



Wilshire Consulting

Institutional Use of Hedge Funds:

Penetrating the Darkness on the Hedge of Town

Steven J. Foresti
(310) 451-3051
sforesti@wilshire.com

July 26, 2005

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Introduction

There's a well known proverb that says: "the early bird gets the worm," but as it relates to institutional investors moving into hedge funds a more relevant proverb and response may well be: "yeah, but the second mouse gets the cheese" (and we all know what became of the first mouse who rushed in without fully recognizing the risks). The hurrying flow of assets into hedge funds has been impossible to miss. Heck, I've seen it with my own eyes and I'm legally blind! Reports fill financial newspapers and journals on a daily basis with accounts of the latest institutional investor that has begun funding an allocation to hedge funds. However, despite this tremendous commitment of capital, little progress seems to have been made in the advancement of best practices for hedge fund investing. Questions like: "Are hedge funds an asset class?", "How should a hedge fund strategy be implemented within an institutional portfolio?", and "How should hedge fund products be evaluated?" have all largely gone unanswered. And the answers that have been provided often conflict, confuse and ignore practical implementation issues. In recognition of the rapidly evolving landscape of hedge fund risks and opportunities, this report will provide an update of Wilshire Consulting's views on the questions cited above and will advance what we believe to be best practices on the appropriate use of hedge funds by institutional investors.

Are Hedge Funds a Separate Asset Class?

To address this question, it's necessary to begin with a definition of what we mean by "asset class" and why the answer even matters. Though often used in a wide variety of ways, the term "asset class" has the primary role of identifying the list of investment categories available for consideration during the asset allocation process. The properties of these investment options are important and should meet the following minimum criteria for distinction as an "asset class."

1. Return Potential – A broad and passive investment in the category is expected to deliver positive long-term returns and, with the exception of a cash equivalent asset class, the return expectation must be in excess of the risk free rate of return.

2. Diversification Potential – A broad and passive investment in the category is expected to deliver a return pattern that substantially differs from the pattern of other recognized asset classes. Additionally, the investment category's return pattern cannot be replicated through a combination of investments in other recognized asset classes (including leveraged combinations of other recognized asset classes).

3. Accessibility – The category is investable – it is open and available to the investor.

In summary, for recognition as an "asset class" within the asset allocation process an investment category must offer an expected return premium to cash, diversification benefits, and be open for investment. An investment category that falls short of these minimum conditions does not warrant recognition as an asset class, and therefore should not be considered for allocation when creating a strategic policy portfolio.

Let's consider hedge fund investments against this definition to evaluate whether they meet the criteria for distinction as a separate "asset class." Though sometimes hidden by their limited transparency, hedge fund performance is constructed from the same building blocks of return common to all investment strategies: alpha (active return) and beta (market return).

$$(1) \quad R_p = R_{rf} + \mathbf{b}(R_m - R_{rf}) + \mathbf{a}$$

Where: R_p is the return of the portfolio, R_{rf} is the risk free rate, β (beta) is the portfolio's sensitivity to the market return, R_m is the market return, and \mathbf{a} (alpha) is the portfolio's return in excess of the risk-adjusted market return.

For simplicity, we'll begin by considering return expectations for market neutral strategies – the basic discussion as related to market neutral strategies also applies to all other major styles of hedge funds. By definition, market neutral funds attempt to take on no net exposure to general markets (i.e. they have no net exposure to other asset classes). For example, an equity market neutral fund may hold an equal dollar amount of stocks long and short. If properly constructed to have offsetting exposure to market or factor risks, the portfolio is insulated from general directional moves in markets or factors. Referencing Equation (1) from above, β is equal to zero and the strategy is only successful if the stocks held long outperform those sold short (i.e. \mathbf{a} is greater than zero). The portfolio's return is equal to the difference in return between the long and short positions, plus a risk free return from investing the proceeds from short selling in the cash market. Only a skillful manager can be expected to consistently deliver returns in excess of cash. The 'average' investor in this strategy is expected to earn a cash return (less expenses and fees) from buying and selling stocks. Therefore, market neutral hedge funds fail asset class Criterion 1 from above, which requires a positive return expectation in excess of the risk free rate.

But what about hedge fund strategies that take on some level of general market exposure? If they are subsequently expected to deliver long-term positive excess returns does that now make them an asset class? The answer depends on the specific market exposure undertaken by the hedge funds. Equation (1) from above can be expanded to reflect the inclusion of multiple market exposures within portfolio strategies as follows:

$$(2) \quad R_p = R_{rf} + \sum_{i=1}^n \mathbf{b}_i (R_{m,i} - R_{rf}) + \mathbf{a}$$

Where: R_p is the return of the portfolio, R_{rf} is the risk free rate, β_i is the portfolio's sensitivity to market i 's return (beta to markets 1 through n), $R_{m,i}$ is market i 's return (return to markets 1 through n), and \mathbf{a} (alpha) is the portfolio's return in excess of the risk-adjusted market returns.

The number of markets in which hedge funds have exposure is not the critical issue in determining their status as an asset class; the more important question is whether hedge funds are investing in markets outside of the previously recognized asset classes. If each market exposure,

$b_i(R_{m,i} - R_{rf})$ from Equation (2), represents an already recognized asset class, then hedge funds fail asset class Criterion 2 from above, which requires that the investment category's return pattern cannot be replicated through a combination of investments in other recognized asset classes. If, however, hedge funds do invest in new markets, outside the recognized list of asset classes, they may meet asset class Criterion 2. This is not the case. Though hedge funds are loosely regulated investment vehicles¹ that often employ leverage and derivative instruments in a variety of strategies and styles², they seek active performance (alpha) in traditional and recognized asset classes. Therefore, the return of an 'average' manager – one without positive or negative skill - can be constructed with passive exposure to the various areas of persistent market risk taken by the strategy. This falls short of asset class Criterion 2.

Wilshire Consulting believes that, as defined above, hedge funds are not an asset class and therefore do not warrant inclusion as a separate investment category within the asset allocation process. As active strategies their main role in an institutional portfolio should be in the pursuit of alpha, or active returns in excess of the betas, or market exposures, dictated by an investor's policy portfolio.

The Appropriate Use of Hedge Funds

Institutional investors have used hedge fund vehicles in two primary ways: absolute return and portable alpha. Though inappropriately named³, absolute return strategies package the more risky hedge fund styles with higher embedded exposure to general market betas (i.e. equity long short) than do portable alpha strategies. The typical funding of absolute return strategies has been done through a dedicated allocation within the strategic policy portfolio. This asset allocation treatment represents a de-facto statement by the investor that hedge funds are a separate asset class. As was discussed earlier, we reject this notion. Just as we don't reserve a separate place in the asset allocation process for the pure alpha we hope to derive from active management within traditional investment vehicles, we should avoid making special exceptions for hedge fund strategies. After all, once one digs beneath their surface to identify any persistent market exposures, hedge funds are merely less constrained, more highly levered and less regulated versions of their traditional active fund counterparts.

Our rejection of hedge funds as a stand-alone asset class should not be misinterpreted as an outright rejection of the use of hedge funds. In fact, Wilshire Consulting is a believer in active management and the ability of a skilled manager to add pure alpha in less efficient areas of the financial markets. In this pursuit, we embrace the notion that hedge fund vehicles should be considered when evaluating opportunities to add alpha to general market return expectations. Alpha generation is a difficult objective to achieve consistently and we feel it would be prejudicial and disadvantageous to systematically reject such a broad opportunity set of active

¹ Toth, Thomas - "New S.E.C. Hedge Fund Adviser Regulations"- Wilshire Consulting, December 6, 2004

² Bonafede, Julia, Steven Foresti, and Thomas Toth - "Alpha: A Right or a Privilege?" (Exhibit 5, page 9) – Wilshire Consulting, October 14, 2004

³ Waring, M. Barton and Laurence Siegel – "The Myth of the Absolute Return Investor" - Barclays Global Investors, Investment Insights, Volume 8, Issue 3, March 2005

managers and strategies. Our recommended application of hedge funds is through a portable alpha strategy, which considers the potential for hedge fund alpha against the cost of ‘porting’ it over to a passive market return achieved through the notional exposure of an index derivative instrument.

What is Portable Alpha?

A primary decision in any institution’s investment structure is the creation of a strategic policy portfolio during the asset allocation process. The role of the policy portfolio is to allocate assets in such a way as to cost-effectively manage the riskiness of an institution’s ability to meet financial commitments⁴. Implementation of the policy portfolio is traditionally accomplished by deploying the market value represented within each asset class to active and/or passive products within that class. As such, an investment in any manager is constrained to the level of allocation to the investment category targeted by the manager. The process for determining an appropriate mix of asset classes (betas) imposes limits on the potential sources of active management (alpha). A portable alpha strategy attempts to remove these “beta constraints” when seeking active management.

By removing the unintended active management constraints implicit in the strategic policy portfolio, portable alpha strategies can clear the way for an investor to deploy capital to managers in a more efficient way. As such, the resultant manager allocations should reflect a more consistent expression of the investor’s expectations of manager alpha. Any ensuing beta mismatch created in the pursuit of alpha is subsequently ‘fixed,’ or brought back to the market exposures dictated by the policy portfolio, through the use of index derivatives. Alpha portability is not limited to transfers between asset classes, but can be ported from any investment category that provides access to active management and is supported by index derivative instruments (only the subset of investment categories represented within the policy portfolio can serve as candidate categories for receiving ported alpha). As long as these conditions exist, alpha can be ported between asset classes (i.e. U.S. fixed income to U.S. equity), sub-asset classes (i.e. U.S. small cap equity to U.S. large cap equity), non-asset classes (i.e. hedge funds, currencies), or between any combinations of the three.

For example, a 50% allocation to U.S. equities implies embedded portfolio exposure of 40% to U.S. large cap stocks and 10% to U.S. small cap stocks, since their respective weights in the U.S. equity market are approximately 80% and 20%. If, however, the investor’s alpha expectations would lead them to invest 20% with small cap managers and only 30% with large cap managers, the investment category weights, sub-asset classes within U.S. equities in this case, would differ from those mandated in the policy portfolio. Large cap U.S. equity would be underweight by 10%, while small cap U.S. equity would be overweight by 10%. To bring the portfolio back to policy market exposures, the investor could short a 10% notional position in Russell 2000 index futures and take a 10% long position in S&P 500 index futures (or enter into a swap agreement to

⁴ Mindlin, Dimitry – “The Role of the Policy Portfolio” – Wilshire Consulting, May 17, 2005

‘swap’ the return of the Russell 2000 for the return of the S&P 500). Exhibit 1 illustrates this sample portfolio.

**Exhibit 1
Portable Alpha Example**

	Policy Portfolio Exposure -A-	% Exposures Before Derivative Beta Correction		% Exposures After Derivative Beta Correction	
		Fund -B-	Net of Policy -C-	Fund -D-	Net of Policy -E-
U.S. Equity		Mismatch to Policy Weights		"Fixed" back to Policy Neutral	
Large Cap					
Large Cap Managers	n.a.	30.0%	n.a.	30.0%	n.a.
S&P 500 Derivative	n.a.	0.0%	n.a.	10.0%	n.a.
Total Large Cap	40.0%	30.0%	-10.0%	40.0%	0.0%
Small Cap					
Small Cap Managers	n.a.	20.0%	n.a.	20.0%	n.a.
Russell 2000 Derivative	n.a.	0.0%	n.a.	-10.0%	n.a.
Total Small Cap	10.0%	20.0%	10.0%	10.0%	0.0%
Total U.S. Equity	50.0%	50.0%	0.0%	50.0%	0.0%
U.S. Fixed Income	35.0%	35.0%	0.0%	35.0%	0.0%
Non-U.S. Equity	15.0%	15.0%	0.0%	15.0%	0.0%
Portfolio Total	100.0%	100.0%	0.0%	100.0%	0.0%

Column A of Exhibit 1 provides the exposures to each investment category as mandated by the policy portfolio. Columns B and C show the desired absolute and policy relative manager weights ignoring and violating the implied policy portfolio constraints. As seen in Column C, the U.S. Large Cap category is underweight by 10%, while the U.S. Small Cap category is overweight an offsetting 10%. Though the overall portfolio remains policy neutral at 50% U.S. Equity, it is out of balance with respect to capitalization exposure within that asset class. Columns D and E show the absolute and policy relative weightings after ‘correcting’ the portfolio via index derivatives. Notice that Column E verifies that all investment categories are policy neutral (net exposure of 0%).

The concept and structure of a portable alpha strategy is both appealing and theoretically sound. The idea of freeing up capital that has been allocated to efficient markets during the asset allocation process to pursue active opportunities in less efficient areas is an attractive proposition. However, using hedge funds to turn theoretical elegance into reality is difficult and should only be attempted if the prospects of active management from the hedge fund source are substantially superior to the alpha opportunities in the resident asset class(es), and if they justify the transportation costs. The term “transportation costs” makes it sound as if we’re putting things on trucks, trains or boats and shipping them around. While that’s obviously not what’s going on, the profit motivation concept is similar to what would be used in evaluating material

shipping costs. It might sound like a great proposition if I'm able to make widgets for \$1 each in my factory when the market price for widgets is \$5, but if it costs me \$5 each to ship my widgets to the marketplace I'm no longer interested in using my factory to make widgets (back to brewing beer!). The cost-benefit analysis of transporting alpha (a capital asset), though less bulky and requiring little or no capital equipment, is similar to evaluating transportation costs in shipping widgets (a capital good). Even if what you're moving has expected value, it's only worth moving if its value exceeds the cost of making and transporting it.

The consideration of hedge funds within a portable alpha strategy must begin with a careful evaluation of the expected costs and benefits. The projected benefits come in the form of a comparison of alpha expectations between hedge funds and specific investment categories defined within the policy portfolio. Efficient asset classes, which present limited opportunity for even a skilled active manager to add value, provide fertile ground for receiving ported alpha. This is because the expected alpha being replaced is insignificant at best. Later in this report we'll define the properties of a valuable hedge fund product, but for now we'll assume that a thorough manager search and due diligence process has resulted in the identification of a stable of hedge fund managers who we are confident can deliver pure risk controlled alpha in the future. Further, our asset mix has significant allocation to markets that we believe to be efficient (i.e. the large capitalization segment of our U.S. equity allocation).

Having thus identified a benefit to investing in our stable of hedge fund managers, we must now examine implementation issues to determine whether that benefit justifies transportation costs. The mechanics of portable alpha with hedge funds requires a notional investment in the resident asset class that frees up capital for deployment to hedge fund managers. Passive market exposure can be achieved through the derivatives market, via index futures and swaps. Exhibit 2 shows the expected costs as of July 2005 for transferring exposure between various indexes through the swaps market.

Exhibit 2
Sample Swap Market Quotes

		Long (Swap In)				
		S&P 500	Russell 2000	MSCI EAFE	Aggregate *	Cash
Short (Swap Out)	S&P 500	n.a.	35	(35)	(30)	0
	Russell 2000	(99)	n.a.	(125)	(120)	(90)
	MSCI EAFE	(114)	(70)	n.a.	(135)	(105)
	Lehman Aggregate *	n.a.	n.a.	n.a.	n.a.	n.a.
	Cash	(9)	35	(35)	(30)	n.a.

Quotes are in annual basis points, additional commissions may be incurred for some markets.

Positive values represent positive cost (i.e. a benefit to the investor).

* Swap contracts are not available for all markets (accessibility is related to underlying market liquidity).

Source: Major US Broker Dealer Swap Quotes (as of July 22, 2005)

Using the data from Exhibit 2, the expected cost of porting alpha from a market neutral hedge fund to the U.S. large cap equity investment category is approximately .09% per annum (swapping out of cash and into the S&P 500). These rates are based on swap quotes as of July 2005 and should be expected to change over time. The quotes do not include any commissions that may be charged for various indexes that are not supported by a liquid futures market. Investors considering a portable alpha strategy must evaluate updated swap quotes and commission rates at the time of implementation. Additionally, investors should carefully consider the tradeoffs between using index futures or index swaps when ‘fixing’ beta exposures. Exhibit 3 lists some of these considerations:

**Exhibit 3
Factors Differentiating Index Futures and Swaps**

Factors	Index Futures	Index Swaps
Margin / Cash Management	Investors are required to post margin (~10%) to cover the daily marking-to-market of any index losses. Investors must consider cash management issues and be prepared for the potential of having to contribute additional capital if market conditions result in a “margin call.”	Margin requirement is negotiated between the parties. Even when margins are not required, investors must consider cash management issues and be prepared for the potential of having to contribute capital upon swap settlement.
Costs	Estimated: Transaction costs from rolling futures contracts and differential between cash return paid on margin reserves versus the risk free rate.	Known: Broker / Dealer swap quotes and commission rates (i.e. see Exhibit 2).
Tracking Error	Yes: Some tracking error against the target index is expected as futures trade at varying bid-ask spreads over time.	No: Only the cost-drag from the swap rate.
Third Party Risk	No: Futures are traded over an established market and settle in cash each day.	Yes: The investor has third party risk with the broker/dealer underwriting the swap agreement.

An Optimal Allocation to Hedge Funds

Several sound quantitative approaches, consistent with the theory of active management presented by Grinold & Kahn (2000)⁵, have been advanced for determining the optimal allocation to hedge funds. One such approach presented by Dopfel (2005)⁶ captures the expected

⁵ Grinold, Richard, and Ronald Kahn – “Active Portfolio Management”, 2nd Edition, New York, McGraw-Hill - 2000

⁶ Dopfel, Fred - “Waiter! What’s This Hedge Fund Doing In My Soup?”, Equations 5 and 6, Derivations in Appendix - Barclays Global Investors, Investment Insights, Volume 8, Issue 4

risk-return relationship of hedge fund alpha against the alpha expectations implied by an investor's existing manager mix to identify an appropriate hedge fund allocation. Though the approach can be applied at either the asset class level or as an alpha overlay at the total fund level, the discussion that follows will focus on implementation at the asset class level. Depending on an investor's objective, either to maintain the risk aversion or established risk budget implied by their existing asset class alpha expectations, Dopfel advances the following two equations.

Maintaining Implied Risk Aversion:

$$(3a) \quad h = \frac{\mathbf{a}_{hf} / \mathbf{s}_{hf}^2}{\mathbf{a}_o / \mathbf{s}_o^2}$$

Maintaining Implied Risk Budget:

$$(3b) \quad h = \frac{\mathbf{a}_{hf} / \mathbf{s}_{hf}^2}{\sqrt{(\mathbf{a}_{hf} / \mathbf{s}_{hf})^2 + (\mathbf{a}_o / \mathbf{s}_o)^2} / \mathbf{s}_o}$$

Where: h is the optimal allocation to hedge funds, a_{hf} is the pure alpha expected from the hedge fund(s), σ_{hf} is the expected active risk (tracking error) of the hedge fund(s) and includes any known impacts from market exposure, a_o is the alpha expected from the resident asset class, and σ_o is the expected active risk (tracking error) of the resident asset class.

Wilshire Consulting advocates an expansion of the basic approach quantified by Dopfel to capture two important factors in the allocation decision framework. First, while Equations (3a) and (3b) from above capture the expected impact from manager expenses and fees within the alpha terms (a_{hf} and a_o), they ignore the transportation cost of transferring the net-of-fee alpha. Wilshire Consulting expands Dopfel's approach to include a transportation cost consideration by penalizing the measurement of expected a_{hf} (hedge fund alpha). We expand Equations (3a) and (3b) to include a consideration of alpha transportation costs.

Maintaining Implied Risk Aversion:

$$(4a) \quad h = \frac{(\mathbf{a}_{hf} - tc) / \mathbf{s}_{hf}^2}{\mathbf{a}_o / \mathbf{s}_o^2}$$

Maintaining Implied Risk Budget:

$$(4b) \quad h = \frac{(a_{hf} - tc) / s_{hf}^2}{\sqrt{((a_{hf} - tc) / s_{hf})^2 + (a_o / s_o)^2} / s_o}$$

Where: tc is the expected transportation cost (the cost of maintaining notional exposure to the resident asset class).

A second additional implementation consideration is the impact from the margin required to maintain notional exposure to the resident asset class through the derivatives market. For example, if the optimal hedge fund allocation is \$90 and the desired margin requirement is 10% of the derivative's notional value, then \$100 of notional exposure to the resident asset class will be required to fund the hedge fund investment (\$10 is reserved for margin). Because of the transportation cost consideration described above, we are now in a position to capture the effect of a margin requirement on our optimal hedge fund ratio. While it may not be immediately intuitive, the optimal allocation is effected because the dollars incurring transportation costs are greater than the dollars benefiting from the expected hedge fund alpha opportunity. Further expanding Equations (4a) and (4b) to capture the impact from a margin requirement produces Wilshire's recommended approach to identifying an optimal allocation to hedge funds.

Maintaining Implied Risk Aversion:

$$(5a) \quad h = \frac{(a_{hf} - tc / m) / s_{hf}^2}{a_o / s_o^2}$$

Maintaining Implied Risk Budget:

$$(5b) \quad h = \frac{(a_{hf} - tc / m) / s_{hf}^2}{\sqrt{((a_{hf} - tc / m) / s_{hf})^2 + (a_o / s_o)^2} / s_o}$$

Where: m is the collateral available to invest in hedge funds after having met the margin requirement (for example, if the margin requirement is 10%, m is equal to 100% minus 10%, or 90%).

As an example let's assume that our expectations are as follows:

	Alpha (α)	Risk (σ)
Resident Asset Class (o)	0.50%	1.00%
Hedge Fund (hf)	7.50%	10.00%
Transportation Cost (tc)		1.00%
Collateral Available (m)		90.00%

The basic approach from Equations (3a) and (3b), which ignore transportation costs and margin requirements, result in optimal hedge fund allocations of 15.0% when maintaining the implied risk aversion and 8.3% when maintaining the implied risk budget. However, when including considerations for transportation costs and margin requirements, as suggested in Equations (5a) and (5b), the optimal hedge fund allocations are reduced to 12.8% and 7.9% respectively, with resident asset class notional exposures equal to 14.2% (= 12.8% / 90%) and 8.8% (= 7.9% / 90%). The reduced hedge fund allocation resulting from this approach represents a better reflection of the investor's true expected implementation results. Expanding the approach to account for implementation issues adds an important practical element to the decision framework. For example, without a transportation cost penalty, one could overlook an important input in the allocation process and could mistakenly conclude that the cost of porting hedge fund alpha is the same for all resident asset classes. As seen in Exhibit 2, this is clearly not the case.

An attractive feature of the approach is its relative ease of use, which stems from its utilization of the active risk tolerance expressed by an investor's existing manager mix. And, while the original active manager mix may be scaled back, this implementation assumes that, relative to each other, the existing active manager mix remains unchanged. In fact, when the objective is to maintain a constant level of risk aversion, the model can be run to assume that all cash freed up through index derivatives was moved out of passively managed products and, therefore, has no effect on either the investment size or mix of the original sources of active management.

For institutions interested in expanding on these simplifying assumptions, by allowing the existing active manager allocations to shift or by evaluating allocations at various levels of active risk, for example, Wilshire Consulting can build an active risk efficient frontier through a more refined optimization process. Such an approach would require alpha inputs at each investment category level, a transportation cost matrix (similar to Exhibit 2), and investment category weighting constraints to ensure neutrality with the strategic policy portfolio. Despite its higher level of refinement, in practice, we believe the expected improvement in optimality that accompanies a full alpha optimization process is rarely worth the added complexity. There are two main reasons for this result. First, the portfolio's existing manager mix is typically an optimal expression of the investor's alpha expectations, which require minimal "reshuffling." Second, because of the cost advantage of porting alpha to the investment category with access to the least costly index derivatives, the optimization will favor alpha transport into that resident category. The approach represented in Equations (5a) and (5b) takes the same action when the cost of porting into the lowest-cost category is input as the transportation cost (tc). And, since U.S. large cap equity is this lowest transport cost category, the largest investment category

within a typical institutional portfolio, and since U.S. large cap equity is one of the most efficient categories, a full alpha optimization would favor this category as a recipient for ported alpha. Therefore, for the typical institutional investor, implementing formulas (5a) and (5b) at the overall portfolio level, using transportation costs based on the U.S. large cap equity category, should produce results comparable to an alpha optimization.

Hedge Fund Selection and “Institutional Quality”

As discussed earlier, whether porting alpha from hedge funds to a recognized asset class or from one recognized asset class to another, there are several conditions that an investor must believe to be true before embarking on a portable alpha strategy. First, an investor must accept that there are unique opportunities for alpha in different investment categories and strategies. This is a broadly shared belief among many investors, which recognizes differing levels of efficiency across markets (i.e. emerging market stocks versus U.S. large capitalization stocks). Next, there would be no reason to port alpha unless the investor is limited by a policy level decision that would constrain them from allocating capital to active managers in a way consistent with their manager forecasts. Why pay alpha transportation costs if the desired alpha is attainable in the asset classes represented by the strategic asset allocation? And, as was established earlier, since hedge funds have no separate place in the strategic policy portfolio, any perceived benefit from investing in hedge fund alpha is constrained to zero by the investor’s asset allocation. Therefore, if the investor believes in a third condition, that they have the ability to identify skilled hedge fund managers, the door is open to consider portable alpha via hedge funds. But how can an institutional investor establish an adequate level of confidence in their ability to identify skillful managers?

Having established a quantitative framework for determining the optimal allocation to hedge funds, we now shift to a discussion of manager evaluation. After all, a model is only as good as the inputs run through it. As with traditional manager evaluation, hedge fund manager research must include both qualitative and quantitative analysis. The combination of these attributes will ultimately drive our understanding of manager skill and will shape our expectations for future results.

A thorough qualitative analysis is the cornerstone of any successful manager selection process. In recognition of this belief, Wilshire Consulting’s manager research model for traditional asset classes places the bulk of its weighting on qualitative factors such as organization, access to information, forecasting, portfolio construction, portfolio implementation and attribution. The structural environment for hedge funds, which breeds limited transparency, requires an even greater focus on qualitative analysis. At a minimum, institutional investors must perform the same level of detailed due diligence as they have done for years with traditional managers. Organizational and investment risks can only be mitigated when investors focus on products that are backed by an experienced organization and seasoned team. These are well understood and important factors to institutions seeking traditional money managers and there is absolutely no justification for an investor to cut corners when it comes to identifying worthy hedge fund products. We are, after all, searching for managers to deliver alpha, something that can only be

done consistently by a skilled manager. Unlike general market exposures, which represent a positive sum game, where every investor can build wealth by accepting a level of market risk, hedge funds will only deliver successful results if the managers ‘take alpha’ from other investors in this zero sum game.

An important objective of qualitative manager analysis is for investors to protect themselves against organizational risks and instability. In the hedge fund world this requires an analysis of the operational procedures followed by the manager with respect to the pricing of illiquid securities, monitoring of market liquidity levels, and controls on the use of leverage, to name a few. Only hedge fund managers that have dedicated ample resources and possess expertise in these areas should be considered “institutional quality.” All others, no matter how high a regard we may have for any individual member of the organization, fail to provide the risk-controlled pursuit of alpha necessary for an institutional investor. In the case of hedge funds-of-funds, where the investor is outsourcing many of these important manager selection, due-diligence and risk control decisions to the fund-of-funds manager, the standards of “institutional quality” must be upheld. These important responsibilities should only be trusted to fund-of-funds managers who recognize and demand a level of “institutional quality” that is consistent with the investor’s vision. The risk of missing a skilled manager pales in comparison to the risks of rushing into investments with firms that lack the required infrastructure (remember, the second mouse often gets the cheese).

A thorough qualitative manager analysis must be coordinated with elements of a quantitative evaluation. The goal of manager selection is to identify skilled managers who are backed by solid organizations providing an acceptable level of risk mitigation. Skill is difficult to measure without looking at the numbers. Assessment of skill is an important element where qualitative and quantitative analyses overlap. A qualitative understanding of a manager’s investment strategy and process must be validated with an evaluation of the resultant return stream. Limited transparency in the hedge fund industry can often make this analysis extremely difficult. A hedge fund cannot be considered “institutional quality” unless its manager provides sufficient transparency to validate that performance results coincide with the qualitative investment story. While it would be strongly preferred, it is important to note that “sufficient transparency” would not necessarily require access to holdings level data on a daily basis. Any level of information that allows the investor to understand the factors, or lack of factors, driving returns may be adequate. This may include a series of risk factor exposures that create an understanding of the fund’s normal portfolio. Absent sufficient transparency, it is impossible for an investor to either match performance to the investment story, or to ensure that active fees are not being paid for general market exposures.

Institutional investors should question whether they are paying steep hedge fund fees for market performance that is readily available through a more cost-efficient passive product versus skillful investing. The level of transparency provided by traditional active managers allows for a comprehensive analysis and validation of product performance. For example, if an institutional investor hired a small cap manager focused on a bottom-up stock picking approach, it is important to measure whether active performance actually resulted from stock selection. A red

flag would be raised if instead the performance was attributable to a general market overweight – something the manager has not described as being part of their skill set. To be an “institutional quality” hedge fund, the information necessary to perform this level of analysis must be made available to the investor; otherwise it is impossible to validate a dynamic hedge fund process.

Using an analogy to illustrate this point, imagine stepping up to a roulette table in your favorite Las Vegas casino. Adjacent to the table is an electronic display of the most recent spins of the wheel. If the last ten marbles landed on a black number would we conclude that the dealer has skill, that it’s a random event, or that the game is rigged? Since the process is transparent – and with our faith in the Nevada Gaming Commission - we would conclude that this was a random result. But instead, what if these results were historical returns provided by a hedge fund that did not meet “institutional quality?” What can we differentiate between manager skill and luck? Unfortunately, without sufficient transparency, it is impossible to conclude whether the performance was the result of repeatable skill or unsustainable luck. That ambiguity presents quite a leap of faith in light of the large management fees.

In addition to ensuring that active management fees are not being paid for repackaged market exposure, capturing any beta effects embedded in hedge fund strategies is vital in allowing the investor to ‘correct’ the fund back to policy portfolio weights. Any known market exposures inherent in a hedge fund product must be accounted for during the portable alpha process. Hedge funds that impede on this level of awareness do not meet the standards for “institutional quality,” and should not be considered for inclusion in an institutional portfolio, as they make it impossible to understand how the hedge fund’s addition would affect the investor’s policy portfolio. Wilshire Consulting believes strongly that an investor’s asset allocation decision has the greatest impact on investment performance and risk. As such, the pursuit of alpha, as important an endeavor as it may be, should never be allowed to cloud an institution’s understanding of its policy portfolio exposures.

In summary, Wilshire Consulting defines “institutional quality” hedge funds as those that meet the following conditions:

- Experienced Organization (with ample resources and solid infrastructure).
- Seasoned Investment Team (with direct experience and expertise in the strategy’s area(s) of focus).
- Sufficient Transparency (enough to allow for an understanding of the strategy’s “normal portfolio” and impact on the investor’s strategic policy portfolio).
- Appropriate Fee Schedule (fees that are aligned with the return expectations and are comparable to fees charged by competing sources of active management).

Conclusion

The broad array of products and strategies within the hedge fund industry present both an opportunity and challenge to the institutional investor. An on-going challenge, which reflects the dynamic and evolving nature of hedge fund investments, is to refine and clearly understand the role that hedge funds can play in an institutional portfolio and to develop a risk-controlled

strategic implementation plan. Wilshire Consulting rejects the treatment of hedge funds as a separate asset class during the asset allocation process and, instead, advocates their consideration within a portable alpha strategy. To this end, hedge funds should be considered as possible alternatives to other sources of active management and should only be included in a portfolio if they are of “institutional quality” and their prospects for delivering net-of-transportation-costs alpha exceed those of other alpha sources. Most importantly, the inclusion of hedge funds should never be allowed to cloud an institution’s understanding of its strategic policy portfolio exposures. Maintaining this structural integrity is only possible through “institutional quality” funds.

The appropriate weighting of hedge funds should be derived through a quantitative approach that is both consistent with the theory of active management and grounded in realistic expectations. Investors will inevitably be disappointed with results if decisions are based on unrealistic assumptions of high alpha at low levels of active risk. To be successful in the pursuit of alpha we must be disciplined and use assumptions we ‘believe to be true,’ rather than those we ‘wish to be true.’ This sounds simple enough, but human emotion can often get in the way when the potential rewards are so valuable (this behavior is not isolated to the Las Vegas Strip, it can also be found on Wall Street and Main Street). Assumptions based on historical results must be tempered by an understanding of the contributors to that track record (i.e. database biases, pure alpha versus repackaged beta, etc.) and how a larger capital base may cause future prospects to differ from past opportunities.