Hedge Fund Education Series
Part 1: What are *Hedge Funds?*

Reports in this series

This primer is designed to assist investors in furthering their understanding of the hedge fund space. It explains the basics of hedge funds, introduces concepts of credit and market risk arbitrage, explains popular trading strategies and provides examples of arbitrage trades in an easy to understand form. The primer series also explains hedge funds' asset characteristics and provides insights into the manner in which they may be included in investor portfolios. It is intended to serve as an investor's quick guide to hedge fund investing.

The alternative investment universe consists of investments outside of publicly traded debt, equity, and real estate. It includes investments ranging from hedge funds and managed futures to venture capital, private placements, private equity LBO funds, natural resource partnerships, private real estate and commodity investments.

The alternative investment industry is changing - maturing, expanding and increasing in complexity. At the same time, it has attracted interest from a growing number of institutional and individual investors. Individual investors have begun to increasingly embrace alternative investments, which, when added to a traditional investments, have the potential to diversify an investor's portfolio, and have historically had a lower correlation to traditional equity and fixed income investments.

But even market-seasoned investors may find certain types of alternative investments, in particular hedge funds, all but impenetrable. Hedge funds present unique risks that differ from traditional investments. Also, in most cases, the primary source of hedge fund returns is from manager skill and security selection, rather than from directional asset class exposure. The superior return characteristics of hedge funds are also, at least in part, driven by risk control processes that are central to the goal of producing positive returns in most, if not all, market environments. Even though modeling and measuring these risks presents challenges, from an optimal portfolio construction perspective, it may often be beneficial to include hedge funds.

Hedge funds have the potential to provide access to additional sources of return by allowing investors to participate in a wide variety of new financial strategies and markets that are not available to traditional stock and bond investors, and may also diversify a traditional portfolio.

Hedge funds have become increasingly popular over the last ten years. Hedge Fund Research, Inc. (HFR) estimates that that there are close to 9000 funds in existence with approximately $1.76 trillion assets under management (AUM). In 2000, this number was less than $500 billion.

As hedge funds have gained stature and prominence, the term "hedge fund" has developed into a catch-all classification for unregistered privately managed pools of capital. A hedge fund, in essence, is an investment structure for managing a private, loosely regulated, investment pool that can invest in both physical securities and derivative markets on a leveraged basis. It may take the form of a limited partnership, corporation or trust depending on where the fund is domiciled and the type of investors it seeks to attract. Most U.S. based hedge funds are structured as limited partnerships while hedge funds outside the U.S., or "offshore" funds, are typically structured as limited liability companies.

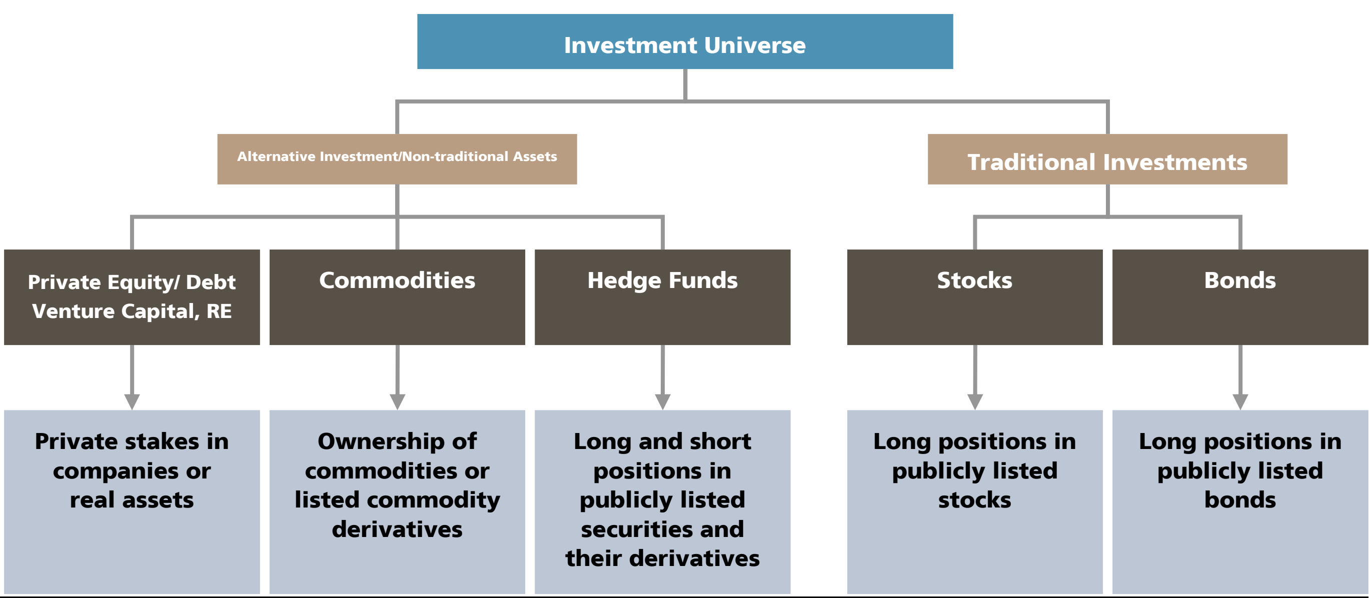
They can be distinguished by their investment technique (i.e., ability to "short"[1] sell, employ leverage, utilize dynamic trading strategies and derivatives) as well as their unique structure (i.e., largely unregulated limited partnerships).

In general, hedge funds:

- Allow the fund manager to be active on both the "long" and "short" sides of the markets.
- Compensate the fund manager with performance related fees in addition to asset-based fees.
- Allow the fund manager flexibility in investment style and approach.

Where hedge funds fall within the universe of investment opportunities versus more traditional investments is illustrated in Figure 1.

Figure 1: Alternative investments complement stock and bond investing



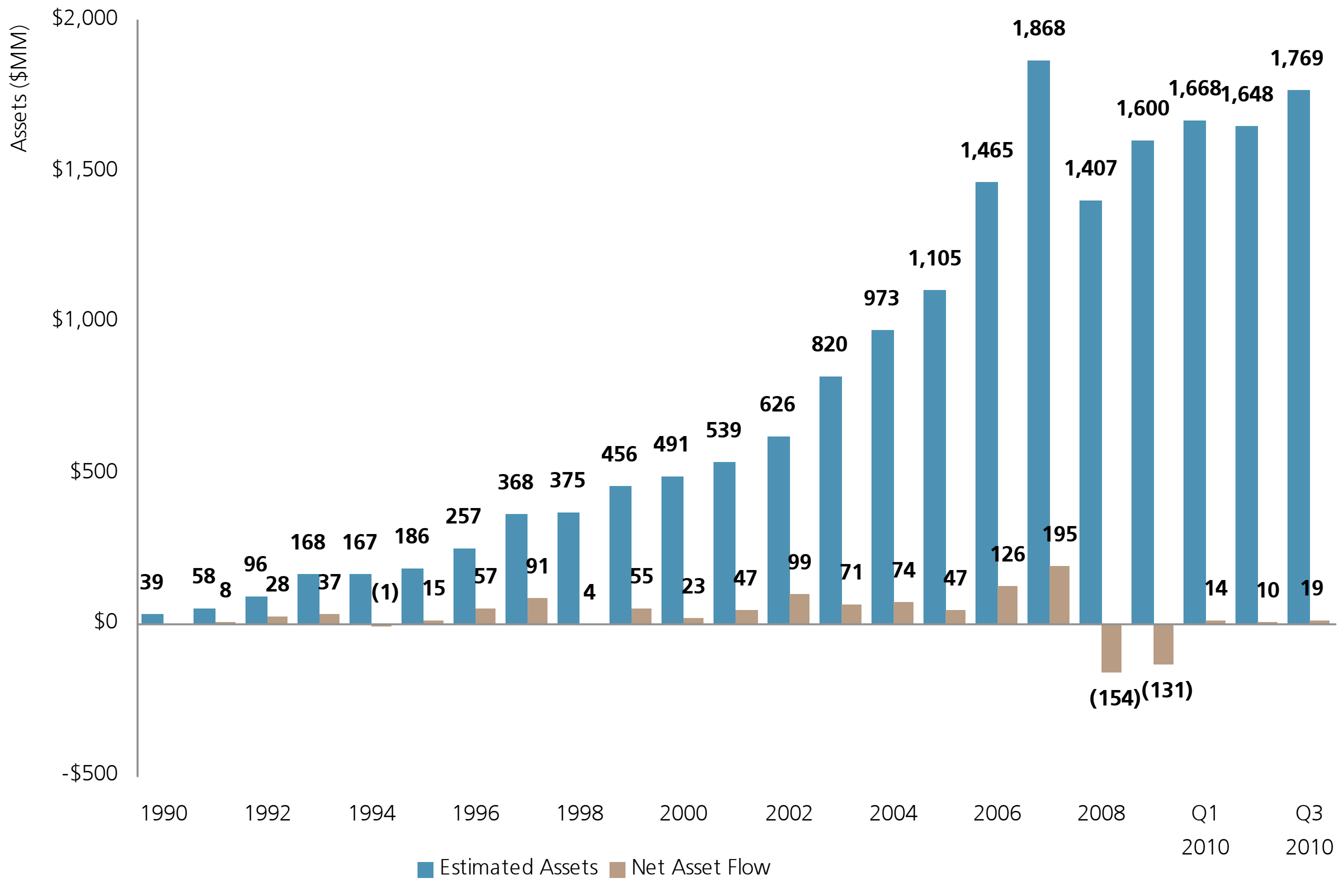
Source: UBS. RE = real estate

Industry size

Although high net worth individuals have historically been investors in hedge funds, in recent years, institutional investors, mostly pension funds and endowments, have been a growing presence. Around 2001, after the internet bubble burst, university endowments began increasing their allocation, responding in part to the lackluster performance of technology, media and telecom equity markets. Following the lead of university endowments, pension plans too have been increasing their allocations. The hedge fund industry has continued to grow in terms of both AUM and number of funds, as shown in Figure 2 and Figure 3.

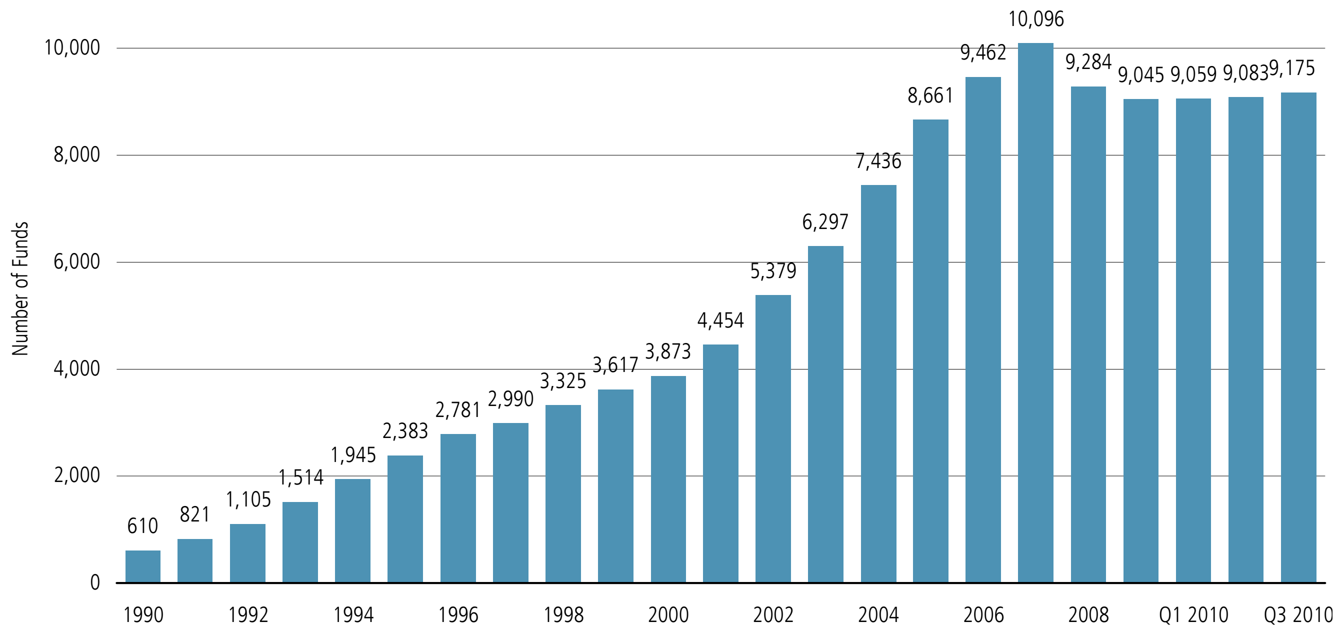
Figure 2: Growth in hedge fund assets resumes

Estimated growth of assets and net asset flow in hedge fund industry



Source: HFR Industry Reports, © HFR, Inc., www.hedgefundresearch.com

Figure 3: Number of hedge funds still off 2007 peak
Estimated total number of hedge funds and fund of funds



Source: HFR Industry Reports, © HFR, Inc., www.hedgefundresearch.com

Industry consolidation

Because there are thousands of potential investors in hedge funds and, traditionally, entry barriers to setting up such funds had been low (this is changing with enhanced regulation), such funds have proliferated. However, at the same time, a part of the hedge fund industry is consolidating around a relatively small number of large players that are well defined by a group of identifiable trading styles and strategies. Funds of hedge funds and investment consultants have identified and steered investments into a select group of larger and more established managers.

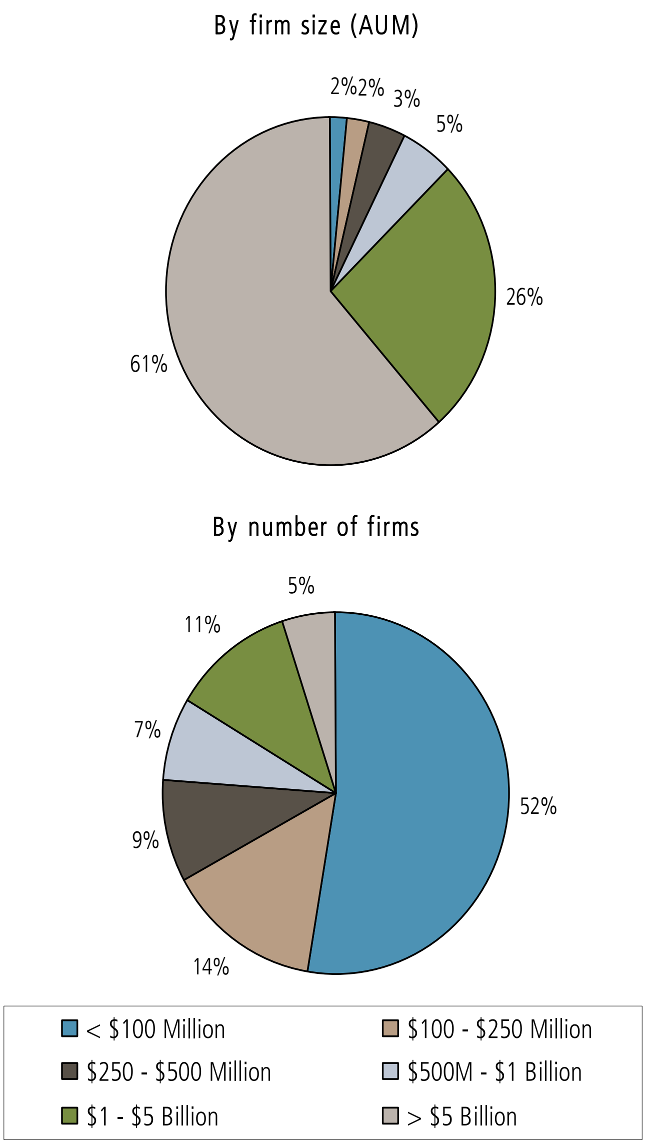
The top firms tend to

- be larger and better organized;
- have longer track records,
- house multiple managers and decision makers;
- offer diversified trading approaches,
- have developed improved systems and risk management processes; and,
- be more transparent and better understood by their clients, partly due to their high visibility.

These select groups of money managers have identifiable brand names, significant AUM and, more importantly, a verifiable track record of at least three or more years.

Despite the proliferation of funds over the years, the industry, in terms of AUM, remains very concentrated. Around three fourths of AUM reside in very large firms i.e. less than 500 firms, with the top 100 managing most of the capital. The industry AUM distribution is depicted in Figure 4.

Figure 4: Bulk of AUM is with large firms
Distribution of industry assets by firm AUM tier, Q3 2010



Source: HFR Industry Reports, © HFR, Inc., www.hedgefundresearch.com

Heterogeneity in trading strategies

Hedge funds form a heterogeneous group that utilizes many different strategies in delivering returns. These returns can be quite different from each other. There are over 20 hedge fund strategies, the important ones being described in detail in Part 4 of this series. These strategies are simple to understand but have been cloaked in jargon making them quite undecipherable to all, but academics. This education series attempts to uncloak the mystique.

Examples of strategies

- Convertible Arbitrage funds typically attempt to extract value by purchasing convertible securities while hedging the equity, credit, and interest rate exposures with "short" positions of the equity of the issuing firm and other appropriate fixed-income related derivatives.
- Dedicated Shorts are funds that specialize in "short" selling securities that are perceived to be overpriced, typically equities.
- Long/short equity funds are typically exposed to a long-short portfolio of equities with a long bias.
- Emerging Market funds specialize in trading the securities of developing economies.
- Equity Market Neutral funds typically trade long-short portfolios of equities with little directional exposure to the stock market.
- Event Driven funds specialize in trading around corporate events, such as merger transactions or corporate restructuring.
- Fixed-Income Arbitrage funds typically trade long-short portfolios of bonds.
- Macro funds bet on directional movements in stocks, bonds, foreign exchange rates, and commodity prices.

The risk and return attributes of hedge funds are determined by their investment strategy. The common element amongst strategies is the use of investment and risk management skills to seek positive returns regardless of the direction of equity and bond markets. Most of the well performing hedge funds place particularly strong emphasis on the disciplined use of investment and risk control processes. This can potentially generate returns with both low volatility and a low correlation with traditional equity and fixed income benchmarks.

Unlike most traditional stock and bond investments, hedge funds often use leverage (described in Part 2 of this series) for both return and risk management purposes. Some hedge fund strategies also use leverage to increase either the size or the number of positions in the fund's portfolio. Some strategies involve the use of leverage to amplify the small residual returns generated by spread trades, the risk of which is lower than outright directional trades. Also, leverage in the form of short selling is often used to hedge, i.e. offset, the portfolio's directional market exposure, which is intended to reduce some market risk.

Hedge funds compared to mutual funds

For traditional investments, mutual funds have been popular investment vehicles. A mutual fund raises money from shareholders and invests it in a group of assets, in accordance with a stated set of objectives. As an alternative investment vehicle, a hedge fund is fundamentally different from a mutual fund -- relative to mutual funds, hedge funds attempt to attain a positive return with a low directional market exposure (referred in the financial jargon as beta).

Figure 5: Differences between hedge funds and mutual funds

Hedge funds	Mutual funds
Managed by a manager who receives a management fee and who also participates in investors' profits.	Managed by a fund manager who typically does not profit in investor's profits, but who gets paid the same fee, the management fee, regardless of whether investors profit or lose.
Available to qualified investors, high-net worth individuals and institutions by a confidential offering memorandum and a partnership agreement.	Available to the general public by prospectus.
Privately offered and typically not allowed to advertise.	Can advertise.
Minimal limitations by the SEC in the securities or strategies they may use.	Subject to SEC regulations by way of strategies they can use and underlying instruments that they can invest in.
Entry is significant - $250K to $1MM+.	Entry is usually from a few thousand dollars.
Illiquid. Investors may not be able to redeem shares at any time.	Redeemed daily on the open markets.
Usually a lock-in period.	Sometimes a fee to redeem early; shares can be bought or sold daily when market is open.

Source: UBS

Besides the differences listed in the above table, hedge funds lack the transparency the mutual funds have; as inherently private investment vehicles this secrecy is partly on account of the fact that managers engage in trading tactics which run the risk of being jeopardized, were the specifics of their trading positions be exposed to clients, and by extension to other traders. Because most hedge fund charters allow their managers wide latitude in investment instruments and strategies, "style drift," in which a hedge fund's investments falls outside their stated investment style, occurs more frequently than desired. These concerns are being dealt with at a number of levels - regulatory, legislative, industry and banking, resulting in improvements in the transparency and risk management practices of the leading hedge funds.

Alternative mutual funds

Traditional investment companies and mutual funds, institutional asset managers and bank owned asset management firms have been developing alternative investment programs, attracted by their high fees, incentive compensation and ability to provide diversification from traditional investment vehicles. The ability of mutual funds to offer hedge fund programs was made possible by the SEC's removal of the short-short rule, which dictated that mutual funds may not derive more than 30% of their profits from short-term trading and "short" selling. However, mutual funds are still required to have 300% coverage on debt - thus they can only leverage up to 1/3 of their equity. A number of mutual fund companies now offer hedge funds, especially sector and market-neutral funds, within their range of investments.

Regulatory changes are blurring the boundaries of what were once classified as "traditional" investments from "alternative" investments. Many long-only large asset management firms, that in the past dealt with "traditional only"-type products have begun offering hedge fund strategies; they employ hedge fund techniques such as short-selling and leveraging trades. In the same vein, some traditional hedge funds have begun offering their strategies in a mutual fund format - ostensibly to attract retail investors that were precluded from investing in hedge funds. Both traditional managers and hedge fund managers stand to benefit from increased fund flows, the ability to offer higher margin products, and revenue diversification. A number of long-only traditional funds, when offered in a hedge fund format offer monthly liquidity, sometimes impose short lock-ups and ask for both management and performance fee.

Certain strategies such as "long-short," that exhibit greater correlation with equity markets and in general have a long only bias, are more suitable than others (such as those with illiquid underlying holdings) to be offered in mutual fund formats. Other hedge fund strategies that have gained traction include market-neutral, commodity investing and currency funds. This is because these strategies can be implemented using very liquid underlying instruments such as futures and options.

Probably the greatest advantages to investors accrue from increased transparency, low minimums, and greater liquidity (daily), reduced fees and stronger regulatory oversight.

Appealing as they are prima facie, hedge funds wrapped as mutual funds are intended to serve as diversification vehicles, rather than as skill based (or "alpha") vehicles. For some investors, the main reason to participate in hedge funds is to reap higher returns, rather than to achieve portfolio diversification, believing that diversification can be cheaply arrived by using other investment vehicles. In such cases, employing hedge funds in a mutual funds structure may be less than optimal.
In certain cases, though not all, hedge funds wrapped as mutual funds may structurally inhibit the flexibility need for alpha generation for a number of reasons:

- Mutual funds have restrictions on leverage, as mentioned earlier, where only a third of the fund can be leveraged. The average leverage in the hedge fund industry depending on the strategy is 1.8 to 3 times, considerably higher than in mutual funds. The higher leverage in hedge funds may help increase returns, but it of course, also has the potential to magnify losses.

- Mutual funds are required by the Investment Company Act of 1940 to provide daily liquidity - less than 15% total fund AUM can be invested in relatively illiquid underlying instruments. This prohibits such vehicles from unlocking the illiquidity premium in underlying securities. Hedge fund investments are considerably less liquid than portfolios of traditional assets. They generally allow quarterly or less frequent withdrawals, generally after a one-year initial commitment. On the positive side, limited withdrawal frequency does let managers focus on longer-term performance without the distraction and demands of, in many cases, daily withdrawal rights provided by traditional managers. This can improve performance. The flip side to this is it creates a perverse incentive on the part of the hedge fund manager to hold on to underperforming securities in the hope that they may some day recover in price in the future.

- Mutual funds have restrictions on the usage of derivatives. Such restrictions curtail efficient ways to both gain exposure and to hedge - which often reduces skill-based "alpha"-generation potential. However, derivatives when improperly employed can prove to be very risky.

- Mutual funds have restrictions on the incentive fees that they can charge. The best investment professionals may not be attracted to such fund complexes. However, there is evidence (albeit inconclusive) that higher management fees and incentive compensation can significantly limit after-fee returns available to investors.

- Many hedge fund strategies cannot be successfully implemented in the open-end format; such as global macro, fixed income arbitrage, or distressed investing, which may require the use of leverage, expression through derivatives, or holding of illiquid securities - all of which are restricted in the mutual fund world. It is for this reason that only certain hedge fund strategies, as highlighted earlier, have gained traction in mutual fund formats.

- Hedge fund strategies have flexible mandates which allows for manager strategy to evolve as market conditions change. Mutual fund structures are not allowed to have flexible investment mandates - most have narrowly defined charters, a practice driven by industry and regulatory convention. While the investment flexibility that hedge funds enjoy has numerous benefits it does entail the risk of style drift within any given fund.

Industry regulation

Historically, the offer and sale of securities within the United States has been subject to concurrent federal and state regulation under the Securities Act of 1933 (the "Securities Act") and state "blue sky" laws. In order to avoid the registration and prospectus delivery requirements of the Securities Act, securities of hedge funds and offshore funds are typically offered in private placement transactions which rely on the private placement "safe harbor" provisions of Regulation D, or the safe harbor for offerings outside the United States contained in Regulation S.

The exclusions from registration under the federal securities laws that apply to hedge funds and their securities offerings are central to hedge funds' ability to operate in their current form. The exclusions define the investment strategies that hedge funds may pursue, the types of investors who generally may invest in them, and how they may be sold. Hedge funds are able to avoid certain regulations by meeting criteria that is laid out in four general exclusions or exceptions:

1) the exclusion from registration of the fund under the Investment Company Act of 1940

2) the exemption from registration of the fund's securities under the Securities Act of 1933

3) the exception from registration of the hedge fund manager under the Investment Advisers Act of 1940

4) the exception from reporting requirements under the Securities Exchange Act of 1934.

Investor suitability

In the U.S., hedge fund investment is restricted to sophisticated, qualified high net worth individuals and institutions who are presumed to understand the risks that hedge fund investing entails, and who, theoretically can afford to lose their invested principal. Generally, hedge funds accept investments only from qualified purchasers and registered hedge funds accept investments only from qualified clients. Generally, a "qualified eligible person" is an accredited investor that owns securities of issuers not affiliated with such person with an aggregate market value of at least $2 million.

In some other countries, hedge funds are more strictly regulated.

Hedge funds are not for every financially qualified investor. Furthermore, not all hedge fund strategies may be appropriate even for the qualified, informed and sophisticated investor. Nevertheless, a judiciously chosen allocation to hedge funds may be beneficial for those qualified investors who have educated themselves about hedge funds and are willing and able to accept those risks. As a general rule, the risks of investing in a particular hedge fund are described in the fund's confidential private offering. Many hedge fund offering documents state *"An investor should carefully review and consider such risks, and consult with financial and tax advisors, before making an investment in..."*

Other risks associated with hedge funds investments include, but are not limited to:

- They can be highly illiquid. Hedge fund managers may limit the ability of investors to withdraw funds. This limitation may be done in different forms and will sometimes prevent investors from accessing their investments in periods that can exceed one year after the initial investment. These limitations are in themselves a potential source of risk because they constrain the ability to rebalance investor portfolios, meet liquidity events or react to manager underperformance.

- They are not required to provide periodic pricing or valuation information to investors although managers do provide investors with reports.

- They may involve complex tax structures and delays in distributing important tax information.

- They are, as mentioned earlier, not subject to the same regulatory requirements as mutual funds.

- They often charge higher fees and the high fees may offset trading profits.

- They may have performance that is volatile.

- There is no secondary market for an investor's interest in the fund.

- They may have restrictions on transferring interests in the fund.

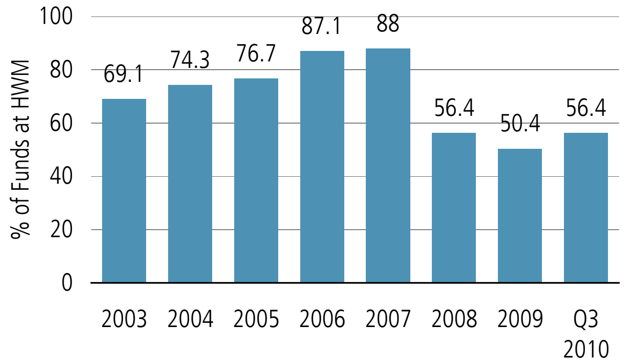
Fee structure

The fees in the hedge fund industry are higher, than those charged in the traditional fund management industry. While a typical long-only manager may charge 50-100 bps of AUM, hedge fund managers usually charge a management fee of 2% and 20% of the profits known as incentive fees. Some funds are able to command above average fees because they have historically provided superior risk-adjusted returns and often have very limited capacity to accept additional investors. This is simply a case of supply and demand; the relatively small number of superior hedge fund managers are in such demand that they are under no business-related pressure to acquiesce by dropping their fees. Performance-based compensation has the potential to create positive manager selection. The hedge fund structure is attractive to top tier talent as it affords greater financial rewards to managers who can deliver net performance on large pools of investor capital.

The incentive fee is a percentage of profit above a base, typically, the asset value at the beginning of the year. It is generally subject to a "high watermark" provision. Being under the watermark means that, in the short run, the manager will not receive any incentive fees. This is sometimes cited as a cause for hedge funds going out of business after periods of sub-optimal performance.

Strong rewards can thus be linked to fund performance. Hedge fund managers are usually invested in their funds and share the rewards as well as risks with their investors. The "incentive fee" remunerates hedge fund managers based on performance benchmark, whereas mutual funds pay their financial managers according to the volume of assets attracted, regardless of performance.

Figure 6: Many funds are below their high watermark (HWM) suggests higher closure risks
HFRI Fund Weighted Composite Index, % of constituent funds at high watermark



Source: HFR Industry Reports, © HFR, Inc., www.hedgefundresearch.co

Hedge fund flexibility comes at a cost

While we have highlighted many benefits that investments in hedge funds can provide, it is important to understand that these advantages come at a cost:

a) *Fees.* As described previously, this is the most visible cost in investing in hedge funds. They are split in two parts: management fees and performance fees. Management fees are a fixed cost and hence a direct drag on performance.

b) *Asymmetric downside risk.* Having flexibility to invest in non-traditional securities and to use leverage, hedge funds are exposed to different sources and magnitudes of risk. If these risks are not properly managed, hedge funds risk losing a substantial part of their assets. The possibility of infrequent but substantial losses, which exceed in magnitude and probability those of normally distributed returns, is known as asymmetric downside risk.

c) *Liquidity constraints.* On top of fees, hedge fund managers may limit the ability of investors to withdraw funds. This limitation may be done in different forms and will sometimes prevent investors from accessing their investments in periods than can exceed one year after the initial investment. These limitations are, themselves, a potential source of risk because it constrains the ability to rebalance the investor portfolios, meet liquidity events or react to manager underperformance.

Liquidity constraints and cost

A typical hedge fund agreement stipulates the redemption policy. This redemption policy has generally the following provisions that restrict investors from redeeming their shares:

- *Lockup period:* all initial monies allocated to their fund cannot be withdrawn for a certain period of time. After the initial lockup period, investors can redeem their shares only at certain periods. Lockup periods range from 3 months to 3 years although not all hedge funds impose lockups. For those funds that do impose lockups, the typical lockup period is one year.

- *Redemption Frequency:* after the lockup period, investors in hedge funds may redeem their shares. However, the redemption process is not continuous and investor can only redeem at certain points in time. The periods where investors are allowed to withdraw funds are controlled by the redemption frequency. For instance, if the redemption frequency is 3 months, an investor can only withdraw funds every 3 months after the lockup period has expired. This translates into a maximum of 4 withdrawing events each year.

Redemption frequencies can range from daily to annually. Not all hedge fund managers impose redemption frequency restrictions.

- *Redemption notice:* investors are generally required to give notice some time in advance before any redemption. This minimum notice period is known as a redemption notice period. Redemption notice periods range from 30 days to one year, although the most common periods notice periods are 30, 45 and 60 days. Some hedge funds do not impose a minimum redemption notice period.

Hedge Fund liquidity constraints impose risks and costs to investors:

1) Investors are limited in their ability to make tactical decisions. Within the lockup period, investors are unable to reallocate their position in a hedge fund. After the lockup period, investors can only change their allocations infrequently.

2) The constraints that limit the potential for tactical hedge fund allocations also restrict investors from using hedge fund redemption to meet unforeseen liquidity events.

3) Certain restrictions introduce new forms of risk: particularly, the redemption notice introduces uncertainty with regards to how the investor's portfolio will look once the redemption is executed. This occurs because redemption notices need to be given long before they come due (if there is a redemption notice clause) and before the valuation period for the hedge fund shares. Hence, one cannot know with precision how much of the hedge fund allocation will be drawn when the redemption decision needs to be made.

4) Not all hedge fund strategies provide investors a "premium" for bearing liquidity restrictions. Strategies like Global Macro which are likely to invest in very liquid markets, do not provide additional returns to investors who face liquidity constraints.

Investor reporting

Generally, reporting is provided on month-to-date net performance estimate of NAV; the industry practice is for performance numbers to be reported net after all expenses, management fees and incentive allocations. For many funds, monthly reporting consists of a performance commentary, accompanied by portfolio analysis, including a breakdown of the portfolio (strategy, security type and geography), an analysis of exposure (gross 'long' and "short," net "long" or net "short"), and their top positions by name. The investor's capital account statement is also sent monthly. At the end of each calendar quarter, an investor's capital account statement is accompanied by an investor letter, which often provides an in-depth narrative of the quarter in review as well as a look at current market conditions. Informally and intra-month, some hedge funds encourage their investors to call for updates on the portfolio and the markets. Hedge funds also send an audited financial statement to all shareholders following the end of each fund's fiscal year.

Conclusion

Well-managed hedge funds have the potential to offer returns that are superior to those of traditional investments by taking advantage of market inefficiencies. Given their historically low correlation to traditional asset classes, they have historically enhanced returns in economic environments in which traditional stock and bond investments have offered limited opportunities. Hedge funds, given their flexible mandates, also allow investors to participate in a wide variety of new financial products and markets not available in traditional investor products.

End Notes

[1]During "short" selling the fund manager borrows securities that it does not own (and pays fees and interest rate charges for such borrowing). The manager then sells such securities with the goal of acquiring them later at a lower price. The manager then returns the borrowed securities and retains the gain (should security prices decline in value), if any, from selling the securities short. If the prices of the borrowed securities rise the manager looses money as those securities need to be bought back at a higher price (for they were borrowed in the first place). To buy and hold something is referred to as taking "long" exposure.