

Department of Finance: Master's Degree in Financial Economics

Financial Market Law and Regulations

Hedge Funds: history, strategies and Regulation

SUPERVISOR

CANDIDATE

Prof. Paola Lucantoni

Jacopo Tropia

Reg. No. 649951

CO - SUPERVISOR

Prof. Carmine Di Noia

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HEDGE FUNDS:

HISTORY, STRATEGIES AND RGULATION

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CHAPTER 1

AN INTRODUCTION TO HEDGE FUNDS

Summary: 1.1 Standard Definitions of a Hedge Fund – 1.2 The History of Hedge Funds - 1.2.1 Long Term Capital Management - 1.2.2 Size and Growth of the Hedge Fund Industry today – 1.3 Risk Management – 1.3.1 Risks shared with other investment types - 1.4 Hedge Fund Performance Measurement – 1.5 Hedge Funds and 2007-09 Financial Crisis

1.1 Standard definitions of a Hedge Fund

A hedge fund can be defined as an actively managed, pooled investment vehicle that is open to only a limited group of investors and whose performance is measured in absolute return units. However, this simple definition excludes some hedge funds and includes some funds that are clearly not hedge funds. There is no simple and all-encompassing definition.

The nomenclature "hedge fund" provides insight into its original definition.

To "hedge" is to lower overall risk by taking on an asset position that offsets an existing source of risk. For example, an investor holding a large position in foreign equities can hedge the portfolio's currency risk by going short currency futures. A trader with a large inventory position in an individual stock can hedge the market component of the stock's risk by going short equity index futures. One might define a hedge fund as an information motivated fund that hedges away all or most sources of

risk not related to the price-relevant information available for speculation¹.

Note that short positions are intrinsic to hedging and are critical in the original definition of hedge funds.

Alternatively, a hedge fund can be defined theoretically as the "purely active" component of a traditional actively-managed portfolio whose performance is measured against a market benchmark. Let w denote the portfolio weights of the traditional actively-managed equity portfolio. Let b denote the market benchmark weights for the passive index used to gauge the performance of this fund. Consider the active weights, b, defined as the differences between the portfolio weights and the benchmark weights:

$$h = w - h$$

A traditional fund has no short positions, so w has all nonnegative weights; most market benchmarks also have all nonnegative weights. So w and b are nonnegative in all components but the "active weights portfolio", b, has an equal percentage of short positions as long

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¹ In our technical context, speculation is defined as any action, with some non-zero risk, made in order to make a profit. This classic definition of speculation also includes the careful research of undervalued securities for long-term gain – what is informally termed "investing". In informal contexts, the word speculation has acquired the implicit meaning of actions based on inconclusive evidence and the desire for short-term, high-risk profit. For an excellent description of how the word speculation has evolved, see LONGSTRETH, BEVIS, *Modern Investment Management and the Prudent Man Rule*, Oxford University Press, 1986, 86-89. The word "hedge", meaning a line of bushes around a field, has long been used as a metaphor for the placing of limits on risk. Early hedge funds sought to hedge specific investments against general market fluctuations by shorting the market, hence the name, see COGGAN, *Guide to Hedge Funds*. London, Profile Books, 2010. Nowadays, however, many different investment strategies are used, many of which do not "hedge risk".

positions. Theoretically, one can think of the portfolio h as the hedge fund implied by the traditional active portfolio w.

The following two strategies are equivalent:

- 1. hold the traditional actively-managed portfolio w
- 2. hold the passive index *b* plus invest in the hedge fund *b*.

Defined in this way, hedge funds are a device to separate the "purely active" investment portfolio b from the "purely passive" portfolio b. The traditional active portfolio w combines the two components.

This "theoretical" hedge fund is not implementable in practice since short positions require margin cash. Note that the "theoretical hedge fund" described above has zero net investment and so no cash available for margin accounts. If the benchmark includes a positive cash weight, this can be re-allocated to the hedge fund. Then the hedge fund will have a positive overall weight, consisting of a net-zero investment (long and short) in equities, plus a positive position in cash to cover margin.

Why might strategy 2 above (holding a passive index plus a hedge fund) be more attractive than strategy 1 (holding a traditional actively-managed portfolio)? It could be due to specialisation. The passive fund involves pure capital investment with no information-based trading. The hedge fund involves pure information-based trading with no capital investment. The traditional active manager has to undertake both functions simultaneously and so cannot specialise in either.

This theoretical definition of a hedge fund also explains the "hedge" terminology. Suppose that the traditional actively-managed fund has been constructed so that its exposures to market-wide risks are kept the same as in the benchmark. Then the implied hedge fund has zero

exposures to market wide risks, since the benchmark and active portfolio exposures cancel each other out, *ie*, hedging.

What we have just described is a "classic" hedge fund, but the operational composition of hedge funds has steadily evolved until it is now difficult to define a hedge fund based upon investment strategies alone. Hedge funds now vary widely in investing strategies, size, and other characteristics.

Hedge fund managers are usually motivated to maximise absolute returns under any market condition. Most hedge fund managers receive asymmetric incentive fees based on positive absolute returns and are not measured against the performance of passive benchmarks that represent the overall market. Hedge fund management is fundamentally skill-based, relying on the talents of active investment management to exceed the returns of passive indexing.

Hedge fund managers have flexibility to choose from a wide range of of investment techniques and assets, including long and short positions in stocks, bonds, and commodities. Leverage is commonly used (83% of funds) to magnify the effect of investment decisions² Fund managers may trade in foreign currencies and derivatives (options or futures), and they may concentrate, rather then diversify, their investments in chosen countries or industry sectors. Hedge fund managers commonly invest their own money in the fund, which further aligns their personal motivation with that of outside investors.

Some hedge funds do not hedge at all; they simply take advantage of the legal and compensatory structures of hedge funds to pursue desired trading strategies. In practice, a legal structure that avoids certain

² LIANG, "On the Performance of Hedge Funds," Financial Analysts Journal, vol. 55, number 4, July/August 1999, 72-85.

regulatory constraints remains a common thread that unites all hedge funds. Hence it is possible to use their legal status as an alternative means of defining a hedge fund.

1.2 The history of Hedge Funds

«Over the years, hedge funds have tended to capture the public imagination at times of economic extremes. In boom times, they have been held up to be miracle money-making machines, but in times of economic crisis, they have come in harsh scrutiny from the press, from government regulators, and from the public. The truth is somewhere in between, and at the time of writing, that's about where we are at with regard to their widespread perception and the wider economic situation, which is neither as desperate as it seemed in 2008 or as buoyant as it was in the years preceding the credit crisis.

Hedge funds can have a positive impact in terms of generating wealth, providing liquidity for the markets, and greasing the wheels of capitalism, but they can also have a negative impact when the culture of greed that drives the whole process goes into overdrive and neglects wider societal responsibilities in favour of profits. Here, we shall tell the story of hedge funds, from their conceptual birth in the boom years of the 1920s through their emergence in the post-war years into their current status as the pre-eminent high-end investment vehicle. It's a chequered history, to be sure, but it's nonetheless one that sheds light on the evolution of the cult of wealth throughout the 20th and early 21st centuries³».

The boom years of the 1920s brought about, and were to a large extent driven by, the emergence of the pooled fund as a mainstream

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³ MILNES, *The History of Hedge Funds*, avaible at www.hedgethink.com, February 19, 2014.

method of preserving wealth and providing capital growth for investors. Although pooled funds had been around for over a century beforehand, the spectacular wealth-generating properties of the markets after the Great War created an unprecedented demand for more accessible routes into this money machine. During this decade, a whole host of new investment vehicles came into play, and among them was the Graham-Newman Partnership, which has since been cited by uber-investor Warren Buffet as being the earliest example of a hedge fund.

The investment craze of the 1920s saw millions of dollars poured into the markets, creating what we now refer to as a bubble, and when the overheated capital markets went into a tailspin in 1929, the results were catastrophic. What followed was the Great Depression, and for a time, faith in the markets all but dissipated among a disillusioned and heavily-impoverished public. The vast majority of funds and investment banks shut down under the weight of heavy losses, but a few remained, and many of those that did grew to be powerhouses in the years following the Second World War.

Although the strategy of hedging had been explored by investors during the 1920s, it wasn't until the late 1940s that it became systematized into an investment product. Alfred Jones, considered by many to be the father of the modern hedge fund, was born in 1901 in Melbourne, Australia to American parents. His family moved back to the U.S. while Jones was still a young child, and he later went on to graduate from Harvard in 1923 before going on to serve as a diplomat in Berlin, Germany. He then earned himself a sociology PhD at Columbia University before joining the editorial staff at Fortune magazine in the early 1940s.

The big turning point in Alfred Jones' life occurred in 1948 when he was asked by his employers at Fortune magazine to write an article about current investment trends. This inspired him to try his hand at being a money manager in his own right, and with \$40,000 of his own money and a further \$60,000 solicited from investors, he launched a fund based on the concept of the long/short equities model, which he dubbed the 'hedged fund''. In addition to this investment principle, he used leverage – the idea of borrowing money at a lower interest rate than the anticipated rate of return from his investment strategy – to enhance the returns from the fund.

In 1952, he changed the structure of his investment vehicle from a general partnership to a limited partnership, and gave the managing partner a 20% cut of the profits from the fund as an added incentive. This made Jones the first money manager to combine the use of leverage, short selling, shared risk through a partnership with other investors, as well as a means of compensation based on investment performance. To a large extent, this investment model remains the template for hedge funds, and this is why Jones is so often credited as being the true hedge fund pioneer.

As is so often the case, it took time for the world to catch up with a truly innovative concept, and it was more than a decade before Alfred Jones' hedge(d) fund idea took off as a major investment vehicle. Again, Fortune magazine holds a place in the story.

In 1966, it published an article that shone a spotlight on an obscure investment that has somehow managed to outperform every mutual fund on the market by double-digit figures over the past year. The investment had also outperformed the mutuals by high double-digits over the last five years. Money managers and investors sat up and took

notice, and for the first time hedge funds became a real industry. Just two years later, there were 140 hedge funds in operation.

During the boom years of the 1960s, the hedge fund industry underwent a period of frantic expansion, but the recession of 1969–70 and the 1973–1974 stock market crash put the kibosh on this growing trend, in the same way that previous and subsequent recessions had done to the investment industry in general. It didn't help that by this time many funds had turned their back on Jones' original strategy by engaging in much riskier strategies based on long-term leverage. As a result, many fund suffered heavy losses during the bear markets of 1969-70 and 1973-74.

Having had their fingers burned badly by the market downturns of the late '60s/early '70s, hedge funds found themselves very much out of fashion among investors. However, in an echo of the original hedge fund boom, the tide turned in 1986 when an article in Institutional Investor shone the spotlight on the phenomenal double-digit success of Julian Robertson's Tiger Fund.

In 1980, Julian Robertson started the Tiger fund with \$8 million in start-up capital. By the late '90s – the peak of this fund's performance – the fund was worth over \$22 bilion, and in 1993 Robertson was estimated to have made \$300 million personally from the fund. Although his actual methods were a lot more subtle than his public pronouncements might have indicated, Robertson expressed the basic philosophy behind the fund as follows: "our mandate is to find the 200 best companies in the world and invest in them, and find the 200 worst companies in the world and go short on them. If the 200 best don't do better than the 200 worst, you should probably be in another business⁴".

⁴ in MILNES P., op. cit.

The performance of this high-flying hedge fund inspired a flood of interest among investors in the world of hedge funds, and by this point the industry had evolved substantially. In their new incarnation, hedge funds employed a much bigger variety of strategies including derivatives and currency trading.

The bull market days of the early 1990s saw a huge outflow of top market talent from the mutual fund industry into the hedge fund industry, where they enjoyed far greater flexibility and renumeration. The high-profile success of George Soros and Jim Rogers' Quantum Fund – particularly the trade that forced the exit of the UK from the European Exchange Rate Mechanism – only fanned the flames.

But just as hedge funds suffered hugely during the 70s market crash, a similar fate would befall many hedge funds when the dot-com bubble burst in the late 1990s and early 2000s.

Several high-profile funds failed in spectacular fashion, including Long Term Capital Management in 1998, the collapse of Robertson's own Tiger Fund in March 2000, and the enforced reorganisation of George Soros' and Jim Rogers' Quantum Fund into the Quantum Group of Funds just one month later.

Following the dot-com crash of 2000 and the global economic crisis of 2008, regulators have clamped down on the previously regulation-light world of hedge funds.

For instance, the U.S. Securities and Exchange Commission (SEC) implemented changes that require hedge fund managers and sponsors to register as investment advisors in 2004. As a result, the number of requirements placed on hedge funds has increased greatly, such as hiring compliance officers, creating a code of ethics, and being sure to keep up-

to-date performance records. Essentially this was all done with the intention of protecting investors.

Today, despite recent troubles, the hedge fund industry continues to flourish once more. Crucial to its success was the development of the 'fund of funds', essentially a hedge fund with a diversified portfolio of numerous underlying single-manager hedge funds.

The introduction of the fund of funds allowed for greater diversification, thereby taking some of the risk out of hedge funding, but also allowed minimum investment requirements of as low as \$25,000. This greatly opened up the hedge fund investment option to a far greater number of average investors than ever before.

Today's hedge funds look significantly different to their forerunners of the 1940s, and even the 1980s. A far greater variety of strategies is used by today's hedge funds, including many that do not involve traditional hedging techniques at all.

The size of the industry is now absolutely vast, as we will show later in this chapter. While Albert Jones started the first hedge fund with just \$100,000, in 2013 the global hedge fund industry recorded a record high of US\$2.4 trillion in assets under management.

1.2.1 Long Term Capital Management

During the late 90s, the largest tremor through the hedge fund industry was the collapse of the hedge fund Long-Term Capital Management (LTCM).

LTCM was the premier quantitative-strategy hedge fund, and its managing partners came from the very top tier of Wall Street and academia. From 1995-1997, LTCM had an annual average return of

33.7% after fees. At the start of 1998, LTCM had \$4.8 billion in capital and positions totalling \$120 billion on its balance sheet.

LTCM largely (although not exclusively) used relative value strategies, involving global fixed income arbitrage and equity index futures arbitrage.

For example, LTCM exploited small interest rates spreads, some less than a dozen basis points, between debt securities across countries within the European Monetary System. Since European exchange rates were tied together, LTCM counted on the reconvergence of the associated interest rates.

Its techniques were designed to pay off in small amounts, with extremely low volatility. To achieve a higher return from these small price discrepancies, LTCM employed very high leverage. Before its collapse LTCM controller \$120 billion in positions with \$4.8 billion in capital. In retrospect, this represented an extremely high leverage ratio (120/4.8 = 25). Banks were willing to extend almost limitless credit to LTCM at very low no cost, because the banks thought that LTCM had latched onto a certain way to make money.

LTCM was not an isolated example of sizeable leverage. At that time, more than 10 hedge funds with assets under management of over \$100 million were using leverage at least ten times over⁵.

Since the collapse of LTCM, hedge fund leverage ratios have fallen substantially.

In the summer of 1998, the Russian debt crisis caused global interest rate anomalies. All over the world, fixed income investors sought the safe haven of high-quality debt. Spreads between government debt

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⁵ PRESIDENT'S WORKING GROUP ON FINANCIAL MARKETS, Hedge Funds, Leverage, and the Lessons of Long-Term Capital Management, available at http://www.ustreas.gov, April, 1999.

and risky debt unexpectedly widened in almost all the LTCM trades. LTCM lost 90% of its value and experienced a severe liquidity crisis. It could not sell billions in illiquid assets at fair prices, nor could it find more capital to maintain its positions until volatility decreased and interest rate credit spreads returned to normal.

Emergency credit had to be arranged to avoid bankruptcy, the default of billions of dollars of loans, and the possible destabilisation of global financial markets. Over the weekend of September 19-20, 1998, the Federal Reserve Bank of New York brought together 14 banks and investment houses with LTCM and carefully bailed out LTCM by extending additional credit in exchange for the orderly liquidation of LTCM's holdings.

The aftermath of the Russian debt crisis and LTCM debacle temporarily stalled the growth of the hedge fund industry. In 1998, more hedge funds died and fewer were created than in any other year in the 1990s⁶. The number of hedge funds as well as assets under management (AUM) declined slightly in 1998 and the first half of 1999. Hearings were held on LTCM, resulting in recommendations for increased risk management at hedge funds, but without new legal restrictions on their practice⁷.

LTCM proved to be a bump, rather than a derailing of the hedge fund industry. The appeal of hedge fund investing remained, and the industry rebounded. Less than a year after the Federal Reserve Bank of New York unravelled LTCM, Calpers (California Public Employees'

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⁶ LIANG, *Hedge Fund Performance 1990-1999*, Financial Analysts Journal, vol. 57, number 1, January/February 2001, 11-18.

⁷ LHABITANT, Hedge Funds: Myths and Limits, John Wiley & Sons, 2002; FINANCIAL STABILITY FORUM, Report from the Working Group on Heavily Leveraged Institutions, availbe at http://www.fsforum.org.

Retirement System), the largest American public pension fund, announced they would invest up to US\$11 billion in hedge funds⁸.

1.2.2 Size and growth of the Hedge Fund Industry today

The explosive growth in hedge funds led to a market for professionally managed portfolios of hedge funds, commonly called "funds of funds."

Funds of funds provide benefits that are similar to hedge funds, but with lower minimum investment levels, greater diversification, and an additional layer of professional management. Some funds of funds are publicly listed on the stock exchanges in London, Dublin, and Luxembourg. The oldest listed fund of funds on the London Stock Exchange, Alternative Investment Strategies Ltd., dates back to 1996.

In the context of funds of funds, diversification usually means investing across hedge funds using several different strategies, but may also mean investing across several funds using the same basic strategy. Funds of funds may offer access to hedge funds that are closed to new investors. Given the secrecy in hedge funds, a professional funds of funds manager may have greater expertise to conduct the necessary due diligence. Of course, professional management of a fund of hedge funds entails an additional layer of fees.

Since hedge funds are structured to avoid regulation, even disclosure of the existence of a hedge fund is not mandatory. There is no regulatory agency that maintains official hedge fund data. There are private firms that gather data that are voluntarily reported by the hedge funds themselves. This gives an obvious source of self-selection bias,

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⁸ OPPEL, Calpers Plans to Invest More Aggressively, New York Times, September 1, 1999, final edition, C2.

since only successful funds may choose to report. Some databases combine hedge funds with commodity trading advisers (CTAs) and some separate them into two categories. Also, different hedge funds define leverage inconsistently, which affects the determination of assets under management (AUM), so aggregate hedge fund data are best viewed as estimates⁹.

Our theoretical derivation of a hedge fund from a traditional active fund can be used to illustrate the problem with AUM as a measure of hedge fund size.

Consider a traditional active fund with AUM of \$1 Billion invested in equities. Suppose that the traditional active fund decides to re-organise itself into a passive index fund and an equity long-short hedge fund. Obviously the equity long-short hedge fund will need some capital to cover margin. The traditional fund could be re-organised as a \$900 million passive index fund plus a \$100 million hedge fund. If this makes the hedge fund seem too risky, it could be re-organised instead into an \$800 million passive index fund plus a \$200 million hedge fund. Note that the hedge fund AUM differs by a factor of two in these two cases, but the overall investment strategy is the same.

The only difference is in the degree of leverage of the hedge fund. Clearly, AUM is not the whole story in understanding the "size" of a hedge fund, or of the hedge fund industry.

Even with the caveat about data reliability and the usefulness of AUM, the growth of the hedge fund industry is apparent. In 1990, Lhabitant estimates there were about 600 hedge funds with aggregate AUM less than \$20 billion¹⁰; Agarwal and Naik cite aggregate AUM of

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⁹ DE BROUWER, Hedge Funds in Emerging Markets, Cambridge University Press, 2001.

¹⁰ LHABITANT, op. cit.

\$39 billion¹¹. By 2000, Lhabitant reports between 4000 and 6000 hedge funds in existence, with aggregate AUM between \$400-600 billion. Agarwal and Naik quote aggregate AUM of \$487 billion. de Brouwer summarises a wide range of end of the 1990s estimates¹²: between 1082 to 5830 hedge funds and \$139-400 billion in aggregate AUM. Lhabitant's figures imply averaging at least 20% annualised growth in number of hedge funds and 35% in AUM. However, this was also a period of tremendous growth in the overall equities market.

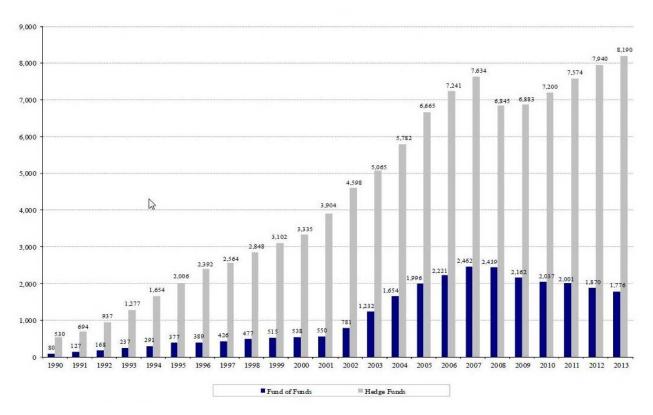


Image 1. Estimated number of funds: Hedge Funds vs. Fundo of Finds. *Source*: HFR – Hedge Funds Research, Inc. 2014, www.hdgefundsresearch.com

¹¹ AGARWAL, NARAYAN, On Taking the Alternative Route: Risks, Rewards and Performance Persistence of Hedge Funds, Journal of Alternative Investments, vol. 2, number 4, Spring 2000, 6-23.

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¹² DE BROUWER, op. cit.

Over the decade, the number of mutual funds grew at 23% annualised and the capitalisation of the New York Stock Exchange grew at 17.5% annualised¹³.

Most hedge funds are small (as measured by AUM), but the uncharacteristically large hedge funds are the most well known and manage most of the money in the hedge fund industry. The Financial Stability Forum (2000) reports 1999 estimates that 69% of hedge funds have AUM under \$50 million, and only 4% have AUM over \$500 million. Despite the number of smaller funds, larger hedge funds dominate the industry. Global macro strategy funds, such as Caxton, Moore, Quantum (Soros), and Tiger (Robertson), manage billions of dollars, attract most of the attention, and establish much of the reputation of the hedge fund industry. For example, a hedge fund index (HFR) used in research by Agarwal and Naik incorporates hedge funds with average assets of \$270 million (non-directional strategies) and \$480 million (directional strategies). In their selection process, hedge fund index providers have considerable leeway and may be likely to favour funds that they judge to be more reliable.

1.3 Risk management

Hedge funds are often mistaken to be very similar in risk to other types of investments, and although they are often measured through the same types of quantitative metrics, hedge funds have qualitative risks that make them unique to evaluate and analyze¹⁴.

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¹³ FINANCIAL STABILITY FORUM, op. cit.

¹⁴ See LO, Risk Management for Hedge Funds: Introduction and Overview, Financial Analysts Journal (CFA Institute), 2001, retrieved 29 March 2011; CASSAR, GERAKOS, How Do Hedge Funds Manage Portfolio Risk?, EFM Symposium. European Financial Management Association, retrieved 17 March 2011.

Standard Deviation. The most common risk measure used in both hedge fund and mutual fund evaluations is standard deviation. Standard deviation in this case is the level of volatility of returns measured in percentage terms, and usually provided on an annual basis. Standard deviation gives a good indication of the variability of annual returns and makes it easy to compare to other funds when combined with annual return data. For example, if comparing two funds with identical annualized returns, the fund with a lower standard deviation would normally be more attractive, if all else is equal.

Unfortunately, and particularly when related to hedge funds, standard deviation does not capture the total risk picture of returns. This is because most hedge funds do not have normally distributed returns, and standard deviation assumes a bell-shaped distribution, which assumes the same probability of returns being above the mean as below the mean.

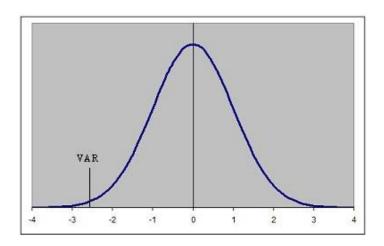


Image 2. Standard Deviation Chart *Source*: Investopedia, 2009.

Most hedge fund returns are skewed in one direction or another and the distribution is not as symmetrical. For this reason, there are a number of additional metrics to use when evaluating hedge funds, and even with the additional metrics, some risks simply cannot be measured. Another measure that provides an additional dimension of risk is called value-at-risk (VaR). VaR measures the dollar-loss expectation that can occur with a 5% probability. In Image 2, this is the area to the left of the vertical black line on the left of the graph. This provides additional insight into the historical returns of a hedge fund because it captures the tail end of the returns to the down side. It adds another dimension because it makes it possible to compare two funds with different average returns and standard deviation. For example, if Fund A has an average return of 12% and a standard deviation of 6%, and Fund B has an average return of 24% with a standard deviation of 12%, VaR would indicate the dollar amount of loss that is possible with each fund with a 5% probability.

Put another way, VaR would tell you with 95% confidence that your losses would not exceed a certain point. (You can never be 100% confident that you won't lose an entire investment.) It tries to answer the question "Given an investment of a particular return and volatility, what's the worst that could happen?".

Downside Capture. In relation to hedge funds, and in particular those that claim absolute return objectives, the measure of downside capture can indicate how correlated a fund is to a market when the market declines. The lower the downside capture, the better the fund preserves wealth during market downturns. This metric is figured by calculating the cumulative return of the fund for each month that the market/benchmark was down, and dividing it by the cumulative return of the market/benchmark in the same time frame. Perfect correlation with the market will equate to a 100% downside capture and typically is only possible when comparing the benchmark to itself.

Drawdown. Another measure of a fund's risk is maximum drawdown. Maximum drawdown measures the percentage drop in cumulative return from a previously reached high. This metric is good for identifying funds that preserve wealth by minimizing drawdowns throughout up/down cycles, and gives an analyst a good indication of the possible losses that this fund can experience at any given point in time. Months to recover, on the other hand, gives a good indication of how quickly a fund can recuperate losses. Take the case where a hedge fund has a maximum drawdown of 4%, for example. If it took three months to reach that maximum drawdown, as investors, we would want to know if the returns could be recovered in three months or less. In some cases where the drawdown was sharp, it should take longer to recover. The key is to understand the speed and depth of a drawdown with the time it takes to recover these losses.

Leverage. Finally, leverage is a measure that often gets overlooked, yet is one of the main reasons why hedge funds incur huge losses. As leverage increases, any negative effect in returns gets magnified and worse, and causes the fund to sell assets at steep discounts to cover margin calls. Leverage has been the primary reason why hedge funds like LTCM and Amaranth have gone out of business. Each of these funds may have had huge losses due to the investments made, but chances are these funds could have survived had it not been for the impact of leverage and the effect it had on the liquidation process. (For more on the possible dangers of leverage, see Hedge Funds' Higher Returns Come At A Price.).

Despite the additional quantitative metrics available for the analysis of risk, many of which were not even covered in this tutorial, qualitative risks are as important if not more important, particularly when evaluating

hedge funds. Since they are unregulated pools of funds and their strategies are more complex, it is imperative that a thorough analysis be completed on items other than numbers.

One of the most important evaluations is that of management. A fund must have good, strong management just like a company. A talented hedge fund manager with strong stock-picking abilities may perform well, but his contribution to success will be blunted if the fund is not managed properly.

The same could be said of back-office operations, including trading, compliance, administration, marketing, systems, etc. In many cases, a hedge fund will outsource many of the non-investment functions to third-party firms, and we will cover some of these service providers later in the tutorial. But whether they have some of these functions in-house or if they are outsourced, they need to be at a level that allows for the effective functioning of the investment management process. For example, it is critical to have adequate systems to measure risks within a portfolio at any given time, so that the hedge fund manager can feel confident that his strategy is intact throughout. It is also important for trading systems to be able to implement the hedge fund manager's ideas so as to maximize the expected returns of the investments and to minimize trading costs that would otherwise harm returns.

Scale is another measure that is critical to a hedge fund's success, and although one might use quantifiable metrics to evaluate scale, it takes a subjective opinion to determine whether a fund's strategy will be impacted by having too large of a fund and by how much returns will be affected. Hedge fund managers often answer this question by providing both a soft-close limit and a hard-close limit to new funding, in addition

to their opinion on how much they can actually manage and still be effective.

A soft close indicates that no additional investors will be allowed into the fund, while a hard close indicates that the fund will no longer accept any additional investments. A fund's capacity, for that matter, should then be higher than the level indicated for a hard close. Otherwise, it would imply that the fund will accept investments up until the point where they can no longer achieve the same returns with their stated strategy. An analyst should be cautious of a hedge fund manager that doesn't close at the time indicated, even if the manager states that he or she is finding opportunities in other areas that will allow for continued growth. In the latter case, you should be cautious of style drift and investigate whether the manager has any skills related to these "new opportunities".

When analyzing hedge funds, the important thing to remember is to look beyond the numbers and statistics. An investor can be lured into an inappropriate investment if the qualitative factors mentioned above are not analyzed within the context of the overall strategy. While there are some risks that should be unconditional, such as management integrity, there are others that can vary by hedge fund strategy. Only after a comprehensive and detailed analysis of all risks can one truly understand the investment.

1.3.1 Risks shared with other investment types

Hedge funds share many of the same types of risk as other investment classes, including liquidity risk and manager risk¹⁵.

¹⁵ JAEGER, All About Hedge Funds "A hedge fund is an actively managed investment fund", Mcgraw Hill, 2003.

Liquidity refers to the degree to which an asset can be bought and sold or converted to cash; similar to private equity funds, hedge funds employ a lock-up period during which an investor cannot remove money¹⁶. Manager risk refers to those risks which arise from the management of funds. As well as specific risks such as style drift, which refers to a fund manager "drifting" away from an area of specific expertise, manager risk factors include valuation risk, capacity risk, concentration risk and leverage risk¹⁷.

Valuation risk refers to the concern that the net asset value of investments may be inaccurate; capacity risk can arise from placing too much money into one particular strategy, which may lead to fund performance deterioration¹⁸; and concentration risk may arise if a fund has too much exposure to a particular investment, sector, trading strategy, or group of correlated funds. These risks may be managed through defined controls over conflict of interest, restrictions on allocation of funds, and set exposure limits for strategies.

Many investment funds use leverage, the practice of borrowing money, trading on margin, or using derivatives to obtain market exposure in excess of that provided by investors' capital. Although leverage can increase potential returns, the opportunity for larger gains is weighed against the possibility of greater losses. Hedge funds employing leverage are likely to engage in extensive risk management practices.

In comparison with investment banks, hedge fund leverage is relatively low; according to a National Bureau of Economic Research

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¹⁶ COGGAN, Guide to Hedge Funds (2nd ed.), The Economist Newspaper Ltd, 2011.

¹⁷ INEICHEN A., Absolute Returns: the risks and opportunities of hedge fund investing. John Wiley & Sons., 2002, 441–444.

¹⁸ BESSON, "What is a Hedge Fund". New York University, retrieved 28 March 2011.

working paper, the average leverage for investment banks is 14.2, compared to between 1.5 and 2.5 for hedge funds¹⁹.

Some types of funds, including hedge funds, are perceived as having a greater appetite for risk, with the intention of maximizing returns, subject to the risk tolerance of investors and the fund manager. Managers will have an additional incentive to increase risk oversight when their own capital is invested in the fund²⁰.

1.4 Hedge fund performance measurement

Hedge Fund Indices. As the hedge fund industry matures, the demand arises for benchmarks to compare the performance of hedge funds to one another and to compare hedge fund performance with other asset classes. Several third parties (such as CSFB-Tremont, Hedge Fund Research (HFR), Van Hedge, and Zurich Capital Markets/MAR) have filled the demand for hedge fund benchmarks byproviding hedge fund indices.

Hedge fund index providers generally do not provide a single monolithic index, but instead provide separate indices for different hedge fund strategies.

This approach groups hedge funds of similar size and correlation to the market. In addition, new categories may arise as hedge fund managers devise innovative trading strategies. However, the categorisation approach suffers because there is no industry-wide consensus on the definition of categories, so indices from different providers are not always comparable with one another.

¹⁹ ANG, GOROVYY, VAN INWEGEN, "Hedge Fund Leverage: NBER Working Paper No. 16801", NBER, retrieved 4 April 2011.

²⁰ CASSAR, GERAKOS, op. cit.

Data Biases: Selection, Survivorship, and Closed Funds. Due to lack of reporting requirements, there is no single, central database for aggregate performance analysis of hedge funds. Hedge funds that do report results and are included in a database may use the added recognition and legitimacy to attract new investors. This gives rise to a "self-selection bias," since choosing to report results to a database might be related to the fund's performance.

Hedge fund databases also exhibit "survivorship bias" from several causes. When a database is created, it cannot reflect funds that are already defunct.

Funds that die or otherwise stop reporting are usually removed from an index and its associated database, and returns from their final period (or even their entire history) may be unreported. Some index providers practice additional selection bias and will not include a small or young hedge fund. These influences generally create an upward performance bias on an index.

Ackermann et al. investigated, in 1999, survivorship bias and compares the performance of funds that leave databases against funds that remain²¹. They conclude that survivorship effects on data are small, as low as 0.013% monthly. Brown, Goetzmann, and Ibbotson (1999) claim that survivorship bias has a much stronger influence. Using only non-US hedge funds, they determine bias of almost 3% per year, up to 20 times Ackermann et al.

There is a performance shortfall (not really a bias) associated with hedge funds that are included in aggregate performance data but that are closed to new investors. Hedge fund managers sometimes have an

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²¹ ACKERMANN, CARL, MCENALLY, RAVENSCRAFT, *The Performance of Hedge Funds: Risk, Return, and Incentives, Journal of Finance*, vol. 54, number 3, June, 1999.

incentive to close funds since a larger-size fund incurs higher market impact costs in implementing trades, and this detracts from net return. Hedge fund managers have personal wealth invested in the fund, as well as strong return-related compensation from the fund. Traditional active funds, where management fees tend to be proportional to assets under management, are less often closed to new investors.

If closed hedge funds tend to outperform other hedge funds, then the average measured return across funds will be higher than the average return available to new investors not already enrolled in the closed funds. This creates a difference between the average return to hedge funds versus the average return available to new hedge fund investors.

1.5 Hedge funds and 2007-09 financial crisis

During the 2007–09 financial crisis, commercial banks, hedge funds, and investment banks suffered huge losses from investments that were exposed to housing markets. In fact, in 2008 the International Monetary Fund estimated that these types of institutions, along with insurance companies, had lost a combined \$1.1 trillion²².

One of the important lessons from the crisis is that systemic risk due to linkages between different types of institutions are significantly underestimated in most widely used risk measures, such as value at risk.

Standard measures need to be adjusted to adequately reflect spillover effects among different parts of the financial system. Further, designating which financial institutions are deemed systemically important could depend on identifying to what degree distress in one institution spills over to other parts of the financial system.

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²² INTERNATIONAL MONETARY FUND, *Global Financial Stability Report*, April 2008, avaible at http://www.imf.org.

However, measuring spillovers effects in practice is difficult for three main reasons. First, spillovers among financial institutions may be quite small in times of financial stability, but large when the system is under stress. Second, it is difficult to distinguish whether a shock affects all financial institutions at the same time or affects only one institution before it is transmitted to other institutions; this is particularly problematic if a common shock affects financial institutions with different intensity and not exactly at the same time. Third, spillovers are typically measured as correlations among the returns of different assets.

These calculations suffer from a major disadvantage: Correlations do not identify the direction risk travels between assets. This means that, based on correlations, one cannot judge whether an adverse shock started in institution A and spread to institution B, or the reverse.

We are going to report on a method developed in Adams, Füss, and Gropp, in 2013, that addresses these concerns²³. This new risk measurement suggests that, compared with normal times, financial crises amplify the spillover effects among certain types of financial institutions. A surprising finding from this study is that hedge funds may be the most important transmitters of shocks during crises, more important than commercial banks or investment banks.

Measuring spillover effects. To incorporate spillover effects into a measurement of risk, we first must find a way to measure them. To do this, we develop a statistical model that links the risk in commercial banks, investment banks, hedge funds, and insurance companies. It our intention to use the model to estimate the risk in each type of financial

²³ ADAMS, ZENO, FÜSS, GROPP, Spillover Effects among Financial Institutions: A State Dependent Sensitivity Value at Risk Approach (SDSVar), Forthcoming, Journal of Financial and Quantitative Analysis, 2013.

institution. We will then eliminate the common components that affect all sets of institutions simultaneously in order to focus on stress that flows from one set to another. The model distinguishes which direction these spillover effects flow between pairs of financial institutions. Finally, we will estimate the links during both tranquil periods and crisis times.

The results confirm our conjecture that spillover effects appear small during normal times. However, during volatile market conditions such as the onset of the 2007–09 financial crisis, some of the effects dramatically increase in importance. This is true for spillovers from commercial banks to investment banks, as well as the reverse.

Even though there were prominent cases of insurance companies, such as AIG, that were adversely affected by the crisis, the model suggests that insurance companies are not systemically important in the sense of causing distress elsewhere. Rather, they appear as relatively safe during crises, as their returns tend to be negatively related to the returns of other financial institutions.

Hedge funds, on the other hand, adversely affect all three other types of financial institutions. During crises, the spillovers become very large, making hedge funds more important transmitters of shocks than commercial banks or investment banks.

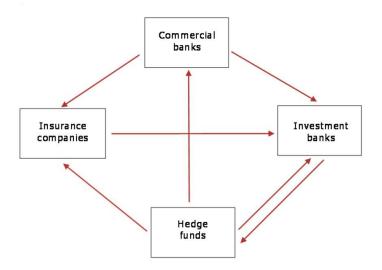


Image 3. Spillovers among financial institutions: Tranquil times

Why are hedge funds systemically important? While most observers tend to agree that hedge funds have some systemic importance, there is little agreement on how large a role they play as transmitters of adverse financial shocks. Images 3 and 4 summarize the model's findings regarding the flow of shocks between different types of financial institutions. In the figures, red arrows correspond to spillover effects; the green arrow in Image 4 shows positive effects from insurance companies, as mentioned earlier. The thickness of the arrows correspond to the strength of the effects: a thin arrow means that a spillover is statistically significant but economically small, while a bold arrow means it is both significant and economically important.

Image 3 shows that during calm times the risks emanating from hedge funds are as small as those from other financial institutions. However, Image 4 shows that during crisis times, spillover effects increase overall. In particular, hedge funds have economically large spillovers to the other three types of institutions.

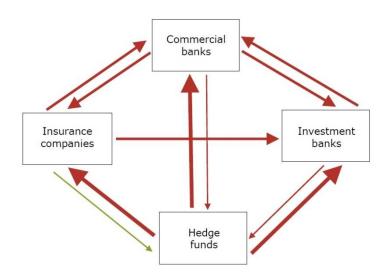


Image 4. Spillovers among financial institutions: Crisis times

Why are the spillovers from hedge funds during financial crises so much bigger, and why do they seem to increase more than those from other financial institutions? Hedge funds are opaque and highly leveraged. If highly leveraged hedge funds are forced to liquidate assets at fire-sale prices, these asset classes may sustain heavy losses. This can lead to further defaults or threaten systemically important institutions not only directly as counterparties or creditors, but also indirectly through asset price adjustments²⁴. One channel for this risk is the socalled loss and margin spiral. In this scenario, a hedge fund is forced to liquidate assets to raise cash to meet margin calls. The sale of those assets increases the supply on the market, which drives prices lower, especially when market liquidity is low. This in turn leads to more margin calls on other financial institutions, creating a downward spiral. Another example is investment banks that hedge their corporate bond holdings using credit default swaps. If hedge funds take the other side of the swap and fund the investment by borrowing from the same bank, the spillover risk from the hedge fund to the bank increases. These types of interconnectedness may underlie some of the spillover effects in our study.

In percentage terms, during normal market conditions, a 1 percentage point increase in the risk of hedge funds is estimated to increase the risk of investment banks by 0.09 percentage point. During times of financial distress, however, the same shock increases the risk of the investment banking industry by 0.71 percentage point. It is interesting to compare this risk to spillovers from commercial banks to

²⁴ BERNANKE, *Hedge Funds and Systemic Risk*, Speech at the Federal Reserve Bank of Atlanta's 2006 Financial Markets Conference, Sea Island, GA, May 16, 2006, avaible at http://www.federalreserve.gov

investment banks. During normal conditions, a 1 percentage point increase in the risk of commercial banks leads to a 0.01 percentage point increase in the risk of investment banks. During financial distress, spillovers from commercial banks to investment banks increase relatively modestly to 0.05 percentage point. Although somewhat higher, this increase from normal conditions to crisis times is much smaller than that for hedge funds. Spillovers from investment banks to other financial institutions show similar results, while insurance companies tend to exhibit small spillover effects, even in crisis times.

How quickly do shocks transmit between institutions? By using daily data to estimate spillovers, we can use the model to trace the path of shocks through the system, that is, how much time it takes between the initial adverse shock and the peak of its spillover to another set of financial institutions. We show this path by shocking each type of financial institution and observing the responses from the other three types of financial institutions.

During normal market periods, the spillover effects are so small that there is no observable response.

However, during more volatile market conditions, the effects from shocks are striking, particularly those from shocks to the hedge fund industry. Adverse conditions in hedge funds increase the risk in all other types of financial institutions, even when shocks to other industries remain small. During crisis times, shocks from hedge funds have substantial effects on all three other types of financial institutions we study. The largest impact appears to be on investment banks, which experience a spillover response around three-quarters the size of the initial shock to the hedge fund industry. When we consider the responses of the shocks over time, we find that the spillover effects from hedge

funds are largest after 10 to 15 days. After about three months, the spillover from hedge funds to other financial institutions subsides.

CHAPTER 2

HEDGE FUNDS STRUCTURES AND INVESTMENTS STRATEGIES

Summary: 2.1 Hedge Funds Structures – 2.1.1 Fee Structure - 2.1.2 Term Structure - 2.2 Hedge Funds Strategies – 2.2.1 Global macro – 2.2.2 Event-driven - 2.2.3 Relative Value - 2.2.4 Long-Short – 2.2.5 Convertible arbitrage

2.1 Hedge funds structures

A hedge fund is an investment vehicle that is most often structured as an offshore corporation, limited partnership or limited liability company¹. The fund is managed by an investment manager in the form of an organization or company that is legally and financially distinct from the hedge fund and its portfolio of assets².

Many investment managers utilize service providers for operational support. Service providers include prime brokers, banks, administrators, distributors and accounting firms³.

Prime brokers clear trades, and provide leverage and short-term financing⁴. They are usually divisions of large investment banks⁵. The prime broker acts as a counterparty to derivative contracts, and lends securities for particular investment strategies, such as long/short equities

¹ LINS, LEMKE, HOENIG & RUBE, Hedge Funds and Other Private Funds: Regulation and Compliance, §1:1, 2014.

² STRACHMAN, *The Fundamentals of Hedge Fund Management*. Hoboken, New Jersey, Wiley, p. 47, 2012

³ STRACHMAN, *ibidem*, p. 23

⁴ Anson, Mark, *The Handbook of Alternative Assets*, John Wiley & Sons, p. 36, 2006; Kolman, "Inside D. E. Shaw", *Derivatives Strategy*. Retrieved, 2013.

⁵ STOWELL, An Introduction to Investment Banks, Hedge Funds, and Private Equity. Academic Press. p. 101, 2010.

and convertible bond arbitrage⁶. It can provide custodial services for the fund's assets, and execution and clearing services for the hedge fund manager⁷.

Hedge fund administrators are responsible for operations, accounting, and valuation services. This back office support allows fund managers to concentrate on trades⁸.

Administrators also process subscriptions and redemptions, and perform various shareholder services⁹. Hedge funds in the United States are not required to appoint an administrator, and all of these functions can be performed by an investment manager¹⁰. A number of conflict of interest situations may arise in this arrangement, particularly in the calculation of a fund's net asset value (NAV)¹¹. Some US funds voluntarily employ external auditors, thereby offering a greater degree of transparency.

A distributor is an underwriter, broker, dealer, or other person who participates in the distribution of securities. The distributor is also responsible for marketing the fund to potential investors. Many hedge funds do not have distributors, and in such cases the investment manager will be responsible for distribution of securities and marketing, though many funds also use placement agents and broker-dealers for distribution¹².

⁶ ATHANASSIOU Research Handbook on Hedge Funds, Private Equity and Alternative Investments. Edward Elgar Publishing. p. 283, 2012; FABOZZI, Handbook of Finance, Financial Markets and Instruments, Wiley, p. 749, 2008.

⁷ LHABITANT, *Handbook of Hedge Funds*. John Wiley & Sons. p. 10, 2007.

⁸ LHABITANT, *ibidem*, p. 4-2.

⁹ Business Knowledge for IT in Hedge Funds. Essvale Corporation Limited, 2008, p. 121; VISHWANATH, RAMANNA, KRISHNAMURTI, CHANDRASEKHAR, Investment Management: A Modern Guide to Security Analysis and Stock Selection. Springer. p. 596, 2009.

¹⁰ NELKEN, *Hedge Fund Investment Management*. Butterworth-Heinemann, p. 51, 2005

¹¹ JORION, Financial Risk Manager Handbook. Wiley, p. 421, 2009.

¹² STRACHMAN, BOOKBINDER, Fund of Funds Investing: A Roadmap to Portfolio Diversification. John Wiley & Sons. pp. 120–1, 2009; Nelken, op. cit., p. 51

Most funds use an independent accounting firm to audit the assets of the fund, provide tax services and perform a complete audit of the fund's financial statements.

The year-end audit is often performed in accordance with either US generally accepted accounting principles (US GAAP) or international financial reporting standards (IFRS), depending on where the fund is established.

The auditor may verify the fund's NAV and assets under management (AUM)¹³. Some auditors only provide "NAV lite" services, meaning that the valuation is based on prices received from the manager rather than independent assessment.

The legal structure of a specific hedge fund—in particular its domicile and the type of legal entity used—is usually determined by the tax expectations of the fund's investors.

Regulatory considerations will also play a role. Many hedge funds are established in offshore financial centers to avoid adverse tax consequences for its foreign and tax exempt investors¹⁴. Offshore funds that invest in the US typically pay withholding taxes on certain types of investment income but not US capital gains tax.

However, the fund's investors are subject to tax in their own jurisdictions on any increase in the value of their investments¹⁵. This tax treatment promotes crossborder investments by limiting the potential for multiple jurisdictions to layer taxes on investors¹⁶.

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¹³ Agarwal, The Future of Hedge Fund Investing: A Regulatory and Structural Solution for a Fallen Industry, Wiley, 2009, pp. 65–66; SCHARFMAN, Hedge Fund Operational Due Diligence: Understanding the Risks. Wiley, 2009.

¹⁴ Fraser-Sampson, *Alternative Assets: Investments for a Post-Crisis World.* Wiley, 2010, p. 112; Anson, *CAIA Level I: An Introduction to Core Topics in Alternative Investments.* Wiley. pp. 174, 2009.

¹⁵ STRACHMAN, *op. cit.*, pp. 88–89.

¹⁶ MURALEEDHARAN, *Modern Banking: Theory and Practice*. Wiley, 2009, p. 162

US tax-exempt investors (such as pension plans and endowments) invest primarily in offshore hedge funds to preserve their tax exempt status and avoid unrelated business taxable income. The investment manager, usually based in a major financial center, pays tax on its management fees per the tax laws of the state and country where it is located17. In 2011, half of the existing hedge funds were registered offshore and half onshore.

The Cayman Islands was the leading location for offshore funds, accounting for 34% of the total number of global hedge funds. The US had 24%, Luxembourg 10%, Ireland 7%, the British Virgin Islands 6% and Bermuda had 3%¹⁸.

In contrast to the funds themselves, investment managers are primarily located onshore. The United States remains the largest center of investment, with US-based funds managing around 70% of global assets at the end of 2011¹⁹. As of April 2012, there were approximately 3,990 investment advisers managing one or more private hedge funds registered with the Securities and Exchange Commission²⁰. New York City and the Gold Coast area of Connecticut are the leading locations for US hedge fund managers²¹.

London is Europe's leading center for hedge fund managers. According to EuroHedge data, around 800 funds located in the UK managed some 85% of Europeanbased hedge fund assets in 2011. Interest in hedge funds in Asia has increased significantly since 2003,

¹⁹ THECITYUK, op. cit., p. 4.

¹⁷ STOWELL, An Introduction to Investment Banks, Hedge Funds, and Private Equity. Academic Press, 2010, p. 267.

¹⁸ THECITYUK, *Hedge Funds: March 2012*, Jersey Finance, 2012, p. 4.

²⁰ SECURITIES AND EXCHANGE COMMISSION, Dodd-Frank Act Changes to Investment Adviser Registration Requirements – Preliminary Results, 2012.

²¹ DAS, Extreme Money: Masters of the Universe and the Cult of Risk. FT Press. pp. 79–80; SHRIMPTON, Hedge Funds: Crossing the Institutional Frontier. Euromoney Institutional Investor, 2006, p. 120.

especially in Japan, Hong Kong, and Singapore.[118] However, the UK and the US remain the leading locations for management of Asian hedge fund assets.

Hedge fund legal structures vary depending on location and the investor(s). US hedge funds aimed at US-based, taxable investors are generally structured as limited partnerships or limited liability companies. Limited partnerships and other flow-through taxation structures assure that investors in hedge funds are not subject to both entity-level and personal-level taxation²².

A hedge fund structured as a limited partnership must have a general partner. The general partner may be an individual or a corporation. The general partner serves as the manager of the limited partnership, and has unlimited liability²³. The limited partners serve as the fund's investors, and have no responsibility for management or investment decisions. Their liability is limited to the amount of money they invest for partnership interests²⁴. As an alternative to a limited partnership arrangement, U.S. domestic hedge funds may be structured as limited liability companies, with members acting as corporate shareholders and enjoying protection from individual liability²⁵.

By contrast, offshore corporate funds are usually used for non-US investors, and when they are domiciled in an applicable offshore tax haven, no entity-level tax is imposed²⁶. Many managers of offshore funds permit the participation of tax-exempt US investors, such as pensions funds, institutional endowments and charitable trusts. As an alternative

²² LHABITANT, *op. cit.*, p. 4.2.

NICHOLAS, *Investing in Hedge Funds, Revised and Updated Edition*. Bloomberg Press, 2005, pp. 40–41; ANSON, *op. cit.*. pp. 22–23

²⁴ LHABITANT, *op. cit.*, p. 4.1.1

²⁵ Essvale Corporation Limited, *Business Knowledge for IT in Hedge Funds*, 2008, p. 124.

²⁶ Fraser-Sampson, op. cit., p. 112;

legal structure, offshore funds may be formed as an open-ended unit trust using an unincorporated mutual fund structure²⁷. Japanese investors prefer to invest in unit trusts, such as those available in the Cayman Islands²⁸.

The investment manager who organizes the hedge fund may retain an interest in the fund, either as the general partner of a limited partnership or as the holder of "founder shares" in a corporate fund²⁹. For offshore funds structured as corporate entities, the fund may appoint a board of directors. The board's primary role is to provide a layer of oversight while representing the interests of the shareholders.[127] However, in practice board members may lack sufficient expertise to be effective in performing those duties. The board may include both affiliated directors who are employees of the fund and independent directors whose relationship to the fund is limited.

These are some types of funds: (i) open-ended hedge funds continue to issue shares to new investors and allow periodic withdrawals at the net asset value ("NAV") for each share; (ii) closed-ended hedge funds issue a limited number of tradeable shares at inception³⁰; (iii) shares of Listed hedges funds are traded on stock exchanges, such as the Irish Stock Exchange, and may be purchased by non-accredited investors³¹.

2.1.1 Fee structure

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²⁷ FUND ASSOCIATES, Offshore Hedge Funds vs. Onshore Hedge Funds, 2008.

²⁸ STRACHMAN, *op. cit.*, p. 3: «If you are marketing to Japanese investors; you must have a Cayman-based unit trust. This group of investors rarely, if ever, invests in a hedge fund that is not set up as a unit trust».

²⁹ LHABITANT, *op. cit.*, p. 4.2.1.

³⁰ SECURITIES AND EXCHANGE COMMISSION, Registration Under the Advisers Act of Certain Hedge Fund Advisers: footnote 141, 2011; INEICHEN, Funds of Hedge Funds: Industry, 2002.

³¹ CLARKE, "Listed hedge funds: Lifting the smokescreen". Financial Times, 2013.

Hedge fund managers are compensated by two types of fees: a management fee, usually a percentage of the size of the fund (measured by AUM), and a performance-based incentive fee, similar to the 20% of profit that Alfred Winslow Jones collected on the very first hedge fund. Fung and Hsieh (1999) determine that the median management fee is between 1-2% of AUM and the median incentive fee is 15-20% of profits. Ackermann et al. cite similar median figures: a management fee of 1% of assets and an incentive fee of 20% (a so-called "1 and 20 fund")³².

The incentive fee is a crucial feature for the success of hedge funds. A pay-forprofits compensation causes the manager's aim to be absolute returns, not merely beating a benchmark. To achieve absolute returns regularly, the hedge fund manager must pursue investment strategies that generate returns regardless of market conditions; that is, strategies with low correlation to the market.

However, a hedge fund incentive fee is asymmetric; it rewards positive absolute returns without a corresponding penalty for negative returns.

Empirical studies provide evidence for the effectiveness of incentive fees.

Liang reports that a 1% increase in incentive fee is coupled with an average 1.3% increase in monthly return³³. Ackermann et al. determine that the presence of a 20% incentive fee results in an average 66% increase in the Sharpe ratio, as opposed to having no incentive fee. The performance fee enables a hedge fund manager to earn the same money

³² ACKERMANN, MCENALLY, RAVENSCRAFT, Journal of Finance, vol. 54, number 3, 1999, pp. 833-874

³³ LIANG, On the Performance of Hedge Funds, Financial Analysts Journal, vol. 55, number 4, 1999, pp. 72-85.

as running a mutual fund 10 times larger³⁴. There is the possibility that managers will be tempted to take excessive risk, in pursuit of (asymmetric) incentive fees. This is one reason why, in many jurisdictions, asymmetric incentive fees are not permitted for consumer-regulated investment products.

To ensure profits are determined fairly, high water marks and hurdle rates are sometimes included in the calculation of incentive fees. A high water mark is an absolute minimum level of performance over the life of an investment that must be reached before incentive fees are paid. A high water mark ensures that a fund manager does not receive incentive fees for gains that merely recover losses in previous time periods. A hurdle rate is another minimum level of performance (typically the return of a risk-free investment, such as a short-term government bond) that must be achieved before profits are determined. Unlike a high water mark, a hurdle rate is only for a single time period. Liang determined that funds with high water marks have significantly better performance (0.2% monthly) and are widespread (79% of funds). Hurdle rates are only used by 16% of funds and have a statistically insignificant effect on performance³⁵.

The presence of incentive fees and high water marks may complicate the calculations of the value of investors' shares. If investors purchase shares at different times with different net asset values (NAV), naïve calculations of incentive fees may treat the investors differently. For example, presume shares in a hypothetical hedge fund are originally worth £100 when investor A purchases them. Subsequently the shares fall to £90, which is when investor B invests, and then shares return to

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³⁴ TREMONT ADVISERS AND TASS INVESTMENT RESEARCH, *Hedge Funds, The Handbook of Alternative Investments*, Darrell Johnan ed., John Wiley & Sons, 2002.

³⁵ LIANG, BING, op. cit.

£100. If there is a high water mark at £100, then investor B theoretically can liquidate her shares without incurring a performance fee, because the high water mark has not been passed. Since B has made a gross profit of £10 per share, this is obviously unfair, so an adjustment is required.

To treat both earlier and new investors fairly, the adjustment of profit calculations is an accounting process called equalisation.

Since new investments are usually limited to certain periods (sometimes monthly or quarterly), a very simple form of equalisation is to issue a different series of shares for each subscription period, each with a different high water mark and different accruals of incentive fees. However, this form of equalisation leads to an unwieldy number of series of shares, so it is rarely used.

A more common equalisation method involves splitting new purchases into an investment amount and an equalisation amount that matches the incentive fee of earlier investors. The equalisation amount is used to put earlier investors and the new investor in the same position. If the hedge fund shares go up in value, the equalisation amount is refunded. If the hedge fund shares lose value, the equalisation amount is reduced or eliminated³⁶. Many US hedge funds do not require equalisation, because they are either closed, so they do not allow new investments, or they are structured as partnerships that use capital accounting methods.

Minimum investment levels for hedge funds are usually high, implicitly dictated by legal limits on the number of investors who are not high net worth individuals ("qualified purchasers" or "accredited investors"), and restrictions on promotion and advertising. The SEC & FSA requirement of private placement for hedge funds means that hedge

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³⁶ LHABITANT, *Hedge Funds: Myths and Limits*, John Wiley & Sons, 2002.

funds tend to be exclusive clubs with a comparatively small number of well-heeled investors.

\$250,000 is a common minimum initial investment, and \$100,000 is common for subsequent investments. From the perspective of the fund manager, having a small number of clients with relatively large investments keeps client servicing costs low. This allows the hedge fund manager to concentrate more on trading and less on client servicing and fund promotion.

Funds of funds (portfolios of hedge funds) are an increasingly popular way to invest in hedge funds with a much lower minimum investment. Funds of hedge funds usually impose a 1-2% management fee and 10-20% performance fee, in addition to existing hedge fund fees. However funds of funds often negotiate with hedge funds for lower fees than individual clients and this lowers their pass-through costs.

2.1.2 Term structure

The terms offered by a hedge fund are so unique that each fund can be completely different from another, but they usually are based on the following factors.

Subscriptions and Redemptions. Hedge funds do not have daily liquidity like mutual funds do. Some hedge funds can have subscriptions and redemptions monthly, while others accept them only quarterly. The terms of each hedge fund should be consistent with the underlying strategy being used by the manager. The more liquid the underlying investments, the more frequent the subscription/redemption terms should be. Each fund also specifies the number of days required for redemption, ranging from 15 days to 180 days, and this too should be consistent with the underlying strategy. Requiring redemption notices

allows the hedge fund manager to efficiently raise capital to cover cash needs.

<u>Lock-Ups</u>. Some funds require up to a two-year "lock-up" commitment, but the most common lock-up is limited to one year. In some cases, it could be a hard lock, preventing the investor from withdrawing funds for the full time period, while in other cases, an investor can withdraw funds before the expiration of the lock-up period provided they pay a penalty. This second form of lock-up is called a soft lock and the penalty can range from 2-10% in some extreme cases.

In conclusion, there are a variety of different combinations that can be used to structure a hedge fund and its related companies and investors.

There are many others and just as hedge funds are creative with their investment strategies, they can also be very creative with their organizational structure. The takeaway of this section is to stress that each corporate structure is unique and should be evaluated along with all other factors covered in the rest of this tutorial.

2.2 Hedge funds strategies

In order to compare performance, risk, and other characteristics, it is helpful to categorise hedge funds by their investment strategies). Strategies may be designed to be market-neutral (very low correlation to the overall market) or directional (a "bet" anticipating a specific market movement). Selection decisions may be purely systematic (based upon computer models) or discretionary (ultimately based on a person). A hedge fund may pursue several strategies at the same time, internally allocating its assets proportionately across different strategies.

As Schneeweis notes, some hedge fund strategies (for example, fixed income arbitrage) were previously the proprietary domain of investment banks and their trading desks³⁷. One driver for the growth of hedge funds is the application of investment bank trading desk strategies to private investment vehicles.

According to the Center for International Securities & Derivatives Markets (CISDM), there are twelve main hedge fund investment strategies described as follows:

- 1. **Equity Market Neutral** strategies take long equity positions and an approximately equal dollar- amount of offsetting short positions in order to achieve a net exposure as close to zero as possible;
- 2. **Convertible Arbitrage** strategies take long positions in convertible securities (usually convertible bonds) and try to hedge those positions by selling short the underlying common stock. Convertible bond arbitrage funds typically capitalize on the embedded option in these bonds by purchasing them and shorting the equities;
- 3. **Fixed Income** strategies attempt to take advantage of mispricing opportunities between different types of fixed income securities while neutralizing exposure to interest rate risk;
- 4. **Event-driven** strategies attempt to predict the outcome of corporate events and take the necessary position to make a profit. These trading managers invest in events like liquidations, spin-offs, industry consolidations, reorganizations, bankruptcies and so forth;
- 5. **Merger/Risk Arbitrage** strategies concentrate on companies that are the subject of a merger, tender offer or exchange offer. Merger/Risk Arbitrage strategies take a long position in the acquired company and a short position in the acquiring company;

³⁷ Schneeweis, "Editorial: Dealing with Myths of Hedge Fund Investment," The Journal of Alternative Investments, Winter 1998.

- 6. **Distressed** strategies take positions in the securities of companies where the security's price has been, or is expected to be affected by a distressed situation like announcement of reorganization due to financial or business difficulties;
- 7. **Equity Hedge** strategies take long and short equity positions varying from net long to net short, depending if the market is bullish or bearish. The short exposure can also be a put option on a stock index, which is used as a hedging technique for bear market conditions;
- 8. **Global/Macro** funds refer to funds that rely on macroeconomic analysis to take bets on major risk factors, such as currencies, interest rates, stock indices and commodities;
- 9. **Short Selling** strategies take short positions in U.S. equities with expectation of price declines;
- 10. **Sector Funds** concentrate on selective sectors of the economy. For example, they may focus on technology stocks if these are overpriced and rotate across to other sectors;
- 11. **Long-only Funds** are funds that take long equity positions typically with leverage. Emerging market funds that do not have short-selling opportunities also fall under this category;
- 12. **Fund of Funds** refer to funds that invests in a pool of hedge funds. This strategy gives everyday investors a chance to join the excitement of investing in hedge funds. They specialize in identifying fund managers with good performance and rely on their good industry relationships to gain entry into hedge funds with good track records.

The strategies listed above, though not complete, are the main ones. They have different names from manager to manager but all have similar investment strategies.

Now, we will analyse some of the above mentioned strategies in details.

2.2.1 Global macro

Hedge funds utilizing a global macro investing strategy take sizable positions in share, bond or currency markets in anticipation of global macroeconomic events in order to generate a risk-adjusted return³⁸. Global macro fund managers use macroeconomic ("big picture") analysis based on global market events and trends to identify opportunities for investment that would profit from anticipated price movements.

While global macro strategies have a large amount of flexibility due to their ability to use leverage to take large positions in diverse investments in multiple markets, the timing of the implementation of the strategies is important in order to generate attractive, risk-adjusted returns³⁹. Global macro is often categorized as a directional investment strategy.

Global macro strategies can be divided into discretionary and systematic approaches.

Discretionary trading is carried out by investment managers who identify and select investments; systematic trading is based on mathematical models and executed by software with limited human involvement beyond the programming and updating of the software. These strategies can also be divided into trend or counter-trend approaches depending on whether the fund attempts to profit from

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³⁸ COGGAN, Guide to Hedge Funds (2nd ed.) The Economist Newspaper Ltd, 2011

³⁹ BARTOLO, *Hedge Fund Strategies Guide*, Goizueta Business School, Emory University, 2011.

following trends (long or short-term) or attempts to anticipate and profit from reversals in trends⁴⁰.

Within global macro strategies, there are further substrategies including "systematic diversified", in which the fund trades in diversified markets, or "systematic currency", in which the fund trades in currency markets⁴¹. Other sub-strategies include those employed by commodity trading advisors (CTAs), where the fund trades in futures (or options) in commodity markets or in swaps⁴². This is also known as a managed future fund. CTAs trade in commodities (such as gold) and financial instruments, including stock indices. In addition they take both long and short positions, allowing them to make profit in both market upswings and downswings⁴³.

2.2.2 Event-driven

Event-driven strategies concern situations in which the underlying investment opportunity and risk are associated with an event⁴⁴. An event-driven investment strategy finds investment opportunities in corporate transactional events such as consolidations, acquisitions, recapitalizations, bankruptcies, and liquidations.

Managers employing such a strategy capitalize on valuation inconsistencies in the market before or after such events, and take a position based on the predicted movement of the security or securities in question. Large institutional investors such as hedge funds are more likely to pursue event-driven investing strategies than traditional equity

 $^{^{40}}$ INEICHEN, *Absolute Returns: the risks and opportunities of hedge fund investing.* John Wiley & Sons, 2002, p. 192.

⁴¹ WALKER, Wave Theory for Alternative InvestmentsI, McGraw-Hill Companies, 2010, p. 348.

⁴² STEFANINI, *Investment strategies of hedge funds*, John Wiley & Sons, 2006, p. 223

⁴³ TRAN, Evaluating hedge fund performance John Wiley & Sons, 2006, p. 54.

⁴⁴ INEICHEN, *Absolute Returns: the risks and opportunities of hedge fund investing*. John Wiley & Sons, 2002, p. 182.

investors because they have the expertise and resources to analyze corporate transactional events for investment opportunities⁴⁵.

Corporate transactional events generally fit into three categories: distressed securities, risk arbitrage, and special situations⁴⁶.

Distressed securities⁴⁷ include such events as restructurings, recapitalizations, and bankruptcies. A distressed securities investment strategy involves investing in the bonds or loans of companies facing bankruptcy or severe financial distress, when these bonds or loans are being traded at a discount to their value.

Hedge fund managers pursuing the distressed debt investment strategy aim to capitalize on depressed bond prices. Hedge funds purchasing distressed debt may prevent those companies from going bankrupt, as such an acquisition deters foreclosure by banks.

While event-driven investing in general tends to thrive during a bull market, distressed investing works best during a bear market⁴⁸.

Risk arbitrage or merger arbitrage includes such events as mergers, acquisitions, liquidations, and hostile takeovers⁴⁹.

⁴⁶ INEICHEN, Alexander, op. cit.

⁴⁵ BARTOLO, op. cit.

Distressed securities are securities of companies or government entities that are experiencing financial or operational distress, default, or are under bankruptcy. As far as debt securities, this is called distressed debt. Purchasing or holding such distressed-debt creates significant risk due to the possibility that bankruptcy may render such securities worthless (zero recovery). While potentially lucrative, these investment strategies require significant levels of resources and expertise to analyze each instrument and assess its position in an issuer's capital structure along with the likelihood of ultimate recovery. Distressed securities tend to trade at substantial discounts to their intrinsic or par value and are therefore considered to be below investment grade. This usually limits the number of potential investors to "large institutional investors -such as hedge funds, private equity firms and investment banks. In 2012 Edward Altman, a leading expert on bankruptcy theory, estimated that there were "more than 200 financial institutions investing between \$350-400 billion in the distressed debt market in the United States and a substantial number and amount operating in Europe and in other markets" (see ALTMAN, *Testimony before the ABI Chapter 11 Reform Commission*, 2014).

⁴⁸ Understanding Event-Driven Investing, BarclayHedge LTD, 2011.

⁴⁹ BARTOLO, op. cit.

Risk arbitrage typically involves buying and selling the stocks of two or more merging companies to take advantage of market discrepancies between acquisition price and stock price. The risk element arises from the possibility that the merger or acquisition will not go ahead as planned; hedge fund managers will use research and analysis to determine if the event will take place⁵⁰.

Special situations are events that impact the value of a company's stock, including the restructuring of a company or corporate transactions including spin-offs, sharebuy-backs, security issuance/repurchase, asset sales, or other catalyst-oriented situations.

To take advantage of special situations the hedge fund manager must identify an upcoming event that will increase or decrease the value of the company's equity and equity-related instruments⁵¹.

Other event-driven strategies include: credit arbitrage strategies, which focus on corporate fixed income securities; an activist strategy, where the fund takes large positions in companies and uses the ownership to participate in the management; a strategy based on predicting the final approval of new pharmaceutical drugs; and legal catalyst strategy, which specializes in companies involved in major lawsuits.

2.2.3 Relative value

Relative value arbitrage strategies take advantage of relative discrepancies in price between securities. The price discrepancy can occur due to mispricing of securities compared to related securities, the underlying security or the market overall.

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⁵⁰ Understanding Merger Arbitrage, cit.

⁵¹ HFR I Strategy Definitions, Hedge Fund Research, 2011.

Hedge fund managers can use various types of analysis to identify price discrepancies in securities, including mathematical, technical or fundamental techniques⁵².

Relative value is often used as a synonym for market neutral, as strategies in this category typically have very little or no directional market exposure to the market as a whole⁵³.

Other relative value sub-strategies include:

- Fixed income arbitrage: exploit pricing inefficiencies between related fixed income securities;
- Equity market neutral: exploits differences in stock prices by being long and short in stocks within the same sector, industry, market capitalization, country, which also creates a hedge against broader market factors;
- Convertible arbitrage: exploit pricing inefficiencies between convertible securities and the corresponding stocks;
- Asset-backed securities (Fixed-Income assetbacked): fixed income arbitrage strategy using asset-backed securities;
- Credit long/short: the same as long/short equity but in credit markets instead of equity markets;
- Statistical arbitrage: identifying pricing inefficiencies between securities through mathematical modeling techniques;
- Volatility arbitrage: exploit the change in implied volatility instead of the change in price;
- Yield alternatives: non-fixed income arbitrage strategies based on the yield instead of the price;

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⁵² Relative Value Arbitrage definition, BarclayHedge LTD, 2011.

⁵³ INEICHEN, *Absolute Returns: the risks and opportunities of hedge fund investing*. John Wiley & Sons, 2002, p. 181.

- Regulatory arbitrage: the practice of taking advantage of regulatory differences between two or more markets;
- Risk arbitrage: exploiting market discrepancies between acquisition price and stock price.

2.2.4 Long-Short

Long-short hedge funds focus on security selection to achieve absolute returns, while decreasing market risk exposure by offsetting short and long positions. Compared to a long-only portfolio, short selling reduces correlation with the market, provides additional leverage, and allows the manager to take advantage of overvalued as well as undervalued securities.

Derivatives may also be used for either hedging or leverage. Security selection decisions may incorporate industry long-short (such as buy technology and short natural resources) or regional long-short (such as buy Latin America and short Eastern Europe).

The classic long-short position is to choose two closely related securities, short the perceived overvalued one and long the undervalued one. For example, go long General Motors and short Ford Motors. This classic example has the greatest risk reduction since the two stocks are likely to have very similar market risk exposures. The pair-trade removes most of the market risk. Idiosyncratic risk remains, but it can be reduced with a portfolio of similar trades.

Long-short portfolios are rarely completely market-neutral. They typically exhibit either a long bias or short bias, and so have a corresponding market exposure (positive or negative). They are also likely to be exposed to other market-wide sources of risk, such as style or industry risk factors.

2.2.5 Convertible arbitrage

Convertible arbitrage is a type of equity long-short investing strategy often used by hedge funds.

Instead of purchasing and shorting stocks, however, convertible arbitrage takes a long position in, or purchases, convertible securities. It simultaneously takes a short position in, or sells, the same company's common stock.

To understand how that works, it is important to know what convertible securities are. A convertible security is a security that can be converted into another security at a pre-determined time and a pre-determined price. In most cases, the term applies to a bond that can be converted into a stock. Convertible bonds are considered neither bonds nor stocks, but hybrid securities with features of both. They may have a lower yield than other bonds, but this is usually balanced by the fact that they can be converted into stock at what is usually a discount to the stock's market value. In fact, buying the convertible bond places the investor in a position to hold the bond as-is, or to convert it to stock if he or she anticipates that the stock's price will rise.

The idea behind convertible arbitrage is that a company's convertible bonds are sometimes priced inefficiently relative to the company's stock. Convertible arbitrage attempts to profit from this pricing error.

To illustrate how convertible arbitrage works, a hedge fund using convertible arbitrage will buy a company's convertible bonds at the same time as it shorts the company's stock. If the company's stock price falls, the hedge fund will benefit from its short position; it is also likely that the company's convertible bonds will decline less than its stock, because

they are protected by their value as fixed-income instruments. On the other hand, if the company's stock price rises, the hedge fund can convert its convertible bonds into stock and sell that stock at market value, thereby benefiting from its long position, and ideally, compensating for any losses on its short position.

Convertible arbitrage is not without risks. First, it is trickier than it sounds. Because one generally must hold convertible bonds for a specified amount of time before they can be converted into stock, it is important for the convertible arbitrageur to evaluate the market carefully and determine in advance if market conditions will coincide with the time frame in which conversion is permitted.

Additionally, convertible arbitrageurs can fall victim to unpredictable events. One example is the market crash of 1987, when many convertible bonds declined more than the stocks into which they were convertible, for various reasons which are not totally understood even today⁵⁴.

Finally, convertible arbitrage has become increasingly popular in recent years as investors have sought alternative investment options. That has reduced the effectiveness of the strategy.

In summary, convertible arbitrage, like other long-short strategies, may help increase returns in difficult market environments, but it isn't without risks. As a result, investors considering a hedge fund that uses convertible arbitrage may want to carefully evaluate whether the potential return is balanced by the potential risks.

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⁵⁴ A more recent example occurred in 2005, when many arbitrageurs had long positions in General Motors (GM) convertible bonds and short positions in GM stock. They suffered losses when a billionaire investor tried to buy GM stock at the same time its debt was being downgraded by credit-ratings agencies.

CHAPTER 3

A COMPARATIVE ANALYSIS OF HEDGE FUND REGULATION IN THE U.S.A. AND EUROPE

SUMMARY: 3.1 INTRODUCTION - 3.2 THE UNITED STATES' REGULATORY FRAMEWORK OF HEDGE FUNDS - 3.2.1 HEDGE FUND REGULATION PRIOR TO THE DODD-FRANK ACT - 3.2.2 THE INVESTMENT COMPANY ACT OF 1940 - 3.2.3 THE INVESTMENT ADVISERS ACT OF 1940 - 3.2.4 THE SECURITIES ACT OF 1933 - 3.2.5 THE SECURITIES EXCHANGE ACT OF 1934 - 3.2.6 THE DODD-FRANK ACT AND THE DIRECT REGULATION OF HEDGE FUNDS - 3.2.6.1 ADDRESSING INFORMATION PROBLEMS AND TRANSPARENCY REQUIREMENTS - 3.2.6.2 COLLECTION OF SYSTEMIC risk data: Disclosure and examinations - 3.2.6.3 Assessment of INFORMATION REGULATION IN THE DODD-FRANK ACT - 3.2.6.4 CONTINGENT DIRECT REGULATION OF HEDGE FUNDS (PRUDENTIAL REGULATION OF SINBFCS) -3.2.6.5 The effectiveness of the Dodd-Frank Act - 3.3 Europe's REGULATORY FRAMEWORK FOR HEDGE FUNDS - 3.3.1 UNITED KINGDOM'S EXPERIENCE - 3.3.2 GERMANY'S EXPERIENCE - 3.3.4 COMPARATIVE ANALYSIS - 3.3.5 THE ALTERNATIVE INVESTMENT FUND MANAGERS DIRECTIVE 2011/61/EU ("AIFMD") - 3.3.5.1 THE EUROPEAN LONG-TERM INVESTMENT FUND regulation - 3.3.5.2 Governance principles and framework - 3.3.5.3 Operating and organisational conditions - 3.3.5.4 Leverage - 3.3.5.5 CONCLUSION

3.1 Introduction

Due to their recent astronomical growth, hedge funds have attracted the attention of the media, investors, investment professionals, and government regulators, not only in the United States, but in Europe as well. In 1990, there were approximately 300 hedge funds managing \$39 billion in assets worldwide⁷⁹. As of 2004, there were approximately 8000 to 9000 hedge funds managing \$1 trillion⁸⁰ in assets worldwide, with current estimates reaching as high as \$1.4 trillion⁸¹. As an industry, hedge funds have experienced an average growth rate of 20% since 1990⁸². In addition to providing investors with diverse financial instruments and investment strategies, one of the main reasons hedge funds have experienced such growth is the rate of returns they offer. For example, Caxton Corporation, a hedge fund founded in 1983, averaged annual returns of at least 30% for most of its existence⁸³.

Although hedge funds offer qualified investors high returns, potential losses are severe because of the risky nature of the investment strategies these funds utilize. Not until the near collapse of Long-Term Capital Management (LTCM) did regulators in the United States and Europe start to appreciate the systemic risk that hedge funds posed to global financial markets. However, prior to the near collapse of LTCM, hedge fund critics questioned whether hedge funds contributed to the financial conditions that led to the Asian Financial Crisis⁸⁴.

For example, Malaysian Prime Minister Mahathir bin Mohamad accused George Soros, founder of one of the world's largest hedge

83 Ibidem

⁷⁹ DANIEL, Hedge Fund Registration: Yesterday's Regulatory Schemes for Today's Investment Vehicles, COLUM. Bus. L., 2007.

⁸⁰ TAYLOR, MACDONALD, Hedge Funds Get Europe's Clippers, WALL ST. J., May 23, 2006.

⁸¹ SHIVANI VORA, Hedge-Fund Milestones, WALL ST. J., Jan. 30, 2007.

⁸² Ibidem

⁸⁴ SHORE, SEC Hedge Fund Regulatory Implications on Asian Emerging Markets: Bottom Line of Bust, 13 CARDOZO J. INT'L & COMP. L.,2005.

funds⁸⁵, of bringing down the Malaysian currency during the Asian Financial Crisis.

This chapter will explore in depth the evolution of hedge fund regulation in the United States, and compare the current state of hedge fund regulation in the United States with that in Europe, specifically the United Kingdom and the European Union.

3.2. The United States' regulatory framework of hedge funds

The recent global financial crisis harbingered substantial changes in the regulatory environment of financial markets and institutions throughout the world. One of the first and foremost sweeping changes was the enactment of the "Dodd-Frank Wall Street Reform and Consumer Protection Act" (hereinafter the Dodd-Frank Act) passed on July 21, 2010. Unless otherwise provided in the Act, it became effective one year after the date of its enactment. The enactment of this Act triggered massive regulatory reforms and resulted in a major overhaul of the regulatory environment of the U.S. financial markets. The reforms introduced by this Act are only comparable, in the extent and depth, to the financial regulatory overhaul after the Great Depression⁸⁶.

The main objectives of the Dodd-Frank Act is to promote "the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail,' to protect the American taxpayer by ending bailouts, [and] to protect consumers

⁸⁵ SOROS FUND MANAGEMENT LLC.

⁸⁶ The Dodd-Frank Act amounts to 845 pages, 16 titles, 225 new rules involving 11 agencies. See

ACHARYA, RICHARDSON, Implications of the Dodd-Frank Act, Annual Review of Financial Economics, n. 1, 2012, 1-38. It is estimated that the Act will result in approximately 400 rules and 87 studies before its full implementation. See POLK, Dodd-Frank Rulemaking Progress Report: Progress as of June 1, 2011, 2011. So far, a majority of regulations have been proposed and passed. See, POLK, Dodd-Frank Progress Report: October 2013, 2013.

from abusive financial services practices⁸⁷." In general, with respect to systemic risk, its objective is to limit the risks *ex-ante*, and minimize damage in case of failure of giant financial institutions by regulating instruments such as derivatives and institutions which are perceived to be Systemically Important Financial Institutions (SIFIs)⁸⁸.

To promote the financial stability and address the systemic risk, the Dodd-Frank Act introduces far reaching provisions focused on the macro-prudential regulation⁸⁹. For example, it requires regulators to measure and provide tools for measuring systemic risks, designate firms or sectors as systemically important, and subject them to enhanced prudential regulation⁹⁰. The most important of these changes involve, *inter alia*, identifying and regulating systemic risk by assigning the responsibility of designating the firms as Systemically Important Nonbank Financial Companies (SINBFCs) to the Financial Stability Oversight Council (FSOC), establishing the Office of Financial Research

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⁸⁷ Negative reactions to the Dodd-Frank Act abound. Indeed, because it may boost their business, the Dodd-Frank Act is called "the Accountants' and Lawyers' Welfare Act of 2010." *See* HIRSH, *Bonfire of the Loopholes*, Newsweek, May 20, 2010.

⁸⁸ SKEEL, Making Sense of the New Financial Deal, Liberty University Law Review, 5, 2011, p. 181-199.

⁸⁹ Micro-prudential regulation is about the study of the exposure of an individual financial institution to exogenous risks and it does not take into account the systemic importance of individual financial institutions. In other words, Micro-prudential regulation is about the stability of each individual institution and its objective is to force the individual financial institutions behave prudently. See BRUNNERMEIER et al., The Fundamental Principles of Financial Regulation: Geneva Report on the World Economy, ICMB International Center for Monetary and Banking Studies, 2009. Macro-prudential regulation, however, is concerned with the safeguarding the stability of the financial system as a whole. It requires a system-wide analysis and involves identifying the principal risk factors in a macro level financial system. Micro-prudential risks can be very different from macro-prudential concerns and when one is falling, the other might be rising. See DIJKMAN, A Framework for Assessing Systemic Risk, The World Bank Open Knowledge Repository, 2010 and also BRUNNERMEIER et al., The Fundamental Principles of Financial Regulation: Geneva Report on the World Economy, ICMB International Center for Monetary and Banking Studies, 2009, p. 10.

⁹⁰ ACHARYA, RICHARDSON, Implications of the Dodd-Frank Act, Annual Reviews, vol. 4, 2012, 1-38.

(OFR) within the Department of the Treasury for measuring and providing tools for the measurement of systemic risks aiming at putting an end to the too-big-to-fail problem, and expanding the authority of the Federal Reserve (Fed) over systemic institutions. The Dodd-Frank Act further authorizes prompt corrective action through the Orderly Liquidation Authority (OLA) which should be modeled and run by the Federal Deposit Insurance Corporation (FDIC)⁹¹. Moreover, the Act restricts the discretionary regulatory intervention through limiting the emergency federal assistance, introduces the Volcker Rule, regulates derivatives markets, and establishes the Consumer Financial Protection Bureau (CFPB). The Dodd-Frank Act also regulates mortgage lending practices, hedge funds (by requiring registration and disclosure), rating agencies, securitization, and risk taking by money market funds⁹².

Nonetheless, the scope of this article will be limited to the analysis of the provisions of the Dodd-Frank Act addressing potential 'systemic' risk of hedge funds and investigating whether the Act adequately addresses this concern. Therefore, issues such as investor protection and hedge fund compliance with new regulations addressing those concerns will not be covered. In addition to the provisions directly involving hedge funds, many of the above-mentioned provisions indirectly affect them. However, this article only discusses the direct regulation of hedge funds⁹³.

⁹¹ ACHARYA, RICHARDSON, *Implications of the Dodd-Frank Act, Annual Review of Financial Economics* 4, no. 1, 2012, p. 1-38.

⁹² ACHARYA, RICHARDSON, *Implications of the Dodd-Frank Act*, Annual Review of Financial Economics, 4, no. 1, 2012, p. 1-38.

⁹³ For a study of indirect regulation of hedge funds in the U.S., See NABILOU, Addressing Interconnectedness of Hedge Funds with Large Complex Financial Institutions: Is the Volcker Rule Panacea?, SSRN Working Paper Series, 2013.

The first part of this article discusses the hedge fund regulatory regime prior to the enactment of the Dodd-Frank Act in the U.S. Such a brief overview serves two main objectives. First, the alleged contribution of hedge funds to financial instability has been materialized in the regulatory framework prior to the enactment of the Dodd-Frank Act. These allegations have subsequently been used as justification for the need to change regulatory framework of the hedge fund industry. Indeed, without a brief understanding of that regulatory framework within which those alleged risks existed, the new regulatory framework and specific regulatory measures devised to address the potential risks of hedge funds to the financial system can hardly be understood⁹⁴.

Second, such a brief retrospect to the previous regulatory framework will also be useful in understanding the potential loopholes of the financial regulatory framework prior to the Dodd-Frank Act. The knowledge of those loopholes could vastly be employed in addressing the problems stemming from the similar future loopholes in the Dodd-Frank Act itself. Furthermore, due consideration of the potential future effects of regulation can only be taken into account in comparison to the previous regulatory framework of hedge funds. Indeed, in the absence of such an introduction, the study of many aspects of newly introduced regulations would be out of the context. Thus, cognizance of the legal

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⁹⁴ One of the purposes of studying hedge fund regulation before the enactment of the Dodd-Frank is to provide a cognizance of amorphous hedge funds and come to a more precise definition of hedge funds. Since the U.S. is the cradle of hedge fund industry, understanding hedge funds cannot be comprehensive without spotting hedge funds in the hodgepodge of the financial regulation in its regulatory framework. Indeed, the assessment of hedge funds contribution to systemic risk cannot be conducted unless hedge funds are objectively defined within a specific financial regulatory system. Therefore, the illustration of regulatory definition of hedge funds can contribute to understanding of the question why there was a need for amendment and change of the regulation which was already in place and why regulations were inadequately addressing potential systemic risk of hedge funds.

environment within which hedge funds were defined and operated will be helpful in understanding the potential impact of the recently introduced regulations. Therefore, before taking further steps in studying hedge funds and their regulation with an eye to addressing systemic risk, the hedge fund industry's legal environment prior to the introduction of recent regulatory frameworks in the U.S. will briefly be discussed which will further be helpful in better understanding of what needed to be changed and what needed not.

3.2.1 Hedge Fund Regulation prior to the Dodd-Frank Act

At least four different approaches to the structure of financial regulation exist worldwide. These include the institutional, functional, integrated, and twin peaks approaches to financial regulation⁹⁵. The U.S. structure of financial regulation and supervision does not fit into any of the above categories. It is, however, a mix of functional and institutional approaches⁹⁶. In addition to the regulation of financial instruments and institutions at the federal level in the U.S., there is another regulatory layer at the state level which adds to the complexity of the U.S. financial regulatory regime.

In the federal level, the U.S. financial regulatory framework and regulatory functions are divided among the following regulatory agencies.

1. Public issuance and the trade of securities are regulated by the Securities and Exchange Commission (SEC).

⁹⁶ The Group of Thirty, Working Group on Financial Supervision, *The Structure of Financial Supervision:* Approaches and Challenges in a Global Marketplace, Washington, DC, 2008. A move from institutional and functional regime towards a modified Twin Peaks Approach is recommended for the U.S. regulatory regime. See The Department of the Treasury, Blueprint for a Modernized Financial Regulatory Structure, 2008.

⁹⁵ The Group of Thirty, Working Group on Financial Supervision, *The Structure of Financial Supervision:* Approaches and Challenges in a Global Marketplace, Washington, DC, 2008.

- 2. Futures and commodities are regulated by the Commodity Futures Trading Commission (CFTC).
- 3. Banks are regulated by the Federal Reserve (Fed), the Office of the Comptroller of the Currency (OCC), and the Office of Thrift Supervision (OTS)⁹⁷.
 - 4. Insurance industry is mostly regulated by state regulators.

Within the above regulatory framework, hedge funds' primary regulator is the SEC. However, if their transactions involve commodities and futures, they may fall under the regulatory purview of the CFTC. With the introduction of the Dodd-Frank Act, if hedge funds are designated as a Systemically Important Nonbank Financial Company (SINBFC), they may be regulated by the Fed⁹⁸.

Before the enactment of the Dodd-Frank Act, hedge funds were considered 'unregulated' financial entities. Such description of hedge funds is more misleading than illuminating. A more realistic description may state that prior to the Dodd-Frank Act, the U.S. financial regulation 'designed out' some entities from the purview of the SEC's regulatory oversight. In other words, prior to the 2010 U.S. financial regulatory overhaul, hedge funds were -by design- exempt from most of the regulations which are normally applicable to investment companies.

Hedge fund regulation also follows the pattern of the U.S. financial regulation. Namely, it is a mix of institutional and functional regulatory approaches. The implication of this combination is that, not only might hedge funds be regulated because of being hedge fund as a legal entity, but also they might be subject to regulation due to their engagement in

⁹⁷ The OTS is abolished/dismantled by the Dodd-Frank Act. Other institutions such as the FDIC can occasionally engage in the regulation of the banking industry in the U.S.

⁹⁸ See HORTON, When does a Non-Bank Financial Company Pose a "Systemic Risk"? A Proposal for Clarifying Dodd-Frank, Journal of Corporation Law, 37, no. 4, 2012, P. 815-848.

certain financial activities or trade in certain financial instruments. In other words, hedge fund regulation is not entirely based on the institutional regulation; instead, there are some instances that hedge funds fall within the functional approach of regulation of the CFTC.

In the U.S. legal framework, hedge funds are negatively defined. In other words, the regulation defined certain institutions and activities and then regulated them. Besides, it exempted certain activities and institutions. Prior to the Dodd-Frank Act, similar to many of its counterparts, the American regulatory framework offered no definition for hedge funds. Disappointed of finding a proper definition of hedge funds, Judge Randolph determined to negatively define them. In his words, "[H]edge funds may be defined more precisely by reference to what they are not" rather than by what they are "". To find out, what hedge funds are not, an overview of hedge fund regulatory framework prior to the Dodd-Frank Act is in order.

To make such an investigation, the proper method of research is not to focus on the entity itself which is to be defined, but the focus should be on other relatively known and defined financial institutions. By studying other financial institutions which are not hedge funds, and by using an elimination method, one could understand the entity to be defined. Due to the fact that such a definition of hedge funds is embedded in the complex web of financial regulation in the U.S., doing so requires going through a maze of financial regulations. In other words, such a negative definition of hedge funds imply that in order to define and understand the hedge fund industry and their implications to

⁹⁹ GOLDSTEIN v. SEC, 451 F.3d 873, 884 (D.C. Cir. 2006). See also DE BROUWER, Hedge Funds in Emerging MarketS, Cambridge University Press, 2001.

the financial system, the regulations designing and exempting hedge funds should be studied.

In this section, four main acts which relates to hedge funds are studied. These legislations include: the Investment Company Act of 1940, the Investment Advisers Act of 1940, the Securities Act of 1933, and the Securities Exchange Act of 1934. In addition, hedge fund regulatory and compliance regimes were and are affected by other pieces of legislation which will briefly be mentioned.

3.2.2 The Investment Company Act of 1940

The Investment Company Act of 1940 regulates publicly-owned companies that invest in securities (i.e., investment companies) in contrast to industrial companies that normally engage in manufacturing goods and providing services. This Act mostly regulates mutual funds, their managers, directors and their advisers, and governs their responsibilities and relationships. Similar to other regulations in financial markets, this Act starts with requiring registration with the SEC. It imposes certain requirements on the funds' capital structure and their transaction with the insiders. It further imposes certain restrictions on various types of transactions of the registered investment companies. Registered companies are also subject to certain disclosure and reporting requirements. They are banned from trading on margin and short selling, and they should seek shareholders' approval for taking certain amount of leverage or engaging in investment in commodities.

Normally, since hedge funds are investment companies as defined by the Investment Company Act¹⁰⁰, they fall under the ambit of the

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¹⁰⁰ According to the Investment Company Act defines an 'investment company' means "any issuer which (A) is or holds itself out as being engaged primarily, or proposes to engage primarily, in the

regulations of this Act. Nevertheless, this Act sets out two exemptions. One is the section 3(c)(1) of the investment company act allowing for investment by one hundred persons and the second is the section 3(c)(7) of the National Securities Markets Improvement Act (NSMIA) allowing for the investment of unlimited number of qualified purchasers. Provided that an investment company complies with the requirements of one of the two exemptions, they could avoid registration with the SEC.

First, section 3(c)(1)¹⁰¹ provided that "any issuer whose outstanding securities (other than short-term paper) are beneficially owned by not more than one hundred persons and which is not making and does not presently propose to make a public offering of its securities" is not deemed to be an 'investment company¹⁰²'. In other words, a fund or an issuer having fewer than one hundred investors which raises capital through private placement is not considered an investment company for the purposes of the Investment Company Act, and accordingly is exempt from the registration requirement.

business of investing, reinvesting, or trading in securities; (B) is engaged or proposes to engage in the business of issuing face-amount certificates of the installment type, or has been engaged in such business and has any such certificate outstanding; or (C) is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis." *See* 15 U.S.C. § 80a-3(a)(1)

¹⁰¹ 15 U.S.C. § 80a-3(c)(1)

¹⁰² Explain beneficial ownership – SEC no action letter, fund or company counting as one person. And also refer to second SEC no-action letter. 15 U.S.C. § 80a-3(c)(1)(A) sets a 10 per centum threshold in the definition of the beneficial ownership "Beneficial ownership by a company shall be deemed to be beneficial ownership by one person, except that, if the company owns 10 per centum or more of the outstanding voting securities of the issuer".

In its 1996 no-action letter¹⁰³, the SEC concurs that "each Fund may be considered a single beneficial owner of a 3(c)(1) Entity, provided that:

- 1. no Fund will invest in any 3(c)(1) Entity to the extent that the attribution provisions of Section 3(c)(1)(A) are triggered; and
- 2. no Fund or 3(c)(1) Entity will be structured or operated for the purpose of circumventing the provisions of the Act¹⁰⁴".

Therefore, according to the above provisions and the SEC's noaction letter, beneficial ownership by a 'company' was considered as beneficial ownership of one person and therefore, section 3(c)(1) issuers could have fewer than one hundred funds as their investors, provided that the ownership of the shares by any one of those companies or persons does not exceed 10 percent of the outstanding voting securities of the issuer.

In its 1994 no-action letter¹⁰⁵, the SEC announced that if the employee participants of a defined-contribution plan involve in investment decision making, that plan cannot be counted as a single investor. Therefore, if participants in such a contribution plan have an active role in the management of the plan; each participant will be counted towards the 100 investors limit.

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[&]quot;A no-action letter consists of a letter requesting that the SEC's staff take a position that if the conditions as detailed in the letter are met, the staff will then recommend that no enforcement action be taken against the parties in the described transaction. The SEC's staff, in granting a no-action letter, will then write a responding letter detailing the staff's position on whether the facts specified in the original letter would warrant an enforcement action. No-action letters represent the opinion only of the SEC staff and not necessarily the view of the SEC's commissioners." *See* CHOI, PRITCHARD, *Securities Regulation: Cases and AnalysiS*, 2nd ed., New York: Thompson/Foundation Press, 2008.

¹⁰⁴ Cornish and Carey Commercial, Inc., SEC No-Action Letter, 1996 WL 422641, p. 3

¹⁰⁵ PanAgora Group Trust, SEC No-Action Letter, 1994 WL 174138, p. 6

Secondly, on October 11, 1996, the National Securities Markets Improvement Act (NSMIA) was signed into law. The act amended, inter alia, the Investment Company Act and the Investment Advisers Act of 1940. The significance of this act was that its amendments were of special relevance to hedge funds and their ability to raise funds from unlimited number of qualified purchasers. Section 3(c)(7)¹⁰⁶ of the

106 "(c) Further exemptions (A) Any issuer, the outstanding securities of which are owned exclusively by persons who, at the time of acquisition of such securities, are qualified purchasers, and which is not making and does not at that time propose to make a public offering of such securities. Securities that are owned by persons who received the securities from a qualified purchaser as a gift or bequest, or in a case in which the transfer was caused by legal separation, divorce, death, or other involuntary event, shall be deemed to be owned by a qualified purchaser, subject to such rules, regulations, and orders as the Commission may prescribe as necessary or appropriate in the public interest or for the protection of investors. (B) Notwithstanding subparagraph (A), an issuer is within the exception provided by this paragraph if (i) in addition to qualified purchasers, outstanding securities of that issuer are beneficially owned by not more than 100 persons who are not qualified purchasers, if (I) such persons acquired any portion of the securities of such issuer on or before September 1, 1996; and (II) at the time at which such persons initially acquired the securities of such issuer, the issuer was excepted by paragraph (1); and (ii) prior to availing itself of the exception provided by this paragraph (I) such issuer has disclosed to each beneficial owner, as determined under paragraph (1), that future investors will be limited to qualified purchasers, and that ownership in such issuer is no longer limited to not more than 100 persons; and (II) concurrently with or after such disclosure, such issuer has provided each beneficial owner, as determined under paragraph (1), with a reasonable opportunity to redeem any part or all of their interests in the issuer, notwithstanding any agreement to the contrary between the issuer and such persons, for that person's proportionate share of the issuer's net assets. (C) Each person that elects to redeem under subparagraph (B)(ii)(II) shall receive an amount in cash equal to that person's proportionate share of the issuer's net assets, unless the issuer elects to provide such person with the option of receiving, and such person agrees to receive, all or a portion of such person's share in assets of the issuer. If the issuer elects to provide such persons with such an opportunity, disclosure concerning such opportunity shall be made in the disclosure required by subparagraph (B)(ii)(I). (D) An issuer that is excepted under this paragraph shall nonetheless be deemed to be an investment company for purposes of the limitations set forth in subparagraphs (A)(i) and (B)(i) of section 80a-12(d)(1) of this title relating to the purchase or other acquisition by such issuer of any security issued by any registered investment company and the sale of any security issued by any registered open-end investment company to any such issuer. (E) For purposes of determining compliance with this paragraph and paragraph (1), an issuer that is otherwise excepted under this NSMIA states that hedge funds can offer their securities to an unlimited number of 'qualified purchasers¹⁰⁷'. In other words, this Act creates new categories of hedge funds to be sold to an unlimited number of 'qualified purchasers'. Nonetheless, section 12(g) of the Securities Exchange Act of 1934¹⁰⁸, sets limits on the number of hedge funds' qualified investors. It posits that if a fund has 500 or more investors, whether qualified or not, the registration and reporting requirements of the Securities Exchange Act will apply. Therefore, to be exempt from the regulations of the Securities Exchange Act, hedge funds should have limited the number of their investors to 499¹⁰⁹.

paragraph and an issuer that is otherwise excepted under paragraph (1) shall not be treated by the Commission as being a single issuer for purposes of determining whether the outstanding securities of the issuer excepted under paragraph (1) are beneficially owned by not more than 100 persons or whether the outstanding securities of the issuer excepted under this paragraph are owned by persons that are not qualified purchasers. Nothing in this subparagraph shall be construed to establish that a person is a bona fide qualified purchaser for purposes of this paragraph or a bona fide beneficial owner for purposes of paragraph (1)." See 15 U.S.C. § 80a-3(c)(7)

107 A "Qualified purchaser" means— (i) any natural person (including any person who holds a joint, community property, or other similar shared ownership interest in an issuer that is excepted under section 80a-3(c)(7) of this title with that person's qualified purchaser spouse) who owns not less than \$5,000,000 in investments, as defined by the Commission; (ii) any company that owns not less than \$5,000,000 in investments and that is owned directly or indirectly by or for 2 or more natural persons who are related as siblings or spouse (including former spouses), or direct lineal descendants by birth or adoption, spouses of such persons, the estates of such persons, or foundations, charitable organizations, or trusts established by or for the benefit of such persons; (iii) any trust that is not covered by clause (ii) and that was not formed for the specific purpose of acquiring the securities offered, as to which the trustee or other person authorized to make decisions with respect to the trust, and each settlor or other person who has contributed assets to the trust, is a person described in clause (i), (ii), or (iv); or (iv) any person, acting for its own account or the accounts of other qualified purchasers, who in the aggregate owns and invests on a discretionary basis, not less than \$25,000,000 in investments." See 15 U.S.C. § 80a-2(a)(51)(A).

¹⁰⁸ 15 U.S.C. § 78(1)(g)

¹⁰⁹ In addition, the NSMIA also simplified the 'look-though' provisions in counting beneficial owners. It allows the advisers of private funds to charge performance fees without limit. It also preempts the

Pursuant to the NSMIA, two types of hedge funds emerged, 'Section 3(c)(1) funds' and 'Section 3(c)(7) funds'. Basically, subject to certain requirements, the Act allows the funds that relied on the definitional exception of the Investment Company Act section 3(c)(1) ('Section 3(c)(1) funds') (privately offered investment companies with 100 or fewer beneficial owners) to convert into the new 'Section 3(c)(7) funds' (privately offered and the fund's outstanding securities are owned solely by qualified purchasers)¹¹⁰. As far as hedge funds fall under the purview of one of the two exemptions, the fund will not be an investment company for the purposes of the Investment Company Act and the strict provisions of this Act would no longer apply.

3.2.3 The Investment Advisers Act of 1940

Acording to the Investment Advisers Act¹¹¹, an 'investment adviser' means "any person who, for compensation, engages in the business of advising others, either directly or through publications or writings, as to the value of securities or as to the advisability of investing in, purchasing, or selling securities, or who, for compensation and as part of a regular business, issues or promulgates analyses or reports concerning

^{&#}x27;blue sky' laws with regard to the registration of the federally registered hedge funds. See LHABITANT, Handbook of Hedge Funds, cit., p. 55-56.

¹¹⁰ The Act defined the qualified purchasers as those who own investment of at least 5 million. Family owned companies "(i.e., those owned directly or indirectly by or for two or more persons related as siblings, spouses or direct lineal descendants, or estates or trusts of such persons) owning not less than \$5 million in "investments", trusts not formed for the specific purpose of acquiring the securities offered, whose trustees or equivalent decision makers and whose settlors or other asset contributors are all qualified purchasers described above; and Any other person, acting for its own account or for other qualified purchasers, who owns and invests on a discretionary basis "investments" of at least \$25 million." See 15 U.S.C. § 80a-2(a)(51)(A).

¹¹¹ 15 U.S.C. § 80b-1(21)

securities¹¹²". The investment advisers falling under this definition should register with the SEC and report through the Form ADV. Once under its regulatory purview, the Act imposes certain restrictions on the structure of fee arrangement and certain requirements with regard to maintaining books and records.

With this definition, hedge fund advisers would clearly fall under the purview of this Act and they should have registered with the SEC and complied with its regulations. Nevertheless, hedge fund could avoid this provision by appealing to the section 203(b) of the Investment Advisers Act's *de minimis* exception. Section 203(b)(3)¹¹³ of the Investment Advisers Act states that an investment adviser having fewer than 15 clients during the course of preceding 12 months, "who neither holds himself out generally to the public as an investment adviser nor acts as an investment adviser to any investment company" needs not be registered 114. On the other hand, under the 'safe harbor' provisions of the Investment Advisers Act, a legal entity such as a hedge fund was to

¹¹² 15 U.S.C. § 80b-2(a)(11)

¹¹³ 15 U.S.C. § 80b-3(b)(3)

[&]quot;(b) Investment advisers who need not be registered The provisions of subsection (a) of this section shall not apply to— (1) any investment adviser all of whose clients are residents of the State within which such investment adviser maintains his or its principal office and place of business, and who does not furnish advice or issue analyses or reports with respect to securities listed or admitted to unlisted trading privileges on any national securities exchange;

⁽²⁾ any investment adviser whose only clients are insurance companies; (3) any investment adviser who during the course of the preceding twelve months has had fewer than fifteen clients and who neither holds himself out generally to the public as an investment adviser nor acts an investment adviser to any investment company registered under subchapter I of this chapter, or a company which has elected to be a business development company pursuant to section 80a-53 of this title and has not withdrawn its election. For purposes of determining the number of clients of an investment adviser under this paragraph, no shareholder, partner, or beneficial owner of a business development company, as defined in this subchapter, shall be deemed to be a client of such investment adviser unless such person is a client of such investment adviser separate and apart from his status as a shareholder, partner, or beneficial owner;" See 15 U.S.C. § 80b-3(b)(3)

be counted as a single client. Therefore, if a hedge fund adviser advised fewer than fifteen individual funds during the course of last twelve months, she would have been exempt from registration. Therefore, according to this *de minimis* exception and the SEC's interpretation of the word 'client,' which included legal entities such as hedge funds, each hedge fund adviser can have 14 funds as her client. It is worth reminding that each hedge fund in turn can have up to 499 individual investors¹¹⁵.

In 2004, the SEC concerned with hedge fund secrecy and fraudulent practices, in an attempt to rein in hedge fund advisers and with an eye to protecting unsophisticated investors which indirectly invested in hedge funds through pension funds and other financial institutions, issued a rule (known as 'the Hedge Fund Rule'). Basically, in this rule making, the SEC argued that the term 'client' includes 'investors' and in the assessment of the number of clients, all investors including individual investors should be calculated. Therefore, the SEC required hedge fund investment advisers with more than 15 clients (regardless of being individual or legal entities) to register with the SEC under the Investment Company Act. Nevertheless, in 2006, the U.S. Court of Appeals for the District of Columbia in *Goldstein v. SEC*¹¹⁶

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¹¹⁵ Thus hedge fund clients can potentially amount to 6986 individuals. *See* KAAL, *Hedge Fund Regulation Via Basel III*, Vanderbilt Journal of Transnational Law, 44, 2011, p. 414.

¹¹⁶ GOLDSTEIN v. SEC, 451 F.3d 873, 884 (D.C. Cir. 2006). The court basically argued that the regulatory obligations of the advisors are owed to the funds rather than to the clients of the funds. Such a decision is criticized on the grounds that the primary focus of regulation should be on the intermediated investors- those who put their investment in the fund- rather than on the funds themselves. Such an approach proposes that the advisers to private funds should owe their regulatory obligations to both the funds and the investors in the funds. See KRUG, Institutionalization, Investment Adviser Regulation, and the Hedge Fund Problem, Hastings Law Journal, 63, 2011, 1-51.

found the rule arbitrary and accordingly vacated it. In the end, the Dodd-Frank Act eliminated the '15 clients' exemption¹¹⁷.

3.2.4 The Securities Act of 1933

Financial services and products and especially securities are deemed to be credence goods whose information problem is the direct of all types of information sensitive goods and services. Historically, this information sensitivity and the existence of huge information asymmetry between issuers and investors frequently caused market failures in securities markets and hence frequent disruptions in market liquidity. In response to market disruptions and with a view to minimizing asymmetric information between issuers and investors in publicly traded companies in the primary market transactions, the Securities Act of 1933 was enacted, which imposes registration and disclosure requirements on the issuers of such securities. The main objective of the Act is to ensure the informed investment decision by investors by requiring the issuer to disclose all relevant information concerning the value of securities to be issued, and thereby prevent fraud in the primary markets.

Based on that objective, this Act offers three approaches to regulation of the primary market transactions. The first is filing mandatory disclosure documents containing information deemed important to investors with the SEC (registration statement and prospectus) for the issuers making a public offering. The second approach aims at protecting investors by 'gun-jumping' rules the aim of which is to ensure that the prospectus is distributed widely and is reached to investors before any other information. In addition, this Act

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¹¹⁷ These are repealed by the Dodd-Frank Act.

also imposes a heightened antifraud liability for material misstatements and omissions in the public offering.

Since interests in a hedge fund are deemed to be 'securities', according to the Securities Act of 1933¹¹⁸ and the judicial interpretation of the definition and the meaning of a security, no public solicitation of these securities allowed unless the issuer is registered with the SEC and complies with the reporting and other requirement of the 1933 Act. Hedge funds, like any other investment funds, might fall within the grasp of the Securities Act if they offer investment opportunities to investors in an initial offering, unless they qualify for one of the exemptions set out in the Act.

This Act furnishes a private offering exemption in section 4(2)¹¹⁹. If an issuer met the requirements of the private offering, it needed not to comply with the requirements of the Act with regard to information disclosure. Alternatively, an issuer could rely on the safe harbor provided by the Regulation D's rule 506¹²⁰. This rule allowed securities to be privately offered "to a maximum of 35 sophisticated purchasers and an unlimited number of 'accredited investors' as defined by the rule 501(a) of the 1933 Act¹²¹".

3.2.5 The Securities Exchange Act of 1934

The Securities Exchange Act of 1934 regulates secondary market transactions and all institutions participating in those transactions such as market professionals and institutions. The Act aims at enhancing the efficiency of trading through the national securities markets. This Act

119 15 U.S.C. § 77d(2)

¹²⁰ Regulation D, 17 C.F.R. 230.506

121 17 C.F.R. 230.501

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¹¹⁸ 15 U.S.C. § 77b(a)(1)

also protects investors primarily through disclosure requirement. It requires, inter alia, brokers, national securities exchanges, and municipal securities dealers to register with the SEC and comply with its extensive regulations. It requires continuous disclosure through periodic reporting requirements, i.e., quarterly and annual reporting by publicly traded companies, commonly known as 'Exchange Act reporting issuers'. This Act only regulates post-distribution or secondary market trading like tender offers, insider trading, and proxy solicitations. Registered funds under this Act are subject to:

- 1. Periodic disclosure requirements under §13¹²² and §13(d), §13(g), and §13(f);
 - 2. Proxy rules under §14¹²³;
 - 3. Insider reporting requirements;
 - 4. Short-swing profits transaction rules under §16¹²⁴.

In addition to the above requirements, this Act imposes the most important and inclusive anti-fraud liability under §10(b) which was followed by the well-known SEC's rule 10b-5. The Securities Exchange Act also contains anti-manipulation provisions and rules regulating the proxy solicitation and certain relevant disclosures.

As for hedge funds, it is relevant to note that this Act generally applied to brokers and dealers and since most hedge funds were considered as traders rather than dealers¹²⁵, this Act's registration

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¹²² 15 U.S.C. § 78m

¹²³ 15 U.S.C. § 78n

¹²⁴ 15 U.S.C. § 78p

¹²⁵ UNITED STATED SECURITIES AND EXCHANGE COMMISSION, *Implications of the Growth of Hedge Funds*, 2003. 15 U.S.C. § 78c(a)(5)(A) defines a dealer as "any person engaged in the business of buying and selling securities (not including security-based swaps, other than security-based swaps with or for persons that are not eligible contract participants) for such person's own account through a broker or otherwise."

requirement in section 15b did not apply to hedge funds. However, if hedge funds take on dealer functions¹²⁶, they should have been registered under this Act¹²⁷. Since most hedge finds do not issue securities to be listed on the securities exchanges, they do not fall under the scope of the Securities Exchange Act and its definition of 'dealer in securities'.

In addition, section 12(g) of the Securities Exchange Act required an issuer having 500 total investors and assets in excess of one million dollars to register with the SEC. However, hedge funds limited the number of their total investors to 499, and thereby avoided such registration and reporting requirements. Nevertheless, antifraud provisions of the Securities Exchange Act (§10b)¹²⁸ and Rule 10b-5 applies to all investment companies regardless of being registered or not.

3.2.6 The Dodd-Frank Act and the direct regulation of hedge funds

One of the most notable and controversial post-crisis changes to the financial regulation in the U.S. is the reform in the regulatory environment of hedge funds and private equity funds. The regulatory environment prior to the Dodd-Frank Act which was the product of the major regulatory overhaul in the financial industry in the aftermath of the Great Depression created a leeway for hedge funds and allowed them to pursue their investment strategies with almost no regulatory restraints.

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¹²⁶ Mehrling argues that although the LTCM was legally a hedge fund, it effectively engaged in dealer functions. *See* MEHRLING, *Minsky and Modern Finance: The Case of Long Term Capital Management*, The Journal of Portfolio Management, 26, no. 2, 2000, p. 81-88.

¹²⁷ Also some hedge funds opted to register as dealers under the Exchange Act. See UNITED STATED SECURITIES AND EXCHANGE COMMISSION, Implications of the Growth of Hedge Funds, 2003.

¹²⁸ 15 US.C. § 78j(b)

However, as surveyed earlier, after the global financial crisis, regulators raised serious concerns about hedge funds' potential initial role in causing the crisis or their subsequent contribution to the financial instability. Based on such a belief, drafting new pieces of legislation for hedge funds on both sides of the Atlantic were put on the regulatory agenda¹²⁹.

The direct or entity regulation involves regulatory measures focusing immediately on the regulation of the target industry as a "discrete activity or as part of the broader, regulated investment services universe¹³⁰". In contrast, the imperatives or commands of indirect regulation is mediated by or transmitted through an intermediary to the (primarily intended) regulated entity or activity, which is ultimately the target.

The American version of direct regulation consists of two sets of regulatory measures. First, the Title IV of the Dodd-Frank Act involves the "Regulation of Advisers to Hedge Funds and Others" the short title of which is the "Private Fund Investment Advisers Registration Act of 2010" (hereinafter, the Private Fund Act). The primary purpose of this title is to change the investment adviser registration and exemption

¹²⁹ So far as it is related to hedge funds, the Dodd-Frank Act is basically built upon the experiences of the Long-Term Capital Management (LTCM) meltdown and the following study by the President's Working Group (PWG). More recently, on February 22, 2007, the PWG published the "Agreement Among PWG and U.S. Agency Principals on Principles and Guidelines Regarding Private Pools of Capital". This report sketches the broad principles related to control of systemic risk as well as investor protection. The approach mainly rests upon 'market discipline' which is supplemented by compliance with the 'industry sound practices'. This approach expresses its interests in principles-based regulation of hedge funds. See Hunt, Hedge Fund Regulation: The President's Working Group Committees' Best Practices Reports: Raising the Bar but Missing Risks, 2008. Accordingly, this report calls for greater market discipline harnessed by a light-touch regulation.

¹³⁰ ATHANASSIOU, Hedge Fund Regulation in the European Union: Current Trends and Future Prospects, Alphen aan den Rijn (The Netherlands): Kluwer Law International, 2009, p. 227.

regime under the Advisers Act of 1940 and impose registration and reporting requirement on hedge funds and private equity funds¹³¹.

Secondly, the provisions of the Title I of the Dodd-Frank Act which involves the "enhanced supervision and prudential standards for nonbank financial companies" to which this thesis refers as 'contingent direct regulation'. The contingent direct regulation of hedge funds depicted in the Title I of the Dodd-Frank Act aims at imposing prudential standards on the SINBFCs which can potentially include hedge funds.

The Private Fund Act eliminates the private adviser exemption, introduces new regulations in connection with the custody of accounts, requires changes to the definition of accredited investors, provides the statutory ground for the possible establishment of self-regulatory organization for private funds, requires certain data, reports and disclosure by private funds, calls for certain disclosure and consultation with the FSOC, sets out certain rules about the examination and confidentiality of books and records of hedge funds and private equity funds, sets certain limits on short selling, and requires collection of systemic risk data. In addition, although not in the Private Fund Act, the Dodd-Frank Act introduces the Volcker Rule which will have an indirect impact on the hedge fund industry.

The U.S. regulation of hedge funds was mostly built upon indirect or market-discipline inspired regulation. Indirect regulation which targets the counterparties of hedge funds has the effect of enhancing market discipline on the hedge fund industry. This tradition in financial regulation of hedge funds did not experience a dramatic change in the

¹³¹ Indeed, in a long-fought battle between the SEC and hedge fund industry, it seems that the SEC won the battle that it had previously lost in the Goldstein v. SEC.

aftermath of the financial crisis. Even after the enactment of the Private Fund Act, the U.S. hedge fund regulatory regime uses a mix of regulatory strategies which heavily rely on the indirect regulation¹³². This is rooted in the fact that in the U.S., hedge funds are not perceived to be major contributors to the global financial crisis. Therefore, aside from the registration and certain minimal disclosure requirements by which the direct regulation is imposed on hedge funds, even under the current regulatory regime which was established after the financial crisis, they seldom are subject to the direct regulation by regulatory agencies¹³³.

Since systemic risk concerns mostly relate to the interconnectedness of hedge funds and their potential strategy correlations, there is substantial support in the literature for indirect regulation of hedge funds¹³⁴. The direct or entity regulation involves regulatory measures focusing on the regulation of industry itself as a "discrete activity or as part of the broader, regulated investment services universe¹³⁵". In contrast, the imperatives or commands of indirect regulation is mediated by or transmitted through an intermediary to the (primarily intended) regulated entity or activity.

In addition, with respect to the choice of regulatory strategies, the U.S. regulators make use of 'laddered' or 'tiered' approach in regulating hedge funds, specifically in differential regulation of hedge funds based on their size. For example, the U.S. hedge fund regulatory framework introduces certain benchmarks. Any hedge fund that meets those criteria

¹³² In contrast, the EU legal system embraced direct regulation of hedge funds more openly.

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¹³³ This means that direct regulation of hedge funds is an exception to the rule and will be applied on an *ad hoc* basis. Fortunately enough, even direct regulation is mostly about disclosure requirements intended to enhance market discipline.

¹³⁴ See ATHANASSIOU, Hedge Fund Regulation in the European Union, cit., pp. 227-228.

¹³⁵ ATHANASSIOU, ibidem.

will be directly regulated. Even after touching certain higher benchmarks, a hedge fund might be subject to heighted prudential regulation by the Fed which can be equivalent or more heavy-handed than the one applied to banks¹³⁶.

Post-crisis hedge fund regulation on both sides of the Atlantic did not necessarily involve regulating hedge fund entity itself. Rather, regulators opted for regulating hedge fund managers or advisers¹³⁷. However, regulating hedge funds through regulating their managers cannot be perceived as indirect regulation of hedge funds. Direct method of regulation in hedge fund industry is mostly used to address the problem of information asymmetry between hedge funds, their regulators, creditors, and investors. This method of regulation, however, can have indirect effects on addressing potential systemic concerns of hedge funds by making the hedge fund industry more transparent. In fact, although registration requirement imposed on hedge funds or their managers is a direct regulatory measure, it is a necessary complement for indirect regulation of hedge funds¹³⁸ and can help harness market discipline. Without such disclosure requirements, indirect regulation of

agencies; however, they might be required to register with the state regulators. At the second level, hedge funds having more than \$150 million in AUM, should register and will be required to keep books and records. The third level of regulation will be triggered when hedge funds are designated as SINBFCs by the FSOC. Once designated as such, they will become subject to the prudential regulation of the Fed. The FSOC can even recommend the Fed to subject SINBFCs to more stringent prudential regulatory regime than it is usually applied to banks. Therefore, American approach to hedge fund regulation at the federal level creates three layers of hedge fund categories and designs appropriate regulation for each of them: They can be called 'the exempted hedge funds', 'the registered funds' and 'the systemically important hedge funds'.

¹³⁷ This is perhaps motivated by the concerns about hedge fund regulatory arbitrage.

¹³⁸ DARDANELLI, *Direct Or Indirect Regulation of Hedge Funds: A European Dilemma*, European Journal of Risk Regulation, 2011, p. 463-480.

hedge funds through their counterparties and creditors would be infeasible due to the fact that without such minimum regulatory measures, regulatory authorities would not be provided with adequate information needed for indirect regulation of hedge funds.

The second prong of the direct regulation of hedge funds is triggered if hedge funds are designated as SINBFCs, after which they will become subject to the prudential regulation of the Fed.

3.2.6.1 Addressing information problems and transparency requirements

The traditional method of addressing information problems in the hedge fund industry is pursued by requiring hedge fund registration and disclosure of certain information deemed to be necessary for assessing the systemic implications of hedge funds. Since in financial markets the source of the most market failures is information problem, there is compelling theoretical and empirical evidence in favor of disclosure requirement¹³⁹.

The first and foremost reason for having a mandatory disclosure system for hedge funds is that such a system is necessary for the assessment of systemic risk in financial markets. For example, for the purposes of this study, designating a non-bank entity as a SINBFC requires having certain information disclosed to the regulators by hedge

Externalities, Review of Financial Studies 13, no. 3 (2000), 479-519. See also FOX, Retaining Mandatory Securities Disclosure: Why Issuer Choice is Not Investor Empowerment, Va.L.Rev. 85, 1999, p. 1335.

¹³⁹ VERRECCHIA, Essays on Disclosure, Journal of Accounting and Economics, 32, no. 1-3, 2001, p. 97-

^{180.} See FISHMAN, HAGERTY, Mandatory Versus Voluntary Disclosure in Markets with Informed and Uninformed Customers, Journal of Law, Economics, & Organization, 19, no. 1 2003, p. 45-63. See also LEUZ, WYSOCKI, Economic Consequences of Financial Reporting and Disclosure Regulation: A Review and Suggestions for Future Research, 2008. To see the advocates of the mandatory disclosure based on positive externalities argument, See ADMATI, PFLEIDERER, Forcing Firms to Talk: Financial Disclosure Regulation and

funds and their advisers. In the absence of a mandatory disclosure system, it is not clear how regulators can acquire reliable data upon which the regulatory strategies and instruments are to be built.

The first and foremost problem about hedge funds which contributed to their amorphous nature, prevented any attempt to gather precise data, and hindered any effort to undertake sound empirical studies about them was that they were not required to register with regulatory agencies. The lack of this requirement created doubts and ambiguities not only about hedge fund data accuracy, but also about the very number of hedge funds. These ambiguities spelt over to the empirical analyses about hedge funds' size, leverage, and riskiness of their financial strategies. In order to address this problem, and to provide the infrastructure for minimal regulation of hedge funds, mandatory registration with a centralized database or a regulatory agency was a step forward on both sides of the Atlantic. Implementation of this requirement will give an estimate of the number of hedge funds¹⁴⁰ which is essential to carry out empirical studies about hedge funds' impact on financial markets and their potential for contribution to financial instability.

The Dodd-Frank Act introduces registration and disclosure requirements by making changes to the Investment Advisers Act of 1940. This Act requires registration with the SEC of a firm falling within the definition of an 'investment adviser' within the Investment Advisers Act, unless it is prohibited from registering with the SEC, or it qualifies for an exception from the Investment Advisers Act's registration requirement.

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¹⁴⁰ Though it can resolve this problem to some extent, it cannot fully address it, because of the ambiguities in the definition of hedge funds and its blurring boundary and scope with other similar funds such as private equity funds, and venture capital funds.

By this provision, the Dodd-Frank Act has reallocated the regulatory functions of the regulatory agencies with respect to the investment advisers between states and federal agencies. For the purposes of the reallocation of regulatory functions, the Act puts investment advisers in three broad categories; namely, small advisers, mid-sized advisers, and large advisers. The small and mid-sized advisers are subject to state regulation and are prohibited from registering with the SEC¹⁴¹; meanwhile the large advisers must register with the SEC unless they can avail themselves of an exemption. This registration and being subject to the SEC rules will preempt the state adviser laws¹⁴².

Based on the Investment Advisers Act, small advisers are those investment advisers with less than \$25 million of AUM. Unless an exemption is granted, these advisers should be regulated by one or more states if the state in which the fund has its principal office and place of business does not have a statute regulating investment advisers such as the state of Wyoming¹⁴³. This category of funds is regulated by the states if:

- 1. The adviser is registered with the state in which it has its principal office and place of business.
- 2. The adviser is subject to examination by the state securities authorities 144.

¹⁴¹ 15 U.S.C. § 80b-3a(a)

¹⁴² For registration requirement, *See* 15 U.S.C. § 80b-3(a). And for preemption of state law, *See* 15 U.S.C. § 80b-3a(b)

¹⁴³ 15 U.S.C. § 80b-3a(a)(1) See also Regulation of Investment Advisers by the U.S. Securities and Exchange Commission, march 2013.

¹⁴⁴ 15 U.S.C. § 80b-3a(a)(2) «prohibits a mid-sized adviser from registering with the SEC if the adviser is required to be registered as an adviser in the state where it has its principal office and place of business and is subject to examination by that state». See Rule Implementing Amendments to the Investment

The Private Fund Act shares the responsibility of hedge fund regulation with State authorities to free the SEC's limited regulatory resources so that it can more effectively regulate the hedge funds deemed to be systemically important. In order for an investment adviser (that is regulated or required to be regulated as an investment adviser in the State in which it maintains its principal office and place of business) to register with the SEC, it should have not less than \$25 million or such higher amount (as the SEC may deem appropriate) in AUM¹⁴⁵.

Mid-sized advisers are those advisers having between \$25 million and \$100 million of AUM. Unless there is an exemption, the mid-sized advisers with their principal office and place of business in New York and Wyoming are not deemed to be 'subject to examination' and should register with the SEC. Advisers passing those thresholds are considered large advisers and should register with the SEC and comply with its rules and regulations. Needless to say, regardless of being registered or not, all advisers are subject to the anti-fraud provisions of the Investment Advisers Act.

3.2.6.2 Collection of systemic risk data: Disclosure and examinations

The established notoriety for secrecy in the hedge fund industry which poses enormous challenges to the efforts directed at addressing their systemic implications could not stand the waves of post-crisis regulatory overhaul. Under the previous regime hedge funds were under almost no obligation of record keeping and reporting to the public, regulators, and investors, unless their investment triggered the

Advisers Act of 1940, Investment Advisers Act Release, no. 3221, june 22, 2011. Regulation of Investment Advisers by the U.S. Securities and Exchange Commission, march 2013.

¹⁴⁵ 15 U.S.C. § 80b-3a (a)(1).

application of certain regulations. This in turn, posed questions about the feasibility of the risk assessment and due diligence verification of hedge funds which they have towards their investors under their fiduciary duties.

However, such secrecy did not mean that they were completely unregulated. In fact, they were indirectly regulated by market participants such as their counterparties and creditors. Particularly, they were increasingly abiding by the standards of transparency such as exposure reports, portfolio diversification and sectoral allocation of their investments imposed by their counterparties and sophisticated institutional investors. Furthermore, without disclosure of the minimum amount of information about the fund, its investment strategies, and the risks involved, the prospect of raising capital from investors or marketing the fund would not be very bright. Investors are particularly interested in the information on hedge funds regarding the existence of gates, side pockets, side letters, fee structure, and the redemption terms. Therefore, in their offering memoranda, hedge funds usually incorporate the information necessary for investors to make an informed decision.

At the same time, regulators face challenges in imposing more transparency requirements on hedge funds. The first challenge is that full transparency in hedge fund industry is not a feasible option, largely because of the existence of proprietary information. Indeed, hedge fund managers gain their competitive edge from the proprietary information on which they build their trading strategies. If they were required to disclose the information to regulators or to the public, they would not be able to reap the benefits of their efforts. There are certain other risks in real time disclosure of information by hedge funds such as making disclosing hedge funds vulnerable to short squeeze which are discussed

earlier. Taking account of the costs and potential unintended consequences of such a disclosure, full transparency is neither feasible nor optimal¹⁴⁶.

As discussed earlier, the second problem with imposing disclosure requirement is that it might generate the false sense of security in hedge fund investors, a phenomenon which is sometimes called the 'legal placebo effect' 147. The risk of legal placebo effect stems from the fact that the investors, particularly less sophisticated ones, will wrongfully believe that the due diligence about the safety and soundness of hedge funds is already performed by relevant authorities. Therefore, based on such a misguided belief, they would invest in hedge funds without doing their own homework in evaluating hedge funds' true risks.

In addition, the lessons from financial history show that the registration and disclosure of financial institution including hedge funds with the relevant regulator is not a panacea. For example in case of the collapse of Amaranth in 2006, the application of disclosure and transparency requirements did not raise the regulatory red-flags in time¹⁴⁸. Indeed, Amaranth was registered with the SEC and its disclosure did not prevent its collapse, nor did it prevent the perceived collateral damages to the financial system or its counterparties¹⁴⁹. Moreover,

¹⁴⁶ There are proposals such as secure multi-party computation which can maintain the confidentiality and secrecy while acquiring the aggregate data which is important in the calculations related to the assessment of the systemic risk. *See* ABBE, KHANDANI, LO, *Privacy-Preserving Methods for Sharing Financial Risk Exposures*, American Economic Review, 102, no. 3, 2012, p. 65-70.

¹⁴⁷ AVIRAM, *The Placeho Effect of Law: Law's Role in Manipulating Perceptions*, The George Washington Law Review, 75, no. 1, 2006, p. 54-104. *See also* AVIRAM, *Allocating Regulatory Resources*, Journal of Corporation Law, 37, no. 4, 2012, p. 739-769.

¹⁴⁸ STEVENSON, Fund of Hedge Funds: Origins, Role and Future, Financial Stability Review; Special Issue, Hedge Funds, ed. Banque de France, 2007.

¹⁴⁹ Though amaranth collapse did not cause any systemic problem, almost no commentator believes that it was because the registration. Some commentators believe that because it had limited exposure

detailed disclosure and full transparency which includes disclosure of unnecessary information for assessing systemic risk impose an excessive burden on regulators and can bury them under the piles of unnecessary information amongst which important information might have been hidden.

Last, but not least, one of the unintended consequence of transparency in hedge funds' operation is that such transparency can undermine hedge funds' benefits to the financial markets such as their contrarian position taking and liquidity provision to the markets. Hedge funds are contrarian position takers in financial markets and they can potentially mitigate the volatility and potential adverse effects of a financial crisis. Mandatory disclosure of positions taken by hedge funds can discourage them from taking contrarian positions in financial markets and hence can potentially reduce the liquidity in markets. This is due to the fact that such requirements can exacerbate the conflict of interest between hedge funds and their counterparties and competitors. If hedge funds disclose information with respect to their position to their trading counterparties, there is a potential that the information can be used in the detriment of the disclosing hedge fund. Therefore, it is argued that position transparency can potentially make financial systems less stable because it essentially removes the class of investors which are otherwise liquidity providers in times of crisis¹⁵⁰.

Hence, a compromise should be reached between a non-disclosure system and full disclosure system. Along this line of reasoning, it can be

and investment in limited sectors of energy, it did not amount to a systemic risk and financial instability. See ROACH JR., Hedge Fund Regulation- "What Side of the Hedges are You on?", The University of Memphis Law Review, 40, 2009-2010, p. 165-214.

¹⁵⁰ KING, MAIER, Hedge Funds and Financial Stability: Regulating Prime Brokers Will Mitigate Systemic Risks, Journal of Financial Stability, 5, no. 3, 2009, p. 283-297.

argued that the adequate transparency might be achieved without compromising hedge fund proprietary information by the limited system of information disclosure. The limits can be put in three dimensions:

- 1. Scope of information disclosure; such as specifying what type of information would be disclosed. For example information which is deemed systemically important for the financial markets can be required to be disclosed.
- 2. Temporality; financial information is generally time sensitive. Namely, it is mainly valuable when it is disclosed on time and the passage of time erodes its value. Some scholars support the delayed disclosure system to guard against the perils of disclosure of the proprietary information for hedge funds¹⁵¹. However, given the temporal nature of financial information, it remains to be seen how effective this system of information can be.
- 3. Confidentiality both in scope and its temporality. Hedge fund information disclosure, by scope, should be limited to the aggregate performance, exposures, and specific risk

indicators¹⁵². As mentioned earlier, if the confidentiality of the proprietary information of hedge funds is compromised, it can seriously affect hedge funds' benefits to the financial markets.

Accordingly, U.S. regulators decided to intervene and address hedge fund opacity problem choosing a qualified disclosure system, i.e., disclosure system with certain levels of confidentiality. This system was a

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¹⁵¹ ZINGALES, *The Future of Securities Regulation*, Journal of Accounting Research, 47, no. 2, 2009, p. 391-425.

¹⁵² It is reported that «[s]ome well-known quantitative third party risk management software providers now offer products and infrastructure that allow the fund manager and investors to share information without compromising confidentiality», STEVENSON, *Fund of Hedge Funds: Origins, Role and Future*, ed. Banque de France, 2007.

compromise and a balance between competing interests of hedge funds, their investors, counterparties, regulators, and finally the taxpayers at large.

3.2.6.3 Assessment of information regulation in the Dodd-Frank Act

Transparency plays an important role in the effectiveness of the market discipline. It also reduces uncertainty and increases liquidity in financial markets. Nevertheless, the usefulness of hedge fund data in estimating systemic risk and forecasting financial crises is questioned. In the hedge fund industry, the complexity of financial instruments, and the speed with which the trades occur and risks evolve are extraordinarily high. Therefore, it is very unlikely that the disclosure of information can effectively be used by regulators to assess the potential systemic risk of hedge funds¹⁵³.

In addition, information disclosure can impose substantial costs in terms of compliance on the industry, because it is the industry and not the regulator that shoulders the costs of disclosure requirements and compliance issues. In particular, the introduction of the detailed forms such as the form PF can potentially be very costly to the industry. Furthermore, the industry should shoulder the costs of the inspections and examinations to be conducted by the SEC. There are additional concerns about the discretionary powers granted by the Dodd-Frank Act to the SEC in conducting the examinations and inspections. Since the nature and politics of regulation encourages regulators to take a proactive stance on regulation, it is not known how much costs the SEC's

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¹⁵³ LLOYD, CLANCY, KUMAR, Hedge Funds and Systemic Risk, Santa Monica, CA: RAND Corporation, 2012. See also JOHNSON, Why Register Hedge Fund Advisers- A Comment, Vol. 70, 2013, p. 713-724.

inspection and examination will impose on hedge funds¹⁵⁴. Regardless of the amount of costs, hedge funds may pass these costs on to the investors, which will eventually discourage them from investing in hedge funds, and further squeeze hedge funds' profit margin. Thus, in terms of compliance costs, information disclosure requirements for hedge funds can create potential *de facto* barriers to entry into the industry.

The disclosure of proprietary trading strategies could be very costly for hedge funds. By disclosing the detailed information, they risk being copycatted by other financial firms which can erode the value of their proprietary investment strategies. Therefore, there are two conflicting interests: increasing the transparency of the market and maintaining hedge fund benefits to the financial markets. In any case, the former should not come at the expense of the latter¹⁵⁵. To achieve that end, the qualified system of information disclosure is introduced in the Private Funds Act to balance such conflicting interests by providing protections in terms of confidentiality to hedge funds' proprietary information.

Nonetheless, there remains the concern that with the increased amount of disclosure, the confidentiality of hedge funds data might in practice be compromised. Failure to sufficiently protect the confidentiality of hedge fund proprietary information and to enforce the relevant provisions of the law would substantially decrease the benefits of hedge funds to the financial markets.

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¹⁵⁴ There are circumstances in which the regulators should not have taken any action, but they act (type I error) and circumstances in which the regulators should have taken action, but fails to do so (type II error). It is argued that the regulators usually minimize type II errors at the expense of type I error

¹⁵⁵ WEBER, *Hedge Funds: A Central Bank Perspective*, Financial Stability Review; Special Issue, Hedge Funds, ed. Banque de France, 2007, p. 161-168.

Overall, hedge fund transparency will substantially be increased after the implementation of the Dodd-Frank Act's disclosure requirements. It is not only the requirements of the Private Fund Act that will require more hedge fund related information to be provided to the markets, but also hedge fund related information will be made available to the markets through other channels such as disclosure of short selling, and creation of the swap data repository. These are the new sources of information established by the Dodd-Frank Act which will make certain information about hedge funds available.

One of the downsides of the Dodd-Frank Act's transparency requirements is that they may result in higher likelihood of herding behavior among hedge funds. It is long acknowledged that one of the potential unintended consequences of imposing mandatory disclosure, particularly disclosure to investors rather than regulators, is that it might give rise to herding behavior in the market¹⁵⁶. Therefore, one of the unintended consequences of enhanced disclosure and transparency, particularly involving the disclosure of proprietary information, might be the increase in the propensity of hedge funds to herd.

In addition, hedge funds voluntary disclosure to the markets will be increased due to the new provisions of the JOBS Act. Prior to this Act, hedge funds were timid in making any public disclosure because it could be regarded as general solicitation or public offering of their securities, hence infringing the private placement provisions of the securities laws.

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¹⁵⁶ BAINBRIDGE, Mandatory Disclosure: A Behavioral Analysis, University of Cincinnati Law Review, 68, 2000, p. 1023-1060. For example, it is argued that the Regulation Fair Disclosure (Reg FD) in the U.S. which prohibits corporations from selective disclosure solely to market analysts or institutional investors would give rise to herd behavior among investors. See RUSSELL, Regulation Fair Disclosure: The Death of the Efficient Capital Market Hypothesis and the Birth of Herd Behavior, BUL Rev. 82 (2002), 527. See also ARYA et al., Unintended Consequences of Regulating Disclosures: The Case of Regulation Fair Disclosure, Journal of Accounting and Public Policy, 24, no. 3, 2005, p. 243-252.

The JOBS Act provides a new channel for hedge funds to provide more information to the markets and the general public, thereby increasing the overall transparency of the industry.

The exemption granted to foreign hedge fund advisers can potentially be problematic and may create a potential loophole. Hedge fund industry is global and it is hard to assess the systemic risk of hedge funds without having aggregate information about the overall industry. The provisions exempting foreign private funds can be exploited by regulatory arbitrage by hedge funds. However, because other major jurisdictions started imposing similar regulations and requirements¹⁵⁷, regulatory arbitrage is unlikely to happen.

Most of the above-mentioned concerns are at least partially alleviated by the fact that the Dodd-Frank Act has a laddered regulatory strategy towards information disclosure. It imposes less stringent requirements on start-up hedge funds. The laddered approach of the Dodd-Frank Act is depicted in the fact that only hedge funds with AUM of more than 1.5 billion are required to fill out the complex sections of the form PF and hedge funds with less than \$150 million in AUM are not even required to register with the SEC¹⁵⁸.

3.2.6.4 Contingent direct regulation of hedge funds (Prudential regulation of SINBFCs)

The Dodd-Frank Act grants the authority to the FSOC to determine whether a non-bank financial company (which among other things includes hedge funds) shall be supervised by the Fed and be

¹⁵⁷ 23 For example, *See* the "Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and Amending Directives 2003/41/ EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010," 2011.

¹⁵⁸ However, they should register with the state regulators.

subject to the prudential standards. Such a determination should be made on a nondelegable basis and by a vote of not fewer than two-thirds of the voting members including the affirmative vote of the Chairperson of the FSOC¹⁵⁹. If the FSOC determines that the "material financial distress at the U.S. nonbank financial company, or the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities of the U.S. nonbank financial company, could pose a threat to the financial stability of the United States", it will subject the company to the prudential supervision of the Fed¹⁶⁰.

Therefore, according to the above provision, the FSOC will designate a Nonbank Financial Company (NBFC) as a SINBFC and subject it to the prudential standards of the Fed if either of the following two standards is met. Under the first standards, a NBFC will be subject to the prudential standards of the Fed if the FSOC determines that the material financial distress at the NBFC could pose a threat to the U.S. financial stability. Under the second standard, a NBFC will be subject to the prudential standards of the Fed "if the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities" of the NBFC could pose a threat to U.S. financial stability¹⁶¹. The Dodd-Frank Act also lists ten considerations for the FSOC to take into account while making such an assessment¹⁶². Furthermore, the FSOC has discretion to take account of any other risk-related factors that it deems appropriate.

The considerations for designating the non-bank financial company as systemically important include, inter alia,

¹⁵⁹ The Secretary of the Treasury is the chairperson of the FSOC.

¹⁶⁰ 12 U.S.C. § 5323 (a)(1). See also 12 CFR § 1310.10.

Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

¹⁶² For more details, See 12 U.S.C. § 5323(a)(2).

- 1. the extent of leverage,
- 2. off-balance sheet exposures,
- 3. the extent and nature of the transactions and relationships of the company with other significant NBFCs and significant bank holding companies (BHCs),
- 4. "the importance of the company as a source of credit for households, businesses, and State and local governments and as a source of liquidity for the United States financial system",
 - 5. whether the funds are managed or owned by the company,
- 6. the nature, scope, size, scale, concentration, interconnectedness, and mix of the activities of the company,
- 7. whether the company is already regulated by one or more financial regulatory agencies,
 - 8. the amount and the nature of the financial assets of the company,
- 9. the amount and types of liabilities of the company including the degree of reliance on short-term funding and
 - 10. any other risk related factors that the FSOC deems necessary¹⁶³.

An analytical framework has been developed by the FSOC which puts all relevant factors including the above considerations into six categories: size, interconnectedness, substitutability, leverage, liquidity risk and maturity mismatch, and existing regulatory scrutiny¹⁶⁴.

Once a company is designated as a SINBFC, it will be subject to the prudential regulation by the Fed. Furthermore, the FSOC has the discretion to recommend that the Fed strengthen the prudential standards on a particular SINBFC and apply standards that are "more stringent than those applicable to other nonbank financial companies

¹⁶³ 12 U.S.C. § 5323 (a)(2). See also 12 CFR § 1310.11.

¹⁶⁴ Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

and bank holding companies that do not present similar risks to the financial stability of the United States¹⁶⁵.

In April 2012, the FSOC promulgated the final rules expounding the process of designating a NBFC as systemically important. According to these rules, the FSOC may make such a designation if it determines that "material financial distress' at the company could pose a threat to the U.S. financial stability or the nature, scope, size, scale, concentration, interconnectedness, or mix of the activities of the nonbank financial company's business practices, conduct, or operations could pose a threat to U.S. financial stability, regardless of whether the nonbank financial company is experiencing financial distress¹⁶⁶".

The rule introduces a three-stage process of evaluation in designating a nonbank financial company as a SINBFC. The firms meeting the first stage requirements will pass on to the next stage, and the firms meeting the second stage requirements will pass on to the third stage. A non-bank financial company will pass on the first stage if its total consolidated assets are \$50 billion or more and it meets or exceeds one of the following thresholds:

- \$ 30 billion in gross notional credit default swaps (CDSs);
- \$ 3.5 billion in derivatives liabilities;
- \$ 20 billion in total debt outstanding;
- a leverage ratio of 15 to 1;

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¹⁶⁵ 12 U.S.C. § 5325(a)(1).

¹⁶⁶ According to the FSOC, material financial distress exists when a nonbank financial company is in imminent danger of insolvency or defaulting on its financial obligations. Financial Stability Oversight Council, "Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies," Code of Federal Regulations, Title 12, Part 1310, April 3, 2012.

• a ratio of total debt outstanding with maturity of less than 12 months to total consolidated assets of 0.1 (10 percent)¹⁶⁷.

The FSOC can aggregate the risks posed by separate hedge funds managed by the same advisers, especially if the funds' investments are identical or highly correlated¹⁶⁸. In Stage 1, the FSOC will solely rely on the information which is available through public and regulatory sources¹⁶⁹.

In Stage 2, the companies identified in the first stage will be analyzed. In this stage, in contrast to the quantitative thresholds of the first stage that should be met, the FSOC uses a wide range of quantitative and qualitative industry and firm specific factors which is available to them through public and regulatory resources to evaluate the risk profile of the individual company. In this stage, the FSOC can start the consultation process with the primary regulatory agencies of the company or its home country supervisors¹⁷⁰. The Firms meeting those thresholds will pass to the third stage. Following stage 2, the NBFCs identified for additional review will receive notice of being considered for a 'Proposed Determination' and pass to the third stage in which they will be subject to an in-depth evaluation.

In Stage 3, the FSOC will assess the potential risks of the company based on the information which is directly collected from the company and on the public and regulatory information which acquired in the

¹⁶⁷ Financial Stability Oversight Council, "Authority to Require Supervision and Regulation of Certain Nonbank Financial Companies," Code of Federal Regulations, Title 12, Part 1310, April 3, 2012.

¹⁶⁸ Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

¹⁶⁹ Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

¹⁷⁰ Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

process of the first and the second stage. It is in this stage that the NBFC can be designated as SINBFC by the two-thirds of the vote of the FSOC members including an affirmative vote of the Secretary of the Treasury¹⁷¹.

As of 2012, only four hedge funds out of 50 hedge funds which are registered pursuant to the Dodd-Frank Act exceed the \$50 billion threshold. Therefore, the number of advisers exceeding the limit will be very limited.

Once a hedge fund is designated as a SINBFC, the Fed upon the recommendations of the FSOC will establish prudential regulations for such a fund. These prudential standards should include:

- 1. risk-based capital requirements and leverage limits unless the Board of Governors, in consultation with the FSOC, determines that such requirements are not appropriate
 - 2. liquidity requirements
 - 3. overall risk-management requirements
 - 4. resolution plan and credit exposure report requirements; and
 - 5. concentration limits.

The Fed may, but is not required to, establish the following additional prudential standards:

- 1. contingent capital requirement;
- 2. enhanced public disclosures;
- 3. short-term debt limits; and

4. other standards that the Board of Governors, on its own or pursuant to recommendations of the FSOC, determines are appropriate.

¹⁷¹ Appendix A to part 1310 - Financial Stability Oversight Council Guidance for Nonbank Financial Company Determinations.

In short, from the standpoint of being systemically important, hedge fund can be put into three categories:

- 1. Hedge funds which are highly unlikely to be considered as systemically important. These hedge funds are not required to register with the federal regulatory agencies. However, the state registration requirements apply.
- **2.** Hedge funds exceeding certain threshold (\$150 million of AUM) should register with the SEC. It is likely that these hedge funds contribute to the financial stability through their interconnectedness with LCFIs or through herding behavior. Hence they are required to register with the SEC and disclose certain information thereto.
- **3.** Hedge funds designated as SINBFCs. These hedge funds are considered as systemically important because of their size and the amount of leverage. Needless to say, these hedge funds can have serious systemic implications for financial markets through their potential interconnectedness or herding behavior. Thus, they are subject to the prudential regulation of the Fed.

The Managed Funds Association (MFA), a hedge fund industry association estimates that applying the thresholds of the §113 of the Act, it is highly unlikely that any hedge fund would be designated as a SINBFC. In addition, the advisers who are approaching the threshold may divest of some assets to avoid being designated as SINBFC. Such a regulatory strategy is well designed to push the hedge funds which are in the periphery of the financial system not to approach to the apex of the system. If the prudential regulation by the Fed would be costly enough, it

will decrease the probability that the law would apply to them with considerable elasticity¹⁷².

3.2.6.5 The effectiveness of the Dodd-Frank Act

In general, the effectiveness of the Dodd-Frank Act in achieving its objectives remains highly controversial. The effects of the newly introduced regulations in the U.S. on hedge fund industry also remain unclear. For instance, some commentators suggest that the financial world will be as prone to bailouts as it used to be prior to the Dodd-Frank Act¹⁷³. Other scholars view the potential regulatory arbitrage as the element which can make most of the regulatory measures of the Dodd-Frank Act toothless¹⁷⁴. It is also suggested that the hedge fund industry is not dramatically affected by the new regulatory measures.

Problems involving leverage and liquidity can potentially be at the heart of the financial crisis, and the Dodd-Frank Act addresses the problem by introducing direct and indirect measures to limit hedge funds' potential excessive leverage and illiquidity.

In addition, the Dodd-Frank Act takes a laddered regulatory approach to regulation of hedge funds. The benchmark for direct regulation of hedge funds is their size. Hedge funds with less than \$50 billion in consolidated assets cannot be considered as SINBFCs¹⁷⁵. The number of advisers exceeding the \$50 billion AUM subject to regulation is extremely limited. Therefore the number of hedge funds that will be

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¹⁷² For the concept of elasticity of law and periphery and apex (hierarchy of the financial system), see PISTOR, A Legal Theory of Finance, Journal of Comparative Economics 41, 2013, p. 315-330.

¹⁷³ SKEEL, Making Sense of the New Financial Deal, Vol. 5HeinOnline, 2011, p. 181-199.

¹⁷⁴ ACHARYA, RICHARDSON, op. cit.

¹⁷⁵ [The consolidated assets of the LTCM were \$125 billon at its peak.]. There might be instances that even smaller hedge funds might be considered as such.

subject to stringent regulation such as being required to conduct stress tests will remain very limited. Hence, it is expected that the direct regulation of hedge funds will be of very limited impact on hedge funds at large and their liquidity¹⁷⁶. Since hedge funds are unlikely to fall under the purview of direct regulation, they will mostly be regulated indirectly. However, there are concerns that market discipline which will be enforced by the indirect regulation of hedge funds cannot effectively address their potential risks. Particularly, it is argued that the prime brokers are not adequately equipped to monitor the liquidity risks of hedge funds¹⁷⁷.

There is a downside for such laddered regulatory approach to hedge funds which is basically based on hedge funds' size. The Dodd-Frank Act cannot address the risks arising from a large number of hedge funds' potential herd behavior. Since the Act is opted for firm-by-firm designation of hedge funds as SINBFCs, it is unlikely that the Act can address the small and mid-sized hedge fund herd behavior. To mitigate such risks, the Dodd-Frank Act grants discretion to financial regulators such as the SEC and CFTC to address industry-wide liquidity issues.

The positive side of such a regulatory strategy, however, is that it will induce hedge funds to reduce their size to avoid being designated as SINBFC and heavier and more costly regulation. This strategy is a sound regulatory strategy because it discourages firms from getting closer to the apex of the financial system. Few hedge funds will be designated as SINBFCs and become subject to the direct regulations of the Fed. Most

¹⁷⁶ LLOYD, CLANCY, KUMAR, *Hedge Funds and Systemic Risk,* Santa Monica, CA: RAND Corporation, 2012.

¹⁷⁷ Ibidem.

hedge fund leverage and liquidity regulation will rest with the prime brokers which in turn are regulated by the Fed¹⁷⁸.

On the other hand, there are other considerations with respect to hedge fund regulation which should be taken into account, the most important among which is the costs of such regulation. Specifically, it should be determined whether the restrictions of hedge fund leverage and liquidity may adversely affect their positive contribution to financial markets. It is suggested that the smaller funds will be more affected by the requirements of the Dodd-Frank Act than bigger hedge funds¹⁷⁹. One of the most policy relevant aspects of hedge fund regulation relates "the transient nature of hedge funds". Structurally organizationally, banks are capable of developing robust and complex regulatory compliance department because they often have longer life expectancy and there are considerable economies of scale in their regulatory costs. While considering the higher attrition rate¹⁸⁰ in hedge funds, it might not be optimal or efficient to force hedge funds to develop regulatory compliance department for such short-lived institutions¹⁸¹. Such regulatory requirements can damage start-up and small hedge funds disproportionately.

The next concern is about the regulatory arbitrage, namely, the regulation of hedge funds in the U.S. might give rise to regulatory arbitrage and potential exodus of hedge funds to regulatory safe heavens or other jurisdictions with lightly regulated markets. However, it seems

¹⁷⁸ Such indirect regulation has its own critics. (It cannot be meaningful, competition erodes such a regulation) LLOYD, CLANCY, KUMAR, op. cit.

¹⁷⁹ KAAL, Hedge Fund Manager Registration Under the Dodd-Frank Act, San Diego Law Review, 50, May-June 2013, p. 243-318.

¹⁸⁰ Attrition rate refers to rate of shrinking in the number of hedge funds due to hedge fund closures.

¹⁸¹ LLOYD, CLANCY, KUMAR, op. cit.

that current coordination between regulators, and more interventionist approach taken in the EU, the prospects of hedge fund regulatory arbitrage is a very gloomy one, because other hedge fund major jurisdictions are introducing more stringent regulations on hedge funds.

Last, but not certainly least, timing in reporting matters and it is not clear whether regulators can move as quickly as markets do, or quickly enough to have an impact in inhibiting systemic risk. Given the inherent sluggishness of regulation and legal processes, it is highly unlikely that regulators can use disclosed information by hedge funds to mitigate concerns about systemic risk and financial instability.

3.3 Europe's regulatory framework for hedge funds

Within the European Union (EU), hedge funds are primarily regulated through advisers managers¹⁸². In the United Kingdom, where 80% of Europe's hedge funds are based¹⁸³, hedge fund managers are required to be authorised and regulated by the Financial Conduct Authority (FCA)¹⁸⁴. Each country has their own specific restrictions on hedge fund activities, including controls on use of derivatives in Portugal, and limits on leverage in France.

In November 2010, the EU approved a law that will require all EU hedge fund managers to register with national regulatory authorities. The EU's Directive on Alternative Investment Fund Managers (AIFMD) was the first EU directive focused on hedge fund managers¹⁸⁵.

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¹⁸² COGGAN, op. cit.

¹⁸³ SHORE, EU finance ministers agree new hedge fund curbs, BBC News Business, 18 July 2013.

¹⁸⁴ DRAWBAUGH, Regulators Crack Down on Banks, Markets, Reuters, 8 March 2011.

¹⁸⁵ DRAWBAUGH, ibidem.

According to the EU, the aim of the directive is to provide greater monitoring and control of alternative investment funds¹⁸⁶.

The directive required managers to disclose more information, on a more frequent basis. It also directs hedge fund managers to hold larger amounts of capital. All hedge fund managers within the EU are subject to potential limitations on leveraged investments¹⁸⁷.

The directive introduced a "passport" for hedge funds authorized in one EU country to operate throughout the EU.

The scope of AIFMD is broad and encompasses managers located within the EU as well as non-EU managers that market their funds to European investors¹⁸⁸. An aspect of AIFMD which challenges established practices in the hedge funds sector is the potential restriction of remuneration through bonus deferrals and clawback provisions¹⁸⁹. Under the EU's 2010 Alternative Investment Fund Managers directive, offshore hedge funds using prime brokers as depositories are required to use EU-registered credit institutions before they can be sold in the EU¹⁹⁰. The AIFMD's regulatory requirements will essentially mandate equivalent regulations for non-EU investment funds, if they wish to operate in EU markets¹⁹¹.

3.3.1 United Kingdom's experience

¹⁸⁹ BARKER, JONES, EU hedge funds face pay threat - FT.com, avaible at ft.com, 2012.

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¹⁸⁶ "Directive on Alternative Investment Managers ('AIFMD'): Frequently Asked Questions". European Union, 11 November 2010, retrieved 8 March 2008.

¹⁸⁷ CHAY, Call For Joint Effort to Protect Hedge Fund Business, The Business Times Singapore. Singapore Press Holdings, 8 March 2011.

¹⁸⁸ CHAY, ibidem

¹⁹⁰ "Offshores Could Struggle Under Directive, Says Collins' Meader", Investment Adviser. Financial Times Group, 8 March 2008.

¹⁹¹ DRAWBAUGH, op. cit..

The approach taken by the Financial Services Authority (FSA), the regulatory body of financial markets in the United Kingdom, for regulating hedge funds is a principles-based approach. This approach contrasts with the SEC's rules-based approach. In its oversight of hedge funds, the FSA has focused on risks associated with market stability, investor protection barriers, and valuation standards¹⁹².

As part of its principles-based approach, the FSA identifies threats to the stability of financial markets, and then allocates resources to monitoring such threats depending on their severity¹⁹³. For example, the FSA established the Center for Hedge Fund Supervision (the Center), which is charged with the responsibility of supervising twenty of the United Kingdom's largest hedge funds 194. These funds may either have significant market impact or pose a great risk to financial markets. The Center is responsible for "relationship management of high-impact hedge fund managers, driving relevant thematic work and support authorization, enforcement and public initiatives that can benefit from such expertise¹⁹⁵. In 2002, the FSA published a discussion paper (DP 16) stating that it would not prohibit the marketing of hedge fund products and services to the public as long as they abided by certain regulations. The FSA stated that only "authorized persons" who abide by the "collective scheme requirements" may conduct general solicitations. More specifically, one of these requirements is that funds have to be authorized by the FSA. The other requirement is that funds report "particulars" about their investment strategies. Not surprisingly, most

¹⁹² SCHMIDT, NOTE, Investor Protection in Europe and the United States: Impacting the Future of Hedge Funds, 25 WIS. INT'L L.J, 2007, p. 161-181.

¹⁹³ Ibidem

¹⁹⁴ Ibidem

¹⁹⁵ Ibidem

hedge funds are not authorized because they strongly oppose the latter requirement for fear that their novel strategies will become public knowledge.

In light of hedge fund growth on a global scale, the increase in hedge fund fraud, and the increased role of hedge funds in providing market liquidity, the FSA decided to reevaluate its regulatory framework of hedge funds.

In 2005, the FSA published two discussion papers (DP) concerning the risks and potential problems caused by hedge funds. DP 05/03 focused on the risks consumers are exposed to as a result of the growing "retailization" of private investment pools, such as hedge funds 196. DP 05/04 focused on risks and concerns related to hedge funds and the manner through which the FSA should address these risks and concerns 197.

More specifically, the paper identified numerous potential key risks. First, the FSA expressed concern about potential serious market disruption and erosion of consumer confidence, not only in hedge funds but also in their creditors and counterparties. Second, the FSA was also concerned about the possibility of liquidity disruption leading to disorderly markets.

Moreover, the FSA stated that the inadequacy of methodologies to evaluate risk and imprudent risk management were areas of concern. The FSA highly recommended that hedge funds establish and maintain significant stress testing procedures. Finally, the FSA stated that deficiencies in asset valuation methodologies and inadequate information

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¹⁹⁶ See generally Financial Services Authority, Wider-range Retail Investment Products-Consumer Protection in a Rapidly Changing World (June 2005), available athttp://www.fsa.gov.uk/pubs/discussion/dp0503.pdf [hereinafter DP 05/03].

¹⁹⁷ Ibidem

systems were of concern because they created a "significant potential for ill-informed investment decisions. The FSA solicited comments from market participants on whether the risks it identified in DP 05/04 were correct and whether any of the risk mitigation recommendations it made warranted further analysis.

In March 2006, the FSA published Feedback Statement 06/02 (FS 06/02) setting out the responses that it received for the questions it posited in DP 05/04. The FSA concluded that it would not institute any new regulations on hedge fund advisers unless there is a market failure requiring regulatory remedies¹⁹⁸. The FSA found two areas in which it believed there was a market failure. The FSA identified the first market failure where the adequacy of asset valuations is difficult or impossible to evaluate due in large part to hedge funds' investments in illiquid financial instruments.

This market failure would be further amplified where found managers have conflicts-of-interest or have an incentive to manipulate asset valuations.

The FSA identified hedge funds' uses of side-letters as the second market failure. Referring to side-letters, the FSA said that «[t]hese result in some, often large, investors receiving more information and preferential (early) redemption terms compared with other investors in the same share class (who may be unaware that side letters exist and who will be denied [the same] terms)». After stating that the use of side-letters constitutes a breach of business integrity, the FSA went on to say that, «[a]s a minimum we would expect acceptable market practice to be for

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¹⁹⁸ Financial Services Authority, Feedback Statement on DP 05/04 Hedge Funds: A Discussion of Risk and Regulatory Engagement 7 (Mar. 2006), available at http://www.fsa.gov.uk/pubs/discussion/fs0602.pdf [hereinafter FS 06/02].

managers to ensure that all investors are informed when a side-letter is granted and any conflicts that may arise are adequately managed».

The FSA emphasized that it will further study hedge funds' use of side-letters and will establish regulatory measures if needed.

3.3.2 Germany's experience

Germany's regulatory approach, which is characterized by substantial regulatory measures, is interesting because it is diametrically opposite to the United States' approach. 240 The SEC's approach is indirect regulation with a prohibition on general solicitation of investors. On the other hand, Germany allows public solicitation, while heavily regulating how hedge funds are managed.

While it appears that Germany's regulatory scheme has had some success, it is crucial to point out that Germany's share of the hedge fund market is relatively small, and thus the cost of regulation is lower than in other countries, such as the United States and the United Kingdom, which have relatively large shares of the hedge fund market.

3.3.4 Comparative analysis

Despite the fact that mandatory registration and regulation of hedge funds was struck down in Goldstein, such an approach would inevitably lead to hedge funds moving offshore or moving to other jurisdictions that are not as heavily regulated as the United States. For this reason, the

German approach is not recommended, as it would threaten the United States' robust capital markets.

Germany is at peace with the risk of losing market share in the hedge fund market because its market share is minuscule. In contrast, the SEC has recognized and appreciated the positive attributes of hedge funds, which include providing alternative forms of investment and greater liquidity, smoothing out pricing discrepancies, and reallocating risk to the most efficient risk bearer.

Although the European Union does not have much of an approach, it is nevertheless cautious and hesitant to implement any regulatory framework before having sufficient information about the hedge fund industry. The United States should consider adopting a more cautious approach that studies in detail the possible impact of regulatory measures before approving them.

In retrospect, it appears, and many scholars suggest, that the SEC's Hedge Fund Rule was implemented somewhat prematurely, and that the SEC should have conducted more research before deciding to approve it.

In fact, one scholar argues that there were psychological forces which drove the passage of the Hedge Fund Rule¹⁹⁹. More specifically, he argues that after the near collapse of LTCM, the SEC felt the psychological pressure of taking action, rather than exercising the caution required in the consideration of such a sweeping rule.

The United Kingdom's approach does not require registration unless a hedge fund plans to solicit to the general public. The United States' approach is the same with respect to public solicitations. However, this is where the similarities between the two approaches end.

The United Kingdom's approach, which is principles-based, is characterized by a risk-based monitoring scheme. This approach is effective and is narrowly tailored since it identifies hedge funds that pose

¹⁹⁹ TROY, On the Decision to Regulate Hedge Funds: The SEC's Regulatory Philosophy, Style, Mission, U. ILL. L. REv. 975, 2006, arguing that after such scandals as Enron and Worldcom, the risk of fraud and other hedge fund abuses disproportionately affected the SEC, causing the agency to act when it had not in the past.

the highest levels of systemic risk, and in turn monitors them. This is a practical approach since it would be impractical and inefficient to monitor funds that do not pose a risk. Moreover, this approach is more costeffective than mandatory registration and regulation because resources are allocated based on the level of risk a fund poses. This approach is superior to mandatory registration because if hedge funds move offshore, then there will be a greater, more detrimental risk of limited or no oversight. The United Kingdom also requires that funds have independent third parties evaluate their valuation processes. This part of the United Kingdom's approach is discussed more in detail in part VI-A.

3.3.5 The Alternative Investment Fund Managers Directive 2011/61/EU ("AIFMD")

The Alternative Investment Fund Managers Directive (AIFMD) was published in the Official Journal of the European Union on 1 July 2011 and each EU Member State had until 22 July 2013 to implement the Directive into their national laws.

By 22 July 2014, all existing EU AIFMs meeting certain thresholds were to request an authorization in their respective home competent authorities and demonstrate full compliance with the Directive.

In Luxembourg, the Directive was transposed into national law on 12 July 2013. Since, the CSSF has published and updates on a regular basis a Frequently Asked Questions (FAQ), providing their views on the implementation of the Directive: The CSSF also publishes the list of Luxembourg and authorized and registered AIFMs on their website.

The scope of the AIFMD covers portfolio management and risk management (the core activities of an AIFM) as well as other functions including but not limited to depositary, valuation, administration, reporting to investors and regulators, and marketing of alternative investment funds (AIFs). Its focus is on regulating the Alternative Investment Fund Manager (AIFM) rather than the AIF²⁰⁰.

In addition to the Directive, the European Securities and Markets Authority (ESMA) was given the mandate by the EU to propose Level 2 legislation and to issue regulatory and implementation technical standards as well as guidelines.

The AIFMD Level 2 Regulations were published by the European Commission on 19 December 2012.

In addition several regulations were issued by the European Commission and guidelines and Q & A were issued by the ESMA:

- (i) Regulation No. 447/2013 as of May 2013 concerning the procedure for AIFM which choose to opt in under the AIFMD;
- (ii) Regulation No. 448/2013 as of May 2013 concerning the procedure for determining the Member State of reference of a Non-EU-AIFM;
- (ii) Delegated Regulation No. 694/2014 determining whether an AIFM is an AIFM of open-ended AIF(s) and/or closed-ended AIF(s); and guidelines:
- (i) Guideline No. 2013/201 on sound remuneration policies under the AIFMD issued on 11 February 2013;

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²⁰⁰ The AIF as provided by the AIFMD refers to collective investment undertakings, which raise capital from a number of investors with a view to investing it in accordance with a defined investment strategy for the benefit of those investors, and which do no not qualify as UCITS. Hedge funds, real estate and infrastructure funds, private equity funds etc. are therefore targeted by the AIFMD, regardless of their current legal regime or form. In Luxembourg, Part II UCIs, SIFs, SICARs and non-regulated investment vehicles qualify or may qualify as AIFs.

- (ii) Guideline No. 2013/600 on key concepts of the AIFMD issued on 24 May 2013;
- (iii) Guideline No. 2013/1339 on reporting obligations under Articles 3(3)(d) and 24(1), (2) and (4) of the AIFMD issued on 15 November 2013.

3.3.5.1 The European Long-Term Investment Fund regulation

On 20 April 2015 the Council adopted a regulation aimed at increasing the pool of capital available for long-term investment in the EU economy by creating a new form of fund vehicle.

European long-term investment funds (ELTIFs), by virtue of the asset classes that they will be allowed to invest in, are expected to provide investors with long-term, stable returns.

Regulation (EU) 2015/760 on European long-term investment funds (ELTIFs) (the Regulation) aims to increase the capital available for long-term investment in the EU economy through this new form of fund vehicle. It is targeted at investment fund managers who want to offer long-term investment opportunities to institutional and private investors across Europe using the AIFMD passport.

The Regulation was published in the Official Journal of the EU on 19 May 2015 and it will apply from 9 December 2015.

In previous articles we have reviewed a number of measures implemented by both the Central Bank of Ireland (Central Bank) and the European Commission that aim to alleviate what has been termed the 'funding gap', that has developed as a consequence of the 2008 crisis whereby banks can no longer act as financial intermediaries that help channel capital toward large infrastructure projects. To try to fill this gap, the Central Bank and the European Commission have each tried to

(and must) find ways to enable such project finance to be raised directly from capital markets. The ELTIF is the latest in a range of fund initiatives at EU level to address the funding gap and it follows 'hot-on-the-heels' of the EU Regulations on European Social Entrepreneurship Funds (EuSEF) and European Venture Capital Funds (EuVECA).

The ELTIF is designed to be available to all types of investors across Europe subject to certain requirements set out in EU law. These requirements include the types of long-term assets and projects that the ELTIFs are allowed to invest in, for example infrastructure, transport and sustainable energy projects; how ELTIFs have to spread their money to reduce risks; and the information ELTIFs have to provide to investors. Any ELTIF manager would also have to comply with all of the requirements of the Alternative Investment Fund Managers Directive (Directive 2011/61/EU of 8 June 2011) (AIFMD) (together with Commission Delegated Regulation (EU) No. 231/2013 of 19 December 2012) to provide adequate protection for its investors, in exchange for which they benefit from the EU marketing passport and the ability to sell to retail investors.

If ELTIFs develop as a brand, similar to the success of the UCITS brand which is recognised worldwide, there could be increased marketing opportunities available to ELTIFs. Under the Regulation, the European Securities and Market Authority is mandated to maintain a publicly available register of all authorised ELTIFs and their managers. In addition, the Regulation identifies the European Investment Bank as a potential investor in ELTIFs.

Only EU managers who are authorised under the AIFMD can offer an ELTIF. The AIFMD puts in place a stringent set of rules for anyone managing Alternative Investment Funds (AIFs). They also include requirements on depositaries, valuation, mechanisms to deal with conflicts of interest and disclosure of information to investors. As an ELTIF is an AIF and not a UCITS fund, its manager must be authorised under the AIFMD. The intention behind the ELTIF Regulation is to enable EU-authorised AIFMs to market EU AIFs which they manage as ELTIFs to both professional and retail investors (as defined under MiFID) across the EU. Authorised managers will be able to make use of an EU-wide passport, subject to a notification procedure established under the AIFMD.

ELTIFs are open for investments from both professional investors and retail investors. Professional Investors, for the purpose of ELTIFs, are those investors who can be considered to be professional clients, or who may, on request, be treated as a professional client in accordance with Annex II to Directive 2014/65/EU (the same definition as is used in AIFMD). Retail investors are investors who are not professional investors.

There are some requirements imposed on AIFMs marketing ELTIFs to retail investors including:

- 1. Assessing the suitability of the ELTIF for the retail investor by obtaining information in relation to:
- 1.1 the retail investor's knowledge and experience in the investment field relevant to the ELTIF;
- 1.2 the retail investor's financial situation, including that investor's ability to bear losses; and
- 1.3 the retail investor's investment objectives, including that investor's time horizon, providing retail investors with a key investor information document that summarises the key points in the ELTIF's

prospectus and provides certain information in relation to risk assessment and fee levels.

2. Ensuring where the financial instrument portfolio of a potential retail investor is less than EUR 500,000, having performed the suitability test referred to in point 1 above and having provided appropriate investment advice, on the basis of the information submitted by the potential retail investor, that the potential retail investor does not

invest an aggregate amount exceeding 10% of that investor's financial instrument portfolio in ELTIFs.

- 3. Requiring an initial minimum investment amount in one or more ELTIFs of EUR 10, 000.
- 4. Where the life of an ELTIF exceeds ten years, providing a written warning that the ELTIF may not be suitable for retail investors that are unable to sustain a long-term and illiquid investment.
- 5. Ensuring that retail investors have no further liability or additional commitment to the ELTIF other than the original capital commitment.

Eligible investments for an ELTIF: the Regulations provide that an ELTIF must generally invest 70% of its capital in "eligible investment assets", which are defined as:

- 1. Equity or quasi-equity instruments that have been:
- 1.1 issued by a qualifying portfolio undertaking and acquired directly by the ELTIF from the qualifying portfolio undertaking (see below) or from a third party through the secondary market;
- 1.2 issued by a qualifying portfolio undertaking in exchange for an equity instrument previously acquired by the ELTIF from the qualifying portfolio undertaking or from a third party through the secondary market; or

- 1.3 issued by an undertaking of which the qualifying portfolio undertaking is a majority-owned subsidiary, in exchange for an equity instrument acquired in accordance with points 1.1 or 1.2 above by the ELTIF from the qualifying portfolio undertaking or from a third party through the secondary market.
 - 2. Debt instruments issued by a qualifying portfolio undertaking;
- 3. loans granted by the ELTIF to a qualifying portfolio undertaking with a maturity no longer than the life of the ELTIF;
- 4. units or shares of one or several other ELTIFs, EuVECAs and EuSEFs, provided that those ELTIFs, EuVECAs and EuSEFs have not themselves invested more than 10% of their capital in ELTIFs; and
- 5. direct holdings or indirect holdings via qualifying portfolio undertakings of individual real assets with a value of at least EUR 10 million or its equivalent in the currency, and at the time, in which the expenditure is incurred.

A qualifying portfolio undertaking referred to above is a portfolio undertaking other than a collective investment undertaking that fulfils the following requirements:

- 1. It is not a financial undertaking (i.e. it is not a credit institution, a MiFID investment firm, an insurance undertaking, a financial holding company, a mixed-activity holding company as defined in the Capital Requirements Directive, a UCITS management company or an AIFM).
 - 2. It is an undertaking which:
- 2.1 is not admitted to trading on a regulated market or on a multilateral trading facility; or

- 2.2 is admitted to trading on a regulated market or on a multilateral trading facility and at the same time has a market capitalisation of no more than EUR 500 million.
- 3. It is established in a Member State, or in a third country provided that the third country:
- 3.1 is not a high-risk and non-cooperative jurisdiction identified by the Financial Action Task Force; and
- 3.1 it has signed an agreement with the home Member State of the manager of the ELTIF and with every other Member State in which the units or shares of the ELTIF are intended to be marketed to ensure that the third country fully complies with the standards laid down in Article 26 of the OECD Model Tax Convention on Income and on Capital and ensures an effective exchange of information in tax matters, including any multilateral tax agreements.

By way of derogation from point 1 above, a qualifying portfolio undertaking may be a financial undertaking that exclusively finances qualifying portfolio undertakings or real assets referred to in above.

ELTIFs are not permitted to invest in assets in which the manager takes a direct/indirect interest, although ELTIFs are permitted to invest in other ELTIFs, EuVECAs and EuSEFs managed by the manager and in which the manager holds units or shares.

ELTIFs may also invest in assets that are eligible assets pursuant to the UCITS Directive (2009/65/EC).

As the purpose of an ELTIF is to invest in long term investments, it is logical that they would be expected to invest at least 70% of their capital in the eligible investments listed above. However, the application of this requirement may be deferred to a date that is five years or half the life of the ELTIF (whichever is the earlier) after the date of authorisation

of the ELTIF in order to enable it to ramp up its investment in long term investments as sourcing and closing such investments can take a significant amount of time. In exceptional circumstances, the competent authority of the ELTIF may approve an extension of this time limit by an additional twelve months.

An ELTIF may not short sell, invest directly or indirectly in commodities or invest more than 10% of its capital in securities lending, securities borrowing, repurchase agreements or reverse repurchase agreements. The aggregate risk exposure of an ELTIF to a repo counterparty shall not exceed 5% of its capital.

An ELTIF shall invest no more than: 10% of its capital in instruments issued by or loans granted to any single qualifying portfolio undertaking; 10% of its capital directly or indirectly in a single real asset; 10% of its capital in units or shares of any single ELTIF, EuVECA or EuSEF.

The aggregate value of units or shares of ELTIFs, EuVECAs and EuSEFs in an ELTIF portfolio shall not exceed 20% of the value of the ELTIF's capital. In addition, an ELTIF may acquire no more than 25% of the units or shares of a single ELTIF, EuVECA or EuSEF.

5% of its capital in assets which may be invested in by a UCITS, as listed in Article 50(1) of the UCITS Directive, where those assets have been issued by a single issuing body. Companies in the same group for the purposes of consolidated accounts shall be regarded as a single issuing body. The UCITS diversification limits also apply in this context so that an ELTIF may acquire no more than: (i) 10% of the non-voting shares of a single issuing body; (ii) 10% of the debt securities of a single issuing body; or (iii) 10% of the money market instruments of a single issuing body.

An ELTIF may raise the 10% limit referred to in points 1 and 2 above to 20%, provided that the aggregate value of the assets held by the ELTIF in qualifying portfolio undertakings and in individual real assets in which it invests more than 10% of its capital does not exceed 40% of the value of its capital.

An ELTIF may raise the 5% limit referred to in point 5 above to 25% in the case of bonds issued by an EU credit institution.

An ELTIF may borrow cash provided that it: represents no more than 30% of the capital of the ELTIF; is used to invest in eligible investment assets (other than loans granted to a qualifying portfolio undertaking with a maturity no longer than the life of the ELTIF), provided that the ELTIF's cash or cash equivalent holdings are not sufficient to acquire the participation in eligible investment assets; is in the same currency as the assets to be acquired with it; has a maturity no longer than the life of the ELTIF; and it does not encumber assets making up more than 30% of the ELTIF's capital.

The ELTIF manager must specify in the ELTIF's prospectus whether or not it intends to borrow cash or not as part of its investment strategy.

An ELTIF may regularly distribute to investors the proceeds generated by the assets contained in its portfolio, whether that be ongoing income generated by the assets or gains on the disposal of assets.

In the event of a disposal of assets before the end of life of an ELTIF, the capital of the ELTIF may be reduced on a pro-rata basis.

Investors in the ELTIF may not redeem their units or shares before the end of life of the ELTIF unless all of the following conditions are fulfilled: the ELTIF has reached the end of the term specified in the ELTIF's constitutive document.

At the time of authorisation and throughout the life of the ELTIF, the manager of the ELTIF has put in place an appropriate liquidity management system, effective procedures for monitoring the liquidity risk of the ELTIF and a defined redemption policy.

The manager of the ELTIF sets out a defined redemption policy, which clearly indicates the periods of time during which investors may request redemptions.

The redemption policy of the ELTIF ensures that: (i) the overall amount of redemptions within any given period is limited to a specified percentage of the ELTIF's assets; and (ii) investors are treated fairly and redemptions are granted on a pro rata basis where necessary.

Where an ELTIF provides for redemptions and investors submit redemption requests in accordance with the ELTIF's redemption policy that are not fulfilled within one year, then that ELTIF may be wound down at the request of the investors.

The Regulation provides that the shares or units of an ELTIF may be admitted to trading on a regulated market or multilateral trading facility, thus providing investors with an opportunity to sell their units or shares before the end of life of the ELTIF.

The ELTIF must apply for authorisation to the Central Bank and in doing so must submit documents including its prospectus, instrument of incorporation, depositary agreement, AIFM agreement and such other agreements and information as is required by the Central Bank.

The ELTIF must comply with the provisions of both the ELTIF Regulation and AIFMD, while its manager must comply with the provisions of AIFMD and will be responsible for ensuring compliance with the Regulation.

3.3.5.2 Governance principles and framework

One of the underlying aims of the AIFMD is to require AIFMs to enhance their governance frameworks so that they are more accountable to regulators and investors.

The AIFMD seeks to improve overall transparency in the way AIFs are managed.

Investors and regulators will seek regular and clear evidence from AIFMs of good governance in action.

With the introduction of Level 2, the requirements focus on the need to create robust governance frameworks, as opposed to the imposition of a set of "one size fits all" prescriptive rules, which had initially been feared. A sound framework will allow different types of AIFMs and AIFs to manage risks and operations generally with regard to their own particular strategies, without unnecessary intervention from regulators. As far as possible, it appears that the AIFMD operational requirements have been aligned with existing provisions in the UCITS IV Directive (UCITS Directive) and the Markets in Financial Instruments Directive (MiFID).

The governing body of an AIFM refers to the component of the governance structure with ultimate jurisdiction and power of direction. In corporate structures this is usually the board of directors but in other structures it may be an equivalent body. The governing body is distinct from senior management, whom it directs, but some or all members of senior management may comprise the governing body. The governing body may also contain non-executive members. As such the board of

directors and senior management of an AIFM will have a key role to play in meeting the governance requirements under AIFMD.

The AIFMD at both Directive level and Level 2 have one major governance "gap" which has been remarked on by industry commentators and which needs to be considered.

That gap is the lack of recognition of the roles of existing governance bodies at the fund level. The AIFMD fails to recognise that many funds and other entities which will be classified as AIFs under the AIFMD have governing bodies, whether boards, trustees, or partners, which have specific sets of responsibilities and fiduciary obligations. How these bodies will discharge their obligations given the pre-emptive assignment of responsibilities to AIFMs and some oversight responsibilities to depositaries remains to be seen.

3.3.5.3 Operating and organisational conditions

The AIFMD contains a broad set of general principles that the AIFM must comply with. Certain general principles apply to an AIFM both in relation to the way that its business is organised and controlled, and in relation to the way it conducts its business. Many of the principles will be familiar to firms already authorised. The conduct of business principles applicable to an AIFM are as follows:

- It must act honestly, fairly and with due skill, care and diligence in conducting its activities;
- It must act in the best interests of the AIF, or the investors in the AIF and the integrity of the market;
- It must employ effectively the resources and procedures that are necessary for the proper performance of its business activities;

- It must take all reasonable steps to avoid conflicts of interest and, when they cannot be avoided, to identify, manage and monitor and, where applicable disclose, those conflicts of interest;
- It must comply with all regulatory requirements applicable to the conduct of its business activities and;
 - It must treat all AIF investors fairly.

These requirements will be familiar to those operating under the UCITS or MiFID regimes.

An AIFM is required to take all reasonable steps to avoid conflicts of interest and, when they cannot be avoided, to identify, prevent, manage and monitor and, where applicable, disclose those conflicts. This requirement is to prevent them from adversely affecting the interests of the AIF and the AIF's investors and to ensure that the AIFs it manages are fairly treated. In particular, the AIFM must take all reasonable steps to identify conflicts of interest between:

- (i) The AIFM (including its staff, controllers and subsidiaries) and the AIF or AIF investors;
 - (ii) One AIF (or its investors) and a second AIF (or its investors);
 - (iii) One AIF (or its investors) and another client of the AIFM;
- (iii) The AIF (or its investors) and any UCITS fund also managed by the AIFM (or the investors in the UCITS fund) and;
 - (iv) Any two clients of the AIFM.

An AIFM is required to operate effective organisational and administrative systems and controls to prevent such conflicts from adversely affecting the interests of the AIF (or investors). To the extent that such systems and controls are not sufficient for the AIFM to be reasonably confident that risks of damage to investors' interests will be

prevented, it must disclose the general nature or sources of conflicts of interest to them in advance.

Conflicts are identified as occurring when the AIFM, or very broadly, a relevant person, whether directly or indirectly linked by way of control to the AIFM:

- Is likely to make, or avoid, a financial gain/loss, at the expense of the AIF or its investors;
- Has an interest in the outcome of a service or an activity provided to the AIF or its investors or to a client or of a transaction carried out on behalf of the AIF or a client, which is distinct from the AIF interest in that outcome;
- Has a financial or other incentive to favour o The interest of a UCITS, a client or group of clients or another AIF over the interest of the AIF o The interest of one investor over the interest of another investor or group of investors of the same AIF;
- Carries on the same activities for the AIF and for another AIF, a UCITS or client receives or will receive from a third person an inducement in relation to collective portfolio management activities provided to the AIF, in the form of monies, goods or services other than the standard commission or fee for that service.

Those relevant persons engaged in business activities involving a conflict of interest are required to carry on these activities at a level of independence appropriate to the size and activities of the AIFM.

To ensure the requisite degree of independence there are a number of requirements such as separation of supervision of the relevant people, removal of any direct link between the remuneration of the relevant people, or measures to prevent or control the simultaneous or sequential involvement of a relevant person in portfolio management activities or other activities where such involvement may impair the proper management of conflicts of interest.

The record keeping elements are also potentially onerous for newly regulated firms. It is likely AIFMs will have to maintain records of each occurrence of material risk of damage to the interests of one or more AIFs or clients. The AIFM will then have to disclose to investors, such conflicts, by a durable medium or by means of a website; the use of website then attracts additional requirements.

Building on the provisions of MiFID, AIFMs will not be able to pay or receive commission, or non-monetary benefits in relation to the activities of the AIF, unless the payment is between the AIF and AIFM in relation to proper fees for services, or the payments are disclosed and are designed to enhance the quality of services. The limitation of the inducement provisions to administration and portfolio management (i.e. excluding marketing/distribution) set out under UCITS IV are not followed under the AIFMD. As such, payments, linked to marketing or placement of the AIFs, are subject to inducement rules.

The existence of a fee/commission needs to be disclosed in the annual report to investors and to competent authorities. The proposed changes to MiFID issued in late

2011 will also impact AIFMs in the future through banning commission payments associated with independent advice. This change may lead some AIFMs to changing their current distribution structure, though should not have any significant impacts on operations.

It is additionally stated that fair treatment of investors by an AIFM extends to the non- preferential treatment of investors. This is a subjective area and may cause issues in terms of side letters commonly currently provided by alternative managers.

Level 2 states that "any preferential treatment accorded by an AIFM to one or more

investors shall not result in an overall material disadvantage to other investors". This approach will cause issues to fund managers used to offering preferential terms to investors depending on their investment stake. This goes further than the Directive which allows preferential treatment of investors if this is fully disclosed in the AIF's relevant rules.

3.3.5.4 Leverage

AIFMD defines leverage as any method used by an AIFM that increases the exposure of an AIF, whether through borrowing of cash or securities or embedded in derivatives or by any other means.

Regulators are concerned that the use of leverage by AIFs could increase the build up of systemic risk in the financial system. Therefore leverage is one of the only areas of AIFMD where regulators can impose requirements on the AIFs themselves, in particular limiting the amount of leverage they can use.

There is a wide range of methods used in the industry to increase the exposure of an AIF, including various borrowings, swaps, contracts for differences, options and various repurchase and securities lending and borrowing activities. For each managed AIF, the AIFM will need to consider all methods used to determine a maximum level of leverage to be employed and establish reasonable leverage limits. Processes and controls will need to be implemented to ensure established leverage limits are complied with at all times.

AIFMD and Level 2 dictate the methods for calculating leverage that AIFMs must use: the gross method and the commitment method. Level 2 states that AIFMs must use both methods. Many in industry believe that these methods are too simplistic in their calculations to fully set out an AIF's leverage. An "advanced" method was proposed by ESMA in its technical advice, but the Commission dropped this from its adopted Level 2 text. However, the Commission will review the methods that AIFMs can use by July 2015 to establish whether they are suitable or not.

Gross method. The gross method consists of calculating the absolute value of all positions of an AIF.

This value should include all short and long assets and liabilities, borrowings, derivatives, repurchase and reverse repurchase agreements where the risks and rewards of the assets or liabilities are with the AIF and all other positions that make up the net asset value of the AIF.

All derivative instruments are to be converted into their equivalent underlying positions using a prescribed conversion method (common to both leverage calculation methods). The conversion method aims to provide the equivalent market position of the derivatives' underlying assets.

Any cash and cash equivalent assets held in the base currency of the AIF which provide no return greater than a 3 month high quality government bond should be removed from the gross calculation because such assets are not deemed to increase exposure.

This includes any cash held for collateral by a counterparty.

Any borrowing used to increase exposure should be excluded from the gross method calculation to avoid double counting. Finally, any borrowing entered into by the AIF is excluded if temporary and is fully covered by capital commitments from investors.

Exposure contained in any financial or legal structures involving third parties controlled by the AIF which directly or indirectly increases the exposure at the level of the AIF, should be included in the calculation. The only exemption concerns AIF's whose core investment policy is to acquire control of non-listed companies or issuers, the AIFM shall not include in the calculation of the leverage any exposure that exists at the level of those non-listed companies and issuers provided that the AIF or the AIFM acting on behalf of the AIF does not have to bear potential losses beyond its investment in the respective company or issuer.

Commitment method. The commitment method is very similar to the gross method but allows for some netting and hedging arrangements to reduce the exposure. The exposure of an AIF under the commitment method is calculated as being.

Each derivative instrument (converted into the underlying as per the gross methodology) **minus** any netting and hedging arrangements **plus** exposure created through reinvestment of borrowings (where these increase the exposure of the AIF).

Derivatives can be removed from the calculation if they swap the performance of assets held by the AIF for other reference financial assets or offset the market risk of the swapped assets held in the AIF so the performance of the AIF does not depend on the swapped assets. In these cases the derivatives are removed from the calculation because they reduce the exposure of the AIF.

Netting arrangements in the commitment method allow derivatives that refer to the same underlying asset to be netted, even if they have different maturity dates. Also, derivatives with an underlying asset of a transferable security, money market instrument or units in a collective investment scheme that holds transferable securities or money market instruments can be netted.

The AIFM can recognise a hedge under the commitment method where:

- (i) Positions involved in the hedge do not aim to generate a return;
- (ii) The hedge provides a verifiable reduction of market risk in the AIF;
 - (iii) Risks linked to the derivatives can be offset;
 - (iv) The hedging arrangements relate to the same asset class;
- (v) The hedging arrangements should still be efficient in stressed market conditions.

This method is based on the UCITS method to calculate exposure as described in CESR Guidelines on Risk Management and the Calculation of Global Exposure and Counterparty Risk for UCITS. The argument behind using the commitment method as one measure of leverage is to reduce costs for some AIFMs: those that operate UCITS may already be using the commitment method to measure leverage, so it will be easier for them to use the same method to measure leverage in an AIF.

Limiting and disclosing leverage. AIFMs should be aware of the powers of competent authorities to limit levels of leverage, to avoid potential build up of systemic risk. Whilst there are a number of requirements and notification processes, broadly if a competent authority deems it necessary to ensure the stability and integrity of the financial system, they can impose limits or other appropriate supervisory restrictions on the use of leverage by such AIFM.

The criteria surrounding this power are wide-ranging, and of potential concern to AIFMs. Guidance suggests that leverage resulting in market, liquidity, or counterparty risk to a financial institution, in particular, to any such institution the competent authority deems to be

systemically relevant could warrant intervention, as could the use of leverage where it may contribute to the downward spiral in the prices of financial instruments, or other assets, in a manner which threatens the viability of such financial instruments or other assets.

There are also rules in AIFMD setting the disclosures AIFMs must make about their use of leverage, both to regulators and investors. AIFMs should disclose any material change in the maximum leverage level of an AIF or to the rights of the re-use of collateral and the nature of any guarantees granted. AIFMs should also disclose, on a periodic basis, details of the total leverage employed, and should supplement this disclosure with other information such as the minimum and average levels of leverage employed during the reporting period. Additional disclosures for AIFMs employing leverage on a "substantial basis". Leverage is considered to be substantial when the exposure of the AIF, as calculated according to the commitment method, exceeds 2 times its net asset value.

3.3.5.5 Conclusion

In some instances the general provisions introduced by AIFMD should have little material impact on the way that alternative managers carry out their business. In some cases it will be a case of formalising existing arrangements: in many areas the requirements being introduced are common sense, and should be followed by AIFMs anyway.

However, there are some areas that will cause damage to the existing alternative fund industry, with the new delegation rules being top of the list here. If AIFMs must maintain "a substantial part" of investment management functions in-house then many firms will be carefully considering their options of how to carry on doing business.

Restructuring existing arrangements may be the answer here, though this may cause other problems, such as increased costs and taxes levied on a fund, reducing the returns that investors will receive.

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