Recent Hedge Fund Performance

Hedge funds have not shot the lights out recently

INEICHEN RESEARCH and MANAGEMENT (IR&M)

"Beware of past performance proofs in finance. If history books were they key to riches, the Forbes 400 would consist of librarians."
— Warren Buffett[1]

In this article we examine recent hedge fund performance which is the single most important factor for investors when examining hedge funds.[2] For many investors, recent hedge funds performance—rightly or wrongly—was disappointing.

The most recent past has been characterised by reflation, i.e., a monetary and fiscal stance that lifted all boats. The money printing has resulted in asset price inflation. Fig.1 shows performance of a selection of indices from the first announcement of quantitative easing (25 November 2008) to today.

- The HFRI Fund Weighted Composite Index, a proxy for the average hedge fund portfolio, has risen over the period of reflation. However, when compared to equity or corporate bond indices, hedge fund portfolios have lagged.
- The HFRI Fund of Funds Composite Index is a proxy for the average fund of hedge funds, i.e., is subject to two layers of fees. Funds of funds underperformed everything including government bonds and commodities.
- The worst performing index shown in Fig.1 is the HFRX Global Hedge Fund Index which is a so-called tradable index and can be viewed as a proxy for the average performance of the hedge fund portfolio that is available to retail investors via financially engineered structures that are traded on an open market and, in many cases, have a regulatory seal of approval of some sort.

Fig.1 Performance of selected indices (1 Dec 2008 – 31 Jan 2013) *Source: IR&M, Bloomberg*

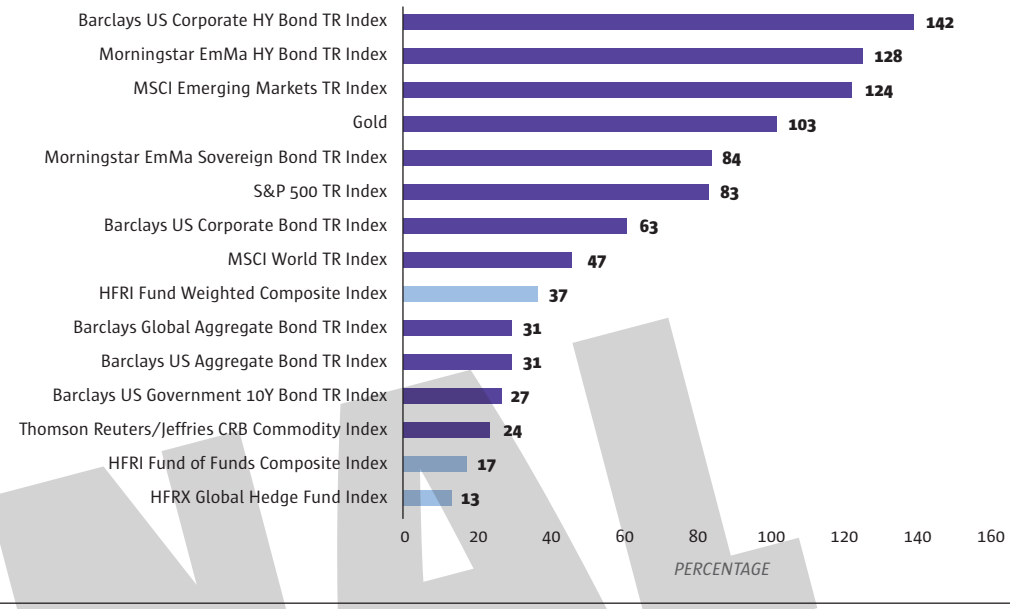


Fig.1 obviously does not make for happy reading from the perspective of hedge funds. However, examining only the period of reflation is misleading. Bad research is characterised not by what it says but what it omits. Many pundits have been lamenting hedge fund performance over the past couple of years. What were they missing? They were omitting that absolute return investing involves hedging and hedging more often than not comes at a cost. From December 2008 to January 2013—with a very big dose of hindsight bias—investors did not need to hedge; the authorities, via monetary and fiscal gimmickry[3], did the hedging. A conservative investment style, that obviously involves hedging, was more costly and therefore has underperformed other investment choices that are long only and do not include any safety nets. There is a Wall Street aphorism that says a bull market misleads the average investor to mistake himself for a financial genius. This wisdom also applies to the recent period of reflation; as the abundant liquidity and intervention lifted all boats. The various stimuli of the past couple of years would probably even make Lance Armstrong blush.

Fig.2 Performance indexed to 100, selected indices (Jan 2000 – Jan 2013) *Source: IR&M, Bloomberg*

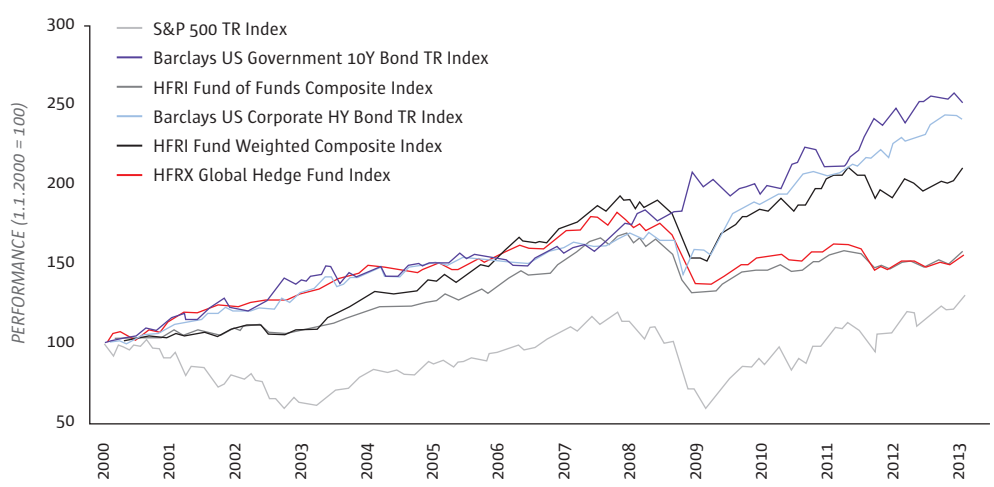


Fig.2 shows the performance of a subset of indices from Fig.1 from January 2000 to January 2013. This time period includes parts of the Great Moderation, the Great Recession as well as the burst of the internet bubble and the 2008 financial crisis.

- Asset prices, thanks to ongoing interventions, have recovered from the dark days of 2008 and early 2009. The various hedge fund products are somewhere in between equities and bonds when examined in this fashion.

Note that in the very long term, hedge fund performance looks attractive (see Fig.3). However, hedge funds were different in the 1980s and 1990s. Hedge funds were more directional than—as an industry—they are today. Furthermore, the industry was much smaller and nimble and could operate more freely, i.e., unobserved by investors, media and regulator.

- There is a saying that hedge funds deliver equity-like returns with bond-like volatility. When examining the 1980s, 1990s, and 2000s this seems to be close to the truth. In the 1980s and 1990s hedge fund returns were indeed equity-like. Then in the 2000s, which was essentially the back-end of

an unprecedented, monetary-policy-baby-booming-technology-revolutionising-peace-dividend-induced equity bull market, hedge fund returns were akin to that of a bond portfolio. The saying is not working very well in this decade though, as hedge funds have underperformed both equities and bonds so far this decade.

- Hindsight is a wonderful thing. If your grandma had invested in a well diversified portfolio of hedge funds in January 1970, you would have done well.

Coco Chanel once said: "Fashions change but style endures." We are tempted to argue that this is applicable to the world of investments. Fashion is something that ebbs and flows. It is a question of time until your author's Hawaii Shirts will be fashionable again. (His old aviator Ray Bans already are.) The same is true with long-only investments; they come and go, ebb and flow. However, an investment style that permanently focuses on risk management, i.e., the preservation of capital under difficult market circumstances, is something that endures.

In the institutionalisation of the equity market, as with aviator Ray Bans, there were pioneers, early adaptors, and late-comers. The pioneers are typically a small group. For reasons that are beyond the scope of this document, it was the English-speaking economies that developed an equity culture of some sort very early on. In the US the idea of investing 60% of assets into equities while 40% into bonds held for many years, decades even. In inflation-prone UK the equivalent allocations were closer to 70% and 30%.[4] An institutional equity culture in continental Europe developed in the 1990s whereas equity allocations—generally speaking—never reached the "English-speaking" levels of 60% or 70%. Some (governmental or government-sponsored) entities literally started allocating to equities plus or minus a couple of months from the 2000 peak. (Investment life can be quite brutal; resembling to some extent a game of musical chairs: someone is always left without a chair).

In "hedge funds" something similar happened. The institutional pioneers invested in the 1990s; early adaptors around 2000-2002; and then the institutionalisation of the hedge fund industry took off. Fig.4 shows rolling five-year returns for an average hedge fund portfolio, US equities and US bonds. The institutionalisation of hedge funds took place during a time where nearly any diversified portfolio of hedge funds had outperformed equities or a 60/40 equity/bond mix on a rolling five year basis. However, hedge funds have recently touched a low point in their history.

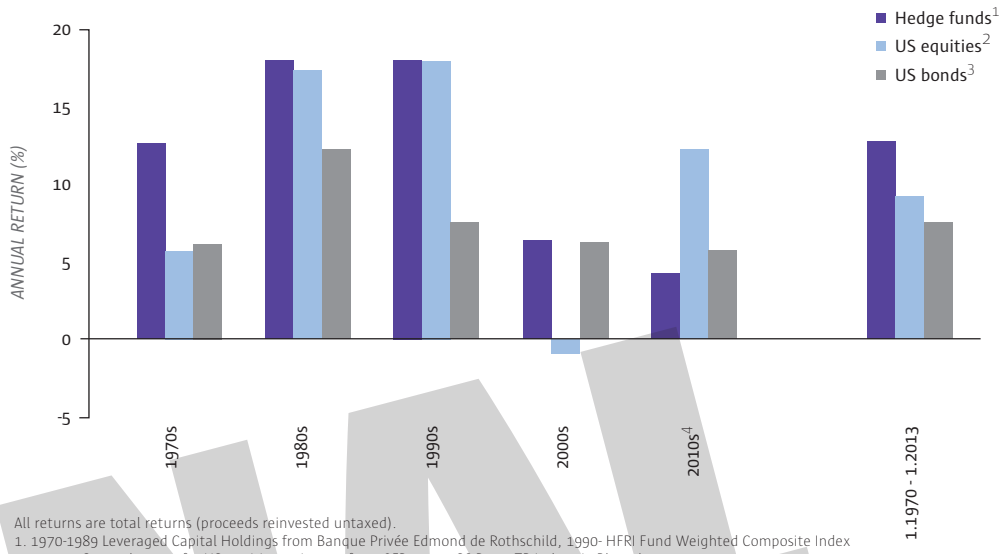
- The average hedge funds portfolio is close to a multi-generational or all-time low. When measured by a rolling five-year return, hedge funds have reached a low of 0.8% annualised five-year return as of October 2012.

- There are not many five-year periods where the average hedge funds portfolio does not outperform a balanced US equity-bond portfolio. Hedge funds, net of one layer of fees, not two, have outperformed a monthly rebalanced portfolio of 60% equities and 40% bonds in 89% of all occurrences in Fig.4. However, since April 2012, the balanced portfolio outperformed hedge funds on a five-year rolling basis.

One question one ought to ask is whether the current governmental induced bull market for risky assets can go on forever. Potentially not. Potentially Herbert Stein's Law applies.

Fig.3 Long-term return comparison (Jan 1970 – Jan 2013)

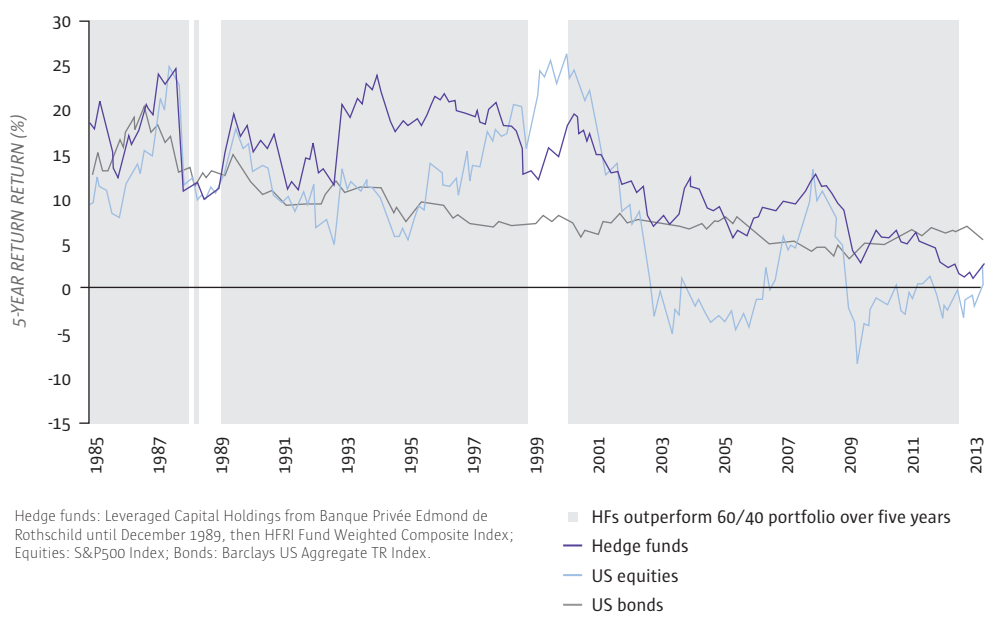
Source: IR&M, Banque Privée Edmond de Rothschild, Bloomberg, Global Financial Data (GFD)



All returns are total returns (proceeds reinvested untaxed).
1. 1970-1989 Leveraged Capital Holdings from Banque Privée Edmond de Rothschild, 1990- HFRI Fund Weighted Composite Index
2. 1970-1989 total return for US equities estimates from GFD, 1990- S&P 500 TR Index via Bloomberg
3. 1970-1979 total return estimates for US Corporate Bonds from GFD, 1980- Barclays US Aggregate TR Index from Barclays via Bloomberg)
4. As of January 2013.

Fig.4 Rolling 5-year return comparison (Jan 1985 – Jan 2013)

Source: IR&M, Banque Privée Edmond de Rothschild, Bloomberg



Hedge funds: Leveraged Capital Holdings from Banque Privée Edmond de Rothschild until December 1989, then HFRI Fund Weighted Composite Index; Equities: S&P500 Index; Bonds: Barclays US Aggregate TR Index.

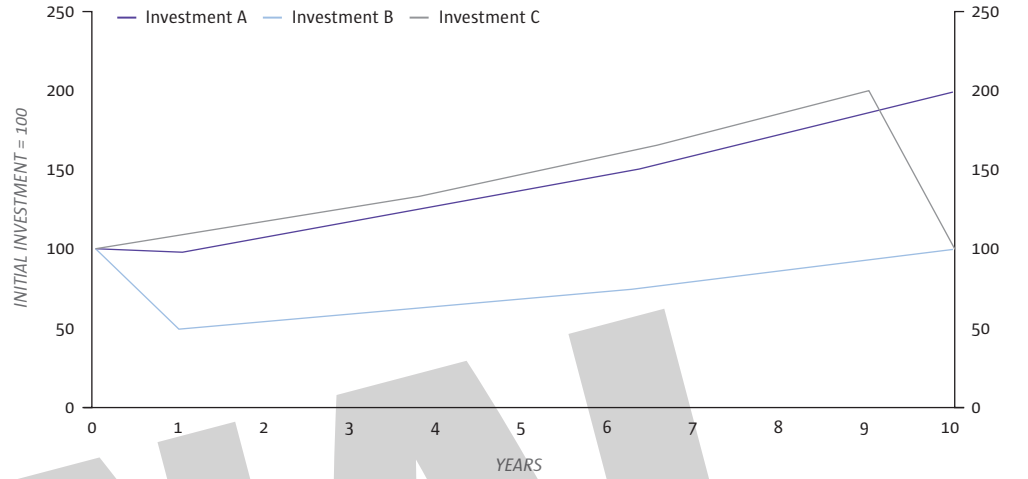
Herbert Stein's Law

Herbert Stein was the formulator of "Herbert Stein's Law," which he expressed as "If something cannot go on forever, it will stop," by which he meant that if a trend (balance of payments deficits in his example) cannot go on forever, there is no need for action or a programme to make it stop, much less to make it stop immediately; it will stop of its own accord. Stein's law has been recited in many different versions. But all have a common theme: If a trend cannot continue, it will stop. It is often rephrased as: "Trends that can't continue won't."

QE1 has been effective since 25 November 2008, as mentioned before. The dosages have been increasing (the Europeans are intervening too) while the effectiveness, one could argue, is falling. Gil Atkinson (1827-1905), businessman and inventor of the automatic sprinkler, was once quoted saying: "If you're already walking on thin ice, you might as well dance." This, we believe, describes the current stimuli-prone investment environment pretty well. Unhedged investors are currently dancing on thin ice. We believe there is a better approach.

Fig.5 Compounding effect

Source: Ineichen (2012)



Different investment approaches

Hedge funds have an investment approach that is different than the long-only approach from traditional asset management (see Table 1). Note here that if a long-only fund is re-branded to include the "absolute returns" moniker that does not mean that it is indeed an absolute return vehicle. The advent of absolute return mutual funds in the US and UCITS in Europe has blurred the borderline between these two approaches. Four years after the 2008 financial crisis, many an asset manager has the absolute return moniker in his marketing material but not necessarily the risk management process that goes with it.

The return objective of a relative return manager is determined by a benchmark. An index fund aims to replicate a benchmark at low cost while a benchmarked long-only manager tries to beat the benchmark. In both cases the return objective is defined relative to a benchmark, hence the term "relative returns". Hedge funds do not aim to beat a market index. The goal is to achieve absolute returns by exploiting investment opportunities while trying to stay alive.

In the late 1990s, many long-only managers needed to buy starkly overvalued technology stocks because these stocks comprised a large percentage of the benchmark index.[5] These managers were "forced" to buy these stocks for tracking risk considerations despite the obvious overvaluation. In a sense, these managers were "forced buyers" whose presence is a similar market inefficiency as the presence of forced sellers. The problem resolved itself a couple of years later as the stocks lost 80-95% of their value and therefore became a much smaller part of the benchmark.

The difference between the two models in terms of how risk is defined and managed is more subtle. Defining risk relative to a benchmark means that the risk-neutral position of the manager is the benchmark and risk is perceived as deviations from the benchmark. For instance, a benchmarked equity long-only manager moving from equities into cash (yielding the risk-free rate) is increasing risk as the probability of underperforming the benchmark increases. In other words, the probability of meeting the (return) objective declines – hence the perception of increased risk. In the absolute return space, the risk-neutral position is cash. A move from an equity long position into cash means reducing risk as the probability of losing money decreases. The same transaction, moving from equities into cash, can mean both increasing as well as decreasing risk, depending on how risk is defined.

Put simply, under the absolute return approach, there is an investment process for the upside (return-seeking by taking risk) and for the downside (some sort of contingency plan if something unexpectedly goes wrong or circumstances change or the market is violently proving one's investment thesis wrong, etc). This could be a sudden exogenous or endogenous market impact, excess valuations, heavily overbought market conditions, a concentration of capital at risk, a change in liquidity, the sudden death of the marginal buyer, and so on. Absolute return investing, therefore, means thinking not only about the entry into a risky position, but also about the exit. Absolute return strategies, as executed by hedge funds, could be viewed as the opposite of benchmark hugging and long-only buy-and-hold strategies.

Under the relative return model, the end investor is exposed to mood swings in the asset class in an uncontrolled fashion. Defining the return objective and risk management relative to an asset benchmark essentially means that the manager provides access (beta) to the asset class – that is, risk and return are nearly entirely explained by the underlying asset class. This means the investor is exposed (has access) to the asset class on the way up as well as on the way down. Investing in a long-only fashion is like driving on a hill in a car with no brakes; as long as it's going up, everything seems fine. However, when it goes downhill on the other side, additional tools and skills are required to control risk.

Boring is good

An absolute return investment philosophy of hedge funds seeks to compound capital positively whereas a relative return investment philosophy has compounding capital not among its formal objectives. When compounding capital is a major objective, downside volatility and losses are of major importance. Large losses kill the rate at which capital compounds. Visualise:

Table 1 Different definitions – different perspectives *Source: Adapted from Ineichen (2001)*

	RELATIVE-RETURN MODEL (MARKET-BASED)	ABSOLUTE-RETURN MODEL (SKILL-BASED)
Return objective	Defined relative to benchmark	Generate absolute, positive returns
Risk management	Defined relative to benchmark	Loss avoidance, capital preservation

- A 10-year investment of $100 that is flat in the first year and then compounds at 8% will end at $200.
- A 10-year investment of $100 that falls by 50% in the first year and then compounds at 8% will end at $100.

This, to us, seems to be a big difference. What we find puzzling is that not everyone agrees with our notion that long-term investors cannot be indifferent to short-term volatility. Note that a 10-year investment of $100 that compounds at 8% for the first nine years and then falls by 50% will end at $100, too. It is for this reason that being disappointed by short-term underperformance of a hedged strategy is potentially unwise; emotionally comprehensible, but myopic. We assume that the three portfolios are diversified portfolios, i.e., idiosyncratic risk is diversified.

Investment C has outperformed investment A for a long time.[6] Investment A and investment C very much resemble hedge funds and long-only equities over the past couple of years. We believe the proper response to a presentation of outperformance is "who cares"? Any form of return examination without a discussion of the risk involved is useless. If we do not know the risk, the next period could be materially different from the past. Examining realised volatility and historical return distribution properties is a start but purely backward-looking. We do not see a short cut for investors that allows intelligent investment decisions without knowing what they are doing, i.e., without having a clear as possible understanding of exposure and risk.

Extrapolating past performance into the future – essentially the cornerstone of the long-only buy-and-hold investment mantra – is extremely dangerous and an accident in waiting. Again, the car with no brakes comes to mind. As Jim Rogers, investment biker and hedge fund legend, put it:

"One of the biggest mistakes most investors make is believing they've always got to be doing something, investing their idle cash. In fact, the worst thing that happens to many investors is to make big money on an investment. They are flushed, excited and triumphant that they say to themselves, "Okay, now let me find another one!" They should simply put their money in the bank and wait patiently for the next sure thing, but they jump right back in. Hubris! The trick in investing is not to lose money. That's the most important thing. If you compound your money at 9% a year, you're better off than investors whose results jump up and down, who have some great years and horrible losses in others. The losses will kill you. They ruin your compounding rate and compounding is the magic of investing." [7]

In essence, boring is good.[8] One of the key claims of our research efforts in this space is that compounding matters. With "compounding" we mean the positive, steady, eventless, and therefore "boring" compounding of capital. If true then the management and control of downside risk is a key ingredient to financial success and survival. Compounding is an elementary part of the successful long-term investor and the absolute return investment philosophy.

Bottom line

The investment philosophy of absolute return managers differs from that of relative return managers. Absolute return managers care about not only the long-term compounded returns on their investments but also how their wealth changes during the investment period. In other words, an absolute return manager tries to increase wealth by balancing opportunities with risk and running portfolios that are diversified and/or hedged against strong market fluctuations on the downside. To the absolute return manager these objectives are considered conservative.

The idea of asymmetric returns revisited

One of the marketing one-liners in hedge fund space is that "hedge funds produce equity-like returns on the upside and bond-like returns on the downside". While this one-liner is somewhat tongue-in-cheek, it is not entirely untrue.

One hedge fund manager in the 1980s came to fame for one particular idea where he bought an option with 2% of the fund's capital. That 2% position returned 30% of the fund's whole principal. The attraction of this way of investing is only partly explained by the 30% return, which – after all – could be a function of luck. The 30% return as a single headline figure does not tell us anything about the risk that was involved to achieve the 30% return. The main attraction in this particular case was that the manager and his investors only would have lost 2% if the investment idea had not worked out. In other words, at the time of investment the manager knew that if the world moved in a way he expected his profits could be unlimited, whereas if he was wrong, he would only lose 2%. This example illustrates the idea of asymmetric returns: high, equity-like returns on the upside, with controlled and/or limited loss potential on the downside. The discipline that can achieve such an asymmetry in asset management is active risk management where risk is defined not in relative but in absolute terms. In earlier work, our claims were threefold:

1. Asymmetric returns are about finding investment opportunities where the risk/reward relationship is asymmetric – that is, situations in which the potential profit is higher than the potential loss or where the probability of a profit is higher than the probability of a loss of the same magnitude or a combination thereof.
2. Finding and exploiting these asymmetries requires an active risk management process.
3. The future of active asset management is about finding and exploiting these asymmetries.[9]

Our claims are simple; first, asymmetric risk/return profiles are attractive. It means nothing else than having a high probability of financial success and survival with a low probability of the opposite. Second, these profiles are not a function of randomness or market forces but a function of seeking (new) investment opportunities while actively managing risk, whereby risk is defined

Fig.6 SPY versus Equity long/short hedge funds (Jan 1993 – Jan 2013)

Source: IR&M, Bloomberg

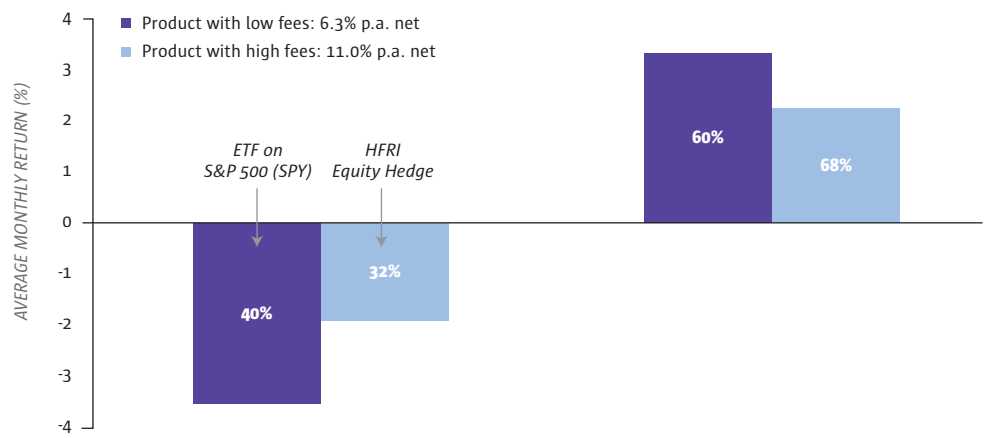
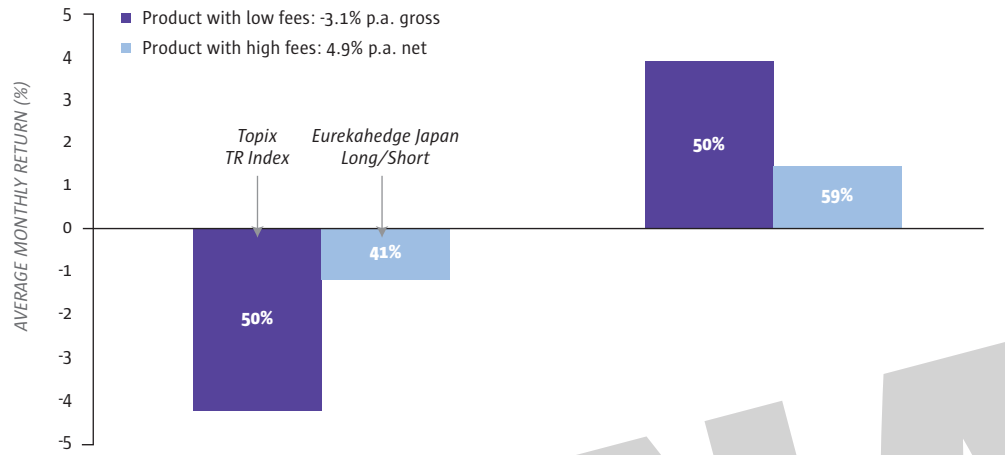


Fig.7 Topix versus Equity long/short hedge funds (Jan 2000 – Jan 2013)* *Source: IR&M, Bloomberg*

**Observation period was determined by the Eurekahedge Japan Long/Short Index going live in January 2000.*



in absolute terms. By asymmetry, we actually mean two things: an asymmetry with respect to the magnitude of positive versus negative returns as well as an asymmetry with respect to the frequency of positive versus negative returns. If our objective is the positive, smooth and sustainable compounding of capital, one needs a combination of both of these asymmetries.

The 2008 financial crisis has caused many investment banks and hedge funds to launch what are best described as "tail risk products." The demand for these products is a direct response to the tail event that was the financial crisis 2008. It was interesting to observe that the demand mushroomed after the tail event while hedging and insurance needs to be conducted prior to the tail event. From an investor's perspective these products can be viewed as portfolio supplements: they introduce an asymmetric element in an otherwise symmetric risk/return profile. The experience of some investors with some of these new products is that one ought to trade these actively. The gains from the product need to be realised when disaster has struck. Many products simply mean revert after the shock.

These asymmetries that we are referring to are best explained with an example. Fig.6 compares two investment philosophies: one where risk is actively managed and one where it is not. For the active portfolio, we use a proxy for the average equity long/short hedge fund portfolio, in this case the HFRI Equity Hedge Index. For the passive portfolio, we have chosen the oldest ETF on equities: SPY which tracks the performance of the S&P 500 Index. SPY was launched in January 1993 which means the observation period covers exactly 20 years to January 2013. The chart shows the average of the positive returns for the two portfolios as well as the average of the negative returns. The compound annual rate of return (CARR) of the two portfolios is shown in the legend while the frequencies of returns are displayed in the bars.

SPY, the passive long-only portfolio in this case, compounded at an annual rate of 6.3%, while the portfolio where we believe risk is actively managed compounded at a rate of 11.0%. Compounding at 6.3% for twenty years turns a $100 investment into a $339 pot. Compounding at 11.0% for twenty years brings $100 to $806. Arguably, this is a big difference. It is very unlikely that this difference can be explained away by imperfect performance data. Neither can this difference be explained using nomenclature from the traditional investment management side, namely the concepts of alpha and beta. The terms "alpha" and "beta" are derived from a linear model, the Capital Asset Pricing Model (CAPM) and are applicable for linear (symmetrical) and static risk exposures of long-only buy-and-hold strategies but do not lend themselves very well for the non-linear (asymmetrical) and dynamic investment styles of hedge funds. (The term "alpha" has become a marketing term for traditional and alternative investment managers alike.) Note that the investment approach with the higher fees compounded at a higher rate on a net-of-fees basis.

Fig.8 Underwater perspective in Japan *Source: IR&M, Bloomberg*

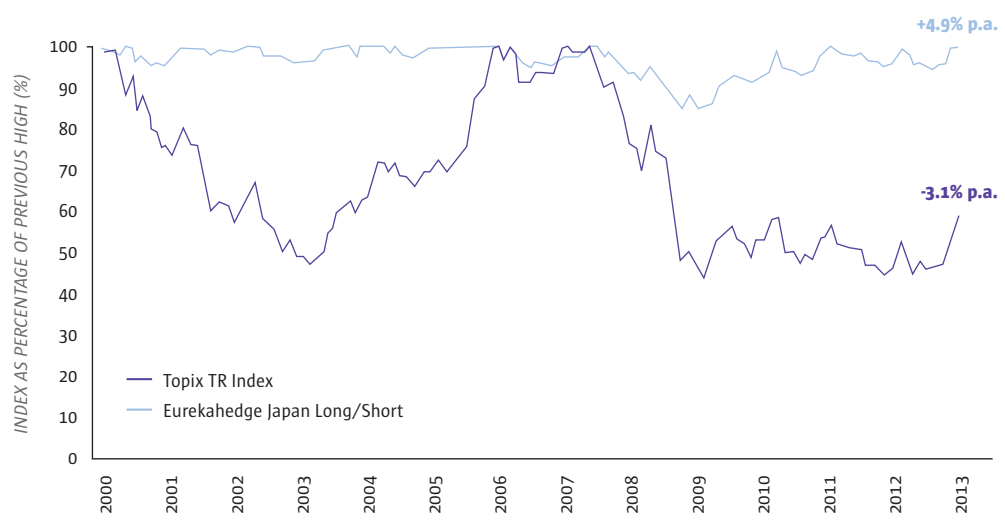


Fig.6 above shows the two aforementioned asymmetries with respect to magnitude and frequency very well. First, the average positive returns of the active portfolio are larger than the average negative returns. The average positive monthly return was +2.3% that compares with -2.0% per month on average in negative months. In the case of the passive portfolio, these averages are more or less symmetrical. The average positive return was +3.3% that compares to -3.6% on average in negative months. In other words, the average positive return is roughly as large as the average negative return.[10] Note here that after a loss a higher return is required to bring the principal back to its initial level. A 30% loss for example requires a 43% recovery return to break even.

Second, the frequency between positive returns versus negative returns is more asymmetric with the active portfolio. In case of the active portfolio, 68% of all returns were positive while only 32%

were negative. This compares to 60% positive returns with the passive portfolio versus 40% negative. These differences are material when compounding capital is concerned.

If both the ratio of magnitude and the ratio of frequency were symmetrical compounding would be around zero. The passive portfolio in Fig.6 experienced a positive compounding rate because there were more positive returns than negative returns. The reason for this is essentially luck. This is the reason we quoted Mark Twain saying that the opposite of hedging is speculation, earlier in this document. The long-only, buy-and-hold (SPY) investor has been lucky that between 1993 and mid 2013 there was a slight asymmetry that allowed positive compounding. The Japanese investor investing locally was not so lucky. If we repeat the exercise above using a Japanese equities index instead of a proxy for US equities, the compounding rate is negative. The Topix Total Return Index compounded at 3.1% over the 13+-year period examined in Fig.7.

- Investing in Japanese equities from 2000 to date was a bit like flipping coins; 50% of the returns were positive, 50% negative. Given this symmetry of magnitude, the negative compounding is explained by the fact that the negative returns were "larger" at -4.3% than the positive returns at +3.9%. The end result was compounding capital negatively for 13+ years at a rate of 3.1% per year.[11] This "could happen to anyone".
- Long/short managers investing in Japanese equities compounded at a rate of +4.9% on a net basis since January 2010. Again, this is a big difference. Compounding at -3.1% for 13 years results in an investment of $100 turning into $66. Compounding at +4.9 turns a portfolio valued at $100 into one valued at $186.

One aspect of risk management is the avoidance of losses, especially large ones. One reason for avoiding large losses is that it kills the rate at which capital compounds and it takes a long time to recover. A 50% loss requires a 100% gain just to break even. Fig. 8 shows the underwater perspective in Japan while showing the two indices in Fig.7 as a percentage of their previous highs, starting at 100 as of January 2000.[12]

Bottom line

In summary, the value proposition of hedge funds is to have an attractive combination of these two asymmetries. These asymmetries allow high compounding of capital per unit of risk. These asymmetries can also be implemented through passive means. For instance, an equity long-only investor can buy put options to hedge his portfolio from falling when the market falls. However, in this case the investor compromises the return. The idea of a hedge fund portfolio is not necessarily to pay for insurance but to achieve these asymmetries through active risk management instead of paying for insurance that compromises returns. **THFJ**

FOOTNOTES

1. Hagstrom (1994), p. 164.
2. See 2012 Deutsche Bank Alternative Investment Survey, p 54.
3. One of the ironies of our time is that complex financial engineering by banks was perceived as one of the factors that led to the financial crisis and the collapse of universal banking as we know it. It is now the governmental agencies who are doing the complex financial engineering.
4. The GBP lost 86% of its value against the CHF since 1971. The USD lost much less; it devalued by only 76% over the past 40+ years.
5. Today, financial repression results in many institutional investors "being forced" to hold government bonds. In an asset liability management (ALM) context, long-term bonds are held irrespective of valuation. ALM is a relative return approach, as risk is defined as deviations from the (liability) benchmark.
6. Investment C resembles a directional portfolio that is unhedged and, potentially, whereby disaster insurance is sold systematically: it outperforms until disaster strikes.
7. From Rogers (2000).
8. "Boring is good" is obviously a pun on Gordon Gekko's "greed is good."
9. From Ineichen (2007), p. 10
10. To be more precise, there is an asymmetry with SPY returns as well. However, the asymmetry is the other way around; losses loom larger than profits, on average.
11. The Topix Total Return Index compounded at a rate of -3.4% from January 1990 to January 2013.
12. Note that the Topix TR Index was still 55% underwater, i.e., at 45% in the chart, when examined since January 1990. If the index starts compounding at 3.4% from 45% (instead of compounding at -3.4%), it will reach breakeven in roughly 24 years from now. That's the reason why Albert Einstein thought that these compounding issues are rather important.

ABOUT IR&M

Ineichen Research and Management (IR&M) is a research firm focusing on investment themes related to absolute returns and risk management.

"Beware of past performance proofs in finance. If history books were they key to riches, the Forbes 400 would consist of librarians."
— *Warren Buffett*