

Amundi Alternative Investments

Alternative Insights

To be, or not to be a hedge fund anymore?

The rapid growth of the hedge fund industry over the last decade has inevitably given rise to a multitude of studies, research and analyses, both academic and practitioner-led; however, despite all this work, it is difficult to find a simple, common definition of the term hedge fund. For the purposes of this article we shall try to define them not according to the often used characteristics of speculation and hedging, but rather by their use of leverage on financial markets. The ability to deploy leverage, amongst other tools, allows hedge funds to manage assets against an absolute return benchmark so that whilst they did not emerge from the recent crisis unscathed, the future looks bright for those managers that can evolve and adapt to the new environment whilst maintaining the absolute return objective.

Editorial



In a world where many institutions face significant deficits in their assets versus their liabilities and in a highly volatile environment, the absolute performance industry is encountering a deep evolution. The 2008 crisis has accelerated the convergence of the old of "traditional" and "alternative" investment worlds which now look at numerous challenges (political, regulatory & commercial). Faced with this new environment, the appetite of market participants for informed, genuine insights has heightened considerably. Many of you have, in the past, received previous versions of our quarterly Alternative Insights letter. We felt the need to update the format and have called on the independent perspective of Pierre Clauss, an academic researcher, Head of the Master Risk Management and Financial Engineering of ENSAI (the French national institute of statistics and information systems). You may not always agree with his views, but you can be sure that they will always be thought provoking. The aim of the letter remains unchanged: to inform and stimulate debate. In the future, Alternative Insights will be published every two months. We hope that you will find it a valuable tool to help you better understand this exciting and progressive industry as it develops. As always, we would highly value your feedback on any aspect of the letter just as we would be happy to receive suggested themes for future publications.

Sincerely yours,

Andrew Watson
Chief Executive Officer
Amundi Alternative Investments

Speculate or Hedge?

The French translation of *hedge fund* alone gives rise to variants which illustrate the controversy in definition: "*fonds de couverture*" (focusing on the hedging characteristic) for the Quebecois, "*fonds spéculatifs*" (focusing on the speculative characteristic) for French people. That said, does not a *mutual fund manager* hedge risks and speculate? Likewise, Banks have demonstrated extreme speculative behaviour as illustrated by the causes of the recent crisis?

In reality, all investors in financial markets must speculate in order to survive. In chapter 12 of *The General Theory of Employment, Interest and Money*, Keynes develops an interesting thesis. He writes: "*Thus the professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the atmosphere, of the kind by which experience shows that the mass psychology of the market is most influenced. This is the inevitable result of investment markets organised with a view to so-called "liquidity"*" (Editor: Payot).

Such liquidity is necessary to financial markets so that they can exist and drain new investment flows. Liquidity here means fluidity in transactions. Without speculation, there is no liquidity and no financial markets. A fund manager, even for mutual funds, has to be a speculator, with more or less clear-sightedness.

A fund manager can employ hedging in many different guises to remove certain risks from the balance sheet and protect from the risk of total-loss. It is the same for hedge fund managers who hedge their portfolios with the aim of insulating themselves from market trends that might negatively affect their positions.

Therefore, speculation and hedging are not the preserve of hedge funds. Actually, we believe that what really differentiate them from

mutual funds is the level of speculation and hedging they use and that leverage is in fact the discriminating factor.

Use of leverage

In April 1966, the journalist Carol J. Loomis wrote in *Fortune magazine* about Alfred Winslow Jones' peculiar investment fund: *the fund's capital is both leveraged and "hedged"*. In recent history, this description was simplified by deleting the leverage reference and sticking hedge together with fund. Yet, it is in the ability to utilise leverage that we believe the essence of a hedge fund lies.

> Leverage Definition

There are two kinds of leverage:

1. On balance sheet leverage, whereby a manager borrows physical assets (cash or stock) with the aim of creating additional return. For example a manager with €20 to invest can increase their exposure by borrowing €80 so that their total investment is now €100. If the investment returns 20% the unlevered return would be €4 (€20 x 20%), the levered return would be €20 (€100 x 20%), less the marginal cost of borrowing. Naturally, one can also lose everything, and even more, in case the loss is higher than 20%. The borrowing can also be created through *shorts* on financial securities.

2. Off balance sheet leverage, through the use of derivatives: e.g. a European option on an underlying product, with a value of €100, will generally have a relatively low premium (let's say €5); if the underlying value is €105 at the point of redemption, the return would be 100% (€105 - €100 = €5 / €5) as opposed to 5% (€105/€100) if the investor had bought and sold the underlying asset.

> Prime brokers

In order to use leverage, hedge funds need lenders, the vast majority of which have historically been the Prime Brokerage operations of investment banks. One critical consideration in this respect is the counterparty risk. Hedge fund managers usually diversify the number of lenders they use as an effective means of mitigating this risk.

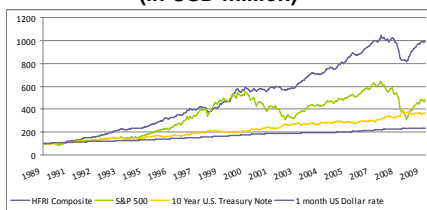
Benchmark Agnostic Approach

One of the cornerstones of the hedge fund industry is that their investment approach does not replicate market trends, enabling them to create *absolute performance*.

> Decorrelation

The decorrelation of hedge funds' performance with respect to 'traditional' asset classes, such as equities, is one of the main characteristics of hedge funds unconstrained approach to investment. A simple graph, comparing the evolution of dividend reinvestments of several stock indices with that of a hedge fund index since 1990 illustrates this. Hedge funds' performance shows up as only slightly dependent on equities' performance, except during the last crisis, where we notice similar behaviours in the bears and in the bulls, between 2007 and 2009.

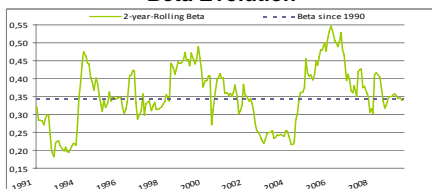
Hedge fund vs. traditional assets (in USD million)



Source: Datastream

A more robust way to test decorrelation is through the *beta* (a measure of an investment's volatility relative to the market). The graph below quantifies the exposure of a hedge fund index to equity markets* in excess of the risk-free rate (*the S&P 500 in the below graph).

Beta Evolution



Source: Datastream and calculations from the author

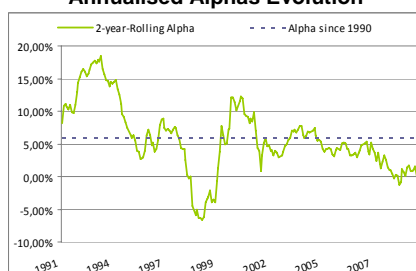
On average, hedge funds demonstrate a slight relationship and a prudent approach to the market, with a beta below 1 (the level at which assets move in exactly the same direction and magnitude as the market). For instance, a beta of 0.35 means that when the S&P 500 has a

1% (positive or negative) return, hedge funds will return 0.35% (positive or negative).

> Absolute Returns

Whilst decorrelation is not perfect, it is of sufficient magnitude that high quality hedge fund managers should be able to realise absolute returns over reasonable time periods as well as generating returns higher than those of assets traditionally seen as safe. This can be quantified by determining the *alpha* with respect to equity markets. On average, hedge fund alpha is higher than 5% a year. It should be noted that a positive alpha may still be consistent with periods of negative performance: e.g. with a hedge fund performance of -1% and an equity performance of -3%, the alpha will be 2%. With the crisis, over the last 2 years, hedge fund alpha has decreased significantly: below 1% a year.

Annualised Alphas Evolution



Source: Datastream and calculations from the author

The Darwinian Challenge

Appeared more than 50 years ago, the hedge fund industry only really began to capture investors' attention on any scale in the 90's. Today, they face a number of challenges and are strongly criticized, including their use of leverage.

It is not the first time the hedge fund industry has faced difficulties. In "*Hard times come to the hedge funds*" published in 1970 in *Fortune*, Carole J. Loomis described the challenges that then confronted the industry, causing some to question its very existence, just 4 years after having revealed their existence to investors. Indeed, at the end of the 60's, numerous hedge funds used leverage for speculation purposes only, without necessarily being suitably hedged. Managers who took this approach and in addition made wrong picks in shorting securities went bankrupt when the bull market trend reversed (between November 1968 and June 1970, the S&P 500 lost about 33%). Conversely, those who made effective use of leverage survived and managed to enhance their investment management process in order to adapt to new market conditions.

In 2010, the industry is looking at yet another period of significant evolution in its existence and will have to adapt to new challenges on a number of fronts (regulatory, shifting client base etc.).

In particular, we believe that hedge fund managers will have to resolve the difficult equation of their need for leverage and the regulators' wish to regulate the use of leverage on global markets.

Pierre Claus (Ensaï)

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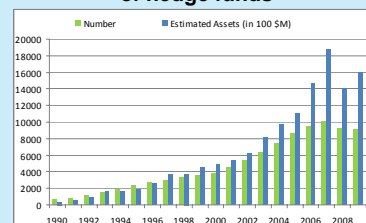
To go further...

Calculating the leverage used by hedge funds is an extremely complex task.

Assets Under Management (AUM)

At the end of September 2009, 66,000 mutual funds represented around USD 22,000 billion of AUM (source: EFAMA). At the end of December 2009, 9050 hedge funds totalled about USD 1600 billion of AUM, i.e. 7% of mutual funds AUM (source: HFR). Nevertheless, the use of leverage increases their impact on financial markets.

Evolution of estimated AUM vs. number of hedge funds

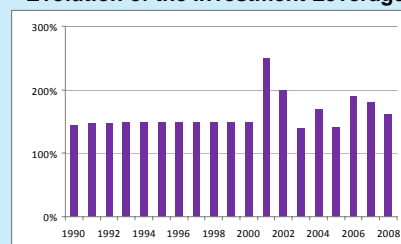


Source: Hedge Fund Research

Leverage Calculation

On the basis of estimated hedge funds' AUM and market exposures, we can quantify the investment leverage since 1990: the last 2 years inevitably show a decrease. Given that the leverage stemming from the use of derivatives is through off balance sheet OTC (other-the counter) transactions, it is simply not possible to quantify its level.

Evolution of the Investment Leverage



Source: Andrew W. Lo (Hedge Funds, Systemic Risk, and the Financial Crisis of 2007-2008) and calculations from the author

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