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TITOLO
Hedge Fund Industry: Well and Alive?

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FOREWORD

"Within five days Lehman had gone bust and it quickly became clear that the world's financial system had problems far beyond a single badly run investment bank and temporarily frozen credit markets. After two decades of expansion and deregulation, and the greatest bull market finance has ever known, many of the world's banks were dangerously undercapitalized. Governments were forced to step in, providing capital, loans and guarantees to banks. In America, the euro zone and Britain the sums involved so far amount to about one sixth of GDP."[1]

After a severe economic drawdown, massive government bailout programs and exceptional stimulus measures, central banks trying to stoke economy by lowering interest rates, executives collecting million-dollar bonuses, irritated investors with less confidence in the financial system, everyone is asking for heavier regulation, enhanced transparency and more effective internal risk management systems.

Without the assistance of governments and central banks, the economic distress would have been extremely worse, but the recession has still been painful and, more importantly it has prompted a sense of outrage at the financial industry. Cases of firms like Lehman Brothers and AIG have pointed out that insolvency issues related to a large player are relevant not only for the individual institutions themselves, but also, and more importantly, for the stability and the integrity of the entire financial and economic system.

Among the others, hedge fund industry was blamed for having played a crucial role in the current financial and economic crisis. Managers were criticized as being selfish and careless about the investors' community. They were also accused of having contributed to the selling pressure in the stock markets, through short-selling transactions and particularly through the massive selling of

[1] *Unnatural selection*, Economist.com, September 10th 2009.

shares to which they were forced because of deleveraging requirements and surge in redemptions.

Other critics are addressed to the excessive use of leverage, to the fee structure, to the lack of appropriate regulation and transparency about their strategies and investments. Indeed, hedge funds are usually not required to file a registration, nor to disclose data about performance, assets under management (AUM) and their financial position. Managers are perceived as having the ability to move markets in order to pursue their objective of enriching themselves and their clients.

As a result, hedge funds have been accused of having magnified the financial crisis due to counterparty concerns, loss of confidence by investors and increased systemic risk. The Madoff episode has provided extensive evidence about the drawbacks of loose regulation and offered support to those claiming a stronger regulation and its enforcement in order to protect investors and the financial system, by closing the gaps and eliminating the weaknesses of the hedge fund industry. Although Madoff was not operating as a hedge fund, he operated through several funds of hedge funds, so there has been a great reputational damage and reduced investor confidence in the hedge fund industry.

Advocates of hedge funds, instead, claim that they have been able to obtain historically higher returns, with respect to the conventional investment strategies. According to them, each of these funds is a business and, occasionally, businesses can fail and go bankrupt. Hedge fund failures are part of the financial life, as well as bank or company failures. Of course, these failures do have the potential to create dangerous effects on the financial markets, but investors should always diversify idiosyncratic risk and hold portfolio of hedge funds as opposed to just few hedge funds.

Hedge fund industry has changed a lot since it was born, in 1949. Modern hedge funds offer several strategies and investment styles, thereby creating an extremely heterogeneous industry.

In 1949 A.W. Jones set up the first equity hedge fund. Although it was not called and created as a hedge fund, the portfolio was made up by long and short positions in order to increase returns while reducing net market exposure, thus the later definition of “hedged fund”. Jones used to short-sell stocks that were overpriced relative to their fair value, he also made use of financial leverage to further enhance performance by making large bets using limited resources. His financial leverage was often around 1.5:1, composed of 110% long positions and 40% short positions. He also added a 20% performance, thereby becoming the first money manager to combine leverage, short selling and alignment of interests between agent and principal.

Jones also started to employ managers with stock-picking skills in order to complement his own capabilities as a stock-picker and in 1954 he converted his partnership into the first multi-manager hedge fund.

Jones’ fund was discovered only in 1996, in a famous article on Fortune written by Carol Loomis: “*The Jones no one keeps up with*”. Jones had been able to achieve risk-adjusted returns well above those of traditional funds during 1950’s and 1960’s, even after the 20% incentive fee. Apparently, the fund was described by Loomis not as a hedge fund but as a “hedged fund”.

The news about Jones’ fund performance created great excitement and by 1968 there were about 200 hedge funds in existence. Most of them perished because they became too leveraged and were net long during the years prior to the market downturns of 1969-1970 and 1973-1974, which surprised them. By 1971, there were no more than 30 hedge funds in existence. This resulted in low competition for investment opportunities and exploitable market inefficiencies. Hedge fund industry recovered its popularity in the mid-1980’s and at the end of the decade there were approximately 200 hedge funds.

Julian Robertson's Jaguar fund, George Soros' Quantum fund, Jack Nash from Odyssey and Michael Steinhardt's Steinhardt Partners were compounding at 40% levels. Not only were they outperforming in bull markets, but they outperformed in bear markets as well. In 1990, for example, Quantum was up 30%, and Jaguar was up 20%, while the S&P 500 was down 3% and the MSCI World Index was down 16%. The press began to write articles and profiles drawing attention to these remarkable funds and their extraordinary managers."[2]

Until 1990, the great majority of hedge funds pursued either equity long/short either macro strategies. Throughout the 1990s hedge fund industry has become extremely heterogeneous. More strategies became available and correlation between one fund and the other felt drastically, thereby giving the possibility to funds of funds and other investors to combine risky hedge funds in order to build conservative portfolios.

Since 1949, hedge fund industry has indeed attracted the attention of more and more investors, but it has also raised many doubts within the community. The implosion and the following government bailout of Long Term Capital Management in 1998, the collapse of Tiger Funds in March of 2000 and of Quantum Fund in April of 2000, after having experienced a decade of more than 30% annual returns, are some examples of high-profile incidents that have overshadowed more than half a century of hedge fund history.

There is no question that hedge funds business model has been under pressure in 2008 and in the first part of 2009. These two years will result as a though period for the hedge fund industry, with AUM likely to decline by 50% or 80% from the once estimated $2 trillion. According to the Hedge Fund Research Centre of Chicago, 12% of the total number of funds – approximately 7700 – has closed in 2008, corresponding to 10thousand job positions less within the industry. In

[2] Ineichen A. and Silberstein K. (2008), *AIMA's Roadmap to Hedge Funds, November.*

2009, Options Group Research Center estimates a further decline of job positions of 20thousand – approximately 14% of the total.

The first section of this work introduces hedge funds. It provides a definition, together with the description of the most important – and at the same time – criticized characteristics of these investment vehicles. It also provides an outline of the hedge funds' investment strategies. Finally, it addresses the topics related to funds of hedge funds (FoFs) and the brand new hedge fund replication strategy.

The second section aims to analyze the performance of the hedge fund industry during 2008 and the first part of 2009. The returns of the overall industry and of individual strategies are compared with the major indexes. In particular, major trends in financial marketplaces are outlined and their consequences on broad equity, bond, commodity and hedge fund indices are analyzed.

The third chapter deals with the changes that the hedge fund industry will likely face in the near future. Namely, a more rigorous regulation, more stringent transparency and disclosure requirements and lastly a more effective risk management process. Managers have to adapt really soon to this "new world" and keep up-to-date with the upcoming new legislation or they risk to be unprepared.

The last part of this work is dedicated to the opportunities related to distressed debt strategy. As the economic and financial environment and credit market conditions have worsened during last year, many companies are facing difficulties, both at the financial and operational level. Even though the recent tightening of liquidity and the volatility in equity markets may represent a bad scenario for some investors, others are positioning themselves and wait to capture a whole range of distressed debt opportunities.

CHAPTER 1

Despite the fact that hedge funds are currently in the spotlight and that they are drawing several critics, surprisingly very little is understood about who they are and what they do. It is indeed not easy to define what a hedge fund is.

The fund is a collective investment scheme, or better a pooled investment vehicle, meaning that investors entrust their money to a fund manager, who then invest in publicly traded securities in an effort to make a positive return.

Hedge funds are also defined as loosely regulated investment vehicles because they are not subject to any formal constraint about use of financial leverage, short selling, types of securities the fund can invest in and investment strategies. In other words, they fall outside many of the rules and regulations governing mutual funds. In addition, hedge funds are generally not required to issue periodic reports about their position. It goes without saying that even though the term “hedge fund” seems to imply market neutral positions and low risk strategies, their actual risk profile is quite different.

Hedge funds are still subject to the prohibitions against fraud, and their managers have the same fiduciary responsibilities as other registered investment advisers. Exemption from regulatory and investment restrictions, which are typical for other investment vehicles comes at the cost of restrictions on public advertising and solicitation of investors. In fact, hedge funds cannot solicit or advertise to general audience. Put differently, by limiting the number of investors, by imposing minimum investment levels and requiring that investors are accredited, which means they meet an income or net worth standard, hedge funds have been able – probably will not be able anymore in the next future – to bypass registration requirements[3].

Lack of constraints, which in turn means lack of transparency, allows skilled managers to achieve higher returns relative to more regulated investment vehicles. In particular, hedge funds try to profit in all kinds of markets by pursuing leveraging and other speculative investment practices.

Scarce transparency is another important characteristic which, as we said earlier, is strictly linked to the loose regulation and implies high difficulty in obtaining reliable information. Historically, hedge funds have tried not to reveal their position, strategy, performance and the value of assets under management. There are two reasons that incentive hedge funds to not disclose such data: the first one is to protect what managers believe to be valuable, or better to defend their competitive advantage or what they do better than the market. The second reason is related to the fact that once the market knows a hedge fund position it can start trading against it.

Hedge fund managers ask investors to pay two different fees. First, they ask a fixed reward for their managing skills, which consists in a periodical asset-based fee that usually range between 1%-2% of the assets under management. Then they charge a performance-related fee of about 20% of the realized profits. It is common for such fee to be effectively paid only only on new profits, not on profits recovering from previous losses. This mechanism, known as high-water mark, implies that managers do not receive any performance fee if they incur in a loss, until the loss has been made up, that is when AUM level reaches and goes beyond the previous highest level.

The performance fee can be considered as a call option: managers pay a premium which is fixed and known in advance, putting some of their wealth in the fund. They then have the right to participate in the unlimited upside. The premium serves to align interest and avoid conflict of interests between agent and

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[3] In Italy Hedge Funds and Funds of Hedge Funds are subject to Bank of Italy and Consob rules. In the USA, hedge funds are not required to register with the SEC.

principal. If a manager has nothing of his net wealth invested in his funds, this option is actually like a call option granted to the manager for free. In this particular case, the manager has a zero initial cost and nothing to lose. He will obtain cash flows that are positive, never worse than the management fee and characterized by an unlimited upside. This means that manager's interests are not properly aligned with those of the investors.

The main purpose of the performance fee is to provide incentives to the fund's managers to generate positive absolute returns as managers have a claim on a share of the profits, whereas the high watermark serves as an incentive to avoid losses. However, the high watermark has a negative side effect as it also incentive managers to close the fund after a large loss, raise new financial resources and re-open a new fund with a new high watermark, so that they will be able to obtain 20% performance fee soon again.

Hurdle rates are often used as well, implying that a performance-related fee is not paid below a certain return level, quite often the risk-free rate of return. They establish a floor that managers have to exceed in order to obtain the performance fee, thereby providing an incentive to perform well.

1.1 Active versus Passive Asset Management

One of the reasons of the increasing popularity of hedge funds over time is the belief that hedge fund managers are better able to produce positive alpha, i.e. superior returns over the expected return, than traditional investment vehicles, such as mutual funds.

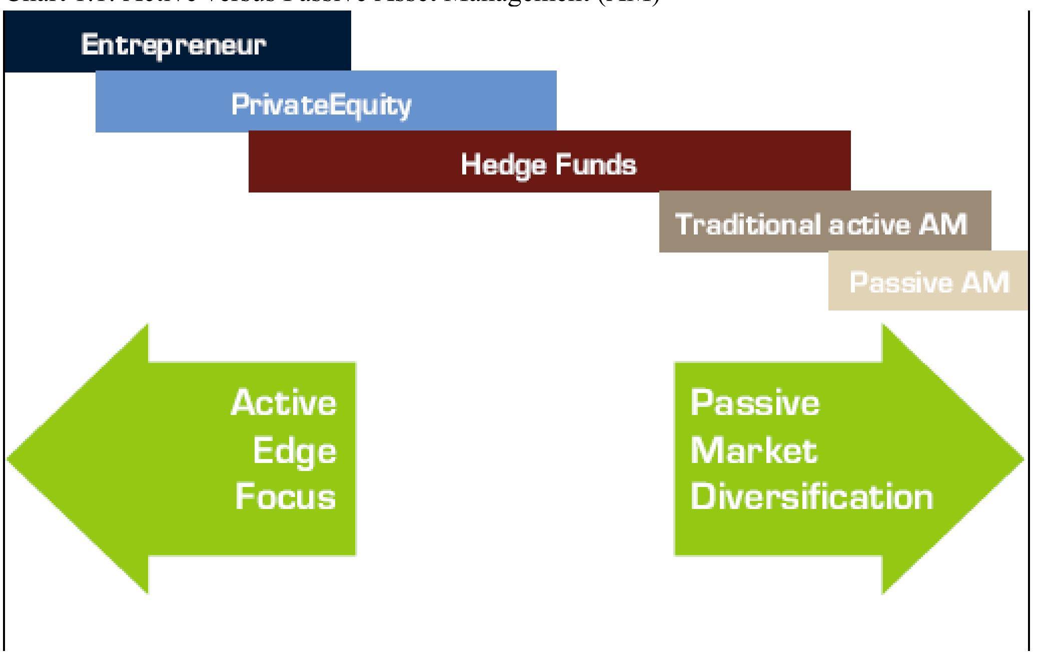
Hedge funds are "active products", also defined as "pure skill asset class". This means that their results depend directly on the capabilities and skills of the managers. Hence, when investing in a hedge fund manager who is free to pursue absolute return strategies, one is automatically investing in the manager's skills and not in an asset class. Hedge fund managers actively manage their portfolio, seeking absolute returns while protecting the principal from potential losses. They do not have to follow or track any benchmark, nor have to respect any constraint. This approach implies a constant assessment of risk and a continuous adaption of the portfolio to changes. Personal judgment is also fundamental for active managers.

On the other side, funds seeking relative returns, e.g. mutual funds, compare their performance to an index or benchmark. These managers usually construct their portfolio by following the index and then applying their picking skills in order to increase the weight of appealing securities and under-weigh less favored securities.

The difference between the two is that active managers always try to obtain positive compounding of the principal, i.e., to make money every year, while controlling potential financial losses and avoiding negative compounding of AUM. Passive managers, on the other side, pursue relative returns. They are still happy if they succeed in performing better than the benchmark, even if it means to have a lower negative return.

The two approaches diverge in bear markets, when active managers do not follow the benchmark, but try to achieve positive results.

Chart 1.1: Active versus Passive Asset Management (AM)



Source: AIMA's Roadmap to Hedge Funds – November 2008

More precisely, among the different forms of passive management indexing is the most passive. This technique consists in tracking the index, with zero degree of freedom and no tolerance for performance variations. Then comes benchmarking – the traditional form of active AM – where the manager has got some discretion in over or under-weighting some securities with respect to the benchmark, in order to beat it. In this case the risk-adjusted performance of the manager is expressed in terms of Information Ratio (IR), which is the excess performance, over the benchmark, divided by the risk taken, i.e., the standard deviation of the extra-returns.

At the other extreme there are private equity funds and entrepreneurs. An entrepreneur can be considered as an investor, making a specific and focused investment. It is purely active management, highly based on personal skills.

The distinction between active and passive asset management is probably not as clear in practice as it is in theory, or better it is likely to become less clear in the future: on one side, hedge funds try to become more transparent and more process driven in order to attract more investors. This leads to a form of self-constraint. Reasonably, there will be also provisions in the near future to enhance it. On the other side, passive managers are trying to loosen up their constraints to add more value.

1.2 Risk Measurement and Risk Management

Absolute and relative-return managers also differ in the way they define risk and subsequently manage it. In a relative return context, risk is defined as tracking error, i.e., the standard deviation of extra-returns over or below the benchmark. Tracking error is generally considered as the dispersion around the average value of the fund's extra-returns compared to the benchmark. In other words, it measures how volatile the manager is in delivering extra-performance.

In the absolute return world, managers look at the total risk. They perceive risk as compounding capital at low or negative rates over extended periods of time, so they do care about downside protection. This means that when analyzing hedge funds performance, several alternatives to traditional risk measures, such as volatility or Sharpe ratio, are generally used. For example, downside volatility measures the volatility of the returns falling below the investors' minimum acceptable level. Value-at-Risk (VaR) quantifies the amount of the portfolio value that can decrease, with a stated probability, over the period of reference. VaR typically states the maximum amount by which the portfolio can decrease, using 90%, 95% and 99% confidence levels.

When speaking of hedge funds, it is often said that their returns are characterized by fat tails, meaning that observations in the right and left tails of the return distribution have a higher probability relative to what the normal distribution predicts. The term fat tails refers to distribution moment called kurtosis, or better excess kurtosis over the level of 3 of a normal distribution. Higher kurtosis means that the distribution has a more acute peak around the mean compared with the normal distribution and fatter tails. Usually, investors are more concerned with the left fat tail of the distribution i.e., large negative returns having an higher probability to occur, and since they view a greater chance of extremely large deviations from the expected return, that is fatter tails, they perceive the investment as being riskier.

In addition to excess kurtosis, investors also look at the skewness, which represents a departure from the normal distribution as well. In particular, they care about negative skewness: higher probability of returns above the mean, i.e. small gains, but a few extreme losses. Put differently, negative skewness implies long left tails, because there is a limited, though frequent, upside compared with a somewhat unlimited, but less frequent downside.

Even though fat and/or long tails are not a distinguishing feature of hedge fund returns versus other investments, hedge fund managers have to properly take into account the possibility of experiencing such return observations. Since the VaR figure does not tell managers what will happen in the remaining 10%, 5% or 1% probability and since investors are concerned with large negative returns,

managers usually complement their risk measurement process with stress and scenario analysis.
Another measure of risk which is used to capture the skewness and excess kurtosis of portfolio returns distribution is the expected shortfall (ES). It measures the expected return of the portfolio in the worst 1%, 5% or 10% of the cases, so it is used to capture the expected loss distribution in the tail of the distribution. In other words, ES is a measure of risk in the sense that it estimates the value of the portfolio focusing on the worst losses or at least ignoring the most profitable but unlikely outcomes.

Measuring risk is not sufficient. After measuring, it is important to effectively manage risk. Risk measurement is quite objective and quantitative as it is usually based on historical financial data, which are assumed to hold true for the future. On the other side, risk management is more subjective and qualitative. Experience, skill, open-mindedness for and toward change are required. Additionally, more than managing risk managers should be able to manage uncertainty. By definition risk is indeed related to situations in which a probability distribution of outcomes is known or at least can be calculated, while uncertainty describes situations in which probabilities are unknown. So risk management deals with adapting the fund's portfolio to the changing environment.
It is clear from the definition of risk that capital preservation is not part of the mandate of a relative-return manager, because in both indexing and benchmarking the return objective and the risk are defined relative to a benchmark. Hedge funds, on the other side, do not track any parameter. They seek absolute returns by exploiting investment opportunities and avoiding losses, hence the term total risk. In other words, active risk management is the process that balances the investment opportunities with the probability of capital depreciation. This means that under the absolute-return approach there is consideration for the upside and for the downside as well and even though

correlation increases among all investment types during falling markets, hedge funds manage to offer investors the reassurance of downside protection.
Moreover, managing derivatives, leverage, short-selling requires experience and skills different from those required for managing money while pursuing relative returns. In fact, when facing a contraction of credit, liquidity or an exogenous shock an over-leveraged manager might face huge losses while a manager who has managed his fund effectively and have well-secured resources available has a great opportunity for investment.

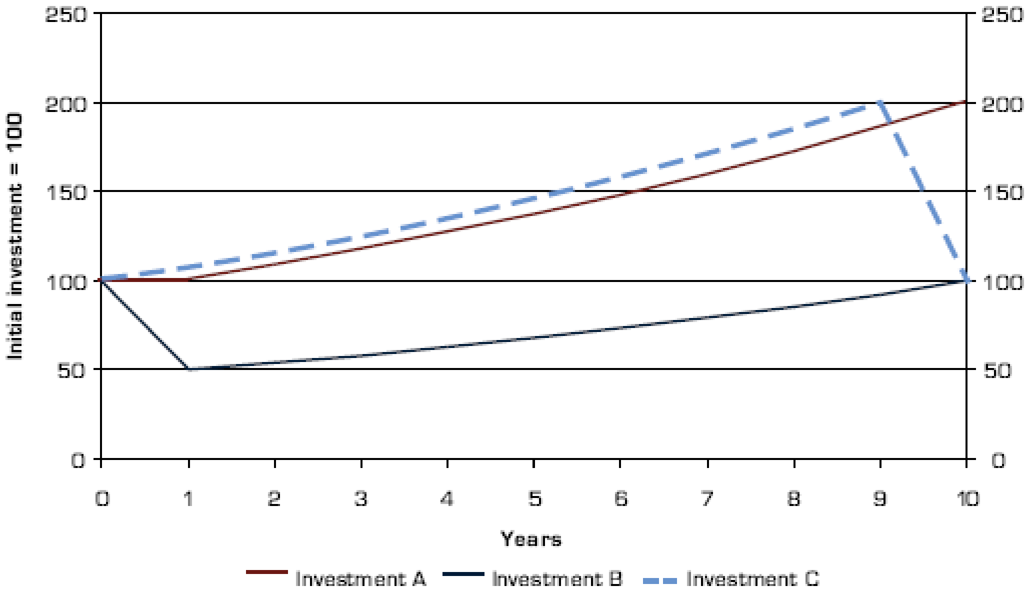
Chart 1.2: Relative versus Active-return

	Relative-return models		Absolute-return models
	(Indexing)	Benchmarking)	
Return objective	**Relative returns**		**Absolute returns**
General idea is to	Replicate benchmark	Beat benchmark	Exploit investment opportunity
Risk management	**Tracking risk**		**Total risk**
General idea is to	Replicate benchmark	Beat benchmark	Preserve capital

Source: AIMA's Roadmap to Hedge Funds – November 2008 – adapted from Ineichen (2001)

As mentioned earlier, absolute return managers seek to compound capital. When compounding capital is a major objective, avoiding losses and short-term downside volatility is fundamental. To have an idea, a 10-year investment of \$100 (A) that starts compounding at 8% from the second year will end at \$200. A 10-year investment of \$100 (C) that compounds at 8% for the first nine years and then falls by 50% will end at \$100, as well as a 10-year investment of \$100 (B) that falls by 50% in the first year and then starts compounding at 8%.
It is always better to have a good constant compounding rate than having excellent years and short-term, horrible losses that ruin the overall compounding rate. Active managers not only prefer more return over less but, unlike a relative return manager, do care about capital preservation because they assign to capital depreciation a disutility larger than utility related to capital appreciation.

Chart 1.3: The effects of negative compounding



Source: AIMA's Roadmap to Hedge Funds – November 2008

Finally, the definition of risk has important consequences on the evaluation of the fund's position. For a relative-return manager, moving to a cash position is perceived as deviating from the benchmark. Hence risk increases since the probability of underperforming increases. For a hedge fund cash represents the risk-neutral position. Shifting to cash means reducing risk, because it allows reducing the probability of negative compounding and losses.

1.3 Leverage and short-sales

« Leverage is borrowing money to amplify the outcome of a deal… It [leverage] turns good deals into great deals"[4] allowing growing tremendously rich. Using leverage affords the levered entity to obtain higher returns, but increases also risk, since it works both on the up-side and down-side, amplifying potential gains as well as potential losses. In other words, leverage undoubtedly has its advantages, but they come at a price. If a hedge fund is too much leveraged and the market moves in the direction opposite of the manager's opinion, it ends up losing too much money.

[4] Jonathan Jarvis (2008), *The crisis of credit visualized*

"…well-deployed financial leverage can greatly enhance performance. Nearly every corporation and every homeowner uses it in forms of loans, mortgages and so on. However, excessive leverage can be ruinous. This is true for corporations and homeowners as well as hedge funds"[5] …and banks.

The objective of using leverage is to exploit new investment opportunities without having to take off other positions prematurely, or to magnify opportunities lying in small price discrepancies. However, the benefits have to be superior to the cost of borrowing money.

We cannot say that leverage per se is good or bad, since it should be evaluated together with market exposure, credit risk and illiquidity. Having a leverage of 4:1 instead of 2:1, i.e. assets of $100 funded by equity of $25 or $50, does not automatically imply that there is a higher risk. The leveraged entity could have invested in government bonds while the less leveraged entity could have invested in stocks.

Of course, use of leverage has to be balanced with opportunity set, strategies and current financial system conditions. For example, if the market environment is stressed, credit is contracting and there is an increasing illiquidity it would be better not to allocate many resources to strategies that are highly levered, such as fixed income arbitrage.

Differently from mutual funds, who can only go long and decide not to invest in a particular company or sector if they don't like it, hedge funds do more: they can short-sell. Thanks to short positions, hedge funds are able, at least in principle, to achieve consistent returns in bull as well as bear markets. In other words, to them it makes no difference whether the market is going up or down.

Unlike long positions, short positions are taken in overvalued stocks, i.e. those securities the manager expects to decrease in value because their price is too high relative to the fundamentals of the underlying companies. In order to short sell, the manager first identifies stocks whose price is likely to decline, borrows them from a prime broker and immediately sells them at the current price. The

[5] Ineichen, A. (2006), *Q&A on Leverage*, Alternative Investment Solutions, August.

manager later closes the position by purchasing these securities, ideally at a lower price than he sold them for, and returns them to the broker. By this way, the manager realizes a profit even in a bear market outlook.

The history of hedge fund failures shows us that it would be wise to structure the leverage position in order to withstand unexpected and unprecedented market movements. In such cases hedge funds are usually forced to exit their investments at inappropriate times in order to meet their debt service, because it is rarely the case that they have allocated some resources in cash.

The lesson is to monitor leverage structure and investment positions because short-term fluctuations, illiquidity or contraction of credit could be fatal. It is also important to recognise that as some point in time it is inevitable to fail in predicting the future. Instead of leveraging the entire investment portfolio there should be some cash reserve or at least some available credit line.

1.4 Liquidity

Hedge funds are not liquid products. They usually have lock-up periods, during which investors must commit their money, extending for months or years. Certain hedge funds suspend or defer redemptions as a defensive measure because they want to avoid unprofitable liquidations of their positions. Not only they limit the possibilities to effectively redeem the investment but they can also require redemption notices.

Hedge funds also use gates, thus limiting the amount of withdrawals from the fund during a redemption period and the amounts of money that can be withdrawn on a particular redemption date. It goes without saying that investors, both funds of hedge funds and direct investors, perceive such an investment as a medium/long-term investment.

The reason behind lock-up clauses and gates is that hedge funds need to align financial resources to their financial needs. Some absolute return strategies are

long-term by nature and long-term resources are necessary in order to profit from them.
Investing in distressed companies, for instance, is a long-term and illiquid strategy. Acquiring distressed debt and going through the bankruptcy proceeding is a long task and the outcome is rather unpredictable. Thus, a long-term commitment from the fund's investors is required. By this way the fund managers make sure that liquidity issues, i.e., a mass exodus of capital during periods of troubles, will not force them to sell at inappropriate times. In other words, if the fund's capital base is not secure and stable there is a chance that capital might be withdrawn at times when it is most needed.
Managers with a sound capital base available, are able to exploit potential opportunities, especially in a stressful market environment where everyone panics and overreacts to bad news.

Hedge funds accept and pursue illiquid strategies because they try to achieve high risk-adjusted returns. They do take risks because they expect a reward for providing liquidity to the market. They buy less liquid securities at discount, while going short on liquid and overpriced securities, because they expect to pick up a liquidity premium. However, such a strategy does not work under periods of financial stress, when investors fly to quality, switching from lower quality and less liquid securities to higher quality assets. In this situation, hedge funds can incur in huge losses.
Ivan Guidotti, of Olympia Capital Management, shows that that there is no significant relationship between lock-ups and alphas, except for event driven strategies. However, we pointed out that event driven strategies, of which investments in distressed debt are part, are the most illiquid and thus require long-term resources in order to profit. We can say that lock-ups and redemption notices are positively related to alpha, especially for less liquid strategies. This implies that investors that seek to invest in higher liquidity funds might pay the price of reduced alphas.

The positive relationship between liquidity terms and positive alphas indicates that illiquidity premiums do exist and that more successful hedge fund managers are probably more effective in imposing harder liquidity terms.
Guidotti also shows that young hedge funds tend to outperform older ones and that the best young funds are the most illiquid ones.
Not only it is quite difficult to cash out an investment in a hedge fund “at will”, it is also rather difficult to enter a hedge fund. Successful hedge funds tend to close, sooner rather than later, their funds to new investors. Being too big could become a problem, especially if the fund is exploiting arbitrage or quasi-arbitrage opportunities.

Liquidity represents an extremely important issue also because of the consequences it has on funds’ valuation process. Since a larger number of hedge funds invest in thinly traded and illiquid securities it becomes more difficult to calculate in a proper way the fund’s month-end net assets value. This problem is compounded when market volatility increase or when credit markets become illiquid and thinly traded as in 2008.

1.5 Beyond equity long-short strategy

The first hedge fund was a long-short equity fund and was rightly described as a hedged fund. Nowadays, the term “hedge fund” refers to an extremely heterogeneous asset class, extending from the original low risk, market neutral strategy of Jones, which have low correlation to the overall market movements to include directional, unhedged and highly leveraged strategies.
Intuitively, hedge funds provide diversification strategies. Since they invest in several types of strategies and employ several investment techniques, they show returns that tend to be uncorrelated with stock market indexes and other traditional investments. Hence, they can be used to improved investors’ risk-adjusted returns.

The traditional classification proposed by Tremont advisers identifies four main categories: Relative Value, Equity Long-Short, Event Driven and Tactical allocation. Each of these categories is characterized by different risk-return profiles and includes different sub-strategies. Additionally, each manager has got his own investment style and can interpret strategies in a personal manner, different from others. A further factor to be considered is that managers tend to employ multiple strategies, in order to achieve a more stable stream of returns over different market cycles. They often drift away from their area of expertise, so to seek opportunities in related investment areas.

1. Managers following an Event Driven approach try to indentify particular events that have the potential to influence the asset valuation. They take advantage of announcements and other one-time events.

► Distressed Debt: investing in distressed companies means investing across the capital structure – debt and not equity – of companies subject to financial or operational difficulties. Such companies might currently be in a bankruptcy proceeding or appear to likely declare bankruptcy in the near future. Hedge funds start accumulating near-default or defaulted bonds at deep discount to intrinsic value, due to difficulties in assessing their proper value, lack of research coverage, or inability of traditional investors to continue holding them. Then, they resell them later for a profit, when the restructuring proceeding has driven the price upward. Moreover, in a worst-case scenario, the manager could realize a profit if the company is liquidated, provided that the manager had bought senior debt in the company for less than its liquidation value.
Additionally, some managers have developed specific competences in restructuring and bankruptcy proceedings, hence they invest in distressed debt in order to go through the entire restructuring process, in the belief that the company will successfully reorganize and return to profitability. When upon

emergence from bankruptcy bondholders' claims are turned into the new company's equity, they acquire a long-term control over the new company.
The ideal situation is the one in which the distressed company has financial only and not operational problems because the manager typically can rely on the operational stability to increase the probability of success of the bankruptcy process.

► Special Situations: such managers typically invest both long and short, in stocks and/or bonds expected to change in price due to unusual events that occur during the lifecycle of a company. Spinoffs, stock buybacks, financial restructuring and recapitalization are all events considered to have an effect on the company's securities. However, managers need to have a certain degree of flexibility in order to pursue event investing across different asset classes and take advantage of shifts in economic cycles. They usually hold directional positions and do not hedge in a combination of event driven equities and credit. Returns are obtained when the event takes place.

► Risk Arbitrage or Merger Arbitrage: Funds bet on merge transactions involving public companies. In particular, by short-selling the buyer and going long the target company, they bet on their view that the acquisition will go ahead and that the deal will close successfully. In other words, they believe that the spread between the transaction bid and the lower target trading price will narrow as the deal gradually closes and prices will converge. Typically, the bid price is higher than the trading price to take into account synergies and eventual other premiums paid by the would-be acquirer. The principal risk is deal risk: should the deal fail to close, the buyer's stock price goes up and the target's stock down.
If, for example, the market believes there is a 60% probability that the deal will close but the fund managers perceive that the probability of success is closer to 80%, the trader will take a position to exploit the difference. He will take the opposite position if he perceives that the probability of success is lower.

2. Managers pursuing Relative Value strategies tend to identify normal relationships between different securities and they try to profit from significant deviations from this long term relationships. This approach usually implies a neutral net market exposure, although leverage is used to enhance returns.

► Convertible Arbitrage: it involves investing in corporate debt that is convertible into stocks and simultaneously short-selling the corresponding stock, trying to find an arbitrage between the value of the two different types of securities issued by the same company and exploiting the pricing error made in the conversion factor of the security.
Managers typically build long positions of convertible and other equity hybrid securities and then hedge the equity component of the long securities positions by shorting the underlying stock. By this way, they make the position less sensitive to the stock price's fluctuations. In other words, they try to exploit inefficiencies related to a specific company in the market while offsetting long with short positions, thereby reducing market-level risk.
Thanks to this strategy, managers are able to achieve different sources of return: initially they are rewarded from the short sale of the stock, then by the income stream of coupons from the convertible instrument.
When the underlying share price is above the strike price, the bond is in-the-money, which results in an appreciation on the bond's value. When the underlying share price is below the strike price the bond is out-of-the-money. When the bond is deeply out-of-the-money it trades in a similar way to straight bonds. To be noted that instruments with embedded options are more sensitive to upward movements of the underlying equity and less sensitive to downward movements. So the idea is to make money from the bond if the stock price goes up and make money from the short sale if the stock price goes down.

Managers can be effective in capturing this price sensitivity discrepancy. Moreover, the price of an equity-linked instrument, such as a convertible bond, takes into account the market's expectation of the volatility of the stock over the remaining life of the investment, because of the embedded option on equity. If the perception of this volatility increases, the price of the instrument will increase.

► Fixed Income Arbitrage: hedge funds take advantage of inefficiencies and pricing disparities between related fixed income instruments, caused by changes in investor preferences or by fixed income market fluctuations. For example, they take opposite positions in instruments like coupon bearing treasury bonds and zero coupon bonds, or bonds having different credit qualities. In order to exploit interest rate-related opportunities, they assume opposing positions in fixed income securities and their derivatives. Because the valuation disparities between related instruments are small, managers usually employ leverage to enhance their overall returns.
Interestingly, hedge funds following this approach usually take position in mortgage-backed securities.

► Equity Market Neutral: such funds take long and short positions of similar size in stocks, thus minimizing exposure to the systematic risk of the market and insulating performance from market volatility. Long positions are taken in securities expected to rise in value while short positions are taken in securities expected to fall in value. The main objective is to exploit investment opportunities related to specific, individual stocks, while maintaining a neutral exposure to broad groups of stocks such as sector, industry, market capitalization, country, or region. The securities may be identified on various bases, such as the underlying company's fundamental value, or with a macroeconomic top-down approach, or a technical analysis on the pattern of price movement.

3. Equity Long/Short is the original and probably the most basic hedge fund investing approach. It involves setting up equity investments with a directional bias, differently form equity market neutral approach. Managers go long in anticipation of rising prices and they go short when they expect declining prices, i.e. when they perceive the stock is overvalued.

► Growth Stocks: the manager invests in companies experiencing or expected to experience a strong growth in earnings per share. Growth stocks are usually those of small or mid-capitalization companies and almost always technology companies. A growth stock usually does not pay dividends, as the company prefers to keep on reinvesting retained earnings.

► Value Stocks: it involves buying a stock that is perceived to be underpriced relative to the intrinsic value of the underlying business, i.e. the stock price is low given company fundamentals such as high earnings per share, good cash flow, strong management, etc. Common characteristics of such stocks include a high dividend yield, low price-to-book ratio and/or low price-to-earnings ratio. Possible reasons that a stock may sell at a perceived discount could be that the company is not appreciated by investors and not correctly judged by the analysts. The manager takes short positions in stocks he believes are overvalued, i.e. the stock price is too high given the level of the company's fundamentals.

► Dedicated Short Bias: managers tend to maintain net short exposures in equities. In other words, they earn returns by taking more short positions than long positions. The strategy is based on detailed individual company research and risk management in order to identify companies with weak cash flow generation while offsetting these short positions with other long positions.

4. Tactical or Directional strategies

► Global Macro: managers typically construct their portfolios employing a top-down global approach in order to forecast how political trends, government policies and global macroeconomic events will impact on financial markets. They consider factors such as interest rates, economic growth, inflation, etc. and rather than looking at individual corporate securities, they seek to profit from changes in the value of entire asset classes, participating in all major markets – equities, bonds, currencies, commodities, interest rates – even if not at the same time. For example, the manager may hold long positions in the Euro and U.S. equity indices while shorting the Japanese Yen and U.S. treasury bills.
Profits are made by correctly forecasting and systematically anticipating price movements, having the flexibility of a broad investment mandate. Hence, the ability to enter into practically any market using any instrument.

► Managed Futures: futures managers aim to be profitable in any economic situation, in bull as well as bear markets. They usually do not have a particular preference about being net long or net short and they also invest globally, trading in a large number of independent sectors and financial markets.
Managers tend to largely rely upon historical price data and market trends. Strategies are built to exploit price trends regardless of direction. Once a trend in futures markets is identified, managers invest in the same direction of the trend, by either buying long or selling short, in the attempt to capture it. They hold the position for as long as the trend is intact and favorable thus realizing as much gain from it. Then they exit the trend by closing positions as soon as possible. Given the nature of the investment strategy, managers prosper in periods of extreme directional bias and turmoil. However, they must commit their resources to the long term as price trends could take some time to develop.

Futures are flexible financial instruments that can be used to profit from both rising and falling markets. Managed Futures managers utilize such instruments to make speculative investments in agricultural commodities such as corn or cotton, in crude oil, gold and other commodities. They also invest in financial markets, in stock indexes, currencies and interest rates.

They take directional positions on certain economic or company specific events, employing a significant amount of leverage as the strategy involves the use of futures contracts.

Future contracts also offer some advantages: first of all they are traded on global exchanges which provide publicly accessible quoted bid and offer prices. Hence, gain or losses on outstanding positions and their current value can be easily determined. It goes without saying that this strategy differs from other strategies that typically involve investments in over-the-counter (OTC) derivatives which are not traded on a centralized exchange.

As a consequence, market values of such instruments are not readily available and managers can experience troubles in making valuations and then manage risk. On the other side, futures do not create problems for valuation because there is clear price transparency.

It has to be noted, however, that some hedge funds that engage in managed futures strategies employ also other strategies. Hence futures represent only a component of a synthesis of instruments.

Futures contracts are also liquid instruments, meaning that positions can be easily entered and exited. This feature is particularly important when managers want to reduce or eliminate an outstanding positions as they notice that a trend is reversing, thus avoiding large drawdowns and significant losses for their investors.

Collectively, managed futures strategy has a relatively low correlation to many other hedge fund strategies. It is also characterized by low to negative correlation to equities, especially in periods of poor performance.

5. Specialty strategies

► Emerging Markets: they invest in currency, debt and equities and of countries with emerging markets, such as China, India, Latin America, Southeast Asia, part of Eastern Europe and parts of Africa. These countries are considered to be in a developing or less mature phase. More precisely, they are in are in a transitional phase, between developing and developed status.
Emerging markets managers face specific issue when designing their strategies because these markets are usually characterized by higher GDP growth as well as higher volatility and inflation levels.
Moreover, managers hedge such investments by taking various positions in developed markets.

1.6 Misconceptions

Hedge funds are usually considered as being speculative funds or gamblers. They indeed take risks in order to seek absolute returns, since there would be no excess return if all risk was hedged. However, their key objective is to realize stable and consistent positive returns with low probability of financial losses, i.e., while protecting the principal against negative compounding. In order to do that, they usually hedge and they are exposed to risk just when they expect a reward from bearing that risk.
Hedge funds also use speculative instruments together with short-sales in order to exploit investment opportunities and that leads many people to wrong conclusions. It is not said that using such instruments or techniques increase risk, actually the opposite effect can be obtained when speculative instruments are used to offset other positions. Ironically, many hedge funds and their investors firmly believe that conventional “long-only” investment strategies are extremely speculative since they are fully exposed to the fluctuations of the market, no matter how much the idiosyncratic risk could have been diversified away. To

them, being fully exposed irrespective of the business cycle, market volatility and opportunity set is not the right way to manage money.

Hedge funds are often blamed for increasing systematic risk of financial markets and even recently they have been object of several critics. They indeed make use of leverage to improve their returns but what is dangerous for the leveraged entity and for financial markets is not leverage itself but the excessive use of leverage. If this is the case, and a market or liquidity shock occurs then, the risks hedge funds assumed are directly transferred to the trading counterparty or to creditors. There is also an indirect effect on financial markets and their participants: the disappearance of a player willing to bear risk can cause price changes and thus increase price volatility. Both the direct and indirect effects can cause a contraction of credit and liquidity, leading to severe consequences for the real economy.

There is no question hedge funds have the potential to destabilise financial markets if they are too much levered. However, they can also contribute to the stabilization of financial markets and can improve their efficiency through providing liquidity, investing in less liquid securities and by bearing risks that no one else would be willing to bear. For instance, when equity markets were going down, in summer 2002, hedge funds emerged and provided liquidity to the market.

Also, looking at what happened in September 2008, it is clear that excessive leverage – but not leverage itself – is dangerous, independently from the legal status of the financial market player.

1.7: What are funds of hedge funds?

"A fund of hedge funds is an investment company that invests in hedge funds -- rather than investing in individual securities. Some funds of hedge funds register their securities with the SEC. These funds of hedge funds must provide investors with a prospectus and must file certain reports quarterly with the SEC.

Not all funds of hedge funds register with the SEC. Many registered funds of hedge funds have much lower investment minimums (e.g., $25,000) than individual hedge funds. Thus, some investors that would be unable to invest in a hedge fund directly may be able to purchase shares of registered funds of hedge funds.”[6]

Funds of Hedge Funds have experienced a rapid growth within a limited amount of time. They are pooled investment products that invest their capital among several hedge funds, from 20 to 40. They might be diversified or concentrated on few funds, or to a strategy, style or even region and they are usually promoted and set up by large institutional managers, who raise funds and invest in a portfolio of individual, unregistered hedge funds.

Funds of funds have some important advantages. First of all, they open up the alternative investment universe to small investors. Secondly, they give the possibility to indirectly invest in individual hedge funds and finally, they offer the possibility to automatically exploit benefits from diversification.

► Hedge funds were once an exclusive investment vehicle for wealthy and rich investors. Nowadays regular investors or new entrants, who are less well off and have smaller investable assets, can take part to the action thanks to Funds of Hedge Funds. Since they are often registered, FoFs require lower minimum investments, less strict income and net worth requirements, shorter lock-ups and can be offered to an unlimited number of investors.

Differently from hedge funds’ institutional investors, funds of funds’ retail investors would not find attractive illiquid investment such as the one in hedge funds. Relative to the underlying hedge funds, FoFs are characterized by looser withdrawal restrictions and illiquidity features, such as quarterly withdrawal

[6] SEC (2008), *Hedging Your Bets: A Heads Up on Hedge Funds and Funds of Hedge Funds*, from the internet: www.sec.gov/answers/hedge.htm

options. Thus, they are more marketable to retail investors and they give to small investors the opportunity to enter the hedge fund industry

► When investing in hedge funds, it is fundamental to understand the risk-return profile and the likelihood of large drawdowns of each manager. Experience and qualitative judgement both play an important role.

Small investors, without previous experience in this asset class, are usually not able to assess an hedge fund. FoFs allow such investors to enter the hedge fund arena by delegating to professional managers the selection process and the choice of individual funds. FoFs' managers usually perform a professional due-diligence process and run several background checks on hedge funds before investing. They verify the credentials and check the references of the funds' managers, they continuously monitor the hedge funds included in their portfolio. In other words, investors entrust skilled professionals with all the time-consuming due diligence tasks. Not only FoFs managers are more competent and better equipped for performing due diligence and for picking the right funds, but they are also in a better position: they could have a competitive advantage, consisting in lower costs to obtain contacts, information, insights and they could even know when a skilled professional is going to launch an hedge fund before the others know.

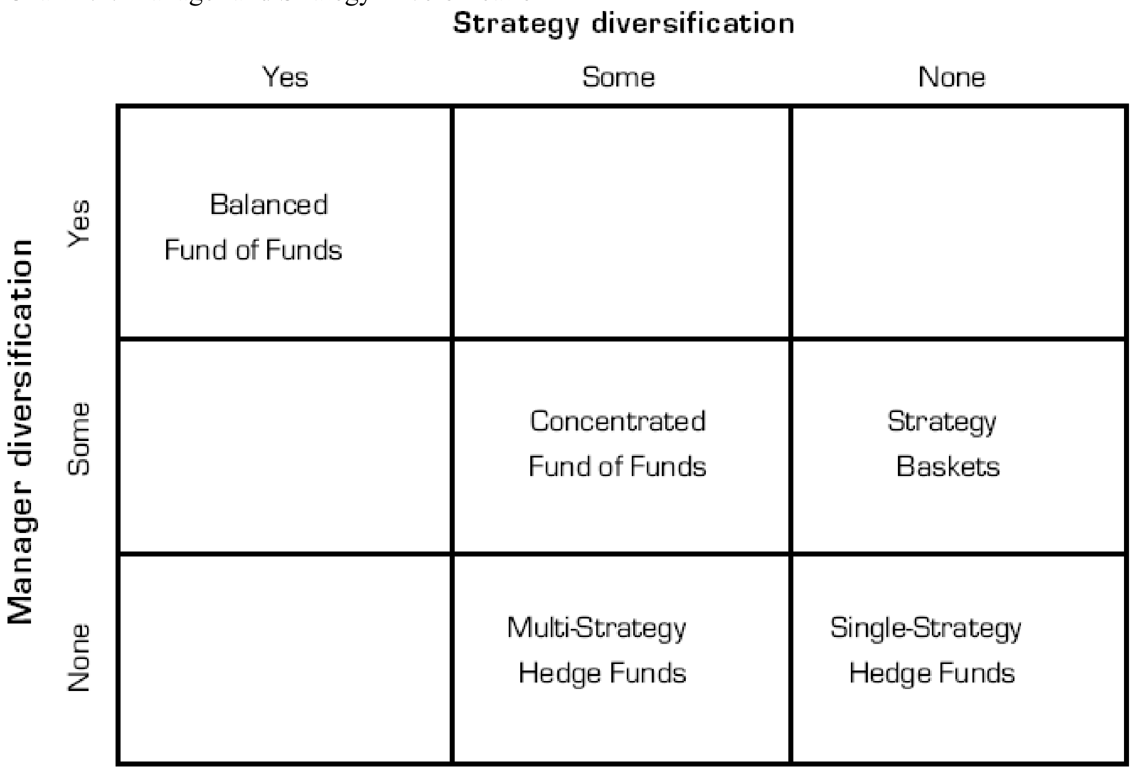
It goes without saying that due diligence is a relevant part – and probably the most relevant – of the FoFs managers' value proposition.

► Hedge fund industry is quite heterogeneous. It is indeed made of funds pursuing several different strategies with low historical correlations among hedge funds themselves as well as bonds and stocks. The diversification benefits can be exploited in order to construct and manage portfolios of hedge funds, thereby diversifying idiosyncratic risk of the underlying funds, i.e., the risk related to single investing strategies and managers' style. For instance, the weaknesses of one manager can be diversified investing in the strengths of another fund manager.

FoFs allow investors to accede a number of fund returns with one investment. Rather than assuming the risk of selecting one or more individual managers, FoFs give investors the opportunity to allocate their money to a portfolio of managers thereby achieving a likely more constant and stable return, due to the avoidance of large drawdowns. This is in line with the objective of absolute-return managers, who purse positive and stable returns, while avoiding negative compounding of the capital under management.

In addition, we have to consider that diversification benefits deriving from investing in several individual hedge funds are usually not fully exploited by retail investors because they face illiquidity problems. In addition to that, hedge funds are also perceived as being too loosely regulated and not transparent. FoFs, on the other side, do offer diversification opportunities and they are more likely to provide performance reports to investors and to be audited.

Chart 1.4: Manager and Strategy Diversification



Source: AIMA's Roadmap to Hedge Funds – November 2008

Chart 1.4 shows some of the investment vehicles within the hedge fund industry. Single-strategy hedge funds do not offer manager nor strategy diversification. Even though multi-strategy funds are sometimes compared to funds of funds, they do not offer manager diversification and hence are riskier. However, a multi-strategy manager could be quicker and more flexible in reallocating capital.

► The most important disadvantage is the double-fee structure. *"Funds of hedge funds typically charge a fee for managing your assets, and some may also include a performance fee based on profits. These fees are charged in addition to any fees paid to the underlying hedge funds. If you invest in hedge funds through a fund of hedge funds, you will pay two layers of fees: the fees of the fund of hedge funds and the fees charged by the underlying hedge funds."*[7]

Relative to individual hedge funds, funds of funds usually charge lower performance fees to their investors, usually 10%. The reason is that, by investing in underlying funds, FoFs' managers delegate the allocation to the individual securities to the sub-funds themselves. However, there are higher management fees, ranging between 2% and 3% of AUM. If the average hedge fund charges a fee structure of 1.5% and 20% of the profits, the overall cost for an investor in a FoF would be 3.5%-4.5% of the AUM and 30% of the gains.

The reason behind this double-fee structure is that investors have to compensate both the manager of the individual hedge fund and the FoF manager. The former for managing risk at the security and market level and the latter for his skills in constructing a balanced portfolio, managing risk at sub-fund level, selecting and monitoring the sub-funds

► Another important disadvantage is that it is still difficult to diversify the risk at the individual security level. For instance, the underlying funds might be all betting on the same individual securities. Thus, the fund of funds and its investors might end up being exposed to a large amount of idiosyncratic risk, related to the same securities through several different funds. In addition, they could be unaware of the situation because of the lack of reporting of the hedge funds.

[7] SEC (2008), *Hedging Your Bets: A Heads Up on Hedge Funds and Funds of Hedge Funds*, from the internet: www.sec.gov/answers/hedge.htm

► Finally, there is the risk of over-diversification. FoFs managers must be careful about the number and the type of individual hedge funds they pick up. They have to coordinate the different holdings and avoid adding too many sub-funds.

1.8 Hedge fund due diligence

As already pointed out earlier, hedge funds can be defined as a "pure skill asset class", meaning that their performance and results highly depend on the capabilities and skills of people that are managing the fund. Trying to replicate strategies that worked well in the past is not a good idea; managers need to have a solid grasp of the strategy they are investing into and of the situation that markets are currently experiencing.

The investment process starts with the manager selection, and the evaluation and identification of the right manager is key to success. Choosing a manager is extremely important and truly makes the difference, both for individual investors selecting a fund of funds or for institutional investors and FoFs selecting an individual fund. For instance, each manager has its own investment style and can have a competitive advantage over the rest of the market in a particular field. Each manager can be prone to directional or non-directional strategies.

Fundamental for evaluating and selecting a manager is the due diligence. This process consists in the evaluation and research of several information, such as financial and legal documentation, operational infrastructure and investment terms. Among the other things to look for and analyze, investors should have a clear understanding of the fund's investment strategy and valuation process, the people, the organization and the track record.

► About the investment process, it is necessary to investigate the fund's investment policies, process, the execution and the risk management policies. Also, the use of leverage, short-selling and liquidity features. To this extent, the Offering Memorandum, the fund's prospectus and the related materials are important documents because they contain legally bounding statements. They are fundamental in order to understand the level of risk characterizing the fund's investment strategies, to assess whether such strategies are suitable to the investors' personal goals, time horizons, and risk tolerance.

► Investors should have a clear understanding of the valuation process of the fund's assets. It is extremely important to know how the fund's assets are valued because FoFs and hedge funds usually invest a really high percentage of their portfolio in illiquid securities that may be difficult to value. To add to an investor's anxiety, managers use significant discretion in valuing securities and they are sometimes allowed to select the price that they think best reflects market value among a wide range of prices.

Investors must be aware of the risks of potential manipulation, from period to period, related to the excessive use of discretion, especially because they are paying management and performance fees on the base of these subjective valuations. They should check whether a pricing/valuation committee exists to oversee managers during the implementation and execution of the valuation process. Such a committee would bring greater accountability and transparency to the whole process and avoid too much discretion to the hedge fund in pricing securities.

► Experience and background of the fund managers need to be carefully analyzed. To this extent, investors shall research the backgrounds of hedge fund managers, so as to know with whom they are investing, to whom they are entrusting their money. They shall be sure of whether hedge fund managers are qualified to manage their money. It is also important to understand whether the fund adopts a team or one man-approach.

► Investors should carefully check the organization: whether the business plan of the hedge fund is clear or not, the way managers plan to raise money for the future, whether a retention plan for the key people and internal audit procedures are in place.

► The analysis of the hedge fund track record and history within the securities industry is also important, even if it is usually not easy due to the well known lack of transparency.

Additionally, in a due diligence process qualitative judgement is as important as quantitative analyses. In other words, investors have to go beyond traditional, quantitative analysis and must take a non-conventional approach towards due diligence. They must ask critical questions to managers, regardless of their reputation, about topics that cannot be found in any financial statement or data-room. This is extremely important to avoid blow-ups, to have an edge and maximise returns. In other words, since they are entrusting their own money to someone else, investors should not be afraid of asking questions. They should carefully understand where their money is going, where it is being invested, who and how is managing it, how and when they can effectively withdraw their money, what protections they have and the rights they hold as investors.

"It's a question of thoroughly reviewing the materials that the funds provide, looking at legal documents, having a thorough due diligence questionnaire, going on-site and meeting the various members of the team in the front- and back-office areas, understanding the liquidity, leverage, concentration, conducting reference checks, understanding the source of returns, and above all, being sceptical of the answers," says Adrian Sales, head of due diligence at Albourne Partners[8].

As Blaine Klusky of AIG suggests, it could be useful to separate operations team from investment team during the due diligence meetings, collect answers to the same questions and ultimately compare them. The most candid people can be a trustworthy source of information for the future. Especially because insiders usually know when and if something is happening before the investors know.
Investors have to check whether senior managers and key staff attend meetings or they are usually absent. It could be also useful to understand whether

[8] Kvasager W. (2009), *Due diligence is all about legwork,* 5th April. From the Internet: http://www.ft.com/cms/s/0/0717ce3c-21b2-11de-8380-00144feabdc0.html?nclick_check=1

employers and staff members are bound by non-disclosure agreements and whether former employers are indemnified in a way that the fund is protected from potential retaliation. Other questions can be addressed to the way management fees are used. Such money should be destined to the payment of operating expenses, not to enrich the managers. It is also important to realize that when investing in a FoF, investors are going to pay two layers of fees.

Due diligence is a never ending, dynamic process. After evaluation and selection, investors need to constantly review managers within their portfolio. It is a continual process because relevant factors of both markets and strategies may change overtime, so that managers have to adapt to change and implement risk management mechanisms.

1.9 Hedge Fund Replication Strategy

Many authors are currently addressing the issue of whether hedge fund managers are actually active managers or they just collect risk premia from the market. The scepticism surrounding the effective possibility of alpha-generation in a crowded market and perhaps the onerous 2%-20% fee structure of the hedge fund industry are making the investor community shift the attention to a new strategy: hedge fund replication. This strategy is conceived to replicate hedge funds' returns at lower costs and higher liquidity features.

Bill Fung and Narayan Naik at London Business School, and David Hsieh of Duke University found that about 85% of the average fund of hedge funds' returns can be explained by a collection of rewards for bearing some common forms of risk premia (or beta). Their main idea is that if hedge fund returns can be explained by few forms of market exposure, then it is possible to construct a portfolio of general market exposure that allows achieving returns that look like hedge fund returns. Put differently, it is possible to achieve FoFs-like returns by investing in the risk factors that tend to drive hedge fund returns.

To them it is possible to construct a synthetic hedge fund, using derivatives and other commonly traded instruments, consisting of a diversified collection of beta exposures that explains the majority of FoFs' index returns.

In particular, they use a multi-factor model with a changing basket of eight factors, such as market risk premium, credit premium, term premium, emerging markets premium, small-cap premium and other dynamic beta which can be considered as *trading strategies that mechanically buy and sell options on certain assets* – government bonds, currencies and commodities – *as prices rise and fall*, thus capturing non-linear returns.

This synthetic hedge fund is a portfolio aimed to replicate FoFs' returns coming from the universe of strategies that are being tracked, for the part that is attributable to the assets and strategies that rise (or fall) in value, independently of the manager's decisions, namely the beta part. Moreover, the beta exposures can be obtained through liquid instruments, low transaction costs and fees and no manager-specific risk, thereby representing a convenient and appealing alternative to the costly, illiquid and direct exposure to hedge funds.

Hedge fund replication delivers FoFs-like returns through transparent, liquid, and low-cost exposure to the risk premia that drive the majority of hedge fund returns. This extremely important, especially in the light of last year's credit crunch, which underscored liquidity issues within hedge fund portfolios and extended lock-ups in many cases.

According to Narayan Naik, *"…hedge funds try to innovate, but once some strategies become mainstream, the beta component can often be replicated. The more directional it is, the easier it is to capture."* [9]

To be noted that synthetic hedge funds just capture the beta part of FoFs' returns, not the alpha, thus forgoing the manager-specific excess return potential. However, the replication strategy starts from the observation that if any alpha is generated by hedge fund managers, it is almost entirely eroded by the fee

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[9] Bishop B., Fieldhouse S. and Jones R. (2008), *Hedge Fund Replication: A Revolution in the Making?*, The Hedge Fund Journal, May.

structure. In other words, FoFs' index returns have little after-tax return in excess of what achieved thanks to the replication strategy.

If the objective is to track hedge funds or FoFs' performance, then the question is why not investing directly in a fund of funds or buying an index. Advocates of the replication strategy say that many well-performing funds have capacity constraints, i.e., they are closed to new investors. Secondly, even if investors have the possibility to allocate their assets to such indexes, the performance of hedge funds is usually considered to be upwardly biased. For instance, funds are selected for an index because they performed particularly well in the reference period, while funds that failed are not considered. In other words, the index is made up of funds that survived and not of all the set of funds throughout the period of consideration.

Among the benefits of replication strategies, there is also the fact that they employ only liquid strategies such as equity index futures. Hence, they do not suffer the typical liquidity risk faced by almost all hedge fund strategies. Replication strategies usually offer daily liquidity features for investors, and weekly liquidity in the worst case.

Usually when managers and investors look at return volatility or Sharpe ratio as proxies for risk they implicitly ignore liquidity issues and other operational risk factors, such as fat tail risk and fraud which is heightened by lack of transparency. If hedge fund replication succeeds in eliminating liquidity risk it means that it delivers superior risk-adjusted returns when liquidity risk and the other risk factors are taken into account.

FoFs replication also allows investors to accomplish other tasks, such as rebalancing the portfolio or temporarily allocating their assets. Indeed, it is possible to use the replication strategy to add exposure (percentage on total portfolio value) to the hedge fund asset class, while maintaining liquidity, in case the exposure dropped too much because of poor performance. Or, it can be used to reduce exposure if it was above the optimal level because of good performance.

Replication strategy also provides immediate exposure to hedge fund asset class for temporary purposes. For instance, during the transition from one hedge fund manager to a new one, a fund of fund could need time in order to perform due diligence or it could be that the liquidity features of the two funds are not coordinated so that a temporary, immediate and liquid allocation to the hedge fund asset class is needed. FoFs might also need exposure to meet the required investment profile when there are no available hedge fund managers that fit with the desired criteria.

Thirdly, investors can use this strategy to implement a core/satellite approach. Replication allows making a passive allocation to access beta, thus being the passive part of the portfolio. Investing directly in the hedge fund industry to seek alpha can be instead considered as the active part of the portfolio. Hence, both the core and the satellite parts of the portfolio would be invested in the same asset class, but investors can decide to pay the onerous hedge fund-like fees only when they do identify genuine hedge fund alpha producers. Replication is a good starting point for new brand investors entering the hedge fund asset class, and then adding other direct and specific investments to supplement it. Existing investors or funds of funds, on the other side, could turn to replication to add exposure to some hedge fund strategies that they are missing.

Lastly, replication offers investors, including funds of funds, a cheap and cost effective means to mirror the beta in more restricted universes, such as particular sub-strategies.

Although hedge fund replication is still a new investment tool, it is rapidly gaining interest within the investors' community. Interestingly, FoFs look at replication as a useful investment tool as well, a complement to individual hedge funds investing. Not surprisingly, hedge funds tend to see replication as a competitor.

CHAPTER 2

2.1: Assets Under Management; 2.2: 2008 Key Performance Facts; 2.2.1: Individual Strategy Performance; 2.3: 2009 Overall Performance; 2.4: Performance of single strategies in 2009; 2.4.1: Convertible Arbitrage; 2.4.2: Emerging Markets; 2.4.3: Managed Futures; 2.4.4: Fixed-Income Arbitrage;

Measuring the performance of the hedge fund industry is far from being an easy task. Hedge fund managers report performance data to databases on a voluntary basis and they tend to stop reporting when performance gets really poor, thus creating a selection bias. As a consequence, they usually exit the database also for reasons other than liquidation.

In addition, estimates on performance are affected by the survivorship bias, i.e. the fact that hedge fund industry's returns for a particular year do not take account of hedge funds that closed during that year, which makes the overall results positively skewed.

Since data providers conduct their own researches to generate estimates, there are no official figures and/or definitive sources for performance data on the industry. It goes without saying that they could vary among different databases and data sources.

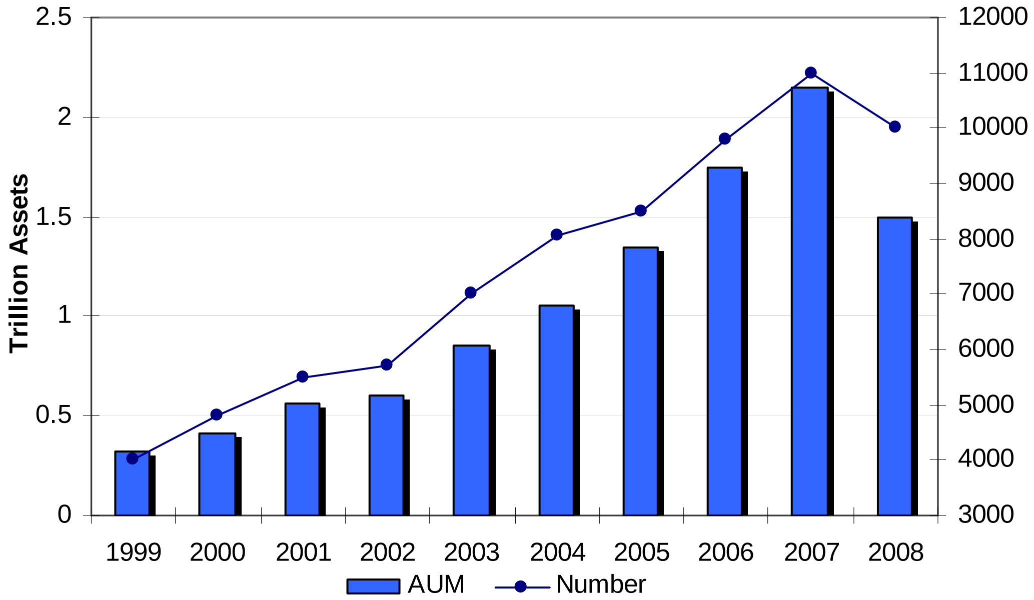
In this chapter, I will make use of the Credit Suisse/Tremont Hedge Fund Index, as a proxy for the whole hedge fund industry. The Index is based on the Credit Suisse/Tremont database, which tracks over 5000 funds. It is made up of only of funds with minimum assets under management of $50m, a 12-month track record, and audited financial statements. It is calculated and rebalanced on a monthly basis, and shown net of all performance fees and expenses.

2.1 Assets Under Management

After a decade of high growth, the hedge fund industry is now experiencing a tremendous shock. With liquidity squeeze and extreme market conditions on the one hand and global deleveraging on the other hand, hedge funds have tried to withstand placing liquidity restrictions, thus trying to break through the downward spiral of the last two quarters of 2008. Credit Suisse estimates that, as December 2008, 11.6 percent of total industry assets under management (AUM) was impaired, meaning suspended redemptions, gate provisions or side-pocketed assets.

According to the International Financial Services London (IFSL) estimates, the hedge fund AUM have felt slightly more than 30 percent in 2008 to $1,500bn[10]. A research from Morgan Stanley shows that total assets of the industry were down to about $1,330bn at the end of March 2009.

Chart 2.1: Global hedge funds



Source: IFSL estimates

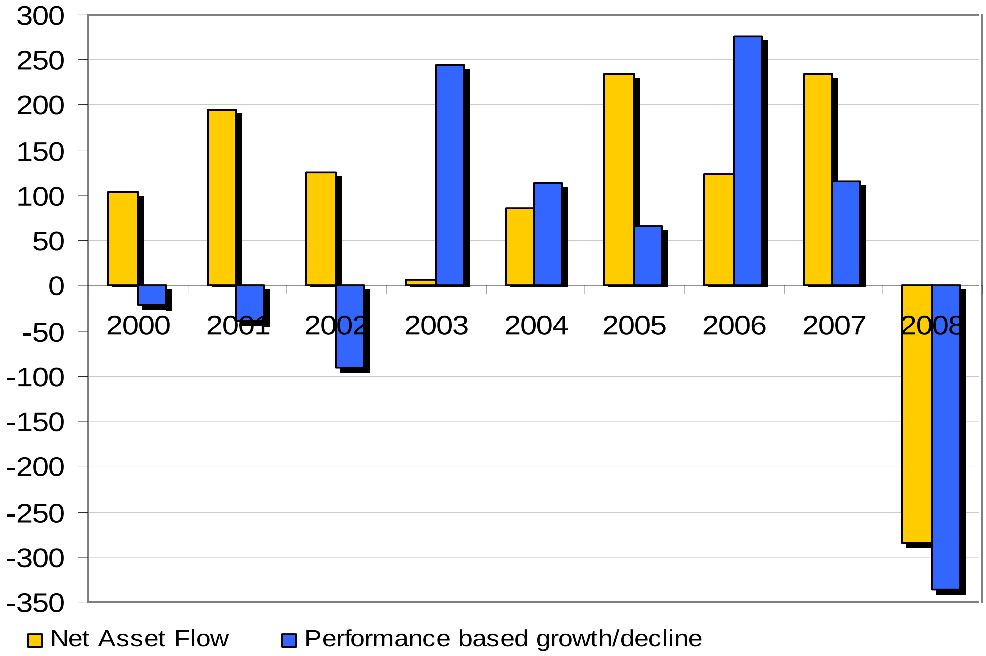
Overall, the size of the industry has declined because of a combination of two main factors. Namely, the negative performance and asset outflows due to liquidations of funds and increase in redemptions.

IFSL also estimates that the record decline in assets during 2008 was split relatively equally between negative performance and asset outflows. Moreover,

[10] All the data and estimates in this paragraph are from IFSL.

redemptions had a bigger impact in Europe and emerging markets, while in the US and Japan, losses on investments were more responsible for the decline in assets. Lastly, Asia experienced the highest rate of liquidations. The balance between performance and asset flows on industry assets over different years is shown in Chart 2.2.

Chart 2.2: Net asset flow and returns



Source: IFSL estimates

► Hedge funds losses were widespread in 2008, with almost 75 percent of global funds recording a negative performance and an annual cumulative loss of 19 percent. The Credit Suisse/Tremont Hedge Fund Index reported the second worst quarterly performance in the last quarter 2008 and then posted a positive 0.85 percent in the first quarter 2009. Nevertheless hedge funds outperformed the S&P and many of the underlying markets, developed and emerging stock market indices, and aggregated commodity indices. It underperformed bond market indices and cash.

► It is estimated that the industry lost nearly 30 percent of assets in 2008 or almost $650bn down to $1.500bn. Of total losses, approximately half of them were lost as a direct consequence of investor redemptions. Monthly net flows started to turn negative in the second half of 2008. By the end of third quarter, outflows were starting to reverse inflows from the rest of the year. The fourth quarter was even worse, with redemptions reaching record levels of $150bn.

The surge in redemptions was due to the dissatisfaction of the performance during 2008. In other words, investors were unhappy because of the huge losses characterizing the hedge fund industry. In addition, many investors were forced to cover their losses or cash calls elsewhere, so they had to recall their investments in hedge funds. Lastly, there has been an increase in risk aversion and a decrease in investors' confidence because of the reputational damage inflicted by the Madoff fraud.

Overall, the positive flows in the hedge fund industry of the first half of 2008 were more than offset by the outflows of the second half, even though many hedge funds suspended redemptions toward the end of 2008 because they feared that selling illiquid assets at a low price in order to repay investors would have exposed remaining investors to even bigger losses.

Hedge funds have continued to post negative cumulative flows also in 2009, $103bn and $42.8bn in the first and second quarter respectively, according to Hedge Fund Research. In particular, the first quarter was characterized by sustained volatility levels and a deterioration of the macro picture. Then, investors have continued to pull money out of funds as restrictions on redemptions were lifted by the funds.

The second quarter saw the investors' risk appetite growing and a trend reversal in many strategies. In particular, institutional investors seems to be getting back while private clients are not giving much signs. Moreover, many deleveraging constraints for hedge funds were eased. Some bigger established hedge funds also enjoyed some small inflows but the majority of hedge funds continued to suffer from outflows as they lifted redemptions' restrictions.

While the industry is still experiencing net outflows, certain strategies have begun to see inflows returning and managers expect to see a trend reversal through the remainder of 2009 as investors regain confidence in the ability of hedge funds to generate returns.

► A lot of funds have been forced to close because they incurred in severe losses or because the pressure posed by redemptions combined with lack of liquidity was unbearable. Investors' redemptions indeed caused a cycle of further redemptions and heavy losses. Since the stock market registered heavy losses in September and October 2008, regulatory agencies in many jurisdictions imposed restrictions on stocks' short-sales. This ban further worsened the situation and many hedge funds were forced to close their positions.

Olympia research found that 28 percent of the funds reporting to the Hedge Fund Research database (HFR), a leading provider of hedge fund industry data, in the beginning of 2008 were no longer there at the beginning of 2009. This attrition rate, which is the percentage of funds that have ceased to report their returns to the database for the year 2008, is much larger than the average rate of 8.7 percent observed between 1995 and 2004[11]. It is an interesting estimate since academic research has shown that the liquidation rate, i.e. the percentage of funds exiting the database for liquidation reasons only, is historically half of the attrition rate[12]. Hedge funds can indeed exit the database for several reasons such as liquidation, merger, huge losses or closing to new investors. However, in the current environment it is likely that most hedge funds' exits are due to liquidations.

IFSL instead found that the number of hedge funds fell by 10 percent in 2008 to around 10.000, as shown in chart 2.1, with most closures coming in the latter part of the year.

Many large hedge funds around the world have begun to experience net money inflows and investors, especially institutional ones such as pension funds, are currently thinking to increase their allocations. Pension funds have to face the pressure of delivering higher returns on their portfolios and thus are extremely

[11] Liang B. and H. Park (2008), *Predicting Hedge Fund Failure: A Comparison of Risk Measures*, Working paper.

[12] Baba N. and Goko H. (2006), *Survival Analysis of Hedge Funds*, Bank of Japan Working Paper Series.

interested in the recent performance of hedge funds. The Universities Superannuation Scheme, the UK's second-largest pension fund, has just announced in July that it is going to quintupling its hedge fund allocation to about $1.25bn over the next two years.

Money flows are expected to turn positive also for the majority of the hedge funds in the next months as investors will start to reallocate their funds to the industry and move away from cash. Investors are supported by the positive quarterly performance obtained by many funds and strategies in the recent months. However, institutional investors have large amount of money at the disposal and will likely allocate many of them to the industry, so hedge funds are expected to close the doors to new investors before too long.

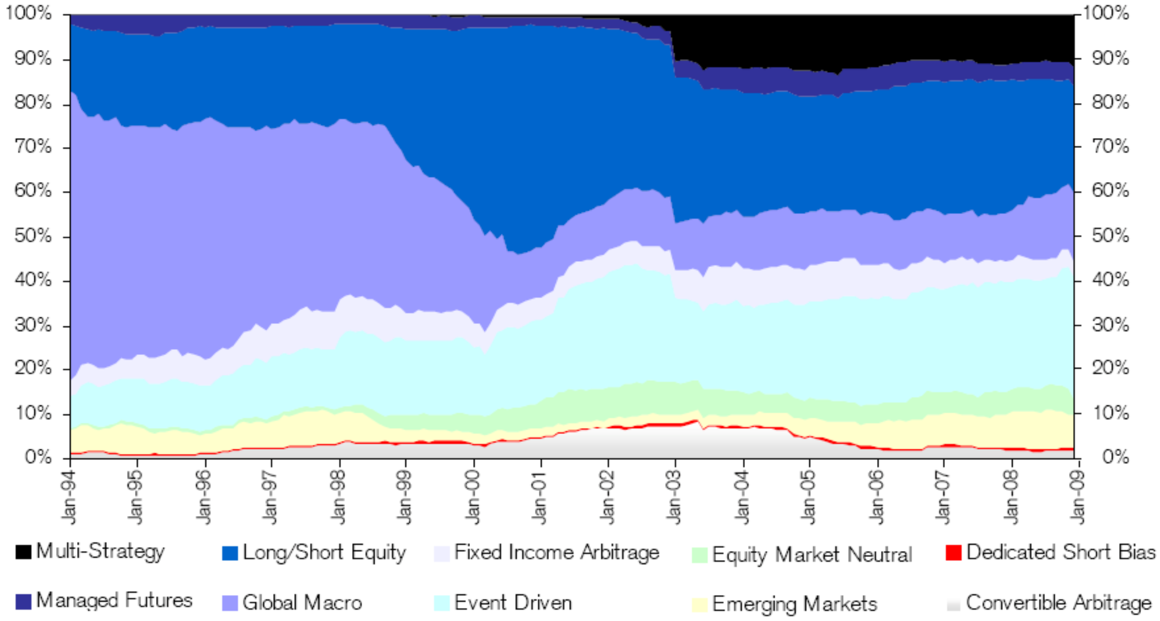
HFR suggests that the hedge fund industry currently manages assets worth $1,430bn, $100 more than its lowest value at the end of this March, of which 9.6 percent is currently impaired.

Chart 2.3 shows the evolution of AUM for each strategy during the last 15 years. According to Credit Suisse/Tremont Equity market neutral have raised interest over time while Global Macro has less investors' consensus today than in the last decade.

CS/Tremont estimates that Dedicated Short hedge funds account for less than 1 percent of all strategies. This is a very interesting result, especially in light of all the criticism short sellers have faced recently.

HFR also estimates that liquidations fell by 50 percent in the first quarter of 2009 with respect to the levels of the prior quarters, whereas new fund launches accelerated, with approximately 150 funds entering the market.

Chart 2.3: Hedge Funds Assets by strategy over time



Source: Credit Suisse /Tremont

2.2 2008 Key Performance Facts

2008 has been a tremendous year for most asset classes, including hedge funds. The industry posted drawdowns that rank among the worst in its history and suffered heavy losses following extraordinary events in the marketplace. Investors had a reminder that hedge funds are exposed to several risk factors, such as credit risk, liquidity risk and a variety of equity risk factors.

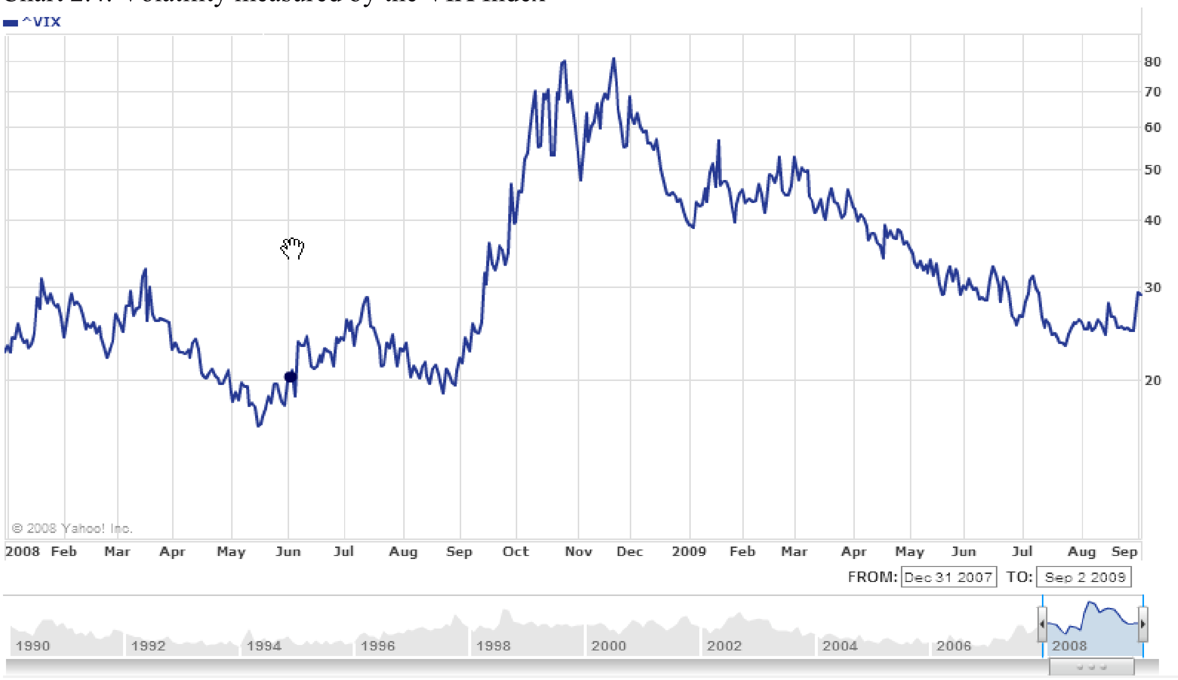
It has been estimated that Lehman Brothers controlled approximately 5 percent of the global prime brokerage business, so it can be imagined that the hedge fund experienced negative effects after the company's collapse. However, strengthened by the previous and not so far experience of Bear Stearns, many big funds had already moved their assets to other prime brokers in order to obtain an adequate level of prime broker diversification and better manage counterparty risk. Nevertheless, smaller funds that relied on fewer prime brokers were harder hit and those sectors characterized by a large percentage of small funds were harder impacted.

The Lehman bankruptcy affected also prime brokers which became more risk averse and increased margin requirements. Managers had consequently to raise

cash in order to meet prime brokers' increasing margin demands and thus faced an even higher pressure to sell assets even at depressed prices.
Although the short sale bans, implemented as a response to weakening financial markets, varied across different jurisdictions and by regulator, they globally affected some strategies and sectors. In particular, funds following the Convertible Arbitrage strategy were not able to hedge anymore.
In December 2008 Bernard Madoff was charged with security fraud by federal prosecutors and was sued by the SEC for a multi-billion dollar Ponzi scheme. This event damaged the reputation of the hedge fund industry and affected investors' confidence. Moreover, managers are expecting a more stringent regulation for the future.

The combination of these unprecedented events caused extreme market volatility and forced governments and central banks to intervene several times.

Chart 2.4: Volatility measured by the VIX Index



Source: Yahoo! Finance

Chart 2.4 shows the level of expected volatility during the past year as measured by the Volatility Index (VIX)[13], a common measure of market risk. The VIX experienced a large upward swing in the third quarter 2008, between the beginning of September and the end of October. Usually there is a negative correlation between the VIX index and the underlying S&P 500, especially in periods when investors are feared and less confident. This happened in 2008 as well.

To check whether the 2008 volatility level was high we can compare 2008 VIX values with historical ones. In 2008, 90 percent of the observations were between 19.64 and 67.7 while only 5 percent were below 19.64. Historically, almost half of the observations, that is 45 percent, were between 19.01 and 34.35 with just 5 percent of observations higher than 34.35. It also interesting to note that the 95 percent percentile of 2007 is almost near to the median of 2008. Such considerations lead to the conclusion that 2008 values have been extremely high.

Chart 2.5: Historical CBOE VIX index values

Year	Number of observations	Percentiles		
		5%	50%	95%
1986-2008	5782	11.60	19.01	34.35
2005	252	10.75	12.52	15.58
2006	251	10.52	12.00	17.73
2007	251	10.34	16.33	26.48
2008	240	19.64	23.79	67.70

Source: IDEMagazine – Borsa Italiana

The high levels of volatility intensified the de-leverage effect on the hedge fund industry because managers had to de-lever and reduce risk in order to be able to face in a better way the reversals in the marketplace. The increasing funding costs compounded the pressure.

Chart 2.6: Libor – OIS spread

[13] The Chicago Board Options Exchange VIX is a measure of the expected volatility over a period of 30 days, that is the fear of market participants. It is calculated as implicit volatility from the prices of both At the Money and Out of the Money options on the S&P500 index.

Source: Bloomberg.com

As we can see from chart 2.6 the Libor-OIS spread, i.e. the difference between the Libor rate and the Overnight Index Swap (OIS), widened in 2008. The average spread was below 1 percent for most of 2008 but then the spread started to skyrocket in September, reaching its peak around 3.6 percent in mid-October.

The widening of this spread signals that the credit markets are becoming unhealthy. In 2008 they were freezing up indeed. What happened is that banks started to understand and to worry about the significant mismatch between assets and liabilities on each other's balance sheet and that led to a total breakdown in interbank lending. In other words, banks lost confidence in each other.

The main effect of banks' unwillingness to lend is that credit was not so easily accessible anymore, so it got harder to obtain financing. Capital lines for businesses and consumer lending completely disappeared. Since capital available for lending activities reduced, funding costs raised for all market participants. Hedge fund managers came under significant pressure and were forced to reduce their position sizes, shift to cash and de-lever.

The S&P 500 index lost more than 37 percent. Most of this fall took place in the last part of the year. In October, the S&P 500 lost almost 17 percent while it registered losses of about 9 and 7 percent in September and November respectively.

The MSCI world index was down 42 percent and experienced a slightly higher volatility during the year. Emerging markets performed poorly and were hit with even greater losses. The MSCI emerging markets index, which includes 22 emerging markets country indices, fell by about 54 percent in 2008. It experienced extreme drawdowns in the second part of the year thus registering an high level of volatility.

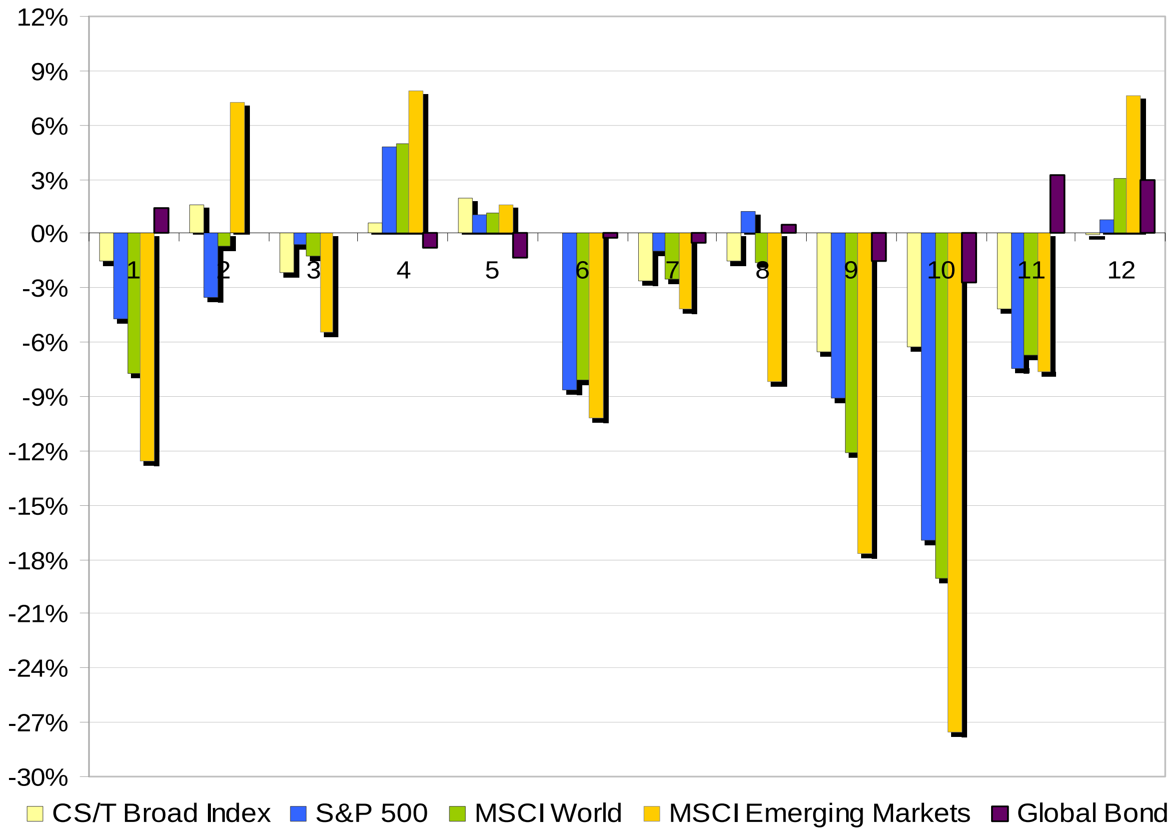
Chart 2.7: Comparative Index Annual Returns and Standard Deviations (2008)

	CS/Tremont	S&P500	MSCI World	MSCI Emerg. Markets	S&P CSGI	Global Bond
Annual Return	-19.1%	-37.6%	-42.1%	-54.5%	-46.5%	0.8%
Annual St. Dev.	9.8%	20.9%	23.6%	37.4%	42.9%	6.1%

Source: Bloomberg.com, hedgeindex.com and standardandpoors.com

After the progression in 2007, commodity prices felt in 2008. The S&P GSCI, recognized as a leading measure of general price movements and inflation in the world economy and as an indicator for commodity markets, fell by more than 46 percent. As equity markets started falling investors moved to fixed income investments in what is generally called a flight to safety. Indeed, the Barclays Global Investors Bond Index finished the year in positive.

Chart 2.8: 2008 Comparative Index Monthly Returns (January 2008 – December 2008)



Source: Bloomberg.com and hedgeindex.com

The hedge fund industry finished the year 19 percent down as measured by the Credit Suisse/Tremont Hedge Fund Broad Index. As shown in chart 2.8, both hedge funds and equity indices fell sharply as volatility increased. Hedge funds suffered the most in September, October and November when they registered some of the worst months in their history. The CS/T Broad Index posted monthly losses of 6.5, 6.3 and 4.1 percent during these three months but it performed better than broad equity indices and commodity markets by limiting drawdowns and maintaining considerably less volatility.

The broad picture of the year is that hedge funds generally beat stock market indices. Put differently, we could say that equity markets experienced an awful year while hedge funds as a group a bad one and they came nowhere near beating bonds or cash.

2.2.1 Individual Strategy Performance

While financial markets suffered and overall performance for the industry was negative, not all hedge funds and investment strategies lost money during 2008. Some funds were able to generate alpha despite the adverse market conditions. According to the Credit Suisse/ Tremont database, Managed Futures and Dedicated Short Bias, which typically perform well in market downturns, registered double digit positive returns.

► Managed Futures in particular benefitted from the short positions in equities and commodities and long exposure to treasury bonds, thus handily beating the overall markets. The last quarter 2008, which was characterized by a clear downward trend, generated almost the 60 percent of the total annual return of 18.33 percent for the strategy, that is 10.9 percent.

Managers operating in this space benefit from directional bias and turmoil and attempt to realize profits from trends, either upward or downward, by buying long or selling short, holding on to positions for as long as the trend is intact.

Since they try to profit from directional volatility, the past year has been particularly fertile for them because financial instability and the uncertain regulatory environment have created the perfect stage, thus triggering the positive performance.

Dedicated Short Bias continued to stand out with good returns and strongly benefitted from the sharp decline in equity markets, as it is characterized by a dominant short exposure to stock markets.

► Emerging markets strategy was negatively affected by the fall in emerging equity markets, which significantly underperformed developed equity markets, across the globe and by the weakening of respective currencies. Since June 2008 the MSCI Emerging markets reported phenomenally disappointing losses, performing worse than both the S&P 500 and the MSCI World Index. Investors witnessed the most severe correction in emerging market equity history amid levels of market volatility and uncertainty that were truly exceptional.

The widespread collapse of investors' appetite for risky assets, together with the rapid deleveraging led to an indiscriminate emerging market sell-off, involving not only countries with structural imbalances such as the Eastern Europe ones but also stronger economies which were probably better placed than developed world to withstand the global economic and financial crisis.

Together with the move away from riskier assets, emerging markets were hit by the falling commodity prices which amplified the selling pressure on emerging countries seen as particularly reliant on commodity-derived revenues. The S&P GSCI reported negative returns for all the six months of the second part of 2008, thus reaching a -46.5 percent annual loss at the end of the year.

However, both equity markets and currencies began to strengthen in December, thus leading to positive results for managers investing in this space.

► Convertible arbitrage managers were significantly affected by the global ban on equity short-selling because they were not able to hedge their long exposures with short positions on corresponding stocks.

During 2008 equity markets experienced high levels of volatility, risk aversion increased, credit markets worsened and hedge fund were more and more pressured by redemptions and deleveraging constraints, so they were forced to continue selling, in many cases at reduced prices, in order to raise cash.

The sell-off in the convertible space and the fact that equities were dropping, thus reducing the value related to the equity options as they were going out-of-the-money, depressed the value of convertibles and led to an extensive devaluation.

According to Barclays Capital, the US convertible market went down from a value of $345.4bn to $190bn from December 2007 to December 2008, shrinking approximately 45%. If we add Asia and EMEA the market size of global convertibles was approximately $350bn as of March 2009.

► Among the worst performers there was also equity market neutral strategy However, the strategy seems to have withstood the equity market decline better than other strategies for most of the year and the poor performance of the fourth quarter happened almost exclusively as a result of the scandal surrounding Madoff, as he managed the assets of some funds in the space.

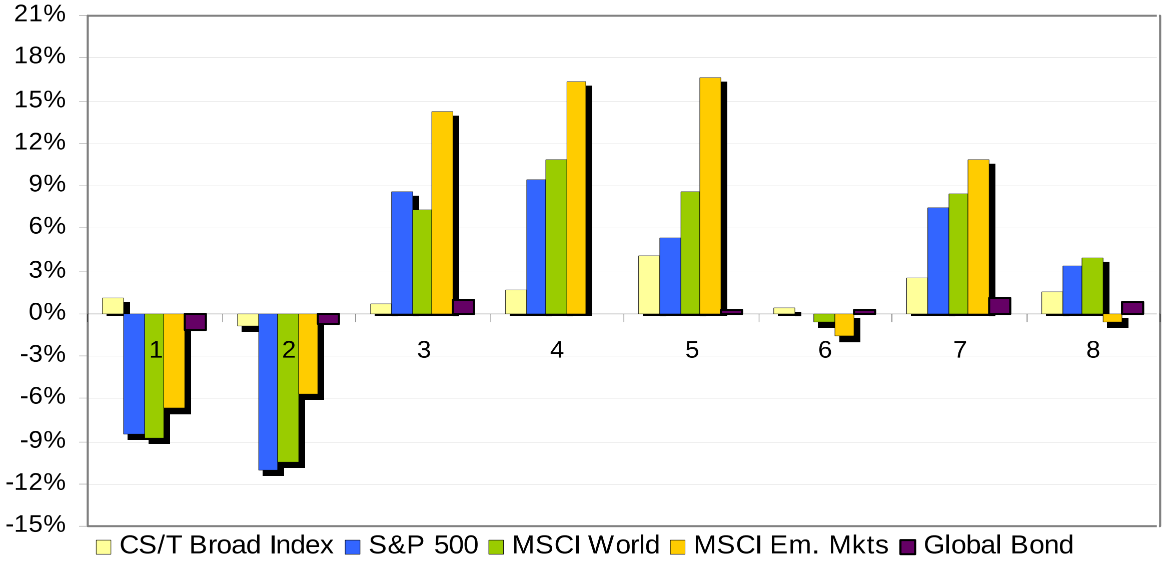
2.3 2009 Overall Performance

2009 has seen major economies worldwide introducing aggressive economic stimulus plans while central banks across the globe have maintained low interest rates and intervened where necessary. The markets were also encouraged by the stress tests conducted on largest banks by the US Government and by other countries. As we can see from chart 2.6, the Libor-OIS spread has narrowed during the first half of the year, signalling that credit markets were becoming healthier and less tight while confidence was increasing. In particular, the spread is decreasing to its historical levels, meaning that financing costs and credit conditions are coming back to normal levels.

After a challenging 2008, hedge funds have started performing better in 2009. They experienced an inversion of the second half of last year and posted the best start to a year in a decade as markets are recovering. Hedge funds, as measured by the CS/Tremont Broad Index, have registered positive returns for both the first and second quarter 2009 and for seven out the first eight months in 2009, as shown in chart 2.9.

Apparently, hedge funds have been able to avoid large drawdowns in the first two months despite the losses of major equity markets. Then, they maintained a relatively defensive position in the following months when all the broad equity indices were posting large positive returns, thus limiting the negative effects of elevated volatility. Just as like as they fell less than equity markets last year, this year hedge funds are rising to a lower extent.

Chart 2.9: 2009 Comparative Index Monthly Returns (January 2009 – August 2009)



Source: Bloomberg.com and hedgeindex.com

The first quarter saw hedge funds outperforming traditional equity and bond indices. During the second quarter the investors community regained the risk appetite lost in the last part of 2008 as equity markets rallied. According to Credit Suisse Research, investors approached the levels of risk appetite that characterized the period before the Lehman collapse. However, the VIX volatility index registered large upward swings in June after it decreased in the first part of the year. These market movements created difficulties in the equity space but hedge funds were able to avoid drawdowns and registered positive returns in June as well.

The VIX index continued to decrease and reached 23.09 in July, its lowest level since September 2008, and in the same month equity indices registered good results while hedge funds maintained their defensive position vis-à-vis the markets. Hedge funds continued to perform well but less than equities in August, a month in which there was great concern by economist on whether markets would continue to rally or not.

According to the Credit Suisse/Tremont Broad Index, at the end of August the industry was up almost 11.57 percent since the beginning of 2009, or 17.9

percent on a yearly basis. By looking at annualized returns it is clear that hedge funds succeeded in keeping volatility low despite the large swings of the VIX index in June and July. Interestingly, the industry has performed slightly below the S&P 500 index. In August, emerging market equities were up almost 50 percent from their level at the end of last year, or 80 percent on a yearly basis, thus making their way back after a disastrous 2008.

Chart 2.10: Comparative Index Annual Returns and Standard Deviations (2009)

	CS/Tremont	S&P500	MSCI World	MSCI Emerg. Markets	S&P CSGI	Global Bond
Annual Return	17.9%	20.1%	28.1%	80.1%	6.8%	2.0%
Annual St. Dev.	5.1%	26.9%	28.5%	34.7%	30.0%	2.8%

Source: Bloomberg.com, hedgeindex.com and standardandpoors.com

Although returns may vary significantly in different years, hedge funds have typically outperformed the S&P in recent years. The point is that they did not beat cash last year, whereas this year they are succeeding in beating both stock and bond market indices and cash in risk-adjusted terms.

Indices seem to agree on the fact that the industry did well and was successful in repositioning itself. Hedge funds have been able to avoid large negative returns and maintain lower levels of volatility with respect to the broad equity indices that registered large positive as well as large negative returns.

The performance of hedge funds through the first half of this year also suggests that hedge fund industry may be considered as a good diversifier during normalizing markets. It can offer diversification benefits and this probably explains the renewed interest of investors in the potential of the asset class.

Money outflows are smaller in scale but they are still there. It is likely that the outflow process will continue and many more hedge funds will be eliminated from the market, making room for more successful and larger hedge funds. The result is that there will be more place for remaining funds and trades will be less crowded, so that any arbitrage strategy has the potential to outperform. Hedge

funds will not have to take too much risk to generate alphas as they used to do when they found themselves in crowded trades.
The hedge fund industry that will emerge after the global economic downturn will be likely characterized by a greater concentration of assets and lower levels of leverage. With more closures and less launches the top 100 hedge funds accounted for 75% of the total industry assets in 2008, up from 54% in 2003.
Additionally, the hedge fund industry may also be characterized by more diversified strategies with less leverage.

Although it is posting positive results, the industry is not healed yet and it is still important to remember and take into account the 2008 enormous crash. There have been no clear macro trends during the first half of the year and hence there is high uncertainty about where the economy is heading.
Among the positive aspects there is the fact that macroeconomic indicators continue to improve, particularly in the USA and the emerging markets. When looking at one of the key causes of the financial turmoil, the US housing market, it seems that thing are recovering. According to HSBC, the US housing market is showing signs of recovery. For instance, new home sales in the US climbed 11 percent month-on-month in June.
Governments and central banks have been effective in avoiding a severe and prolonged economic slowdown, however the likely recovery that will happen in the last months of 2009 and in 2010 will not be strong.
There are several reasons leading to this conclusion. First of all, governments will be forced to release their stimulus measures in order to reduce the levels of public debt and also to find a balance between aspirations of growth and threats posed by potential inflation. Second, labor market conditions continue to deteriorate and in some countries unemployment rate is expected to go well above 10 percent. Being a lagging indicator, improvements in the job market will not be immediate neither significant, thus negatively affecting consumer demand and overall economy growth.

2.4 Performance of single strategies in 2009

Although 2009 has been favourable to hedge funds as an asset class, things are different at the sub-category level. According to the Credit Suisse/Tremont database, Convertible Arbitrage strategy, which performed negatively in 2008, is up more than 35 percent since the beginning of the year, thus continuing to be the best-performing hedge fund strategy this year followed by the strategies that exploited emerging markets momentum. Other strategies which suffered a hard hit to their reputations over the past years are experiencing a good period as well.

Many of the world's largest funds have reported extremely high returns since January 2009. The UK funds, GLG and Tosca, have started making their way back after they were hit really hard last year and traditional strategies such as equity long/short and arbitrage are regaining consensus among asset managers.

On the other hand, managed futures which was very strong last year is down almost 7 percent. The worst-performing strategy so far this year is dedicated short selling which suffered from the powerful rally in global equity markets and was down on average more than 7 percent in July and 1.7 in August, reaching a -18.68 percent since the beginning of the year.

To sum up, strategies that performed well in 2008 are now performing poorly while the worst performing funds of last year are amongst the best performers in 2009. Credit Suisse/Tremont reports that eight of ten strategies posted positive returns in August and are experiencing a positive performance year to date.

2.4.1 Convertible Arbitrage

Convertible arbitrage is currently the best performing strategy year-to-date. On August it posted the eighth consecutive month of positive performance, thus bringing the year to date return to 35.6 percent, amid a strong performance of equity indices, healthier credit conditions and volatility going down.

The strategy is making its way back after a perfect storm in 2008, when the forced sell-off by hedge funds in the convertible space, the extensive deleveraging and the ban imposed by governments on short-selling weakened managers ability to realize profits and made Convertible Arbitrage strategy one of the worst performers.

The convertible bond market seems to have overcome the steep drop in the fourth quarter 2008 and demand by fund managers and other investors has increased despite the fact that supply was somewhat constrained. In August 2009, we have also witnessed a slowdown in new convertible bonds issuance, with respect to previous months. However, it is expected that companies will turn to convertible bonds between now and the end of the year as a source of cheaper financing in the foreseeable future.

Interestingly, convertible bonds, which should trade at a premium with respect to straight bonds with similar maturity issued by the same company because of the value of the embedded equity option, suffered a severe devaluation in 2008 and ended up being quite cheap at the beginning of the year. Indeed, cheapness levels of convertibles were at all time highs at the end of 2008 and beginning of 2009, so yields on some convertibles bettered those of the straight bonds.

Devaluation was mainly due to the sell-off by hedge funds operating in the space: because the market for lower grade convertibles was disappeared, managers had no choice but to sell higher quality assets in order to generate cash. Moreover, convertibles' value further decreased as equities kept on decrease in 2008: the underlying share prices for many convertibles dropped below the strike price and the embedded equity options ended up being out of the money.

The atypical yield advantage for many convertibles and the resumption of primary market activity attracted non-traditional credit and equity investors to the convertible space. These crossover investors played an important role in the first part of 2009 because they have brought some liquidity back to the market.

The devaluation has been slow to correct as both hedge funds and crossover investors have continued dealing with liquidity issues. As a consequence, new issues were still priced attractively in March 2009 and convertibles remain relatively cheap still today.

During the next months the attention of managers in the convertible bonds' space will likely be addressed to the credit long play aspect of convertibles with little or no leverage, as opposed to volatility trading.

In fact, improving credit conditions usually lead to lower stocks' volatility which is bad for a long volatility strategy as that of convertible arbitrage whereas narrower credit spreads lead to higher convertible bonds' valuation which is good for going long on credit.

2.4.2 Emerging Markets

The performance of the emerging markets managers is strictly linked to that of underlying markets. Looking back at 2008, emerging market equities suffered from severe losses as risk aversion rose. However, both equity markets and currencies began to strengthen in December, thus leading to positive results for managers investing in this space. Although global markets are still affected by economic uncertainty, the MSCI Emerging Markets Index has outperformed the S&P 500 and MSCI world index in the first part of 2009.

By looking at the performance of hedge funds in the space we can see that they registered positive returns for six out of the first eight months in 2009, as measured by the Credit Suisse/Tremont Index. In January and February they were still affected by the negative performance of emerging market equities, as measured by the MSCI Emerging Market Index. In the following months, managers benefitted from the returning appetite for international risk on the back of fiscal stimulus packages. In May, managers experienced the third consecutive positive month. Optimism about growth was also supported by rising commodity prices because many of Emerging economies are classified as exporters of natural resources. Indeed, the S&P GSCI reported a monthly positive return of almost 19.7 percent in May and is currently up 4.5 percent on year to date.

In August, emerging equity markets were down 0.5 percent as measured by the MSCI Emerging Market Index, mostly driven by the negative contribution of China. However, emerging markets managers were able register a positive performance.

According to T. Rowe Price Research, emerging markets are now better placed and stand in a much stronger structural position to deal with harder economic times than in previous crises. Emerging markets outperformance versus developed markets has been fuelled by many factors.
First of all, they had built up substantial foreign currency reserves that have been used by many governments to adopt a proactive response to slower growth. They have been effective in preventing defaults, currency devaluations and further decrease in investors' confidence, thus avoiding that a crisis which started from the developed world could have translated into an even larger crisis in the emerging world.
In other words, emerging market governments around the world have undertaken effective monetary and fiscal policy responses in order to prevent the crisis from deepening. Most obviously in China, where a $585bn stimulus package is expected to drive its economy towards an estimated 8 percent GDP growth in 2009, according to Bloomberg estimates.
In essence, many emerging economies are in the enviable position of having both the ability and the willingness to use domestic resources to stimulate domestic demand and investments. On the other side, many developed nations are heavily indebted and are expected to run in big deficits in order to launch stimulus plans.
The overall health of the emerging markets is also demonstrated by financials sector which compares favorably with that of developed markets. In fact, financial sector received great assistance by developed nations whereas it has emerged relatively unscathed within the emerging nations. The main reason is the relative simplicity of balance sheets and lower levels of overall leverage.

It is expected that when global economy will eventually recover, emerging market growth will account for an increased share of global growth, perhaps as much as two-thirds against less than 50% of the pre-recession period, as estimated by T. Rowe Price Research.

Emerging markets will continue to provide a rich source of future returns for hedge funds. However it will be critical to identify potential divergences among different countries and regions. Such differences will be a permanent feature and understanding them and the way in which they relate to both opportunity and risk, will be crucial to effectively capture the benefits of the opportunities presented.

2.4.3 Managed Futures

Managed Futures managers are performing negatively this year. During the first two months of the year, gains were coming from short positions on equities and agricultural commodities and from long positions on the US Dollar versus other currencies. Such gains were partially offset by losses coming from short positions on energy commodities, as major energy prices were going up during the last weeks of February.

In March, managers posted negative returns as equities sharply reversed. Indeed, managed futures suffer from trend reversal just as they benefit when trends accelerate. Moreover, other losses came from long positions on the US Dollar and bonds as both of them weakened, thus reversing the earlier trends.

During these months managers suffered from the lack of clear trends. In fact, even if volatility was above the average it was not directional, so there was a tremendously challenging environment for long-term trend followers.

In June and July trend followers have started to shift to long positions in commodities and equities and posted positive returns in August. Investors gained form long position in equity markets and commodities even though returns were generally lower than in the previous month. In particular, commodity markets experienced again significant divergence between various sectors: natural gas prices declined while agricultural gained.

2.4.4 Fixed-Income Arbitrage

Institutional investors generally prefer riskier investments over fixed-income hedge funds. Investments that have exposure to equities, commodities or also alternative asset classes are highly demanded and usually dominate investors' portfolios.

However, many investors preferred to abandon such strategies during the economic crisis of 2008 and fly to quality in the attempt to preserve their wealth by focusing on high-quality fixed-income funds.

Indeed, "*government debt is considered one of the safest places to invest. In times of financial market turmoil, short-term Treasury prices skyrocket, thus lowering the yield. Government debt prices and yields move in opposite directions.*

In early December 2008, for example, the yield for the 3-month Treasury bill bottomed out all the way to zero, indicating that investors were more concerned with keeping their investments safe than making any kind of a profit."[14]

Investors became interested in fixed-income strategies because bond markets were considered to be a more stable environment. They were looking not only at safety but they were also interested in adding exposure to their portfolios in order to beat equities. Not surprisingly, there was an increasing interest for fixed-income hedge funds.

Fixed Income strategy was the third top performer for 2009, according To Credit Suisse/Tremont data provider. Most of the arbitrage strategies in the previous months were designed to exploit movements in the yield curve, coming from central banks' announcements of buy-back programs and from announcements of governments of new issuance of securities to finance their debt.

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[14] Clifford C. (2009), *Green shoots? Check the yield curve*, CNNMoney.com, May

In the US, the Federal Reserve has kept its key rate low since December 2008, at a target range going from 0 to 0.25 percent in the attempt to stoke capital lending and spur the economy.

Since the Fed put all of its effort to keep interest rates low, the front end of the yield curve, including the 2-year note, has been locked. The reason is that the shorter term Treasury yields are tied closely to the Federal Reserve's key lending rate. It goes without saying that much of the spread's movement has been led by the 10-year note yield, which was just over 2 percent in mid-December but rose above 3 percent in May 2009.

When looking at the last quarter of 2008, it is clear that investors were feared by the fact that major financial institutions were experiencing hard times while Wall Street was crumbling. Investors flew to safety, selling everything but shorter terms treasury bonds. As a consequence the longer end of the yield curve experienced an excess of supply and yields increased.

In February 2009 the situation was similar: the macro-environment was characterized by weak economic data, which is usually supportive for fixed-income products, especially shorter-term government bonds. However, the rising supply of government bonds to fund stimulus programs more than offset the pressure posed by demand and bonds cheapened in the longer end of the yield curve. The government unveiled unprecedented spending initiatives to prop up financial institutions and restore investor confidence and so it had to bring a record amount of new issuance to market in order to pay for the various stimulus programs. The sheer volume of supply has put downward pressure on bond prices, sending yields higher. Fixed-Income Arbitrage managers were able to benefit from such supply-induced distortions, using curve and volatility related strategies.

In March 2009 there were other opportunities related to moves in the longer end of the yield curve as UK, US and Japanese governments announced to start their Quantitative Easing policy. Governments were worried about sinking Treasury

prices and rapidly rising yields, and in order to stabilize the situation the government entered into a program of quantitative easing, consisting in buying back its own debt.
Central banks started to buy back 10 year treasury securities in order to keep longer term rates low. For instance, the 10-Year US Treasury yield reached a level of 2.5 percent but ended the month at 2.7 percent as there were several auctions of new issuances. The Fed announced it was going to buy $300bn of long-term treasury bonds through August in order to stimulate demand.

Overall, quantitative easers were successful in limiting the steepening of the yield curve, also climbing due to concerns over long-term inflation, but not in obtaining a flattening. Even though there were buy-back programs pushing the prices up and the longer end rates down, the size of the new issuances were such that the supply of debt flooded the market and sent long-term bond yields higher.
Indeed, May and July were still characterized by a global sell-off in the longer end, and consequently curve-steepening.
When the spread between the 2-year and the 10-year bond yields widens, it usually signals that the economy is recovering. Short-term interest rates are depressed because of the economic downturn but long-term rates are high in the expectation of a growing economic activity and a future high demand for capital.
However this is not the case in the current economic situation. Yield curve is steep not because of the expectation of an immediate recovery but most likely because governments are running huge amounts of debt, have continue to issue long term bonds during the past year and borrowing costs have increased.
Another explanation for a steepening curve is the expectation for inflation which pressure the prices of longer maturity treasury notes. However, inflation should have affected also inflation protected bonds (TIPS) whereas this market has been relatively steady.
The spread experienced in the recent past has more complex factors widening it than in other periods of economic slowdown.

Fixed Income managers were able to generate positive returns and benefit by participating both to the underwriting processes of government bonds and, on the other side, from buy-back programs by central banks. Many Fixed Income managers anticipated a choppier environment for some time, so they prepared for these moves by keeping low exposures to the longer end.

CHAPTER 3

3.1: Regulation; 3.1.1: The EU; 3.1.2: The UK; 3.1.3: The USA; 3.2: Better Corporate Governance?; 3.3: Risk Management?; 3.4: Transparency and Due Diligence; 3.5: Fees; 3.6: Industry Consolidation;

The hedge fund industry has not been immune to financial market dislocations: many hedge funds have wavered, some have even performed well but the majority of them have gone out of business. Overall, investors have lost confidence and risk appetite in the asset class.

While governments worldwide are still busy trying to tackle the severe crisis that crippled financial markets, hedge funds have started to register comforting performance and started to experience a slow down in asset outflows.

However, they now face a new challenge, coming from regulators. It goes without saying that, after the events of the past 18 months, many things will change in the future and the hedge fund industry will not be immune. Managers are currently concerned about the impact that recent events will have on their business and on the environment in which they work.

The general opinion is that we have assisted to years of excessive deregulation and now we are called to regulate the unregulated. As a consequence, both investors and alternative asset managers will face a new environment, characterized by a more sophisticated and robust infrastructure. Structural changes will shape the future of the hedge fund industry and, most importantly, the way in which hedge funds will organize their business and trading activity will be at least as important as how well they perform.

In this chapter I will try to discuss some key issues and analyze some of the likely changes that will characterize the near future of the hedge fund industry.

3.1 Regulation

The recent experience has taught that any single financial institution, bank, insurer or fund may pose systemic risk to global financial markets. As such, an unregulated hedge fund industry has the potential to threaten the markets and magnify the extent of a crisis.

Indeed, hedge funds are very active and leveraged market players, thus have the potential to create a relevant impact on markets. Until now, they have been able to build up massive leveraged positions and to take excessive risks. Moreover, they are no longer a little niche industry for sophisticated investors and in the last three years they did contribute to magnify market movements as a result of deleveraging and investor redemptions.

According to Andrew Donohue, SEC director, hedge funds account for 18 – 22 percent of the total trading on the New York Stock Exchange but the SEC has at its disposal only incomplete and unreliable data, hence cannot exercise a proper oversight.

However, hedge funds bring also some benefits to the markets. Namely, they have an increasingly important role in current capital markets both as a source of capital and as an investment vehicle for institutional and high net worth investors. They also provide liquidity and possibilities of portfolio diversification.

Before the current crisis, the industry has reported several years of growth but needs to adjust and refine now in order to regain strength and stability so to attract again less confident investors and earn the community consensus.

It will not be sufficient anymore to show historical track records or outstanding skills or rely on reputation because investors have learnt the lesson and will be more rigorous in conducting their due diligence and fund selection processes. The current crisis has led to the conclusion that standards and conventions adopted in the past may not be accepted in the future and hedge funds will have to adapt if they want to attract investors and perform well. In particular, hedge fund managers must move quickly towards newly proposed rules in order to check and understand to which extent and how they will affect their business and operating model. Although new rules are not definitive, managers should monitor developments carefully as new rules emerge.

Effective Risk Management, adequate corporate governance, transparency and independency will be critic factors for the comeback of the industry. In addition to that, managers will not earn large fees anymore.

It is clear that the legislative action will strengthen regulation and will likely lead to mandatory oversight and regulatory requirements for the hedge fund industry. The result is that after 20 or 30 years in which the hedge fund industry has been able to obtain a light regulation it is now trying to prevent over-regulation. Although it is still unpredictable whether hedge funds will be required to register with national commissions such as the SEC or subject to the oversight of central banks, they will have to face more stringent rules for sure and reconsider the way they manage their business and disclose the relative risks. Most likely, hedge funds will have to adapt to the best practice standards and demonstrate robust controls and processes.

The more rigorous regulation will have several advantages and all of them will have the effect of enforcing a stronger investor protection:

- First of all there will more information about the hedge fund industry at disposal. The more accurate, reliable and complete data about hedge funds' teams, business, clients will give the chance to estimate the threats of creating risk for the market integrity.

Such data will be available thanks to periodic inspections and examinations and also thanks to books and records that hedge funds will likely be required to maintain.

- It will enforce fiduciary responsibilities and support existing anti-fraud provisions by creating a deterrent effect. In particular, registration will increase the chances of identifying and discovering misbehaviors, fraudulent activity or conflicts of interests, when the manager has not properly disclosed them. Lastly, compliance programs will help managers to manage their conflict of interests.

- It will also allow to impose, when necessary, investment restrictions and diversification requirements in order to protect investors or regulate redemption suspension terms.
- Mandatory registration could allow to identify persons unfit to manage a hedge fund and so deny the permits.

Among the disadvantages of a tighter regulation there is the fact that hedge funds will inevitably lose some of their flexibility to invest in accordance with opportunities. Regulation represents without a doubt a threat for hedge funds because it will create further costs while decreasing leverage and the overall ability to pursue investment strategy. The question is whether managers will still be able to generate the needed returns or will have to face over-regulation.

Moreover, disclosure about hedge funds' investment strategy, asset positions, and trades can facilitate imitation by others market players, which likely leads to deterioration in the hedge fund's performance. In particular, hedge fund managers are concerned about how their trade secrets will be safeguarded. So even though lack of transparency of hedge funds undoubtedly magnifies financial crises due to counterparty concerns, disclosure will add a cost to hedge fund strategy.

There should be a balance between regulation and flexibility of the universe of alternative investments, so to obtain the twin goals of higher protection for investors and for financial markets on the one hand and maintain the benefits coming from the hedge fund industry on the other hand.

3.1.1 The EU

The European Commission published a draft directive at the end of April 2009, which is proposed to apply to Alternative Investment Fund Managers established in an EU member state and which provide their services to one or more alternative investment funds, that is, hedge funds or funds of hedge funds. Moreover, the directive is also addressed to managers established outside the EU that are marketing their fund within the EU. This means that the directive will apply to EU and non-EU fund managers that offer or place units of shares in their fund to EU investors. It does not matter whether the offering is solicited or unsolicited, hence if the non-EU manager responds to an unsolicited approach from a EU investor he is subject to the directive.

The directive is a response to the financial crisis and is aimed to enhance transparency while reducing potential systemic risk that hedge funds can pose to the economy. Among the others, it provides for leverage limits and for an independent valuation agent to value the fund's assets at least once a year. It will also increase the degree of harmonization by eliminating differences between national laws.

The European Commission stated that its intention is to finalize the Directive by the end of 2009, so that it will come into force before the half of 2011. Even though the directive is currently at the beginning of the EU legislative process and will likely undergo several amendments, the general opinion among experts is that most of it will remain in the final version.

As of today, the EU draft directive is quite stringent and imposes a mandatory registration for managers and funds. It requires that they disclose the level of leverage employed, to both investors and regulators. It also requires the appointment of an independent valuator so to have a sound valuation of the fund's assets.

What drew the attention is that the directive is particularly restrictive for non-EU managers as there are several provisions and limiting conditions that apply to them. If non-EU managers will not satisfy such conditions they will be denied to market their funds within the EU.

As an example, non-EU managers must be established in a country that has a legislation on regulation and supervision which is equivalent to that of the EU directive. So, if a US manager wants to market a (EU or non-EU) fund in Italy he will obtain the necessary registration only if there is equivalence between US and

EU legislation, especially on tax matters. Moreover, if a EU manager wants to market a Cayman (non-EU) fund there should be equivalence between EU and Cayman legislations, that is very unlikely.

Fund managers will also need to appoint a EU-domiciled depository. Hence, depositories must be credit institutions with registered offices in the EU.

It goes without saying that if the final directive will keep all these stringent conditions, EU institutional and wealth investors will likely be restricted in the choice of funds in which they can invest. They will not have access to a significant portion of alternative investment funds.

3.1.2 The UK

Some of the provisions introduced by the European Commission directive are already industry practice in the UK, such as those aimed to increase transparency and disclosure or remuneration policy. However, the UK industry is greatly concerned about the potential restriction on trading that the EU directive will create. Indeed, even though the UK regulator, the Financial Services Authority (FSA), agrees on the fact that more rigorous regulation should be considered, there are several critics addressed to the EU directive.

First of all, the limits on the use of leverage in excess of the fund equity capital implemented by either a putting a cap or an average level during a given period, are seen as too strict. The UK would prefer higher supervision and data reporting instead of such limitations.

Another important critic has been addressed to the provisions that limit the ability of European investors to access to non-EU funds, thus affecting their possibility to invest internationally. According to the UK the directive unnecessarily restricts both non-EU managers operating in the EU and EU managers marketing foreign funds.

In addition, the UK regulator disagrees on the provision regarding the need of a EU depository. As of today, the EU directive states that managers aiming to market their fund within the EU must appoint a EU-domiciled depository.

According to the FSA such provision will create a de-facto monopoly of EU credit institutions, thus disadvantaging non-EU banks such as US and Swiss based providers.

The UK government will probably lobby for obtaining amendments to the current provisions of the directive, thus avoiding the risk of over-regulation. Moreover, it will try to ensure a cohesive approach with respective to the US legislation in order to obtain communication among regulatory bodies and avoid geographical fragmentation.

To be noted that almost 85 percent of EU hedge funds managers are based in the UK so the observation and critics of the UK regulator are worth being considered.

3.1.3 The USA

The USA seems to be moving at a slower pace than EU but they are still moving in the same direction. In June, the Obama administration recommended in its Administration Proposal on regulatory reform that hedge fund managers should register with SEC. Then, in July, the US Senate Banking Subcommittee on Securities discussed about the possible ways to improve the oversight on hedge funds and other private funds. The SEC also agrees on the necessity of closing the regulatory gap and complains about the fact that until now it has the possibility of seeing only a slice of the private fund industry.

If approved, the Private Fund Transparency Act of 2009 would require that hedge fund advisers, as well as all private fund advisers, must register to the SEC, under the existing Advisers Act, if they have at least $30m of assets under management. In particular the mandatory registration requirement would be extended not only to US investment advisers but also to all non-US investment advisers who have US clients. The SEC would have full authority over all private fund managers meeting such term.

By this way, the SEC would have the needed information about the industry to adequately protect investors and the security markets. Moreover, it is likely that hedge funds themselves, in addition to their advisers, will also have to register under the existing Company Act. By this way the SEC expect to have the power of inspection of hedge funds and could obtain complete data about the industry so to reach the goals of enhance transparency and enhanced protection of investors and capital markets.

On the other side, even though hedge funds and the broader private investment industry recognize that there should be regulatory requirements to protect investors and counterparties, they think that the regulators should introduce a different law or statute for private investment funds, such as a Private Investment Company Act, tailored to their specific and unique characteristics.
In fact, there is the risk that the Advisers and Investment Company Acts could be inadequate and too much restrictive for hedge funds. The greatest concern for hedge funds is that these existing acts are designed for advisers and funds which are addressed to retail investors and could be not appropriate for funds addressed to institutional and wealthy investors.
Simply extending those Acts to the hedge fund industry could prove unsatisfactory because they do not have the right provisions suited to face the types of risks posed by hedge funds, their investment structures, strategies and the type of contracts they enter.
The Advisers and Investment Company Acts are designed to protect a large number of retail investors and they could end up offering an inadequate protection to selected groups of institutional and high net worth investors.
As an example, the Investment Company Act provides for either daily liquidity (mutual funds) or no liquidity terms (closed-end funds), whereas hedge funds adopt a flexible approach, with flexible redemption dates.

In conclusion, even if the Congress will choose not to develop a separate Act but to extend the existing Acts, it should write a set of rules that are tailored to hedge funds. Such rules should provide targeted controls needed for oversight of hedge funds while allowing them to preserve their flexibility. In particular, there should be more detailed provisions for the largest funds as they have a greater potential to magnify systemic risk.

As of today, enhanced Advisers and Investment Company Acts appear to be the most effective and smartest approach to regulate hedge funds. The SEC, which is the current regulator with oversight powers, will likely have an extended regulatory mandate and control responsibilities. However there are concerns about whether the SEC will have the needed resources and capabilities to be an effective regulator when hedge funds' managers and other private pools' advisers will be required to register under an extended registration framework. It goes without saying that the SEC will need new tools and resources along with greater authority.

3.2 Better Corporate Governance?

Although regulations governing the hedge funds vary across different countries, overall they are loosely regulated and they are free to employ various techniques and instruments to execute their investment strategies. In the USA, there is no corporate governance at all, hedge funds are not subject to any agency which has the mandatory power of inspection and control over their activities. They are only subject to various anti-fraud rules.

However, if the activities of hedge funds will be under increased scrutiny, they will need better corporate governance as it represents one of their weakest points right now. Hedge funds will be required to demonstrate that they have a sound governance structure, allowing to clarify how decisions are made as well as control structures that allow to adequately manage several types or risks such as investment, operational and credit ones.

- As an immediate priority, hedge funds probably need a board, made up of active, independent and loyal members, which can ensure an effective and genuine control over the valuation process of the fund's positions. The board should be active in evaluating the pricing process and in challenging the valuations of the fund when necessary.

Valuation of assets will likely be one of the main areas of regulatory focus because it is critical to assess the position of the fund. Today, hedge fund valuations are typically performed internally by managers and not by independent external administrators. This means that valuations could lack in accountability or transparency while leaving room for mispricing. On the other side, investors have become more insistent about transparency and more sophisticated.

Indeed, hedge funds make use of several financial instruments, some of which are not traded on centralized exchanges and hence appropriate pricing becomes a very difficult task. In addition, they make investments such as illiquid distressed debt which are hard to value because of their nature.

Hedge funds also rely on fair valuation methodologies, which are different from fund to fund as they require great amounts of personal judgment and discretion.

The board could be helped by valuation committees in overseeing the various aspects of the business but the legislative action appears to be addressed towards a third-party administrator. As of today, administrators tend to accept managers' valuations when they come to that part of the portfolio which is unavoidably hard to value. However, this portion is the most challenging and investors need the most independent and objective oversight.

Instead of simple verification and confirmation functions, administration companies should have a valuation and price origination function, thereby providing a mechanism to prevent potential frauds.

- Since hedge funds have recently imposed gates and lock-up periods, investors may also require that an independent board exercise a genuine oversight over the decisions of the fund to suspend redemptions. In particular it should take an independent decision whether a redemption suspension is necessary in order to protect the fund's portfolio value or not.

- A solid corporate governance should also provide a division of responsibilities in order to avoid concentration of power and potential conflict of interests while guaranteeing a balance. Corporate governance should ensure the possibility of having free challenge.

Corporate Governance is strictly related to effective Risk Management procedures as it creates the bases for appropriate evaluation and control of the risks associated to alternative asset management.

3.3 Risk Management?

Risk Management is becoming increasingly important and is gaining unprecedented attention from hedge fund managers as they feel that it has become an almost non-negotiable prerequisite to attract resources. Indeed, managers agree that this area will undergo significant changes in the near future as investment and operational risks are rising significantly and the marked volatility of financial markets is magnifying the concern of both investors and regulators.

It goes without saying that nowadays it is far more difficult than ever to achieve effective protection against markets turbulence. According to Moody's, deficiencies in operational management and control accounted for a relevant portion of the losses suffered by hedge funds last year. Many conventional approaches have failed and so an effective handling of risk issues has been demonstrated to be imperative.

As an example, hedge funds used to rely on Value at Risk measurements in the past, which shows the kind of loss that can happen 95 or 99 times out of 100. However, the current crisis has highlighted the limitations of such a method because what really matters is what happens in the tail, in the extreme event or else, in the bad months of the year.

Investors require today more detailed information about the risks surrounding the hedge fund industry and thus perform a careful scrutiny of this function. In particular, when conducting their due diligence investors are now more than ever interested in having information about how risk management is carried out. Risk management is probably the first step to regain investors' trust.

Another important factor that is contributing to make risk management a more relevant topic than ever before is the need to respond to regulators. Indeed, regulators worldwide are paying more attention because sound risk management will contribute to prevent future financial dislocations. At the same time, the fact that there will be new rules regarding risk management, is also creating confusion within the hedge fund industry.

Lastly, managers are devoting a larger share of resources to risk management not only to respond to investors and regulatory concerns, but also to develop new approaches. Indeed, the critical risks that funds are facing today are moving beyond the traditional investment and operational risks. The current crisis has highlighted new areas of risk and so it calls for more complete risk management processes. For instance, avoiding reputational damage is one of the most challenging concerns today. Hedge funds have to take into account also liquidity related issues, fiduciary and counter-party risks.

These considerations imply that risk management should be a comprehensive tool addressing all risk types, traditional as well as new-brand issues, while enhancing an appropriate information flow, thus increasing the level of accountability of the overall function and eliminating potential gaps across different areas of risk.

To sum up, investing in risk management seems vital in a volatile and unpredictable environment where many funds have succumbed. An appropriate rethink of risk management procedures across the industry is thus necessary.

- Managers should implement sound processes aimed to assess the investment risks related to the specific strategies employed. At the same time, they need to control operations and enforce a dialogue between the investment staff and the rest of the firm.

- Moreover, the financial crisis has highlighted that hedge funds face a relevant amount of counter-party risk, especially the risk that their prime broker can collapse. In order to reduce such risk, many hedge funds have started to maintain multiple prime brokerage relationships, thus increasing diversification and in turn reducing the dependence on every single commercial relationship. Managers will have to undertake counter-party risk assessments and monitor their prime broker relationships closer than ever. Moreover, they should develop a contingency plan addressing the risk that a major broker will disappear.
- Another important risk is represented by liquidity: when they receive large requests of redemptions hedge funds can use existing cash on hand but then are likely forced to sell their assets. Using cash reduces the ability of funds to employ capital and exploit new opportunities in the pipeline, thus creating an opportunity cost for managers and remaining investors. Moreover, selling quality assets to meet redemption requests of short-term investors will leave long-term investors with a pool of illiquid assets.

While fund managers should not deprive investors of the possibility to access to liquidity, managers should properly use gates and lock-ups to smooth redemption pressure over the long term to avoid mismatches between investment and redemption horizons and to ensure that liquidity risk will not be faced exclusively by long-term investors

Managers must be sure that liquidity terms are shorter than redemption periods so to have plenty of time to raise the sufficient cash to repay investors. However, the opposite was true during 2008 when hedge funds were forced to heavily rely on redemption suspensions and longer notices.

Such situation led investors to be more concerned with funds' liquidity structures. Indeed, the general opinion is that funds should increase and constantly monitor the level of liquidity of their portfolios in order to identify weaknesses and better manage liquidity crisis. They should also conduct liquidity stress tests aimed to indentify mismatches between liquidity terms of the fund assets, that is the time needed to liquidate them, and redemption terms.

- Nowadays, the greatest current concern for the hedge fund industry is probably reputation. As managers are striving to regain consensus among investors they recognize that reputational risk is hard to define and quantify, hence to manage. It represents an area where risk management needs to develop appropriate procedures.
- In light of the current EU directive, jurisdiction is now a significant component of risk. Fund managers need proper expertise to deal with challenges posed by cross-border investments and by the marketing of their fund across different countries.

3.4 Transparency and Due Diligence

The hedge fund industry has witnessed several failures over its history. LTCM, Quantum and Tiger funds are all examples of funds that collapsed because they had experienced strategy-led problems. Indeed, the managers were overly optimistic and probably too much arrogant.

The current crisis instead has been characterized by extreme drawdowns in the major markets, thus leading many managers to shut down their fund. This, combined with recent cases of fraud like Madoff's one, has spurred investors to conduct more detailed and intensive researches of the fund before committing their money.

Such events have caused the balance of power to shift from managers to investors. Since hedge funds have demonstrated to be not immune to large drawdowns, investors increasingly ask for more courtesy and transparency to check whether managers have set up strong and robust infrastructures to face this climate.

The reason for enhanced transparency is that it is necessary to manage in a proper way the systemic risk that hedge funds can potentially create. However, it is unclear whether such disclosure will be publicly available or will be available on a confidential basis to the regulators of the industry.

Investors now require more transparency, more information on a more constant basis because they want to make sure that their money are handed properly and they want to see appropriate controls in place to prevent fraud and misbehaviours.

They want to take a closer look at internal operations, exposure monitoring and crisis recovery. In addition, they want more details on positions, valuation procedures and fund's administrator and other counterparties the fund is using. Investors also require more transparency about how the fund pays compensation to managers and general partners. This point is very delicate right now as hedge fund managers have been attributed the bad reputation of being selfish, concerned to enrich themselves at the expense of investors. All these issues represents key steps in today due diligence processes.

From a fund manager's perspective, this change in investors' due diligence has to lead necessarily to a shift in emphasis. Before managers were exclusively concerned on performance numbers, believing that if returns were strong everything else would look strong as well. Today, they need to care not only to front office investment strategies but to back office aspects as well.

In order to attract investors' interests, managers must prepare more detailed offering documents, with unambiguous terms, especially about restrictions and specific disclosures. They have to provide more information on the type and amounts of assets that they hold and must clarify how decisions are taken and things are monitored because investors view this transparency as a competitive advantage of the best hedge funds. Offering documents cannot be in favour of managers and at the expense of investors anymore. As of today, investors want to make sure that managers do not have an unrestricted freedom of action.

3.5 Fees

With hedge fund industry reporting poor results in 2008, investors have become more concerned with the fees they pay to managers. In particular, investors are upset with the recent performance and have started to think that the hedge funds' fee structure is way too expensive. Even though investors do not pay any performance fee when the fund performance goes below the high-water mark, high management fees are not justified by last year losses, increased risk and reduced possibilities of redemption.

First of all, management fees should be used by managers just to cover operating expenses and not for strategy expansion or business reinvestment.

Coming to performance fees, investors think that they should be calculated on alpha and not on all positive returns above the high-water mark level because the hedge fund industry is about alpha generation.

Secondly, performance fees should not be calculated on a yearly basis but on a period that is at least equal to the period for which investors' money are committed. In other words, there should be an alignment of performance fees with realisations for investors over an extended period of several years. Indeed, if money cannot be redeemed before than a lock-up period of three years, managers should not receive any incentive fee until the three years have passed because this will be the first opportunity for investors to decide whether to withdraw or retain money to the fund.

Several pension funds have proposed plans to hedge funds with their preferred terms. They agree on the fact that fees should be paid at the end of a lock-up period or spread out over several years instead of being paid on a yearly basis.

Another critic which has been addressed to the fee structure is related to the fact that incentive fees are calculated on the Net Asset Value (NAV) of the fund, which is derived from single assets' evaluation. Such evaluation is not a problem for securities that are traded on global exchanges with readily available prices. However, things are different for complex and hard-to-value instruments as the evaluation of such securities is often subjective and funds' administrators usually execute a mere confirmation function. The problem is magnified by the fact that managers run into a conflict of interest when they have to evaluate assets that will contribute to the overall NAV of the fund because they will receive a 20 percent on positive performance.

The general opinion is that the 20 percent fee should be calculated not on NAV but on realized prices at disposal. By this way, fees paid by investors would rely on estimated and hypothetical values anymore. This is extremely important because of the presence of hard-to-value instruments. Moreover, there would be a reduction of potential valuation fraud by the fund manager.

Actually, some funds have slashed management fees last year in order to mitigate the bad sentiment raising among investors because of poor performance and lock-up periods. In addition to that, hedge funds on average are not receiving any performance fee since the end of 2007 because of the high-water mark mechanism. Indeed, on an industry index basis, the NAV peaked in the last quarter 2007 and managers, on average, are still far from the old high-water mark. Moreover, many hedge funds have offered to reduce performance fees or fee breaks for next years on new capital subscriptions.

The main question is whether the 2 – 20 percent fee structure will remain or not. Actually it depends on the balance between demand by investors and supply by funds. Such balance has been in favour of investors last year, that is more supply than demand, and fees have slightly become lower. However, the balance has become more even this year as proved by the first net inflows during the first half of 2009.

Chart 3.1: Average hedge fund fees by location

	Management Fee	Performance Fee
North America	1.54%	16.33%
Europe	1.72%	17.94%
Asia	1.55%	15.88%
RoW	1.67%	19.25%

Source: Preqin

The information provider Preqin has surveyed fund managers in April and May over the fees they asked to investors. The survey shows that fees were actually lower than the traditional 2 – 20 scheme. Chart 3.1 shows that US fund managers ask the lowest fees, probably because the US market is the most mature in terms of supply and number of hedge funds.
However, it is likely that fees will go up again when the balance between demand and supply will turn in favour of hedge funds.

3.6 Industry Consolidation

As we have seen, the new environment for hedge funds will likely be characterized by rising costs due to the more stringent regulation, to the need for more transparency and more robust risk management processes. At the same time, investors are not willing anymore to pay expensive fees. These issues lead to the question of whether the hedge fund industry will be characterized by fewer but bigger funds, thus becoming more consolidated.
Indeed, managers will need a stronger capital base to give investors confidence about the stability of the fund. Moreover, they will be pushed to increase the size of their fund in order to increase revenues.
It goes without saying that in the new hedge fund industry it will be extremely difficult for small funds to attract money and survive. It will be even more difficult for new start-ups to face the barriers to entry represented by the increasing costs.
On the other side, the hedge fund marketplace will become stronger as a result of the ongoing turmoil and funds natural selection process. It is also true that fewer managers and less assets will be able to profit from the opportunities rising in the markets.

CHAPTER 4

4.1: What Distressed Debt Strategy is about; 4.2: Current opportunities; 4.2.1: European distressed debt managers; 4.2.2: North American distressed debt managers; 4.3: Default rates;

After a period in which credit was seemingly available everywhere and to anyone, where defaults rates were somewhere near zero and distressed debt investors had no opportunities to invest, corporate defaults recently soared to levels higher than at any point in the recent history, distressed debt began to be available and companies started to go bankrupt. Global credit markets were paralysed in the late summer of 2008 and the financial turmoil quickly spilled over to real economy by October.

Today, the world of distressed debt securities and companies involved in bankruptcy or restructuring is without any doubt full of opportunities for hedge funds. However, one should bear in mind that no profits come without risk. Distressed debt is an extremely risky investment area and not all distressed companies are worthy to invest in. In order to enjoy the benefits of what could be one of the greatest distressed cycles in history, investors must pay attention and be diligent in their assets purchase process because selection will be fundamental. Additionally, investors have to consider that such investment strategy is characterized by a time horizon going from 3 to 5 years.

4.1 What Distressed Debt Strategy is about

Distressed debt investment strategy consists in constructing a position in a company or securities which are experiencing financial difficulties. Such companies may be in their bankruptcy reorganization or will emerge from bankruptcy in the near future or just about to declare bankruptcy.

There are several reasons that could lead a company to distress: mismanagement, overexpansion, product liability are just some of them. Perhaps the company has short-term liquidity problems and is too leveraged to not file for bankruptcy protection. As an example, many times a profitable business suffers from cyclicality and is not able to generate adequate cash flows to make debt repayments on a regular basis. Profitable business may also experience troubles because of excessive leverage taken as a result of M&A activity or a leveraged buyout. Lastly, it may turn out that a business have operational problems because the product line is obsolete or competition has intensified.

It goes without saying that the most attractive opportunities for managers in the distressed debt space are represented by firms with financial and not operational problems because once the financial structure has been fixed up the company can rely on its brand, market niche, industry position or products in order to go back to profitability.

It is also worth to remember that distressed investment strategy is only about debt markets, not equity. Indeed, it is rarely a good idea to buy stocks in a company in distress, that has recently filed or is going to file for bankruptcy. The reason is that stockholders would have the last claim in the liquidation process, when it comes to divide the assets of a bankrupt company, and even when the company successfully re-emerge from a restructuring proceeding there will not be much value left for pre-bankruptcy shareholders.

By buying debt securities at a low price instead, one can take control of a company that is performing poorly and is near bankruptcy. The aim is to become a major creditor so to have a considerable power during the liquidation or reorganization process.

Hedge funds usually start accumulating near-default or defaulted bonds, bank debt and trade claims at deep discount to face value, due to difficulties of the company. Then, they resell them in the short run for a profit, when the restructuring proceeding has driven the price upward. Moreover, in a worst-case scenario, the manager could realize a profit if the company is liquidated, provided that the manager had bought senior debt in the company for less than its liquidation value, because owners of debt have priority over equity holders.

Additionally, some managers have developed specific competences in restructuring and bankruptcy proceedings, hence they invest in distressed debt in order to go through the entire restructuring process, in the belief that the company will successfully reorganize and leveraging on its operational stability will return to profitability. Managers provide direction and support to the management which may be inexperienced in bankruptcy situations, thus increasing the chances of success. When upon emergence from bankruptcy bondholders' claims are turned into the new company's equity, they acquire a long-term control over the new company.

Hedge funds can access to distressed debt through several channels. First of all there is the bond market which is probably the easiest way. Usually a large supply of distressed debt securities is available on the market after a firm defaults because other regulated funds such as mutual funds are not allowed to hold securities that have defaulted.

Hedge funds can also buy distressed securities directly from mutual funds. By this way they can ensure large quantities of securities in single transactions without affecting market prices.

Lastly, hedge funds can extend credit to the distressed firm, which is usually in need of cash.

4.2 Current Opportunities

The current volatile economic environment offers extraordinary opportunities in the credit world and in distressed debt market, for many years to come. Indeed, even though the current tightening of liquidity may represent a bad scenario for some investors, others are positioning themselves and wait to capture a whole range of distressed debt opportunities.

Scarce liquidity combined with extremely high corporate leverage and a slow recovery of earnings will likely lead an unprecedented amount of businesses, particularly those taken private through leveraged buyouts, to restructure their

balance sheets. The number of distressed businesses is still rising and many agree on the fact that this will be one of the biggest distressed debt cycle ever.
In particular, hedge funds are shifting their attention to distressed debt investing as money flows into high-yield bond funds, i.e. funds investing in bonds with a higher risk of default or other adverse credit events, have increased in a time where other strategies were registering negative flows. According to the data provider EPFR Global, money flows into high-yield bond funds reached a net $4.4 billion between the end of 2008 and early February 2009.

Even though there is a huge buying opportunity in distressed debt, managers are still uncertain about when the market will bottom. In particular, there is concern on the timing because of the risk of picking debt securities too early, when the selling pressure can push the prices further down. Additionally, managers are still reluctant to increase their allocations to distressed assets because of the flight to quality recently experienced in the global markets. Another reason can be that investors usually beware the front of the cycle because the first companies to file for bankruptcy are empirically the worst ones.
Managers in the space are aware that early players may be burned as default rates could still rise, thus threatening to deflate their debt portfolios. In particular, managers are not sure right now that corporate defaults have hit the highest level yet because the bankruptcy cycle could still be in its early stages. As a consequence, there is uncertainty about when to enter the market.
Indeed, the richest pickings follow the period in which default rates peak and funds that build their exposure by buying assets at too high price may found themselves in troubles and miss their targeted returns. In fact, a Research by Edward Altman at New York University’s Stern Business School confirms that the two best years for distressed investing—1991 and 2003—followed the peaking of high-yield bond default rates.

Investors that entered the market in the last part of last year evidently suffered from losses as the Credit Suisse/Tremont Index reported an annual loss of –20.48% in 2008 for the distressed debt sub-strategy. The index was down in the first quarter of 2009 as well but then started posting positive performance. Distressed debt investors think that the strategy hit the bottom at the end of 2008 and are now positioning to catch the rebound.

Indeed, many experts expect that prices will keep on going down and become more attractive. In particular they agree on the fact that distressed securities could keep falling until the first or second quarter of 2010. This is extremely important because investors aiming to build their exposure into discounted corporate debt, as any other investor, want to buy low and sell high. Hence they will likely wait until the bottoming out in the second quarter of 2010, having clear that they still face high levels of risk.

Investments in distressed securities are cyclical in nature, with the main part of the cyclical aspect being the growth of distressed securities supply due to a combination of fundamental and macroeconomic factors. It goes without saying that investors must be opportunistic in timing their investments.

Going more in depth, the current financial markets offer several opportunities across the capital structure. In the first phase of the cycle, hedge fund managers frequently focus on bank loan opportunities and stressed high yield investments. So, hedge funds are expected to initially invest in securities which are higher in the capital structure of a distressed company so to have a better collateral and a stronger downside protection.

It is difficult to imagine that distressed investors would take the risk of investing down in the capital structure before they have at least a position in the senior debt. Then, when default rates reach their highest levels they will move down into the capital structure and they will likely look to junior securities which have attracting valuations, resulting in a higher return potential.

Moreover, hedge funds will target companies that have the operational strength to survive in a really tough economic environment and they are expected to probably have an initial focus on distressed companies that are filing or have already filed for bankruptcy or are in default and whose distressed debt will eventually be restructured into equity.

To sum up, there are great opportunities for hedge fund managers investing in distressed debt and experts agree on the fact that it will continue to get better in the months and years to come.

4.2.1 European distressed debt managers

Distressed debt has without a doubt gained attention this year as the current environment is affecting every sector. European businesses started to crack as they were caught by liquidity needs.

In such a climate, Debtwire, the publisher of data for financial professionals in fixed income markets, has published its annual report. The outlook is based on a survey over hedge fund managers and reveals expectations and opinions of managers for the European distressed debt market in 2009 and beyond.

According to hedge fund managers surveyed, high levels of debt combined with scarce liquidity will cause an increase in insolvencies and restructurings, thus creating opportunities for managers investing in distressed debt.

Indeed, European managers seem to agree on the fact that tightening liquidity is the primary factor that is putting pressure on businesses. 40% of respondents expect that cash flows are the primary factor determining the timing restructuring proceedings. In other words, it is very likely that business will need to restructure because they lack adequate cash flows to continue paying interests. Then over-leverage and the inability to refinance are identified as the other two factors that will trigger restructurings and insolvencies.

While the current economic and financial slowdown has undoubtedly triggered opportunities to invest in distressed debt markets, many of the managers surveyed were cautious about the effective opportunities in 2009. In particular, the largest proportion of managers, nearly a third (27%), expects that the volume of European financial restructurings will reach its highest level at the end of 2009 when the distressed debt market will hit the bottom. The volume of financial and operational restructuring activities across Europe is indeed already at a very high level. Moreover, the 21% of respondents think that there will be a decline in the number of restructuring proceeding from the first quarter of 2010, while the 17% forecast a decline from the second quarter.

To sum up, managers have waited throughout the last part of 2008 and the first half of this year because they think that the last part of 2009 and the first half of 2010 will offer the best opportunities to investors in the restructuring market. At the same time they feared and are still concerned with the high volatility and the unpredictability of every market.

Among the people surveyed there is also the opinion that the number of insolvencies will increase and outnumber that of restructurings. On the other side, given the systemic risk that they create, larger businesses could face political pressure to restructure. Moreover, high leverage will have to be readjusted and so many businesses will have to equitise their debt and undertake a restructuring process in order to get a better capital structure.

Respondents are uncertain about whether there will be more insolvency situations or restructuring proceedings. Indeed, they are evenly split between the two. The most important factors for successful restructurings are considered to be the availability of funds and the attitude of banks.

In addition to that, managers also seek to gain control of companies with a loan to own strategy. Investors see the chance to have their debt investment converted to equity holdings even though they recognize that such a strategy requires time and capital commitment.

Surveyed managers think that the most attractive investment opportunities lie in senior debt and high yield bonds as they are believed to have the highest returns prospects. Moreover, they also target the top of the capital structure as a protection against the risk of depressed asset values and uncertain value recovery.

When questioned about the most attractive sectors, the Property/Construction, Auto/Auto parts and Consumer Retail sectors were identified by respondents as offering the most opportunities for distressed investors in 2009. Financial, Chemicals and Media businesses are also expected to experience problems.

Managers think that the most interesting sectors are the cyclical ones and of course they target highly levered companies because it is harder for them to find new sources of financing and thus are more likely to undertake a restructuring process. Indeed, leverage multiples play a critical role in determining which investment to undertake. Managers also recognize that it is important to distinguish between vulnerable sectors which offer more opportunities and those with fewer but better opportunities. That is, it is not said that the most affected sectors are those with the best distressed debt to invest in.

4.2.2 North American distressed debt managers

Looking at the North American region, Debtwire found that the majority of asset managers interviewed agrees on the fact that the current distressed investing cycle will be remembered for its high level of bankruptcies across all industries and for its unprecedented level of corporate defaults. At the same time, it will be surely remembered for the outstanding buying opportunities that the economic downturn is offering to distressed debt investors.

Even though the tough economic environment has caused hedge fund redemptions to peak and has forced many funds to close, those who withstood the storm have now the chance to soar. The consolidation of the hedge fund industry in 2008 and 2009 has undoubtedly reduced the competition for attractive

positions and so everyone recognize the unprecedented opportunities offered by distressed debt. Fewer hedge funds, however, will be able to capitalize on them.
It is impossible for hedge funds to predict when the distressed debt market will bottom but for sure knowledgeable investors have the chance to post high returns.

According to the 2009 North American Distressed Debt Outlook, investors think that mid-2009 was the early stage of a distressed investment cycle that will continue in 2010 and beyond.
In particular, 2008 has experienced quite low default rates despite a deteriorating financial environment. 2009, instead, has already been full of opportunities as companies, facing scarce liquidity in the markets, were unable to refinance their existing debt obligations thus needing a restructuring process or being forced to liquidation. Default rates have moved from their historical low lever in 2007 to high levels during this year.
The 2009 initial stage has been particularly interesting also because of the strong US government intervention which prevented many firms to fail. The government has appeared ready to do whatever necessary to prevent a systemic failure of the financial system and so, hedge funds investing in the area had to keep an eye on government action as well.

Distressed investors expect that many opportunities have yet to come in 2010 when default rates will reach unprecedented levels. Indeed, next years will represent a dynamic environment for the distressed investing community and the majority of the managers interviewed, nearly two-thirds, anticipate that they will increase the allocation to the distressed asset class in 2010.
Experts also foresee an increasing distressed M&A activity in North America. Such rise in distressed M&A deals will be driven by forced consolidation and forced sellers in the attempt to deal with the current financial climate.

Financial services sector is expected to offer the most interesting opportunities for distressed investors. Another sector that will likely gauge the attention of investors is the automotive manufacture sector. In fact, these two sectors are the most beat-up of the last two years and distressed investors believe that they can realize great value by investing in them.

However there will be significant opportunities in every other sectors that has been impacted in 2008 and 2009, suffering the consequences of recession. It goes without doubt that the crisis has touched almost every sector of the market so there is everywhere the need for restructuring debt.

When questioned about where they will invest in the capital structure distressed investors say they will commit their funds to the top of the capital structure, because they will have collateral, covenants and more control over restructuring processes.

Investors in the area fear that they can lose money if they start right now to invest down the capital structure in junior debt as asset valuations could be slashed as they were in the last part of 2008.

4.3 Default rates

As outlined before in the chapter, distressed debt investors are really concerned with the level of default rates as the richest opportunities come just after default rates have peaked. Such rates are thus extremely relevant for timing the strategy in a correct manner.

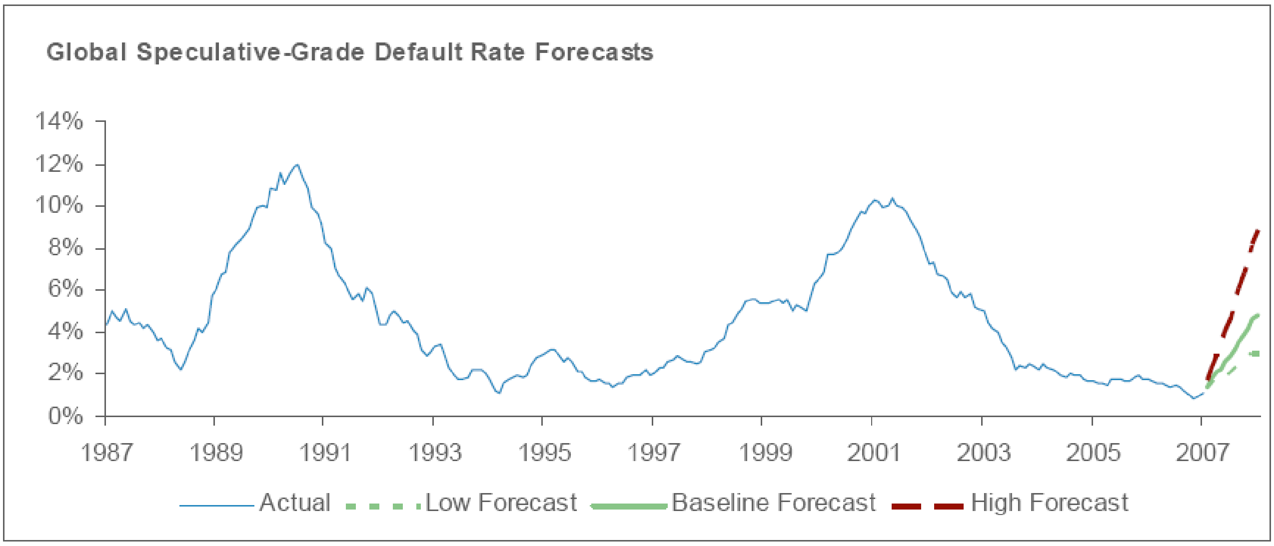
Despite the turbulence in credit markets which derived from the defaults in the US sub-prime mortgage sector, the corporate default rates were surprisingly low in 2007, remaining somewhere near zero at the lowest historical levels.

The majority of companies were able to service their debt payments in 2007 as economy in real terms was growing and credit conditions were still relatively loose. Companies were able to refinance their debt and obtain longer maturities and more favorable terms, thus being able to avoid default. Indeed, few of them had to access the credit market in the last part of 2007 when credit conditions had already deteriorated.

Moody's global speculative-grade (high-yield) corporate default rate reached a record 0.91 percent at the end of 2007, the lowest year-end level since 1981, almost 30 years ago, when it came in at 0.70%. The rate was down approximately 48 percent from 2006 level of 1.74 percent and since 2003 has been well below the its last 26 years average level of 4.48 percent per year.

Chart 4.1:

Exhibit 2



Source:

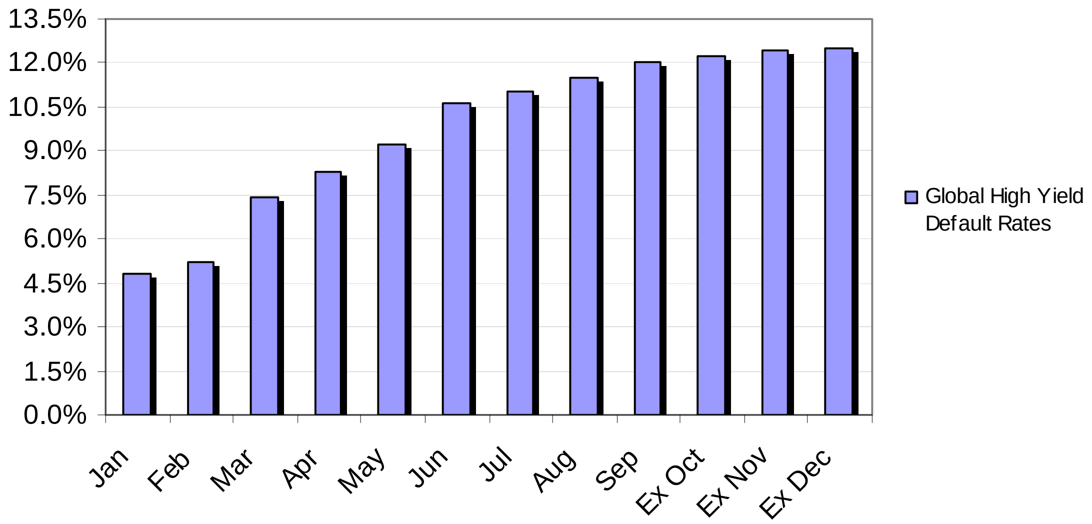
In 2008, companies experienced the first consequences of tightening credit conditions with default rates increasing sharply and approaching their average level. The most relevant factors that are considered to have created upward pressure on default rates in 2008 are weaker global macroeconomic conditions, widening credit spreads and tougher corporate underwriting standards. Overall, these events have reduced the ability of many corporates to make debt service payments and re-finance maturing debt,

2009 has seen a surge in defaults with the global speculative grade default rate expected to keep on increasing also in the last quarter. In particular, corporate defaults have accelerated as access to capital for distressed companies was extremely limited. As shown in chart 2.2, Moody's estimates that the global high yield default rate has sharply climbed over the year and will reach a 12.5 percent level in December 2009. Since Moody's use a 12 month trailing default rate, this means that they expert 12.5 percent of the global high yield market to be in default in the year to the end of December.

It is interesting to compare such levels with the peaks that characterized 2002 and the early 1990s. According to Moody's the high-yield default rate in July 2009 was 11 percent and hence surpassed the peak of 10.4 percent that was registered in 2002. Moody's also expect that in the last quarter 2009, the default rate will go above the 1991's peak of 12.2 percent.

To sum up, it seems that this credit cycle will be worse than the last two in the early 1990s and 2000s. This year is considered to be until now and expected to be in its last part, the year with the largest number of defaults since the early 1980s.

Chart 4.2: 2009 Global High-Yield Default Rates (January – December 2009)



Source: Moody's estimates

Moody's expect that defaults will continue to increase in the first quarter of 2010 as a lot of high-yield names will need to refinance. The most affected firms will

be the cyclical businesses, the leveraged buyout during recent years and the poorer rated ones.
The thing that catch the attention is that speculative grade default rates are expected to go well above the previous two peaks of early 2000s and 1990s. Such prediction will make 2010 a record year for defaults. Indeed, defaults are expected to increase to 13.8 percent in February 2010, that is almost 14 percent of the high yield bond issuers will have defaulted globally in the year ending in the first quarter 2010.
After the first quarter's peak of almost 14 percent, Moody's forecast that defaults will sharply decline and reach the level of 4.5 percent in August 2010. While precisely forecasting default rates is a difficult task by nature because of the dependency on macroeconomic and credit market conditions, which themselves are difficult to reliably forecast, such predictions are effective in summarizing how default rates are expected to evolve over time.

There are several reason for such a trend. The first driver underlying these forecasts is that many of the weakest rated firms will have already defaulted, leaving a pool of relatively stronger issuers.
Secondly, the narrowing of high yield spreads in 2009 and the fact that the high yield bond market is re-opening will most likely allow many companies to refinance their debt thus avoiding to go in default. Indeed, the high yield bond spread, over government bonds yield, began increasing in the second half of 2007 and reached unprecedented levels in the fourth quarter 2008. As a consequence, corporate defaults have peaked, or better, are just about to peak in 2009.
Instead, since the very first months of 2009 high yield bond spreads have declined significantly even if they still remained at near-record levels. Since high yield bond spreads have narrowed, default rates are expected to fall in 2010 after a further increase in the first quarter.

Thirdly, many experts believe that 2010 will experience a modest economic recovery and unemployment rates, both in US and Europe, will have reached the highest level and so will start to decrease.

Looking at the sectors level, the Automotive industry has been the worst performer in the U.S. during the 2009. The Media industry, particularly the Advertising, Publishing and Printing Media sectors followed closely behind. The European sector with the highest default rate has been the Durable Consumer Goods sector.

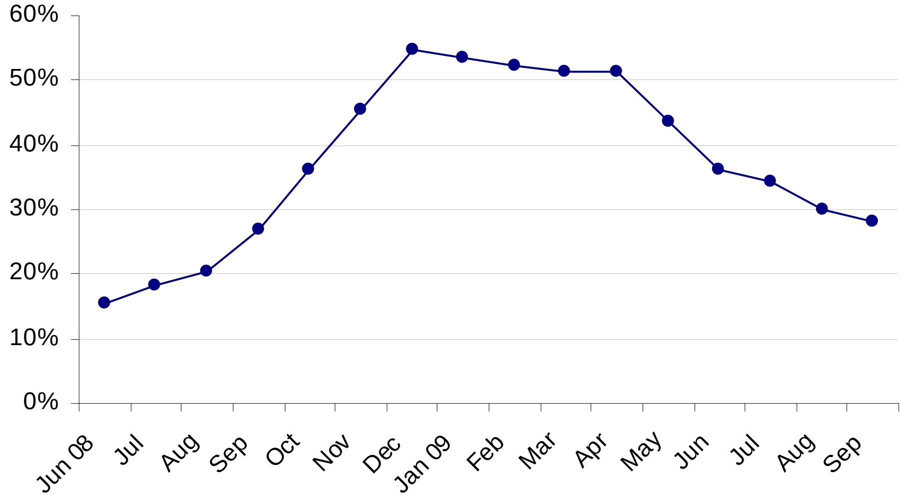
Across industries over the coming year, Moody's forecast that the Consumer Transportation sector, which largely constitute airlines, media companies and car manufacturers, will be the most troubled in the U.S. and the Durable and Non-Durable Consumer Goods will be the sectors most at risk of defaulting in Europe.

Another interesting index that is worth to be considered is the Moody’s Distressed Issuer index, which measures the percentage of rated issuers that have debt trading at distressed levels. High-yield is traditionally classed as distressed when it trades at spreads to Treasuries greater than 1000 basis points, that is when the credit spread exceeds 10% over government bonds.

The index began to increase at the end of 2007. It was higher than 15 percent at the end of the second quarter 2008 and then reached almost 27 percent at the end of the third quarter. It sharply climbed in the final three months of 2008 and rose to a record 54.6 percent in December 2008. In 2009, especially from the second quarter on, the index has declined standing at 28 percent at the end of September 2009. S&P has even a worse view, stating that 85 percent of all high yield corporate bonds were distressed in January 2009. In other words, all the theoretical definitions between high yield, stressed and distressed debt securities were blurred in practice.

Chart 4.3 suggests that the Moody’s distressed issuer index precede subsequent changes in the level of the high yield default rate. It is actually quite obvious that the more distressed debt you have the larger is the number of defaults that you will likely experience. In other words, a huge decline in loan prices anticipates an increase in corporate defaults and this is happened especially in the current distressed debt cycle.

Chart 4.3: Distressed Issuer Index (June 2008 – September 2009)



Source: Moody’s estimates

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