hedge fund offerings coming to market almost daily, a sound and structured approach to selecting managers positioned to deliver alpha is imperative.

Equity Market Equity Relative Event Fund Large Core Small Core Value Macro Driven of Funds Neutral Hedge Equities Equities

EXHIBIT 3: MANAGER DISPERSION, ALTERNATIVES VS. TRADITIONAL MANAGERS



Manager Dispersion	Relative Value	Macro	Event Driven	Fund of Funds	Equity Market Neutral	Equity Hedge	Large Core Equities	Small Core Equities	International Equities	Core Plus Fixed Income
Top 5% to Bottom 5%	14.6%	13.9%	10.4%	6.6%	17.1%	14.7%	3.8%	5.2%	3.9%	2.8%
Top 25% to Bottom 5%	4.2%	4.5%	3.1%	2.2%	3.0%	5.3%	1.7%	2.1%	0.7%	0.8%

Source: Wilshire CompassSM, PerTrac. Traditional strategies consists of separate account strategies. Large Core Equities represented by Wilshire's classification of Large-Cap Core strategies, Small Core Equities by Small-Cap Core, International Equities by EAFE, Core Fixed Income by Core Plus Fixed Income. Alternative strategy custom peer groups are defined by their respective HFRI benchmark constituents.

CONCLUSION

As a new wave of investors gain access to hedge funds and alternative investment strategies, they face a broad set of challenges. Thoughtful strategy selection that considers one's current portfolio mix is critical. For many investors, there is probably room to improve the efficiency of their overall hedge fund strategy mix. As the proliferation of liquid alternatives products continues, investors must understand that different hedge fund strategies will interact with their existing holdings and impact their overall asset allocation in many different ways.

Identifying the right strategies to improve a portfolio's efficiency and selecting the most appropriate managers to implement those strategies is essential. Having professional advisors experienced in hedge fund management and capable of conducting ongoing due diligence and oversight can be a significant advantage in achieving investors' objectives for their alternatives allocation.

ABOUT ROTHSCHILD LARCH LANE

Rothschild Larch Lane Management Company is a joint venture company established by Rothschild Asset Management Inc. and Larch Lane Advisors LLC to act as investment adviser to a U.S. based liquid alternatives mutual fund. The venture brings together two entities that have extensive hedge fund investing experience and who have identified the growing demand for liquid alternatives.

Rothschild and Larch Lane each have a 20-year track record managing hedge fund portfolios and offer a proven capacity to source and allocate to emerging hedge fund managers and liquid strategies. Investors can benefit from complementary in-depth research, idea generation, and global manager selection.

ABOUT WILSHIRE

Founded in 1972, Wilshire Associates Incorporated ("Wilshire®") is an independent investment advisory and services firm owned by active key employees. Wilshire provides consulting services, analytics tools and solutions, and customized investment products to plan sponsors, investment managers and financial intermediaries around the globe. Today Wilshire serves in excess of 500 clients across 20 countries with combined assets exceeding \$8 trillion¹. Wilshire Funds Management (WFM) is the global investment management business unit of Wilshire Associates. WFM provides multi-asset class, multi-manager and hedge fund investment solutions to financial intermediaries serving retail and institutional investors. Rothschild Larch Lane Management Company has retained Wilshire Associates to consult on the liquid alternatives industry.

DISCLOSURES

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RETURNS.

All investing is subject to risk, including the possible loss of principal. Diversification does not ensure a profit or protect against a loss.

Hedge funds are not subject to the same regulatory requirements as mutual funds. The funds may engage in leveraging and other speculative investment practices that may increase the risk of loss of investment. Hedge funds can be highly illiquid, and there is no secondary market for them nor is one expected to develop. Hedge funds are not required to provide periodic pricing or valuation information to investors and may involve complex tax structures and delays in distributing tax information. In addition, hedge funds may charge high fees and expenses that may offset trading profits.

Any indices and other financial benchmarks shown are provided for illustrative purposes only. Comparisons to indices have limitations due to the volatility and other material characteristics of indices that may differ from a particular hedge fund. Consequently, a hedge fund's performance may differ substantially from the performance of an index and indices should not be relied upon as an accurate measure of comparison.

Information contained herein is not to be construed as an offer to sell or the solicitation of an offer to buy any securities. All material presented herein is believed to be reliable but we cannot attest to its accuracy and opinions expressed herein may change without prior notice.

Note

¹ Client assets are as represented by Pensions and Investments, detailed in P&I's "Largest Retirement Funds" and P&I's "Largest Money Managers (U.S. institutional tax-exempt assets)" as of 9/30/14 and 12/31/14, and published 2/9/15 and 5/18/15, respectively.

INDEX DEFINITIONS

HFRI Emerging Markets (Total) Index is composed of funds that invest primarily long, in securities of companies or the sovereign debt of developing or 'emerging' countries. HFRI Equity Hedge (Total) Index contains funds that maintain positions both long and short in primarily equity and equity derivative securities. HFRI Equity Hedge Quantitative Directional Index contains funds that employ strategies with sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities, select securities for purchase and sale. HFRI Equity Market Neutral Index contains funds that employ sophisticated quantitative techniques of analyzing price data to ascertain information about future price movement and relationships between securities to select securities for purchase and sale. HFRI Event Driven (Total) Index is composed funds that maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety, including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. The HFRI Event Driven Distressed / Restructuring Index contains funds that employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near term proceedings. The HFRI Event Driven Merger Arbitrage Index contains funds that employ an investment process primarily focused on opportunities in equity and equity related instruments of companies which are currently engaged in a corporate transaction. The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. HFRI Macro (Total) Index is contains funds that trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency and commodity markets. HFRI Macro Systematic Diversified Index contains funds that employ strategies with investment processes typically as a function of mathematical, algorithmic and technical models, with little or no influence of individuals over the portfolio positioning. The HFRI Relative Value Fixed Income Convertible Arbitrage Index contains funds that employ strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a convertible fixed income instrument. HFRI Relative Value Multi-Strategy Index contains funds that employ an investment thesis that is predicated on the realization of a spread between related yield instruments in which one or multiple components of the spread contains a fixed income, derivative, equity, real estate, MLP or combination of these or other instruments. HFRI Relative Value Fixed Income -Corporate includes strategies in which the investment thesis is predicated on realization of a spread between related instruments in which one or multiple components of the spread is a corporate fixed income instrument. Strategies employ an investment process designed to isolate attractive opportunities between a variety of fixed income instruments, typically realizing an attractive spread between multiple corporate bonds or between a corporate and risk free government bond.

This article does not constitute investment advice. The views in this article are solely opinions of the Rothschild Larch Lane Management Company and are subject to change without notice.

To determine if a liquid alternatives fund is an appropriate investment for you, carefully consider the particular fund's investment objectives, risk factors, charges and expenses before investing. This and other information may be obtained by calling SEI Investments Distribution Co., at 1-844-RLL-FUND or by visiting the website at www.rllfunds.com.



