

Fund of Hedge Funds: Industry Overview

Advantages and Disadvantages of Investing in Fund of Hedge Funds

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Abstract

Given the current hype surrounding investing in hedge funds, we assume that most investors by now will agree that investing in hedge funds can make sense when viewed not in isolation but in a portfolio context. The next step, therefore, is implementation. Investing in fund of hedge funds has some advantages and some disadvantages. This article is designed to look at the fund of funds industry and contrast the advantages with the disadvantages from the investors' point of view.

Advantages and Disadvantages of Investing in Fund of Hedge Funds

Given the current hype surrounding investing in hedge funds, we assume that most investors by now will agree that investing in hedge funds can make sense when viewed not in isolation but in a portfolio context¹. The next step, therefore, is implementation. Investing in fund of hedge funds has some advantages and some disadvantages. This article looks at the fund of funds industry and contrasts the advantages with the disadvantages from the investors' point of view. It starts with an overview of the fund of funds industry, including a discussion of the various structures of typical offerings. We then turn to an analysis of the advantages and disadvantages of investing through a fund of funds, rather than through a custom-designed portfolio of hedge funds, and conclude that, for most investors, the advantages seem to outweigh the disadvantages.

Fund of Funds Industry Characteristics

Heterogeneous Market

The estimated size of the hedge fund industry ranges from around US\$500 to US\$600bn based on assets under management. Fund of funds manage around 20-25% of this amount.

One of the main characteristics of the hedge fund as well as the fund of hedge fund industry is a wide dispersion of returns among managers. Figure 1 shows the dispersion of quarterly returns from a selection of funds of funds. At each point in time, the chart shows the range of outcomes, which funds of funds experienced. We believe the chart demonstrates the importance of evaluating individual fund of funds managers.

<<< Figure 1 around here >>>

The dispersion of returns of funds of funds has increased over time which is primarily a function of an increasing sample size. However, in the recent past the dispersion has increased primarily on the downside. This could be a function of a widening gap between talented and less talented fund of funds managers. It probably also is a function of an increased number of fund of funds managers having a bias towards investing in hedge funds with a long bias towards technology. In 1999 funds of funds suddenly appeared that invested

solely in technology or internet-related hedge funds. Some of these funds of funds probably shared a similar faith, as did the NASDAQ. In other words, the increase in dispersion could be either a longer-term trend due to erosion of skill or an anomaly associated with the bursting of the Internet bubble or a combination of both.

Liquidity

One of the “disadvantages” of investing in Alternative Investment Strategies (“AIS”) such as private equity and hedge funds is a lack of liquidity. Hedge funds or fund of funds cannot as easily be liquidated as for example US government bonds or US large cap equity.

To keep the capital base as stable as possible, hedge funds as well as funds of funds introduce lock-up and withdrawal periods. We found that 77% of the funds of funds had a withdrawal period of either monthly or quarterly (Figure 2). In contrast, 88% took monthly or quarterly contributions (Figure 3).

<<<< Figures 2 and 3 around here >>>>

69% of 177 funds of funds where we had information on withdrawals as well as contributions had a match between withdrawals and contributions. 17.5% took monthly contributions and had a longer withdrawal period. 28% had longer withdrawal period than contribution period. No fund of funds had a shorter withdrawal period than contribution period.

Relationship between Liquidity And Performance

Whether there is correlation between liquidity and performance on a fund of funds level² and whether a fund of funds manager can have a duration mismatch between his investors (liabilities) and his investments in individual hedge funds (assets) is open to debate. In addition, liquidity on a single fund or fund of funds level is to some extent a theoretical issue. Most managers will have provisions to extend redemptions, either buried in the fine print of the offering memorandum or via some other legal recourse. In other words, liquidity is not necessarily as it appears at first sight³.

Liquidity terms of skilful hedge fund and fund of funds managers will probably get tougher. Since the hedge funds with the greatest skills will generate returns in less efficient markets, and demand going into hedge funds is expected to increase at a pace faster than new skilled managers can supply new capacity, skilled managers potentially will continue to be in the position to tighten (and dictate) liquidity terms. Thus, we might expect more 2+20 fee structures for single hedge funds⁴, tougher liquidity terms, and more lockup provisions. Potentially some managers may face a moral hazard of opening their doors to new money once having closed. Nevertheless, one could argue that the truly skilled managers would not add capacity beyond what is optimal in their field of expertise and with their operational setup.

Liquidity has a tendency to disappear exactly then when most demanded. Assuming that fund of funds managers must match the duration of their assets with their liabilities, they will have to tighten their liquidity terms as a result of the above. A counterargument to this view is that the fund of funds manager need only manage weighted average terms and probabilistic redemptions. This would be similar to a bank that only needs fractional reserves since a run on the banking industry is seen as unlikely. In addition, funds of funds, as banks or hedge funds themselves, in such catastrophic situations could refuse to pay redemptions. Nevertheless, in the long run, funds of funds will have to tighten their weighted average liquidity terms by either replacing old investors with new investors facing lockups or adding new vehicles with tougher terms.

Flight-to-quality scenarios such as in autumn 1998 do not happen often. In other words, a duration mismatch between assets and liabilities will not be a problem in most market situations. However, shocks to the system do happen. We believe that sound funding and matching asset/liability duration are advisable.

Fee Structure

In this section we examine the fee structures of some of the funds of hedge fund. One caveat of this analysis is that we are not comparing fund of funds on a like-for-like basis. A fund of funds specializing in constant absolute returns will most likely have different fee structure than a fund of funds maximizing returns, i.e. with a strong directional bias. In addition, we have no information on the variety of fees, which a fund of funds manager may additionally earn from the relationship⁵.

From the whole sample of funds of funds data available to us, we found information on base fee, hurdle rate and performance fee for 118 funds, of which 51 were in operation as of December 2000. Figure 4 and figure 5 (cumulative) show the distribution by flat fee.

<<< Figures 4 and 5 around here >>>

58% of the funds had a flat fee between 1% and 1.4%. 75% of the flat fees were between 1% and 1.9%. From the 118 funds of funds the median manager had a flat fee of 1% where the average was 1.2%. The range was between 0% (four funds) and 3% (one fund).

Of the 88 funds with a flat fee between 1% and 1.9%, only eight (9.1%) did not have an incentive fee. The incentive fee varied between 2% and 25%. 20 funds of funds (22.7%) had a hurdle rate⁶ of some sort in place.

Of the 88 funds with flat fee between 1% and 1.9%, the median incentive fee was 10% and the average 12%. The hurdle rate varied from 0% to S&P 500 returns. Figure 6 shows flat fee in relation to incentive fee from the whole universe of 118 funds of funds.

<<< Figure 6 around here >>>

The most common structure is a flat fee of 1% and incentive fee of 10%. 28 (21.5%) funds of funds had this structure. Of these 28, nine had a hurdle rate of 10%, six had no hurdle rate and five had a hurdle rate associated with T-bills or other short-term interest rate benchmark. From the remaining eight funds of funds with a 1+10 structure, three had a hurdle rate of 8%, two of S&P 500 returns, and the remaining three had hurdle rates of 7%, 7.5% and 8% respectively.

The second most common structure was a 1% flat fee and a 15% incentive fee. 12 funds had this structure. However, all of these 12 funds had a hurdle rate ranging from T-bills to S&P 500 returns. Four funds had 1% plus 20%.

Figure 7 estimates the total fee from the universe of 118 funds of funds. The graph has been sorted by ascending total fees. We assumed a hedge fund gross return of 20%. For the benchmarked hurdle rate, we assumed a three-month rate of 6% and an equity return of 10%. The equity hurdle benchmark rate was either the S&P 500 or MSCI World.

<<< Figure 7 around here >>>

For the total fee the median was 2.4% and the average was 2.7%. The range was from a total fee of 0.935% to 7.0% given our assumptions outlined above. The lowest total fee was in a fund of funds with a flat fee of 0.9% and an incentive fee of 0.25% above a hurdle rate of two-year T-notes. The highest fee structure was 2% flat fee and 25% incentive fee with no hurdle rate.

Volatility of Funds of Funds

Different funds of funds have different objectives and, as a result, different portfolios with different volatilities. Figure 8 shows the dispersion of volatility for 475 funds of funds products where we had at least 36 months of continuous monthly returns.

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19.4% of funds of funds had volatilities that were 5% or lower, 34.1% were between 5% and 10%, 24.6% were between 10% and 15%, and 11.2% were

between 15% and 20%. 10.7% of the funds of funds had annual volatilities higher than 20%. Five funds of funds (1.1% of sample size) had a volatility lower than 2%. The lowest volatility was 1.17% (based on 48 monthly returns to December 2000). Five funds of funds had volatilities above 45%. The two most volatile funds had volatilities of 72.7% and 66.3% respectively (based on 36 and 48 monthly returns, respectively).

Figure 9 shows the most volatile compared with the least volatile funds of funds. We only screened funds with continuous monthly returns of five years or more. The fund with the highest volatility had an annual standard deviation of monthly returns (volatility) equal to 47.6% (based on 180 returns to December 2000) whereas the lowest was 1.72% (based on 72 returns to December 2000).

<<< Figure 9 around here >>>

The conclusion we draw from Figure 7 and 8 is that the fund of hedge funds industry is probably as heterogeneous as is the hedge fund industry. Figure 9 is an indication that the notion that an increase in expected return is only possible by allowing an increase in volatility is probably not true for the fund of hedge funds industry. In other words, there are many funds of funds that construct mean-variance sub-optimal portfolios. This could be intentional due to specialization into a certain sub-category or unintentional due to a lack of skill.

Minimum Investment

The following charts show the distribution of fund of hedge funds by minimum investment requirement. From a universe of 929 existing and distinct funds of funds we have minimum investment information on 395 funds of funds.

<<< Figure 10 and 11 around here >>>

The median fund of funds had a minimum requirement of US\$250,000. The range varies from US\$1,000 to US\$5m. 66.1% of the funds of funds had a minimum investment requirement of US\$250,000 or less and 37.0% of US\$100,000 or less. Only 3.5% of the funds of funds had a requirement of more than US\$1m. We believe that Figure 10 could have a slight bias to the left as some requirements of older funds of funds might not have been updated.

This concludes our brief analysis on fund of funds industry characteristics. In the following section we will contrast what we believe are the advantages of investing in funds of funds, with some obvious and less obvious disadvantages. Myths and misconceptions surrounding hedge funds we discuss in Ineichen (2001).

Advantages and Disadvantages of Investing in Fund of Hedge Funds

The main advantage of investing in a fund of funds with an edge is that the manager is able to add value through manager selection, portfolio construction

and monitoring investments and managers. The main disadvantage is that most fund-of-funds managers charge a fee on top of the fees of the individual hedge funds.

Value-added

We believe that the potential to add value is somewhat inversely proportional to the efficiency and/or liquidity of the underlying instruments.

<<< Figure 12 around here >>>

Where markets are price-efficient, more and more investors adopt a passive approach since the potential for an active manager to add value is limited.

The greatest potential for adding value is where information is not freely available, ie in inefficient markets. There the potential for active management is larger. Note that there is a difference between adding value in an *informationally inefficient* market through achieving an informational advantage and adding value by picking up a premium for liquidity in an *informationally efficient* market. Hedge funds are involved in both.

Given that the hedge fund industry is opaque, i.e. inefficient, the more experienced and skilled fund of funds managers should have an edge over the less experienced and skilled. Given the high dispersion of returns between managers (Figure 1), hedge fund selection is most likely a value-added

proposition. Investing with the first quartile of hedge fund managers differs widely from investing with the lowest quartile. In Figure 13 we show conceptually the expected dispersion of long-only strategies in contrast with strategies where there is no tracking error constraint.

<<< Figure 13 around here >>>

The dispersion of returns with alternative strategies is much higher than with long-only strategies where tracking error constraints drives the range of dispersion. The dispersion for passive bond funds, for example, with the same benchmark is probably minimal. Also, actively managed equity funds on, say, the Russell 2000 index will have, by comparison, a relatively low dispersion. A wide dispersion means that the lower quartile will do much worse than the upper quartile. To an investor with no edge this is a risk. To an active investor with a competitive advantage this is an opportunity to add value.

A point could be made that time spent in evaluating a passive bond manager is not as well spent as the equal amount of time spent in evaluating a fund of funds manager. If the tracking error constraint is zero or a couple of basis points, there is a high probability that the return of most managers will lie within a small range. In AIS, however, there is no tracking error constraint. In other words, time spent in evaluating a fund of funds manager has the potential to make a big difference to the bottom line.

As the number of hedge funds increases, the number of fund of funds managers is also increasing as a result of increasing demand for exposure to hedge funds. The lack of longevity of some of the newer fund of funds is a risk to the investor as is the low level of experience relative to fees by those fund of funds managers. We therefore believe that the selection of a fund of hedge funds manager will become more difficult and costly over time.

The accepted wisdom in the hedge fund industry is that it is a demand-led business. But 'quality hedge funds' – ie those with superior business models, investment philosophies and risk management capabilities – are actually driven by supply (capacity) rather than demand. There is an imbalance between the demand for hedge fund exposure in general (increasing fast) and the supply of quality hedge funds (increasing slowly).

Quality hedge fund managers are making their funds less attractive to new investors either by increasing fees, increasing redemption periods or simply closing to new money. It seems that these hedge funds close at a continuously faster pace than normal hedge funds⁷.

One possible outcome of this supply and demand imbalance is that the quality of the median manager falls. If the current acceleration of demand for hedge funds should quicken, the deterioration of quality could accelerate and those

investors last to jump on the bandwagon will likely invest with the least talented hedge fund managers⁸. An experienced and established fund of funds manager, however, is probably more likely to invest with the most talented managers. This, we believe, is a strong value proposition.

Diversification

Portfolio diversification is probably the main reason why institutional investors invest in AIS in general and hedge funds in particular⁹. The main reason for investing in a portfolio of hedge funds instead of a single hedge fund is diversification. Investing in a portfolio of hedge funds significantly reduces individual fund and manager risk.

Schneeweis and Spurgin [2000] differentiate between different degrees of diversification, as shown in Table 1.

<<< Table 1 around here >>>

A fund of funds is normally not a random composition of hedge fund strategies. The fund of funds manager aims to deliver more stable returns under most market conditions through portfolio construction, ie combining the various hedge strategies. Most often hedge fund portfolios are constructed in a way to reduce the volatility of traditional asset classes such as equities and bonds.

Efficient Exposure

Analyzing hedge funds is laborious¹⁰. Once the information is collected, which in itself is difficult, due diligence begins. What are the annual net returns of the fund? How consistent are the returns, year-on-year? Are audited returns available? What reputation does the principal have and what objective references (investors, not friends) can the manager provide? How much of the managers' money is at risk in the fund? Are any investor complaints on file with local or national authorities? Does the investing style make sense? Has the fund performed well in relative as well as absolute terms? What is the risk of losing the principal? How leveraged is the fund?

There are around 2,000-6,000 hedge funds available¹¹. Certainly, many of them are closed or do not meet certain basic criteria. However, picking hedge funds from a small, easily accessible universe is probably similar to building a diversified equity portfolio with pulp and paper stocks only. In other words, building a large database of information is costly.

There are two aspects with respect to staff analyzing and selecting hedge fund managers: finding and hiring. Since the hedge fund industry is relatively young, there is no oversupply of investment professionals who have the necessary skill set and experience to analyze the investment philosophy and quality of business franchise and management. Given the opaqueness of the industry, someone from within the industry will probably have a competitive advantage over

someone from outside. We believe experience is an important variable in ex-ante manager evaluation. Finding investment staff is not equal to hiring. Location probably matters. One could make the point that a plan sponsor located in the suburbs of Helsinki will not appeal equally to all investment professionals with hedge fund manager selection experience. In other words, the costs of setting up one's own hedge fund selection process could exceed those charged by fund of funds managers.

A fund allows easier administration of widely diversified investments across a large variety of hedge funds. Private and small institutional investors are not able to diversify properly by investing in single hedge funds. The fund of funds approach allows access to a broader spectrum of hedge funds than may otherwise be available due to high minimum investment requirements.

Providers of Capacity

The notion that fund of funds managers are gatekeepers of capacity is not entirely uncontroversial. An established fund of funds manager is quick to spot talent and can secure a certain capacity in a new fund, even when the fund closes for new money. On the other hand, many hedge fund managers are only *soft-closed*, ie they officially announce they are closed but are still open for high-quality investors.

The term *high-quality investor* is obviously subjective. However, hedge fund managers prefer sophisticated long-term investors who understand the merits

and risks of the strategy. This reduces the risk that the investor will pull out of the fund at the worst possible moment. In other words, a hedge fund manager might prefer a professionally managed pension fund over a fund of funds. Although the fund of funds manager might understand the merits of the strategy, this might not necessarily be true for the investors in the fund of funds. In this respect, the capacity argument for fund of funds managers is a double-edged sword.

There is probably a difference whether the end-investor of a fund of funds is retail or institutional. We believe the capacity argument has been diminishing over time because the allocation from institutional investors into funds of funds has been increasing relative to hot (short-term) money. In other words, a hedge fund manager will distinguish between a fund of funds marketed to retail investors or a fund of funds where the client base is institutional or sophisticated or both.

Probably every investment decision can be broken down to balancing the advantages and disadvantages. In the following section we will discuss some of the disadvantages of investing in fund of funds. The main disadvantage is probably cost.

Double Fee Structure

With funds of funds, fees are charged twice. The individual hedge fund collects fees from the fund of funds manager and the fund of funds manager collects

additional fees from the distributor or investor. The double fee structure is often seen as a negative aspect of investing in hedge funds¹².

The double fee argument does not relate fees to the value added by the fund of funds manager. If a random selection of hedge funds yields the same gross risk-adjusted returns as the fund of funds approach, then we would have to question the double fee structure. However, we doubt that the hedge fund industry is efficient. Most likely it is quite the opposite. Information is still scarce and costly. Institutions have just begun to think about hedge funds on a grander scale.

In theory, an active fee should be paid on active management and a passive (lower) fee for passive management. The main reason for passive management having lower fees is that the costs of getting exposure to efficient markets such as the US or UK stock market have continuously been falling. In other words, an active fee should be charged on exposure that is not available through indexation or other passive investment strategies. Put differently, excess returns attributed to skill are scarce and costly while market exposure is not¹³.

We believe that performance attribution is becoming more and more important to the fee-paying investor base. The distinction between performance attributable to beta and performance from alpha is, therefore, becoming increasingly important. Figure 14 shows the results of a study conducted by

Fung and Hsieh (1997) based on a sample of 3,327 US mutual funds and 409 hedge funds/CTAs. The authors compared the performance attribution of mutual funds with the performance attribution of hedge funds. Although this example applies to individual hedge funds, the logic should apply to active and passive fees in general.

Figure 14 shows the percentage of performance attributable to traditional asset classes for long-only funds and hedge funds. In the chart, a reading of 100% indicates that 100% of the return is attributable to asset classes whereas a reading of 0% indicates that performance is not attributable to any asset class¹⁴. While more than half the mutual funds have R^2 s above 75%, nearly half (48%) of the hedge funds have R^2 s below 25%. This means that whatever is driving hedge fund returns it is not the stock market or any other efficiently replicable variable. We believe it is primarily differences in the skill and flexibility of hedge fund managers' mandates that allow them to deliver an uncorrelated set of returns¹⁵.

<<< Figure 14 around here >>>

We believe that the high fees of hedge funds and the double layer of fees of the fund of funds manager have to be put in context with the value added on an after-fee basis. Exposure to price-efficient markets is most efficiently accessed

through passive vehicles such as index funds or total return swaps or any other variant. Exposure to price and informationally inefficient markets do not normally have a passive alternative.

Lack of Transparency

Some investors find it unnerving not to know what they are investing in when investing in a hedge fund since transparency is lower compared with traditional managers.

In some cases, transparency is diminished still further when investing in funds of funds because not all fund of funds managers disclose the names of the funds they invest in. However, quite often fund of funds managers have greater transparency of the positions of a hedge fund manager they invest in than any other investor. Hedge fund managers might be more willing to disclose information to market participants who do not trade in the same markets and securities as they do.

Again, we attempt to challenge this disadvantage: How many hedge funds does the reader know by name? Hedge funds are not like stocks with respect to brand recognition. The industry itself is opaque to most investors. Even an investor who can name 20 different hedge funds still only 'knows' a fraction of the industry. Fund of funds managers specialize and operate in a field where knowledge is only attainable at high cost.

Asset management firms that specialize in AIS in general or hedge funds in particular are not usually household names. This is a disadvantage for two reasons: Unfamiliarity and information cost.

Unfamiliarity

In the most general sense, everything else being equal, something unfamiliar has more subjective risk than something familiar, i.e. uncertainty is perceived as higher¹⁶.

Many fund of funds managers are not well known to the decision-maker in an institutional setup. However, today there is a core of asset management firms that have a track record of five years or more. Given that the hedge fund industry is newer than the traditional long-only industry, investors are familiar with the large asset management institutions but unfamiliar with the newer alternative asset management firms.

Going forward we will probably witness combinations of traditional asset management firms with alternative asset management firms in general and funds of hedge funds in particular. That way the traditional asset manager can market a product where demand is increasing and margins are high while the fund of funds manager gets distribution power. In addition, some single hedge funds have grown to a size where their business is not scalable. One alternative

for those managers is to close. Other options are to outsource funds or to expand in strategies that are scalable, ie traditional long-only strategies.

Cost

The cost of information in the hedge fund industry is high. The main reason is the persistent opaqueness of the industry. An institutional investor will have to go through a lengthy due diligence process before the fiduciaries and plan sponsors are prepared to invest the OPM (Other People's Money) they were entrusted to manage. The decision-making process for non-institutional investors is faster and less rigid, ie cheaper, than it is for fiduciaries.

Limited Liquidity

Liquidity on a Single Hedge Fund Level

Some investors might find comfort in the fact that most hedge fund managers have a large portion of their net wealth tied to the fund, ie the same long redemption periods as the investor. A more pragmatic argument for low liquidity is the fact that hedge funds exploit inefficiencies and therefore are by definition operating in markets that are less liquid than the bluest of blue chips. In other words, exploiting inefficiencies by its nature involves some degree of illiquidity. The main reason for a hedge fund to have a lock-up period however is the benefit of stable capital structure. There are many opportunities to exploit in periods of market distress. As Ken Griffith from Citadel puts it:

“If you’re Avis, and the lights suddenly go off at Hertz, you had better be in a position to make a lot of money¹⁷.”

Liquidity on a Fund of Hedge Funds Level

Limited liquidity in a fund of funds is certainly a disadvantage, especially when compared with single hedge funds offering superior liquidity or traditional investments offering daily withdrawal/redemption terms. Limited liquidity comes with a cost, and this cost ought to be compensated with proper returns for the investor. Earlier we examined the issue of liquidity of fund of funds managers in relation to performance. Skilful fund of funds managers should not only be able to construct portfolios that outperform, but also be able to target a

liquidity horizon that is optimal both for hedge fund investments as well as the needs of the investors in the fund of funds.

Some funds of funds nonetheless offer opportunities for withdrawal on a weekly or daily basis, though mainly with penalties attached. A fund of funds manager who aggressively provides liquidity free of charge should be viewed with suspicion. Non-marketable securities are by definition illiquid. The suspicion is based on two assumptions:

1. A fund of funds manager could be investing in hedge funds which are only trading in liquid markets. These funds are traditionally directional and their performance more volatile. We would view this as negative because market inefficiencies are by definition to be found in smaller, less liquid and less efficient markets. Long-term investing in hedge funds, therefore, is to some extent about picking up a liquidity premium.
2. *'Beggars can't be choosers'*. We do not believe that the most talented managers in the alternative investment arena make compromises. At least not at this stage in the cycle. We assume these managers can resist the temptation of being part of a retail product that offers high-frequency, eg daily liquidity.

No 'Learning-by-doing' Effect

A further disadvantage of investing in a fund of funds instead of investing in hedge funds directly is a lack of knowledge transfer. One could argue that, at the most general level, investing involves a ‘learning-by-doing’ effect. Mark McCormack’s classic *What They Don’t Teach You at Harvard Business School* could have easily been addressed to investment management as opposed to marketing sport celebrities. Success in investment management is to some extent a function of experience¹⁸.

This argument has two sides to it. Many institutions use funds of funds to get acquainted with the asset class¹⁹, for example by investing some of the allocation with the fund of funds manager and, at the same time, investing with the hedge fund manager directly. This implies that the fund of funds manager is part fund manager and part advisor. The investor, therefore, benefits from the experience of the fund of funds manager in the field of alternative investments.

Conclusion

We believe the hedge fund industry is inefficient as information on managers is not available for all market participants at the same time and at the same price. This means a fund of funds manager with a competitive advantage should be able to add value primarily through manager selection. Portfolio construction is a further area where a fund of funds manager adds value.

The hedge fund industry is heterogeneous. This means different hedge fund strategies have different expected returns, volatilities and correlation

characteristics. Unlike with equities, portfolio volatility can be reduced to below 5% through portfolio construction. A fund of funds manager is probably more likely to estimate return, volatility and correlation, and is therefore in a position to construct more efficient portfolios. However, we believe that the value added of a fund of funds manager is more attributed to manager selection and monitoring than to portfolio construction and portfolio management.

The main disadvantage of investing in funds of funds is the double fee structure. Fund of funds managers charge a fee on top of the fee structure of the hedge fund manager. We believe investors should relate the double fee structure with the value added of the fund of funds manager. However, to a minority of institutional investors the total amount of fees charged is unacceptable, irrespective of the net value added.

References

- Agarwal, Vikas and Narayan Y. Naik (2000) 'Performance Evaluation of Hedge Funds with Option-based and Buy-and-Hold Strategies,' working paper, September.
- Brunel, Jean L.P. (1999) 'The Role of Alternative Assets in tax-Efficient Portfolio Construction,' *The Journal of Private Portfolio Management*, Vol. 2, No. 1 (Summer), pp. 9-26.
- Fung, William and David A Hsieh (1997) 'Empirical Characteristics of Dynamic Trading Strategies: The Case of Hedge Funds,' *The Review of Financial Studies*, Vol. 10, No. 2, pp275-302.
- Ghaleb-Harter, Tanya; Lamm, Jr., R. McFall (2001) 'Do Hedge Funds Belong in Taxable Portfolios?' *The Journal of Wealth Management*, Vol. 4, No. 1 (Summer), pp. 58-73.
- Greer, Robert J. (1997) 'What is an Asset Class Anyway?' *The Journal of Portfolio Management*, Winter, pp. 86-91
- Horvitz, Jeffrey E. (2000) 'Asset Classes and Asset Allocation: Problems of Classification' *The Journal of Private Portfolio Management*, Vol. 2, No. 4 (Spring), pp. 27-32.
- Ineichen, Alexander (2001) 'The Myths of Hedge Funds – Are Hedge Funds The Fireflies Ahead of The Storm?' *Journal of Global Financial Markets*, Vol. 2, No. 4 (Winter), pp. 34-46.
- Keynes, John Maynard (1936) 'The General Theory of Employment, Interest, and Money,' Harcourt, Brace & World, New York.
- Liang, Bing (1999), 'On the Performance of Hedge Funds,' *Financial Analysts Journal*, Vol. 55, No. 4 (July/August), pp. 72-85.
- Lowenstein, R (2000) 'When Genius Failed – The Rise and Fall of Long-term Capital Management,' Random House, New York.
- Schneeweis, Thomas and Richard Spurgin (2000) 'Hedge Funds: Portfolio Risk Diversifiers, Return Enhancers or Both?' forthcoming in 'European Fund Management, working paper, 31 July.
- Swensen, David F (2000) 'Pioneering Portfolio Management – An Unconventional Approach to Institutional Investment,' The Free Press, New York.
- Taleb, Nassim Nicholas (2001) 'Fooled by Randomness – The Hidden Role of Chance in the Markets and in Life,' Textre, New York.

Tables

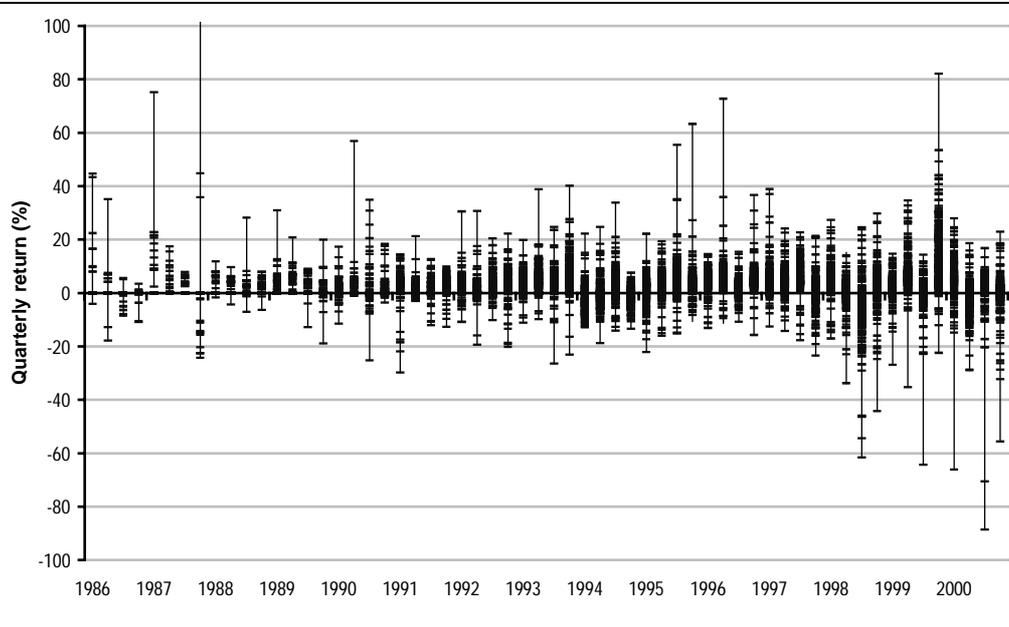
Table 1: Classification of Hedge Funds by Diversification Characteristics

Classification	Characteristics	Examples
Return Enhancer	High return, high correlation with stock/bond portfolio	Merger arbitrage, distressed securities, long/short equity
Risk Reducer	Lower return, low correlation with stock/bond portfolio	Equity market-neutral, CB arbitrage
Total Diversifier	High return and low correlation with stock/bond portfolio	Global asset allocation
Pure Diversifier	Low or negative return with high negative correlation with stock/bond portfolio	Short seller

Source: Schneeweis and Spurgin (2000)

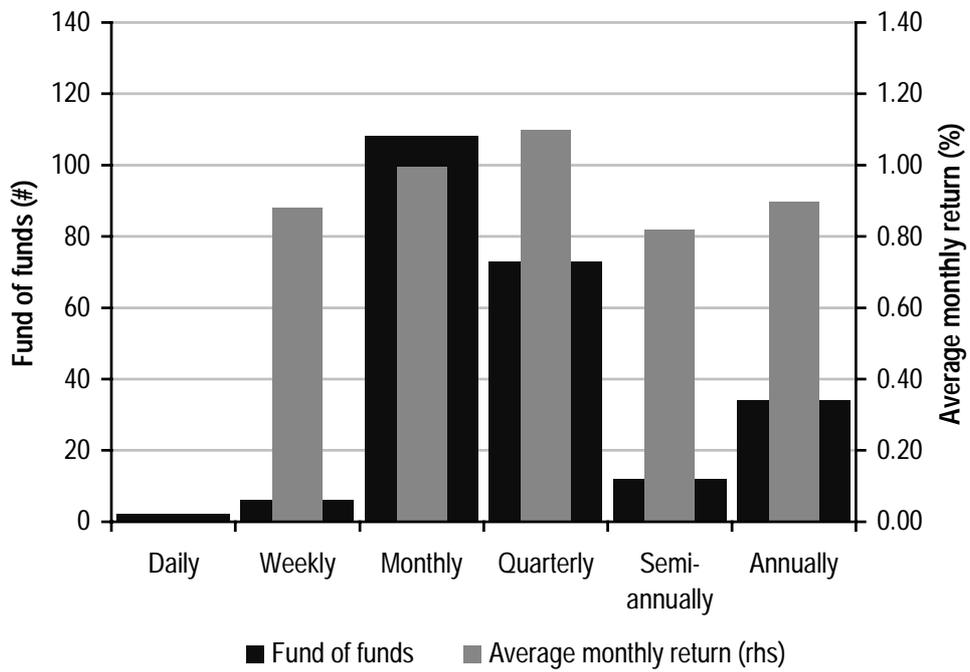
Figures

Figure 1: Dispersion of Fund of Funds Returns (1986-2000, Quarterly Returns)



Source: UBS Warburg and Quellos

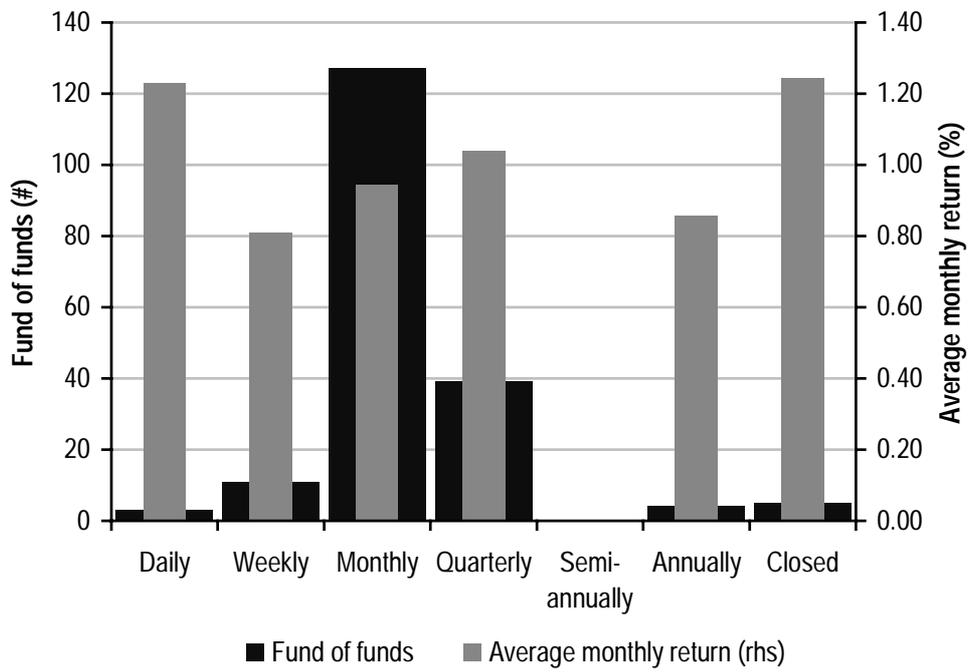
Figure 2: Withdrawals



Source: UBS Warburg and Quellos

Return (rhs) only shown for funds of funds in existence between January 1996 and December 2000.

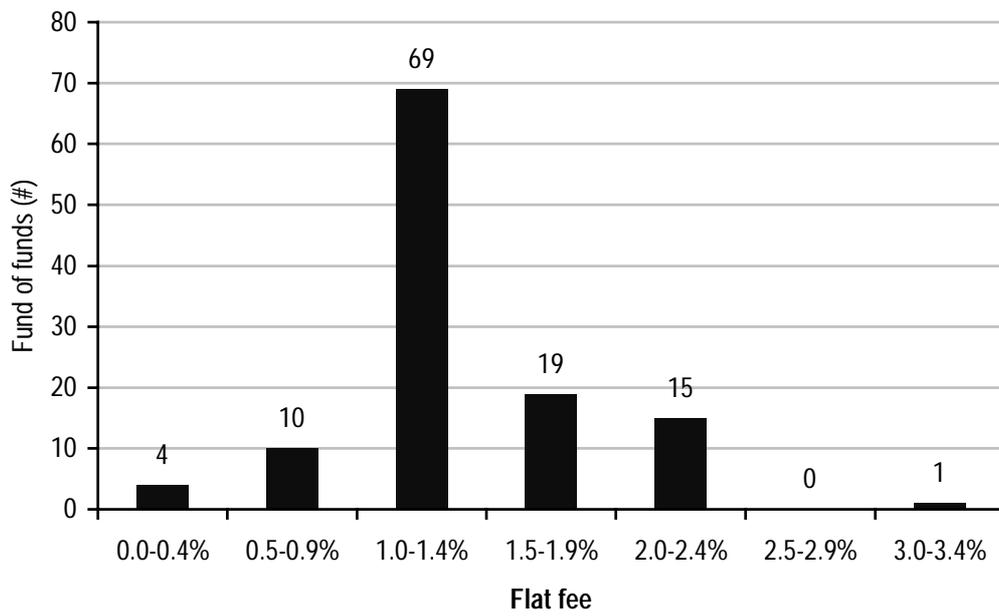
Figure 3: Contributions



Source: UBS Warburg and Quellos

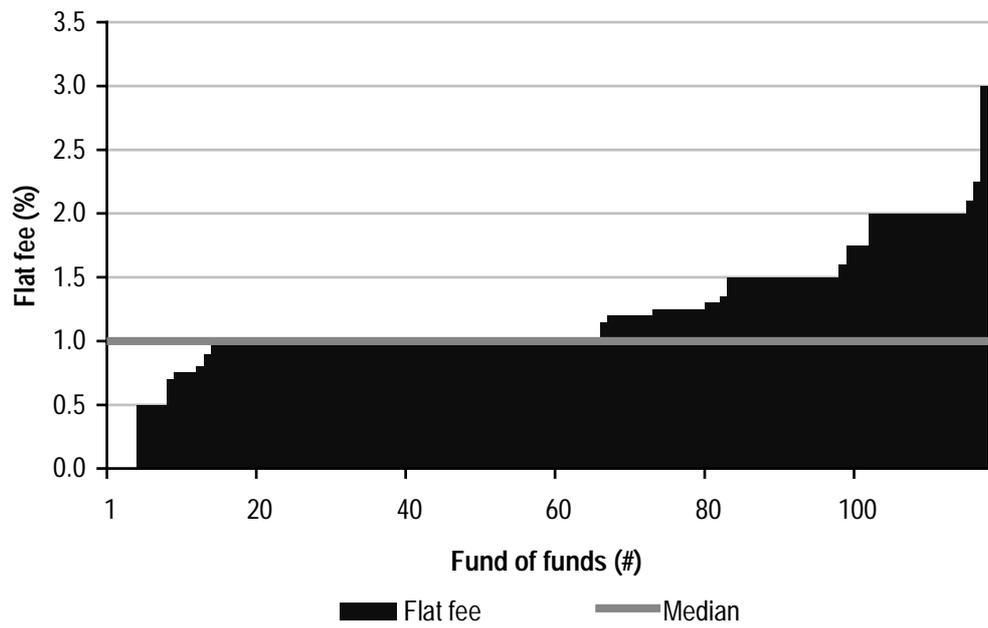
Return (rhs) only shown for funds of funds in existence between January 1996 and December 2000.

Figure 4: Distribution by Flat Fee



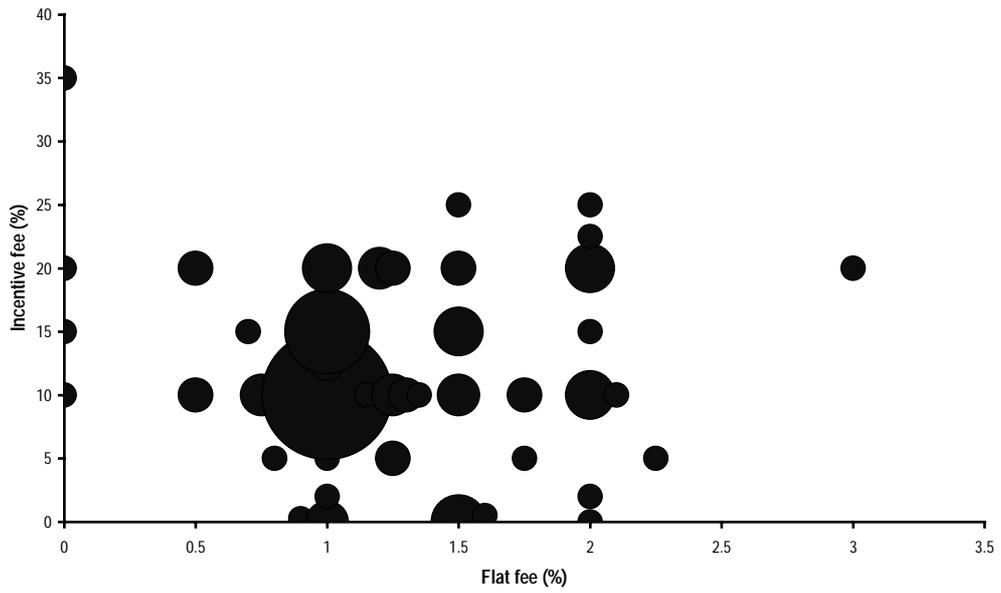
Source: UBS Warburg and Quellos

Figure 5: Flat Fee of Funds of Funds



Source: UBS Warburg and Quellos

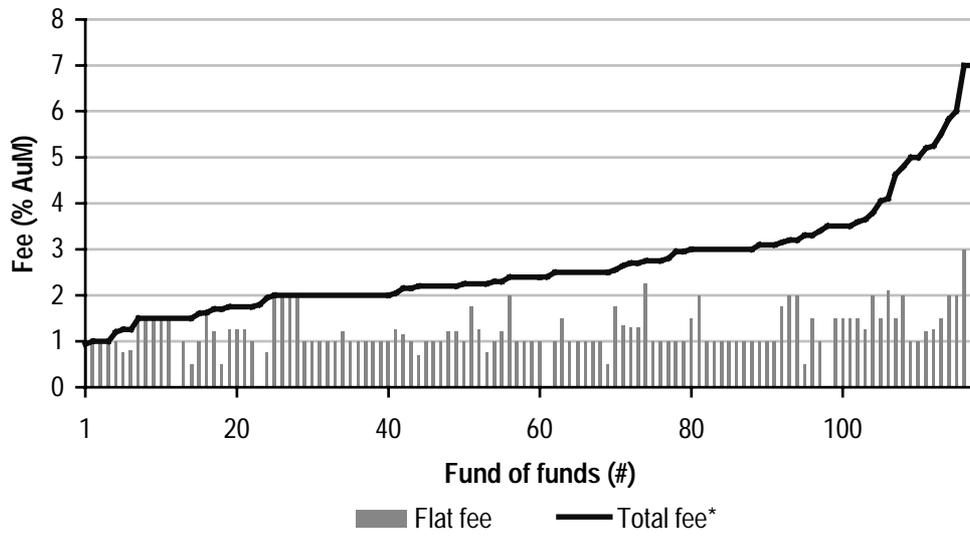
Figure 6: Flat Fee versus Incentive Fee



Source: UBS Warburg and Quellos

Bubble size measures number of funds of funds with same fee structure.

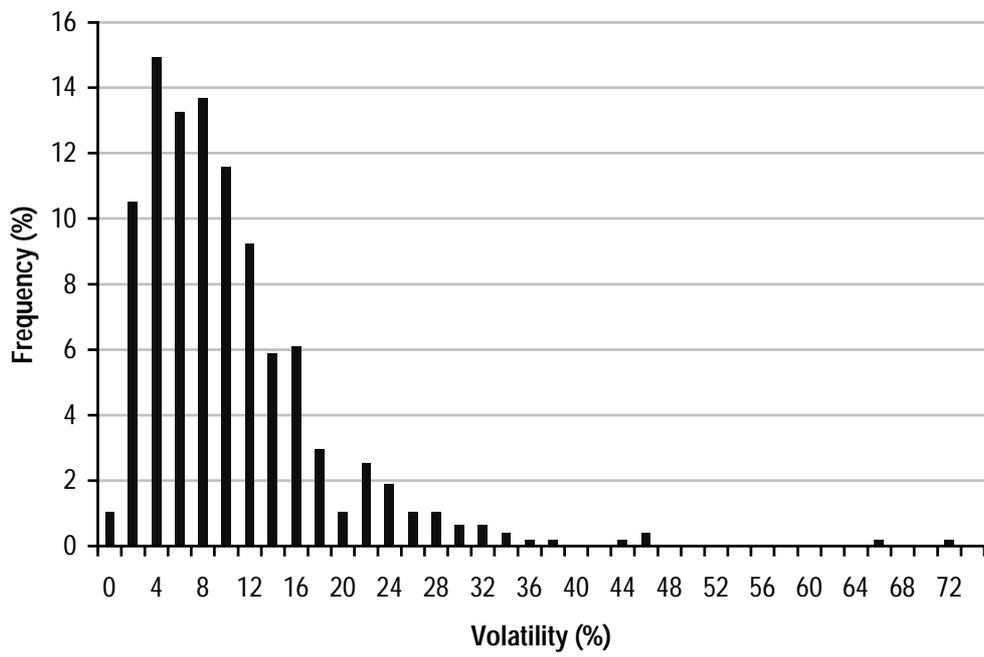
Figure 7: Total Fee Structure



Source: UBS Warburg and Quellos

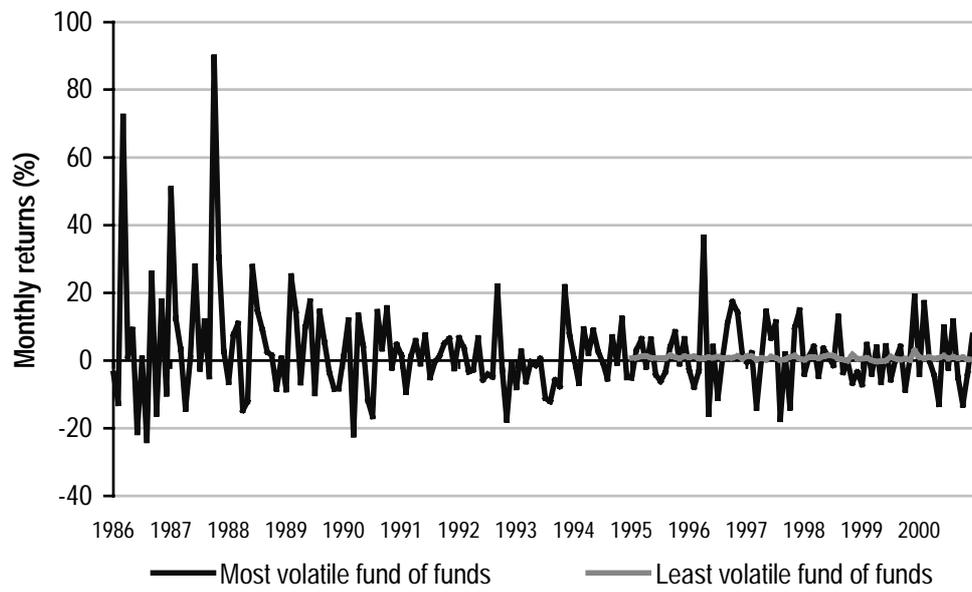
* Assumptions: Hedge fund gross return of 20%, 3-month rate 6%, equity hurdle was set 10%.

Figure 8: Volatility of Funds of Funds



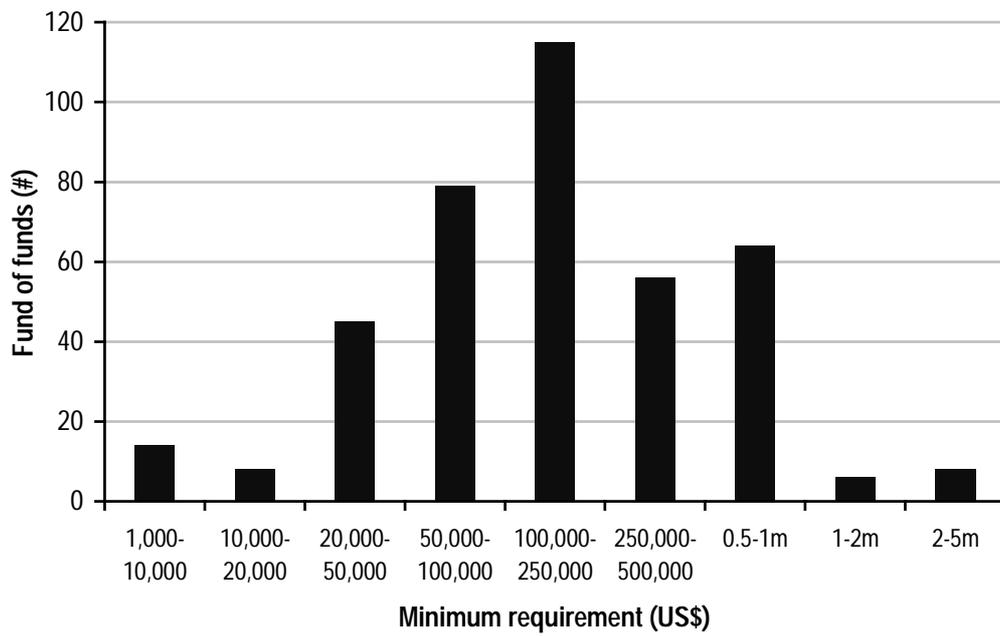
Source: UBS Warburg and Quellos

Figure 9: Most and Least Volatile Funds of Funds



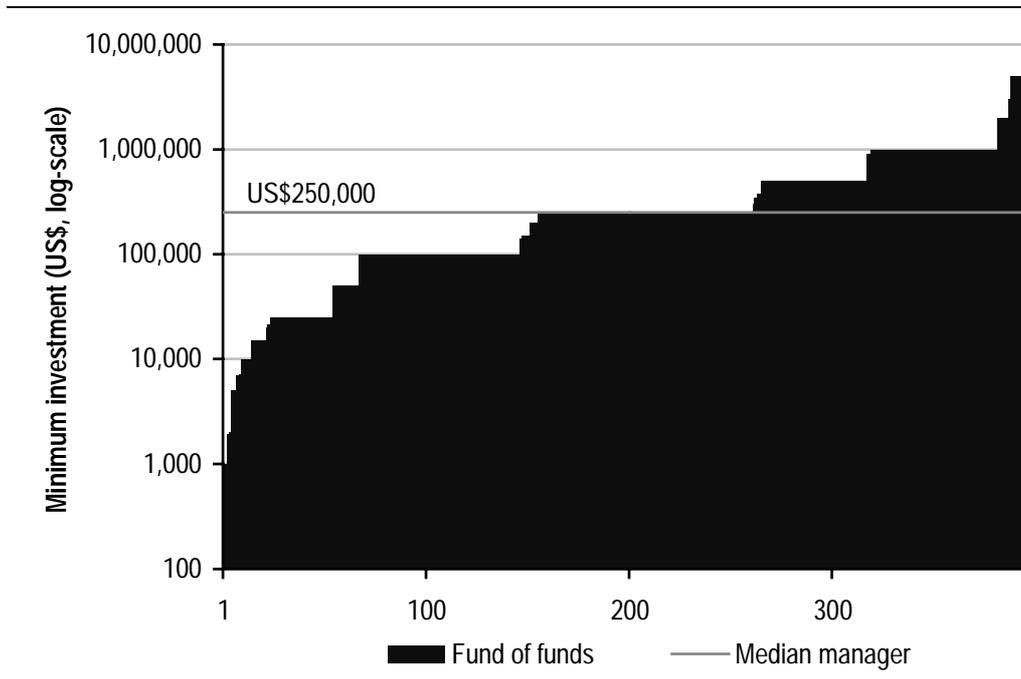
Source: UBS Warburg and Quellos

Figure 10: Distribution by Minimum Investment



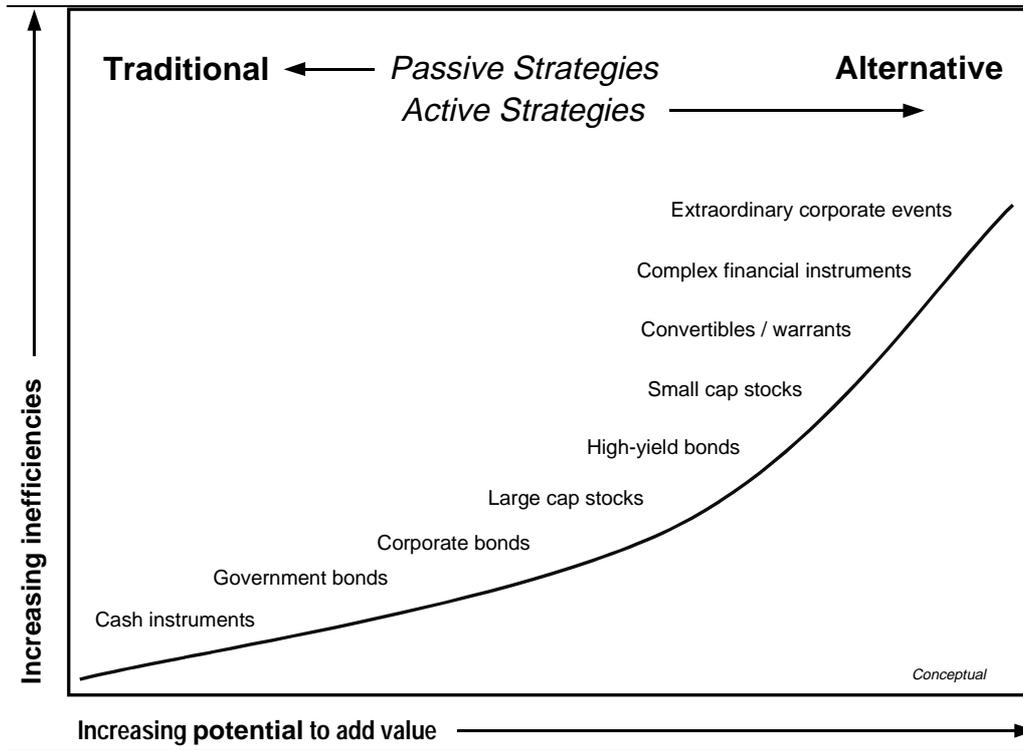
Source: UBS Warburg and Quellos

Figure 11: Minimum Investment of Funds of Funds



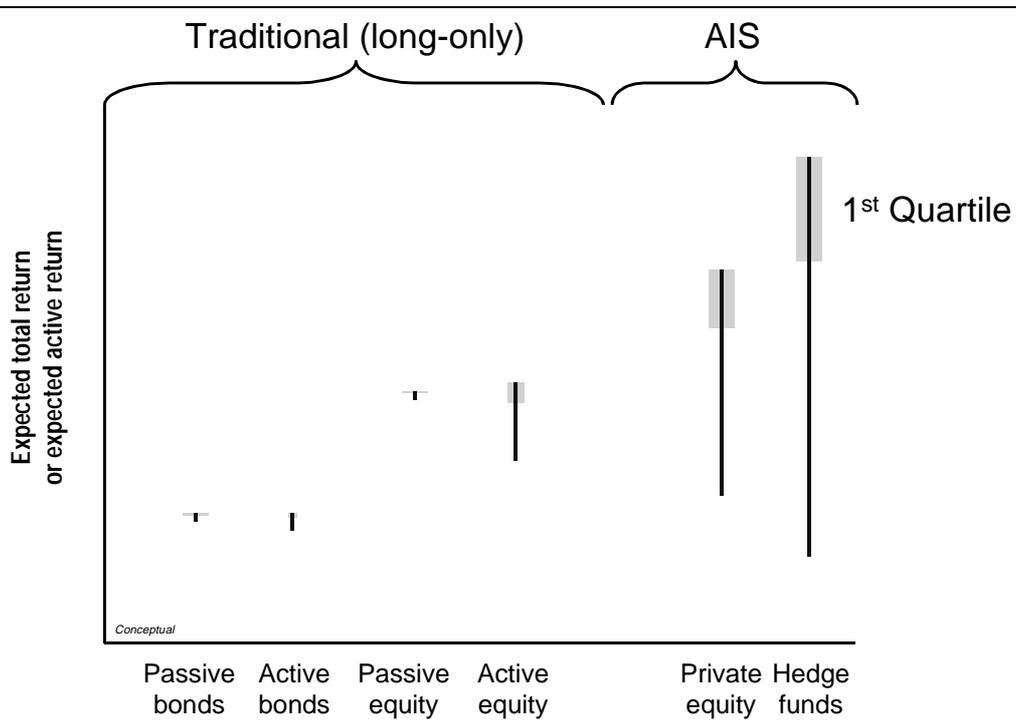
Source: UBS Warburg and Quellos

Figure 12: Potential Alpha Generation



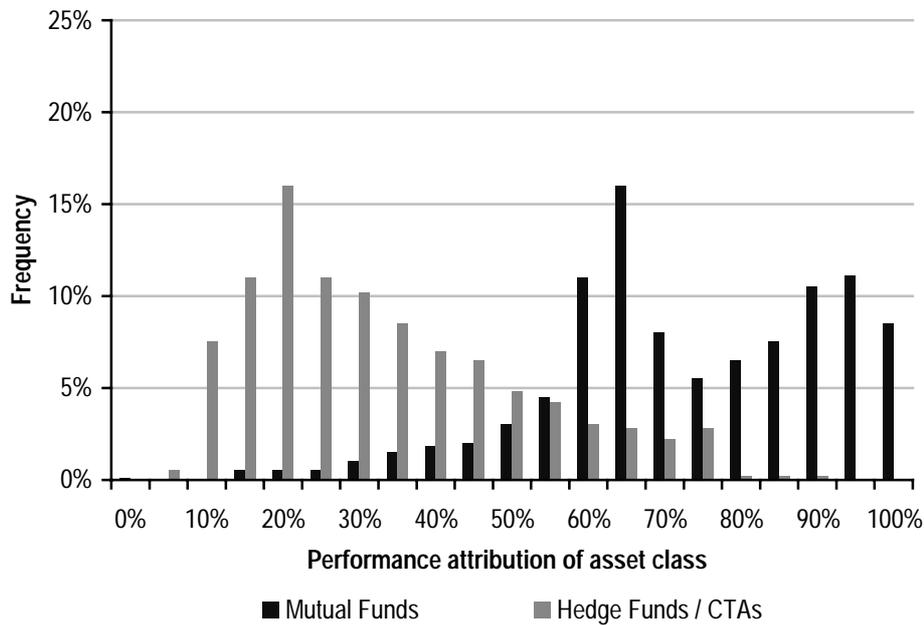
Source: Quellos

Figure 13: Expected Return Dispersion of Traditional and AIS Managers



Source: UBS Warburg

Figure 14: Performance Attribution



Source: Fung and Hsieh (1997)

¹ In particular, see Brunel [1999] or McFall Lamm [2001].

² Liquidity on a single hedge fund level is a different matter. For example, currencies, interest rate and equity index instruments are the most liquid and also the most efficiently priced. Thus, funds specializing in these instruments could easily offer weekly liquidity. Distressed and convertible bonds are relatively illiquid. Managers focusing here need quarterly redemptions if not longer. In general, the efficiency of an asset is highly correlated to its liquidity. Since active money management is about exploiting market inefficiencies, this necessitates less liquid investments.

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- ³ One could argue that liquidity in itself is a theoretical or at least ephemeral concept. Liquidity tends to evaporate when most needed. For example, there was no liquidity during the 19 October 1987 crash. According to the *Report of the Presidential Task Force on Market Mechanisms*, market makers possessed neither the resources nor the willingness to absorb the extraordinary volume of selling demand that materialized. (Swensen (2000), p. 93) Just when investors most needed liquidity, it disappeared. Swensen (2000) quotes Keynes (1936) who argued that “*of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of ‘liquid’ securities. It forgets that there is no such thing as liquidity of investment for the community as a whole.*” Swensen (2000) suggests that investors should pursue success, not liquidity, ie fear failure, not illiquidity. If private, illiquid investments succeed, liquidity follows as investors gain interest. In public markets, as once-illiquid stocks perform well, liquidity increases as investors recognize progress. In contrast, if public, liquid investments fail, illiquidity follows as interest dries up. Recent trading turnover patterns in telecom stocks might be an example of the latter point.
- ⁴ Here, the first 2 relates to the typical 2% management fee charged by the manager, while the 20 refers to the fact that managers also often charge a performance fee equal to 20% of the actual returns, with, depending on the circumstances, provisions for high water marks or minimum return thresholds. See endnote 6 for additional comments on this topic.
- ⁵ Certain fund of funds get a fee from the hedge fund’s clearing broker, e.g. a fund of funds manager insisting that a hedge fund clears with a broker of their choosing and that broker then gives a percentage back to the fund of funds. Others benefit from the fact that hedge fund managers may give a percentage of their total fee income and a percentage of their hedge fund business to the fund of funds manager, in compensation for the latter having been an initial investor. Both of these are rarely disclosed. A trail fee is usually payable on mutual funds and seen as a payment to an intermediary for ongoing client servicing and monitoring on the fund. Retrocession is a fee-sharing arrangement whereby a portion of the fees charged by the hedge fund or fund of funds is given back either to marketers or other agents in consideration for their efforts in raising money for the product, or given back directly to the client as a form of compensation (mainly true of retail-distributed products).

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- ⁶ The return above which a hedge fund manager begins taking incentive fees. For example, if a fund has a hurdle rate of 10%, and the fund returns 25% for the year, the fund will only take incentive fees on the 15% return above the hurdle rate.
- ⁷ There is the distinction between hard and soft close. Hard close means that a fund is officially as well as unofficially temporarily not taking new funds from any investors. Soft close means that the fund is ‘officially’ not open to new money. However, an allocation by a large long-term investor is still possible. Note that quality hedge funds are in a position to ‘manage’ their client base, i.e. not all investors are treated equally. Sophisticated long-term investors are preferred over unsophisticated short-term investors.
- ⁸ An interesting aspect of the LTCM period is that initial investors had an 18% annual return over the life of the firm because LTCM returned more funds back to investors in 1997 than it initially had invested. Investors who were paid out fully had an even higher return. However, investors who entered last, i.e. at the peak, lost money. See Lowenstein [2000], p. 224.
- ⁹ After hedge funds have become mainstream and institutionalized there will be new forms of alternative investments. The goal of this search will be positive returns with low correlation to equities and bonds. The future of AIS, therefore, could include exposure to, for example, Bordeaux wine. Euronext has launched futures on a basket of clarets. As the connoisseur will know, the 2000 vintage achieved high prices which were, therefore, negatively correlated to the NASDAQ. The reason Bordeaux wine is weakly correlated with equity markets is because one variable is weather in France, which by definition is not affected by investor sentiment. (There is some causality between equity returns and Bordeaux wine because the price for Bordeaux is also a function of general wealth, which to some extent is dependent on the level of the stock markets.) Further alternative investments could include other commodities, which are dependent on weather (as opposed to economic conditions for commodities) or weather risk itself.
- ¹⁰ For a discussion of the issue, see, among others, Anson, Mark. “Selecting a Hedge Fund Manager.” *The Journal of Wealth Management*, Winter 2000, pp. 45-52.
- ¹¹ Admittedly, this constitutes a pretty wide range of estimates. The reason is that there is no consensus as to what a ‘fund’ is. We assume that some vendors, to exaggerate the size of their database, list for example Class A shares (leverage 2:1) and Class B shares (leverage 3:1) as two separate funds. We would consider these two separate share classes. By this reckoning, the number tranches joined by *pari passu* approaches (hot issues/no hot issues, onshore/offshore, leveraged/non-leveraged, US\$/other currency, etc.) suggest only about 2,000 different ‘funds’, with probably 8,000 different share classes.
- ¹² Some investors still regard the fee structure of a single hedge fund as excessive. However, fees are probably positively correlated with skill. An unskilled manager will not be in a position to demand high fees. Liang (1999), for example, finds that average hedge fund returns are positively correlated with incentive fees, fund assets, and the lockup period. (In addition, excess returns cannot be explained by survivorship bias.)

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- ¹³ One could argue that an investor pays a long-only manager based on the potential ex-ante value-added. In other words, the fees are calculated not based on beta (which is not scarce) but on the ex-ante alpha.
- ¹⁴ The asset classes were US equity, non-US equity, emerging markets, US bonds, non-US bonds, high-yield corporate bonds, the US dollar, gold, and cash.
- ¹⁵ This is, obviously, not the full story. The flexibility comes at a cost. In addition, hedge fund returns are not normally distributed, adding an extra layer of complexity and calling for greater efforts in due diligence, portfolio construction and risk monitoring. Agarwal and Naik (2000) examined the performance of hedge funds following different strategies using a generalized asset-class factor model consisting of excess returns on buy-and-hold strategies and passive option-based strategies. This model is able to explain a significant proportion of variation in hedge fund returns over time. The result of this study suggested that only 35% of the hedge funds have added significant value in excess of monthly survivorship bias of 0.30%. Performance varies over time. 37% of the funds added value in the early 1990s compared to 28% in the late 1990s.
- ¹⁶ Unfamiliarity is not a very scientific and sophisticated way of expressing risk. Note, however, that LTCM was, without a shadow of a doubt, the most scientific and sophisticated risk managers with honors and high-flying reputations in both academia as well as Wall Street. The point is that it is probably healthy to practice some degree of conservatism to anything new, even if we cannot model it econometrically. In addition, there is a difference between risk management and risk measurement. Risk measurement can be done by econometricians. Risk management cannot.
- ¹⁷ See Institutional Investor Magazine, September 2001.
- ¹⁸ The counterargument to this notion is that from 1995 until March 2000 inexperienced investors loading up on Internet stocks were outperforming the establishment, which, to a large extent, thought that the market was 'overpriced.' Most 'seasoned' investment veterans probably agreed with Alan Greenspan and Robert Shiller that the market was 'irrationally exuberant.' That was in December 1996, i.e. many years before the peak. However, Taleb [2001] tells the story of 'John' – an unskilled trader unfamiliar with statistics and randomness – who acquired a fortune over a seven-year period and losing all over a seven-day period in 1998 by ignoring 'event risk' and its asymmetrical return distribution.
- ¹⁹ Whether hedge funds are a separate asset class or not is open to debate. Normally, investment vehicles with different risk, return and correlation attributes are classified into different asset classes. This would suggest that hedge funds are a separate asset class, as their risk, return and correlation attributes are different from equities and bonds. However, value and growth investing have different attributes but are not separate asset classes. One could argue that long-only, market-neutral or long/short strategies are simply other investment styles (but not different asset classes) as are value, growth and small-cap investing. For a more detailed discussion of this issue, see Greer (1997 or Horvitz (2000).