Hedge Fund Education Series
Part 5: Implementing a Hedge Fund *Portfolio*

Reports in this series

As discussed in parts 3 and 4 of this series, selection of a hedge fund (HF) strategy, or strategies, is highly relevant in determining how a HF portfolio will fare under various financial market environments. Equally important, one can easily argue, is the task of implementing the selected strategy mix by choosing among HF managers in each of the selected strategies and skillfully combining them into robust portfolios. This installment sketches a framework for due diligence for selecting from among competing HFs and touches on aspects of portfolio construction. While financial professionals have specific regulatory diligence requirements, the issues discussed in this paper will also be useful to anyone considering an investment in HFs.

Manager Selection

Due to the typical asymmetric risk/return characteristics of HF, investing in them warrants deeper analysis than investing in long-only managers. The skill of shorting securities is often under-appreciated by investors. Identifying HF managers who consistently, and over cycles, perform in the top 10% or top 25%, on a risk-adjusted scale, is not easy and even once such managers are identified, they are often capacity constrained so getting access to them is not easy. Consequently, with the HF investor base – and the industry serving them – steadily growing, as described in the Part 1 of this series, manager skill is often quickly recognized and capacity snapped up. Managers of this caliber take in capital for only a very brief period and then "hard close" to new capital from all sources including existing investors. Alternatively, they can be "soft closed", accepting no new investors. Hence, there is considerable pressure to allocate capital to these managers very quickly or risk missing the opportunity. On the other hand, when capital flows are less discerning, many managers accept too much money, which can reduce or destroy their competitive advantage – something that astute investors need to avoid.

Evaluating Managers

In order to justify the higher fees charged by HFs, their returns should comprise more than simple market exposure, i.e. beta-based returns. They should rather (also) include a meaningful alpha return component. The latter derives from manager skill that is unrelated to market exposure.

Some strategies, particularly those in credit and special situations investing, are more complex than others. Moreover, supply, demand and market technicals can impact them disproportionately. These strategies require managers with deep knowledge, expertise, and the right investment vehicle to extract excess returns. Other strategies such as those for quantitative arbitrage or high frequency trading have higher barriers to entry – given complex and sophisticated trading approaches and considerable investments needed in computing infrastructure. These products require managers with proprietary and advanced tools coupled with experienced staff to analyze arbitrage opportunities.

Managers differ substantially in their execution and implementation abilities. They also differ with regard to investment diversification, portfolio hedging, security hedging, the use of derivatives, the degree of leverage and the amount of short sales they undertake. It is therefore imperative that investors look beyond the risk and return profiles of fund strategies and more fully evaluate a potential manager's investment and risk management processes. While much of this evaluation is comparable to the process that would be used for a traditional active manager, there are some significant differences.

Evaluating HF managers can be more difficult than evaluating traditional fund managers for a number of reasons. These include the lack of transparency in investment and risk management processes, limited knowledge of underlying portfolio positions – especially concentration and short positions, the lack of standardized disclosure requirements and the complexity of strategies. More so than with traditional active managers, there are special risks associated with hedge funds that are particularly important to assess both before managers are hired and monitored on a continuing basis thereafter:

- **Process Risk**. This includes both investment and risk management processes. Both are critical to a manager's performance. The consequences of a breakdown or change in either one are potentially more severe than for managers of traditional long only stock or bond portfolios.

- **Personnel Risk**. The majority of HFs are relatively small, and turnover of key personnel may be more disruptive than for traditional managers. It is therefore common to insist on a "key man" clause that enables client fund redemptions in the event of such a departure of key persons from the hedge fund.

- **Asset Growth Risk.** Although there are many excellent large HFs, depending on the particular strategy and degree of leverage, HFs may experience downward pressure on expected returns if assets grow too large. Indeed, greater size may make a HF less nimble in its ability to effectively take advantage of market conditions, thereby shrinking the available set of arbitrage opportunities.

It is for these reasons that in-depth due diligence research into investment and operational capabilities can often help identify HF managers who can generate skill-based returns consistently. Proper due diligence helps determine whether processes are performance-driven around specific, forward-looking objectives for return, risk and correlation. It also helps ascertain manager investment discipline, objectivity and consistency in decision-making.

Due Diligence

Investment Due Diligence

The investment due diligence process involves reviewing the manager/ key risk takers' professional "pedigree", including their credentials, reputation, performance evaluation versus peers and benchmarks as well as the duration of such track records.

Attributes of the top hedge managers include

(i) excelling in systematically and dynamically analyzing the underlying markets and identifying conditions that might provide asymmetric arbitrage opportunities;

(ii) having superior security selection skills and trade expression capabilities including shorting of securities;

(iii) deploying a disciplined risk management approach; and

(iv) being nimble in allocating capital across opportunities.

Therefore, getting access to managers who have market knowledge and experience across varying markets and cycles, advanced analytical tools, developed risk management processes, flexible investment vehicles, and an edge in exploiting fleeting opportunities is critical. The due diligence function involves assessing these attributes and several other aspects including:

a) investment theses and the process of arriving at them;

b) investment philosophy;

c) complexity of the investment strategy;

d) sizing the trade and portfolio construction;

e) organizational stability;

f) employee turnover and compensation schemes;

g) assets under management;

h) costs, fees and pricing structure;

i) liquidity conditions and

j) operational and control checks.

Operational Due Diligence

Operational risk analysis is a key factor in avoiding fund failure and manager fraud. It is important to build review procedures to enhance the ability to protect oneself from such risks. Operational due diligence typically includes an analysis of fund documentation, contractual arrangements, valuation methodology and pricing basis (including analysis of mark-to-market versus mark-to-model practices) and the strength of key service providers and administrators. It inevitably reviews operations infrastructure, systems, processes and controls including middle- and back-office staff qualifications and capabilities. It also includes ongoing media and background check monitoring and considers the independence and quality of service providers. Lastly, it involves understanding the firm’s approach to infrastructure issues including ways in which the firm is positioned to handle growth in assets/ or clients, personnel needs, client service functions and disaster recovery back-up arrangements.

Monitoring Managers

Once allocations are made, the ongoing monitoring process becomes an extension of the analytic and qualitative due diligence process completed prior to the investment decision. As with any active management strategy, the goal is to arrive at an early identification of factors that could cause future underperformance. Among these, the most critical include:

a) style and strategy drift. The key concern is whether the HF is plying in strategies and investment processes for which it was hired or whether it is venturing into areas where either the arbitrage opportunities are likely to be less abundant or in which the HF's risk takers have not demonstrated prior expertise;

b) size and investment liquidity. Investors need to monitor whether, with the growth of assets under management (AUM), the HF's position sizes are increasing and/or if it is venturing into, for example, large cap stocks or larger transactions when its core competency lay in analyzing small and medium size entities or transactions. On the flip side, a related concern is whether in order to manage the larger AUM, the HF is moving into more illiquid or potentially more risky, transactions;

c) lessened hands-on portfolio and risk management attention. This can sometimes happen due to satiation or development of other business interests;

d) material change, if any, in the mix of investors and their proportions in the AUM of the HF. This is an important consideration as the action of other investors, – such as a flood of redemptions, especially during times of market drawdowns – can, and often does, negatively impact the returns of the non-redeeming investors;

e) infrastructure for trading, risk management, client accounting and servicing is not in keeping up with the changed, hopefully increased, AUM.

Recently, HF managers have come under pressure from regulators, clients, and potential investors to improve their disclosures about portfolio position, risk exposures and strategy evolution. There has been some progress in this direction, sometimes through third-party "aggregators". The latter receive proprietary security-level information files from the participating HFs. With a view to preserve the privacy of the security-level detailed positions held by each HF manager, yet to provide a meaningful level of disclosure to investors, they aggregate the information and provide portfolio level metrics on the holdings as well as several risk measures for the portfolio. These developments, while desirable, have made the monitoring of HFs more involved.

Portfolio Construction

Hedge funds come in different flavors regarding their mix of beta and alpha return components. While many claim to be “absolute return” providers, meaning that they would provide positive returns regardless of the broad market ups and downs, few genuinely are. True, that due to their ability to short securities and/or engage in trades to hedge out elements of risk which they determine do not provide an adequate expected return for the risk borne, they should be expected to be less correlated with the return patterns of traditional long-only investment portfolios. For example, by shorting an industry sector index they may reduce exposure to that industry sector, or by buying credit protection they may be able to reduce credit deterioration in the bonds that they may hold long. So, shorting can at least provide a partial hedge against declining markets. However, truly “market neutral” HFs that are alpha producers are few and far between. So, while their hedging activities generally tend to reduce hedge fund’s correlation with long-only investments, thereby providing portfolio diversification, that is not always the case. HFs do retain some “net long” exposure and may have some elements of leverage too.

In addition, they are not immune to the illiquidity risk of the broader market. Correlations across securities and markets tend to rise in such times of stress –as they did in late 2007 and 2008 -- that may cause HFs to provide less diversification than expected. These are important issues to be borne in mind during portfolio construction and particularly so for investors relying on a "core and satellite" approach to determining asset allocation / portfolio mix.

When considering a HF as a candidate for inclusion in an existing or proposed portfolio, in addition to the due diligence on it one also needs to estimate its correlation overlap and incremental expected risk/return impact on the portfolio. Clearly, the greater the number of HFs in the portfolio, the more the aggregate portfolio will mimic an index-like portfolio, thereby increasing the probability that the fund will underperform the benchmark index net of management fees. This is akin to the over-diversification concept for long-only securities. Providing alpha returns is the goal of all actively managed portfolios. But sourcing of such uncorrelated alpha is challenging, to say the least.

In conclusion, therefore, the criteria for assessing the suitability of candidate HF strategies and manager combinations should include:

- Estimating projected alpha and alpha volatility for each strategy/HF

- Estimating historical beta exposures for each strategy/HF
- Incorporating uncertainty in alpha forecasts, alpha volatility estimates and beta estimates through confidence interval measures
- Keeping in mind downside risk characteristics of each strategy's/HF's alpha
- Correlations across different strategies'/HFs' alphas and betas

Implement Considerations

Portfolio diversification is a well understood concept, best popularized by the adage not to put all of one's eggs in the same basket, and formalized by the Markowitz portfolio diversification approach. Yet, there are still numerous examples of investors taking excessive risk by investing in only one or two hedge funds. True, the counter-argument that "nobody ever got very, very rich holding a diversified portfolio" also holds water. The crux, then, is to determine the risk bearing ability of the investor and invest accordingly. Typically, this evaluation is a function of the wealth level of the investor.

The avenues to include HFs in a non-institutional portfolio include the following:

a) self-managed,
b) discretionary account,
c) advisory account,
d) separate accounts,
e) investment via Fund of Hedge Funds (FoHFs).

Each of these have their own advantages and disadvantages particularly as to the due diligence burden (borne or delegated), strategy and portfolio transparency, on-going monitoring and evolution, portfolio re-balancing, additions/ deletions and so on. Clearly, the ideal route among these would emerge from a cost-benefit analysis via-a-vis the amount of investment contemplated, the investor's risk bearing capacity and desire, holding period horizon and wealth level. Hence it is not uncommon for non-institutional investors to choose among these alternatives and often deploy a combination of these often through their professional advisors.

Fund of Hedge Funds

FoHFs offerings comprise of portfolios of HFs with strategy or allocation concentration of focus. For example, a FoHF product may be a fund of long/short equity HFs diversified by the number of the constituent funds i,e. concentrated or diversified, or by their investment geographies i.e. domestic or global or emerging markets, or sectors e.g technology FoHFs. There are also multi-strategy FoHFs or fixed income or relative value FoHFs. In short, FoHFs can offer investors exposure to a wide range of alternative investment styles and strategies. This allows the investor to off-load to investment professionals the tasks of due diligence, fund selection, record-keeping and monitoring managers in addition to providing access, and tactical asset allocation overlay—all value-added services. FoHFs may also be able to negotiate more transparency and fund liquidity than might be available through direct hedge fund investments simply because of their aggregated size and allocations to a particular hedge fund.

Smaller investment size
FoHFs provide investors access to multiple hedge funds with a much smaller investment than the minimum required by individual hedge funds. Unless targeted for the retail investor, minimum initial investment requirements for some hedge funds running into millions of dollars. Therefore, building a diversified hedge fund portfolio typically entails a significant investment amount for the investor.

Access to capacity constrained funds
Many single-manager hedge funds are closed to new investors, due to capacity constraints. However, FoHFs run by managers with good relationships in the hedge fund industry are often able to invest in these funds. Due to the aggregate size of investment in each selected hedge fund, FoHFs typically may be viewed preferentially by hedge funds seeking to raise their AUM. However, in the downturn of 2008, contrary to expectations, FoHFs were in fact among the fastest to redeem money from the managers. Therefore, there is some wariness to accepting funds from the run-of-the-mill FoHF. Hence, selection of a FoHF through which to invest is of significant importance regarding gaining access to limited capacity.

More liquidity
Hedge fund liquidity varies by the strategy and the underlying liquidity of the investment instruments as well as the investment theses and the time needed to realize them. Some may impose longer liquidity terms to prevent fast entry and redemptions that hurt all investors. While some FoHFs provide shorter liquidity terms, that may be due to their portfolios comprising of such shorter redemption period hedge funds. Alternately, they may be taking a redemption mismatch risk, the desirability of which may be questionable.

Costs
Certainly these advantages come at a price. Fees are charged by both the FoHF manager and the underlying hedge funds. In some cases, FoHF managers may be able to mitigate these fees by obtaining fee rebates from the underlying managers, taking advantage of the substantial allocations they can make to the manager. However, such fee rebates are increasingly uncommon because they are disclosable items; every institutional investor will require such discounts too under the so-called "most favored nation" status.

So the cost of the added level of fees arising in a FoHF needs to be weighed against the access, benefits and services that FoHFs provide.

Conclusion

As market events are reflected differently in each strategy and in each HF, combining a portfolio of HFs with different but complementary investment styles and risk/ return attributes is desirable. However, a naive diversification across a large number of HFs and strategies may be suboptimal in that it may not be fully effective in reducing market and credit risk, or specific risk of a particular HF. Also, given finite resources, monitoring a large portfolio of HFs often increases portfolio risk in light of the increased demands on due diligence capabilities. Conceptually, the place to start is to separate skill based “alpha” components from systemic “beta” components; combining managers on the basis of non-correlated alphas is a target to shoot for in an effort to arrive at the desired level of diversification. This entails careful selection of exposure to strategies and HFs. Admittedly, this is easier said than done but perhaps therein lies the return to research and investment effort expended. In this piece we have outlined the general considerations needed to create such a portfolio.

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