Can Regulation Rescue Financial Markets from the Invasion of Hedge Funds?

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ABSTRACT
Following the crisis of Long Term Capital Management (LTCM), concerns about the hedge funds have increased tremendously. Since the LTCM crisis; hedge fund industry has grown impressively, attracted many investors due to the high rate of returns and has begun to act as financial market leaders which also in return increased the concerns. The problems that hedge funds are able to cause, were seen during this crisis and proved that the benefits of hedge funds can easily be reversed and cause a financial disaster. This ability of hedge funds took the attention of regulatory authorities. This paper discusses the costs and benefits of the hedge funds, shows how hard it can be to impose further regulations on the problematic areas and tries to come up with some possible solutions for these problems that threaten the systemic stability.

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1. Introduction

Although there is not any commonly conceded definition of hedge funds in economic literature; hedge fund, according to the US President’s Working Group on Financial Markets (1999), is “any pooled investment vehicle that is privately organized, administered by professional investment managers, and not widely available to the public”. While using different kinds of investment tools like commodity pools and private equity funds; hedge funds use also different investment strategies such as short selling and derivatives. However, we should point out that other registered or unregistered investment companies also use those techniques. The only difference is that hedge funds are almost entirely outside of government regulation and not restricted in their choice of instruments or strategies because of their limited disclosure requirements and reporting obligations.

Some of the most important features of hedge funds are; as long as the investors agree to pay, hedge funds can impose any kind of fee structure including management compensations, they are lightly regulated and generally get funding from financial institutions to lever their portfolios. Furthermore, as Garbaravicius and Dierick (2005, p. 9) discussed, hedge funds differ from each other due to their investment strategies while they have some similar characteristics. There are also funds of hedge funds (FOHFs) which diversify their investment through investing in many hedge funds. By investing in those funds, there is no need to meet the minimum investment requirements or have expertise to invest in a hedge fund. Different than hedge funds, those funds require less payment and offer shorter redemption periods like one month or three months which is appropriate for institutional and retail investors.

There is no doubt that the most popular hedge fund type is “offshore funds” as being organized outside of the United States and keeping half of the industry under control. Some of the offshore centers are Ireland, Luxembourg and Cayman Islands. The main advantage of offshore centers is stemmed from the fact that they are tax havens and there is no restriction on the number of accounts. In addition, by operating on offshore centers, hedge funds aim to protect their non U.S. citizens from U.S. regulation and taxation. Thus, hedge funds are easy exists from many laws and restrictions. With their unique structure, they can offer alternative investment strategies that are different than what mutual and pension funds offer and provide diversification benefits. However, there is only one condition that hedge funds in U.S. have to satisfy; investors should be relatively wealthy, well aware of the possible financial risks and not in need of the legal intervention of the public authorities.
2. History

According to Caldwell (1995, p. 10), the first hedge fund was formed by Albert Wislow Jones in 1949. The main investment strategy of this fund was to buy long on undervalued stocks and sell short on overvalued stocks. By this strategy, by hedging; no matter what direction the market moves, the fund expected to earn money. Another interesting point to consider about this fund is that Jones never withdrew his money from the fund which shows that objectives of the manager and the investors of the fund are aligned. After the April 1966 article in Fortune magazine mentioned that Jones’ fund had greater returns than successful mutual funds, the hedge fund era was born.

By the early 1980s, hedge funds started to invest in global markets which were called “macro” hedge funds. They made bets depending on the degree of volatility in financial markets such as foreign exchange rates, interest rates and stock prices. In May 1986 Institutional Investor published an article about Julian Robertson’s Tiger Fund. Returns to Robertson’s fund were 43% compounded annually over six years, net of expenses and incentive fees (Caldwell and Kirkpatrick, 1995: 11). Different than Jones, Robertson benefited from the use of derivative instruments while investing in financial markets.

Since 1980s, the techniques and investment strategies have become more and more complicated and sophisticated. Today hedge funds can use high leverage for high returns and low risks. Furthermore, large investment banks and financial institutions take similar positions which make it difficult to distinguish one from another.

3. Current Regulation

Hedge funds are not fully subject to the securities laws of the U.S. due to their special status. However, according to the Securities and Exchange Commission (SEC); hedge funds have this special status if and only if investments of hedge funds are not advertised and marketed publicly. In addition, they must have less than 100 investors and those investors have to be wealthy and have sufficient financial sophistication. Whereas Securities Act 1933 puts certain controls and regulations on; prospectus disclosure, registration of fund shares and advertising content of mutual and pension funds. The reason behind all those legal obligations is that unsophisticated investors need to be protected by law.

By the National Securities Markets Improvement Act, 1996, if investors of a fund are only ‘qualified purchasers’, the limit on the number of investors is out of practice. Qualified purchasers are any investor with minimum $5 million in securities, or with $100 million
owning beforehand and invests minimum $100 million or any person that the SEC believes that the protection of mutual fund regulation is not necessary. This act also allows the institutions like pension funds which have a minimum of $25 million in capital to invest in hedge funds. As Hutson and Donabedian (2003) mentioned, hedge funds are not fully free to do whatever they want; they are regulated through four different institutions. In addition, with the Investment Company Institute, 1997, the restriction on the number of investors increased to 499 if each investor has more than US$5 million in assets.

Meeting the criteria above, gives hedge funds the opportunity of exerting any investment strategy without meeting the legal requirements of regulation and transparency. Therefore, unlike other funds, hedge funds are free from the restrictions on leverage ratio, diversification, disclosure, transparency, registration, redemption…etc. In other countries, like UK, hedge funds are not exempt from regulations. However, investors may shift to invest in hedge funds in offshore centers to benefit from tax exemption if the regulations are too restrictive. There is no need to remind that since most of the investors or advisors are onshore, most of the offshore investment vehicles exist in the major financial centers.

Hedge funds or their advisors are not regulated however, they do operate in regulated markets. Hedge funds generally outsource many activities like leverage through big investment banks or other prime brokers who are regulated. Thus, the regulatory authority regulates hedge funds indirectly. In UK, for example, the Financial Services Authority (FSA) or its recent replacement The Financial Conduct Authority, arranges meeting with prime brokers in order to estimate the risks that can affect financial stability.

**4. Who Are The Investors?**

In U.S. and many countries, investors of the hedge funds are wealthy, financially sophisticated and do not need the legal protection. However, legal constraints listed above do not fully prevent average investors to participate in hedge funds.

As Edwards (2004) mentioned; UBS and Standard & Poor’s have a new financial innovation, investment certificates, which require $10,000 as the minimum amount. Performance of S&P Hedge Fund Index depends on 40 hedge funds which are implementing diverse investment strategies. Value therefore the return of the investment certificates changes in accordance with the performance of the index.

According to Bradbery (2004), the report conducted by Pioneer Investments shows that approximately half of UK pension fund managers either invest or plan to invest money in
hedge funds. In the 30 August 2001 issue of *The Economist*, the madness for the hedge funds is summed up:

“…In the first half of [2001], almost twice as much money flowed into them as in the whole of 2000…hedge funds were not so long ago the preserve of a wealthy few. Now everybody wants to get into them, from institutional investors to the ‘mass affluent’: individuals with as little as $10,000 to punt. In Belgium, hedge funds are advertised on television. In America, where such advertising is banned, hedge funds are still keenly marketed in private, in seminars given by stockbrokers and private banks.”

5. Why Are The Hedge Funds So Popular?

Information services like Credit Suisse First Boston (CSFB/Tremont), Barclay Hedge, Hennessee Group, Managed Account Reports (MAR/Hedge) and Van Hedge Fund Advisors provide information about hedge funds and their performance. Although, the overall hedge fund index and S&P 500 index have similar rate of returns, hedge fund returns have relatively smaller standard deviation. Furthermore, IMF reveals that when risk adjusted returns are concerned between the years 1990-1997 except few, almost all hedge funds provide higher returns than S&P 500.

Hedge fund performance data is based on voluntarily reporting, so many hedge funds do not reveal information because of some possible reasons like loses, mergers or bad performance. On the other hand, there are significant difference between the return rates of some hedge funds and S&P 500. The Hennessee Group survey reported that since 1987 not only yearly returns of Hennessee Hedge Fund Index is greater than S&P 500 but also rate of returns have smaller standard deviations as can be seen in Chart 1.

Also, there is a rise in trading volumes of hedge funds in several markets. In addition, in NYSE one-third and one-half of trading activity accounts for hedge funds, where this rate comes up 80% in certain markets as in convertible bonds or distressed debt (Bank of England, 2005). Although there are a lot of academic researches about returns of hedge funds, we are not willing to go into much technical details. (Note that this article is about the logic behind the regulation of hedge funds).
6. Industry Overview

According to BarclayHedge data that can be seen in Chart 2, assets under management (AUM) of hedge funds increased remarkably from an amount of 118 billion USD in 1997 to almost 2.7 trillion USD in the third quarter of 2015. However, those numbers are only estimates due to the fact that hedge funds are not regulated.

![Figure 1: Risk vs. Return of Hennessee hedge fund index and benchmarks (Source: Hennessee Group LLC)](image)

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![Figure 2: Asset Under Management (AUM) of hedge industry (1987-2015) $ billions)](image)

**Figure 2**

Asset Under Management (AUM) of hedge industry (1987-2015) $ billions

Source: Barclay Hedge
Although hedge funds do not have as much capital in assets as mutual and pension funds; by their ability to use excessive leverage through derivatives and ability to borrow more than their capital from commercial and investment banks, hedge funds play an important role in financial markets as much as mutual and pension funds. The LTCM crisis (1998) showed how large the leverage of hedge funds can be. Before the crisis, LTCM had borrowings of up to $120 billion (positions in derivatives are excluded) and investors’ funds of approximately $4 billion (Lowenstein, 2000). However, according to Hennessee Group (2003), 84 percent of hedge funds had leverage less than 200% of capital and only 2 percent used leverage over 500% in 2003.

Contrary to the amount of capital in assets, hedge funds survival rates are lower than mutual funds. According to a study conducted in 2005, a significant proportion of the new hedge funds do not have a lifespan more than five years (Chan et. al., 2005, p. 19).

**7. Possible Benefits of Hedge Funds**

The main advantage of hedge funds is their flexibility while investing in financial markets, as they are able to use high leverage ratios in their positions and easily adapt their portfolio to changing economic conditions. Moreover, hedge funds have the flexibility to change investment styles according to the changes in market conditions. For example, they can change their asset spectrum in the portfolio and pick assets which are sensitive to bull markets but not sensitive to bear markets or vice versa. Note that market timing is an important issue while changing their portfolio or investment style.

Contrary to mutual funds, they have many advantages in investment styles and are not subject to many legal requirements. Therefore, they can use different kinds of investment strategies like, tracking for undervalued or overvalued stocks and arbitrage opportunities. Therefore, hedge funds aiming to exploit and benefit from the price distortions in financial markets, help the financial asset prices move back to their fundamental values faster which indeed, contribute to price discovery. The developing countries especially when they are affected from a global financial crisis or have a liquidity squeeze, need the liquidity injection of such funds vitally. By the help of this liquidity injected by such funds, developing countries or countries that are not financially strong enough, recover the negative effects of the crisis faster.

Hedge funds have a certain impact on the prices and volumes. By taking long-short positions and by injecting certain amounts of liquidity, they disclose private information to the market
and signal that there are some arbitrage opportunities. In addition to hedge funds if the local investors start to invest in those assets, prices come back to fundamental levels much faster rather than the other way around. Some may argue that by tracking the price differences in the markets that are in similar risk level, hedge funds also contribute to the financial market integration.

Moreover, hedge funds assist competition. Many hedge funds try to benefit from mispricing of securities through sophisticated trading strategies with the guidance of their advanced research facilities. Mispricing occurs in a market where economic actors’ access to publicly available information is not only deferred but also problematic. Therefore, derivatives price and underlying stock prices do not reflect each other. As the traders profit from those arbitrage opportunities, they continue to take positions and make trades to earn even more, which in return, leads the market prices to move back to fundamental levels. As a result, there exists a competition between market makers and intermediaries who are chasing for market spreads.

In the end, prices reflect almost true value of the financial assets, there will be lack of arbitrage opportunities and the invisible hand does its job so that the market efficiency will be settled. In other words, hedge funds play an important role in correcting price discrepancies in globally integrated financial markets. As the regulator SEC (2003b) mentioned: “The absence of hedge funds from these markets [of innovative financial instruments] could lead to fewer risk management choices and a higher cost of capital.”

Because of the lack of data, those benefits are not for sure. However, as Van Wincoop (1999) or Davis (2001) discussed:

“…Gains from trade that arises from cross-border trade in purely financial assets, due to different methodologies, vary from 1 and 5 percent of GDP for developed and developing countries respectively, to a multiple of those fractions.”

Furthermore, hedge funds put longer redemption horizons and most of the time; they do not sell into a falling market or buy into an increasing one. Therefore, they may decrease market volatility as they earn from taking counter positions to the market herding. By using different investment strategies like short-selling; hedge funds benefit from any market, no matter what the market trend is. The logic behind the fact that hedge funds happily invest in volatile markets is the same. They see an arbitrage opportunity, track for it and wait until prices come back to true fundamental level. While the economy is recovering and volatility is decreasing,
they gain what they deserve because of their patience to wait long enough and correct estimates of the fundamental price level.

Hedge funds also provide diversification benefits which have varying according to different strategies. As Garbaravicius and Dierick (2005, p. 26) showed, the correlation in different market returns is varied. Contrary to traditional funds, hedge funds are not subject to regulatory authority while choosing their investment styles. Thus, they can offer different types of investment strategies to the investors that are not eligible by other types of funds.

Garbaravicius and Dierick (2005) summed up how hedge funds provide diversification by numbers according to the data available which may be problematic:

“…Based on data from the past 11 years, all correlation coefficients between CSFB/Tremont Hedge Fund family indices and major stock market indices were below 0.61 and even negative in the case of dedicated short bias and managed futures strategies. The case for the inclusion of hedge funds into an investor’s portfolio becomes even more compelling when historical risk-adjusted returns are taken into account… Thus, new combinations in the risk-return space can be achieved with hedge funds, thereby increasing the completeness of financial markets. This should ultimately also result in greater social welfare.”

Moreover, hedge funds provide liquidity to the markets in trouble. Due to the positive developments in data availability and financial technology, financial institutions and investors can use advanced risk management techniques and reach information easily. However, those improvements in technology and information availability cause investors and financial institutions to behave similarly in their investment decisions, which cause market herding of participants more than the past.

In a crisis environment, the similarity in investment behaviors like everybody is selling into a falling market, will increase the negative impacts of the crisis and make them more severe. Due to the fact that information is available to everybody and that’s why market participants respond to the market conditions in the same manner, fire sales will take place and reduce market liquidity when it is needed most. The reason behind this liquidation of their risky positions is the regulatory constraints of financial institutions and intermediaries. As hedge fund investment strategies are not subject to any regulatory authority, they can take counter positions to fire sales, provide liquidity to the market and reduce volatility.

Hedge funds make their bets depending on their sophisticated financial technology and expertise on the fundamental values of the asset prices. In an environment where fire sales
take place, it is not a surprise that probability of arbitrage opportunities increases. Hedge funds will track this opportunity and invest in those markets which need liquidity urgently. Injection of the necessary amount of liquidity will lower the fire sales and volatility, and speed up the recovery of the market so that financial stability can take place. By lowering fire sales, not only investors of hedge funds but also the market participants also benefit. During the period of recovery, the prices will come back to fundamental levels and individual investors will also gain.

8. Why Should The Hedge Funds Be Regulated?

Hedge funds need to choose their investors according to some restrictions about their customers such as wealthy and financially sophisticated ones to be able to be exempt from certain regulations. With the recent financial innovations and developments, investor profile of hedge funds consists of some small and not sophisticated investors. This increasing demand of small investors brings out the concerns about the necessary regulation of hedge funds as they do not satisfy the constraints about investors anymore. Although the proportion invested in hedge funds is too small compared to overall funds market, the concerning and significant point is that small retail investors do not know much about what they buy and not claim any legal protection. Thus, the investor constraint is no more valid due to the financial innovations that can be purchased with $10,000 and marketed in seminars by stockbrokers and private banks secretly.

In case of pension funds, there are certain legal requirements like periodic reporting and trustee duties for understanding their investments. Moreover, pension funds have relatively long investment horizons; therefore, they may not be sensitive to short-term fluctuations which, in hedge funds case, increase concerns about their investments.

Another concern is about the “qualified” investors who are eligible to invest in hedge funds by law. The problem originates from the fact that even “qualified” investors may not have enough financial sophistication to understand complex investment styles of hedge funds. Moreover, hedge funds are not obliged to meet the disclosure requirements that other funds are subject to and managers do not really like to provide the information about their positions. The reason is simple, to hide their investment strategies and gain more by avoiding hedge fund market herding. Even though they provide information disclosure and abandon non-transparent structure, there may only be a small number of investors who will understand those complex positions. During the LTCM crisis, there were thousands of trading positions,
some of which were complex positions taken in derivatives market. Thus, even for “qualified” investors, more regulations should be applied to hedge funds because of question mark about the financial sophistication of them.

Hedge funds need to interact with regulated financial institutions to operate in financial markets. The financial services that hedge funds benefit can be listed as; trading and execution, securities lending, financing through margin loans and repurchase agreements,. As Beales and Chung (2006, p. 7) discussed:

“Revenues for prime brokerage services alone accounted for about $8 billion in 2005, with total hedge-fund-related business revenue estimated at $26 billion, about 2 percent of the funds’ total assets under management.”

The most important interaction which causes the counterparty credit risk is that financial intermediaries provide credits to hedge funds. Regulated financial institutions use the traditional Counterparty Credit Risk Management (CCRM) systems that require certain amount of collateral depending on the risk exposure, because these institutions provide credits and derivative contracts to the hedge funds. With the help of financial intermediaries and other financial institutions, hedge funds on the one hand, can leverage their positions however on the other hand, cause these institutions to be more exposed to certain risks due to the default or the liquidity squeeze of the hedge fund.

Financial market stability has a “public good” nature and because of this nature free-rider problem occurs in terms of CCRM. While supplying credits to a hedge fund which has credit lines with other banks and financial institutions, banks may not make the necessary calculations about the risk exposure therefore, cannot keep the excessive risk-taking of the hedge fund under control. As a result, financial intermediaries will escape from the monitoring costs and enjoy the benefits of CCRM.

Besides, none of the creditors can evaluate overall leverage level of a hedge fund and its exposure to risk due to the non-transparent structure of hedge funds, even if they intend to monitor and calculate their risk exposures. The reason behind this problem is that hedge funds interact with many dealers and therefore cause counterparty risks for creditors. The problem originates from the asymmetric information. While the hedge fund knows how much risk it takes, creditors cannot learn much about it. Thus, hedge fund manager may intend to take excessive risks. Therefore, a legal authority should intervene due to the fact that CCRM
cannot work efficiently and provide sufficient information about the risk exposure. The concerns about financial stability will be worsened as the liquidity risk takes place.

Hedge funds can also cause systemic risk. As Kambhu, Schuermann and Stiroh (2007, p. 7) discussed:

“If systemic risk is fundamentally about financial market linkages to the real economy, then hedge funds create systemic risk to the extent that they can disrupt the ability of financial intermediaries or financial markets to efficiently provide credit.”

The losses due to a negative price shock on highly leveraged positions will trigger liquidity shortages of hedge funds. The situation will get worse due to the mass exists from the market and the asset illiquidity in stressed markets. Mass exists can take place in the markets where hedge funds other large financial institutions take the similar positions. If a hedge fund does not have enough liquidity reserves or borrowing capacity, it can default because of not meeting its obligations to financial institutions. Therefore, hedge funds will start to liquidate their positions in the falling market and even liquidate their positions in other markets. By doing so, the price shock is transferred to other markets due to the need for liquidity. Moreover, investor withdrawals may come into the picture due to the inverse price shock and they may try to get rid of the assets that they are holding to meet the margin calls and also may sell to a falling market. In an environment where the losses are high enough, hedge funds cannot provide enough liquidity by selling into a falling market which will cause the prices to fall even faster.

Note that taking collaterals in return of financing the credits and derivative contracts provided to hedge funds by financial institutions does not mean much if banks have large amount of capital exposed to risk. An inverse reduction in asset prices can easily decrease the collateral value while increasing the risk exposure of banks. Therefore, if a significant portion of banks capital is exposed to risk, banks will cut the loans to positive net present value projects (NPV) due to the change in risk perception. This will affect the real economy negatively and in return, will decrease the profits of financial market. This chain reaction will increase the impact of the initial shock and hence increase the systemic risk.

Therefore, banks and other financial intermediaries have to be more than careful if they risk large amounts of their capital by financing and lending to the hedge funds. They should adjust the tradeoff between the return and the risk of financing hedge funds. In addition, financial intermediaries should reduce the risk exposure relative to current capital levels.
That’s why banks should diversify their credit portfolio instead of chasing for the profit that hedge funds provide through financial transactions.

As Garbaravicius and Dierick (2005, p. 28) discussed, hedge funds can affect financial stability through three channels:

“…First, the failure of a large individual or a group of hedge funds could lead to far-reaching repercussions for exposed banks and financial markets. Second, the serious mismanagement of exposures to hedge funds at an individual bank or banks might lead to a systemic crisis via contagion effects. Third, instability could be initiated through the impact of hedge fund activities on financial markets. A triggering event could be associated with any of these channels and instability could be further escalated by the vicious cycle of reinforcing ripple effects on other channels.”

The liquidity provider role of the hedge funds is one of the few benefits of them. The discussion of Chan (2006) is illustrative: “Recent reports, however, suggest that hedge funds are moving increasingly into less liquid markets, with structured credit and distressed debt at the top of the list.”

The combination of leverage, illiquid markets and short-term financing does lead to liquidity risk for hedge funds. To escape from this risk, hedge funds increase the redemption periods. Thus, investors can not withdraw their money easily and managers of the fund have the necessary time to cope with the inverse situation instead of worrying about the withdrawals (European Central Bank 2006; Mercer Oliver Wyman 2006). Nonetheless, liquidity risk has a potential impact on market dynamics. As mentioned above, there will be a chain reaction due to selling in a falling market which will decrease the prices more and increase volatility. Even greater margin calls will take place and financial stability will be affected larger than the initial shock. Thus, the leverage ratio of hedge funds matter in the end as these positions can easily cause the hedge funds to be exposed to liquidity risk. Therefore, the tradeoff between liquidity risk and return due to the leverage ratio must be optimal. Otherwise, the liquidity providers, hedge funds, will find themselves in a position where they need the liquidity urgently and moreover disrupt the financial stability, market efficiency and increase volatility while tracking arbitrage opportunities. Therefore, the factors listed as benefits of hedge funds will become the problems that have significant effects on financial stability because of the hedge funds.
Hedge funds, contrary to other regulated financial institutions, are not limited in terms of the leverage ratio which will increase the probability of defaults and have potential in causing financial instability. As the President’s Working Group on Financial Markets (1999) and others concluded, excessive leverage as the key issue driving systemic concerns associated with hedge funds. LTCM is a good example of the leverage problem. Long Term Capital's net worth from almost $4.8 billion in January is chopped off with the losses and decreased to just $600 million. However, according to Hennessee Group (2003); majority of the hedge funds (84 percent) uses leverage ratio of 200 percent and only two percent of hedge funds uses 500 percent.

One of the problems occurred because of asymmetric information is moral hazard. Hedge fund managers aim to maximize the returns to fund investors due to the total-return-based compensation structure. The base fee is 2 percent of the net asset value of the fund and incentive fee is 20 percent of the profits. Because the biggest part of the manager income is incentive fee, the success of the hedge fund and the amount of the profit is very important. Therefore, managers can take tail-risks aiming to maximize profits and their incentive fees. Rajan (2005) discussed that those risks “are ‘tail’ risks—that is, risks that have a small probability of generating severe adverse consequences and, in exchange, offer generous compensation the rest of the time.”

As hedge funds are lightly regulated, it is easy to hide those risks. In addition, because of the fee structure which rewards managers when profits increase but does not punish them heavily when they lose money; hedge fund managers have incentives for risk-taking and leverage. Note that, information about manager’s investment strategies is generally known only to the largest and most sophisticated investors. Moreover, managers or traders of a default hedge fund, or managers who are fired because of trading losses can find jobs in the sector as it is very difficult to separate the talented ones from the others in other words; problem consists of using beta measures while evaluating the managers’ performance. Different than the alpha, beta is the measure of systematic risk factors which affects a large part of the market. As Naik and Tapley (2007, p. 70) discussed:

“…No investor wants to pay handsomely for a fund to perform simply in alignment with the rest of the market. And that’s why beta measures should, in general, be taken out of the assessment of how well a fund manager performs – especially when it comes to assessing hedge funds. Clients increasingly want to pay fees only for true alpha, the measure of performance tied to the special, perhaps unique, skills of the hedge fund manager.”
This excessive risk-taking behavior of fund managers can be prevented when you, as a manager, also put your money where your mouth is. Therefore, the benefits of investors and managers are aligned. Moral hazard problem also originates from the financial institutions who provide loans and derivative contracts to the hedge funds. As the government provides guarantees to the creditors of certain commercial banks, these financial institutions may not always have the incentives to monitor the actions of hedge funds which have high profit ratios and experience high growth. These attractive properties of hedge funds also provide profits to the banks due to the increased number of transactions and fees charged for those transactions.

Thus, banks will enjoy the income that comes from hedge funds. When there is increased competition between intermediaries, those profits mean more than ever in an environment where high competition decreases profits. Even if hedge funds default, banks know that they have many customers that government will not let them go bankrupt which can sometimes be the “too-big-to-fail” policy of large financial institutions which can be seen in the recent global financial crisis of 2008. Therefore, there can be a moral hazard problem for large financial institutions. As the regulatory authority knows the important role of those financial institutions and intermediaries for the financial system, it cannot let them fail which can cause a financial crisis and affect real economy. However, this problem is always valid even if hedge funds are not the topic.

Ability of market manipulation is another concern about the hedge funds. A hedge fund manager can force a specific asset or group of assets price to increase through a highly leveraged purchase of them, and the financial institutions and investors who make the technical analysis will be attracted. As they buy those assets, prices will go up further and attracts more investors. Another way is informing the market about the purchase so that they signal that there is an arbitrage opportunity. In both cases the prices do not reflect the fundamental values because of the manipulation of the market by pushing the prices and hedge funds will enjoy the profit by selling at higher prices.

Similarly, hedge funds have been buying crude oil future contracts which opened the gates to speculation therefore price volatility which in return leads prices to be far away from reflecting the fundamental values. In addition, hedge funds take positions also in London Metals Exchange (LME). European Exchange Rate Mechanism (ERM) crisis in 1992 is another example of how influential hedge funds can be. This crisis showed that hedge funds have the enough power to change prices regardless of the fact that whether the British pound,
oil prices or anything that is traded in the markets, reflected the fundamental values or not. However, proving the manipulation is difficult due to non-transparent structure of hedge funds.

LTCM crisis showed that all of the possible negative effects can happen. With the net worth of $4.8 billion, hedge fund industry did leverage almost an amount of $1.3 trillion in nominal investment positions. With the LTCM, hedge funds showed that they are also providers of “economic disaster insurance”. Hutson and Donabedian (2003) summed up the problem as:

“…Across all of LTCM’s positions, in a ‘portfolio’ of investments that was on the face of it diversified, there was one common feature. LTCM was ‘short volatility.’ Many of its largest positions – across swap, bond and equity markets – were highly exposed to a rise in financial market volatility...[and]... When the Russian debt default triggered uncertainty in financial markets, the persistently high volatility that resulted wiped out most of LTCM’s $5 billion in capital. Its ‘short volatility’ positions were in effect insuring their counterparties against the ‘economic disaster’ of a substantial increase in volatility.”

The reason is the computer models that hedge funds are using to track the arbitrage opportunities globally. As the probability of a disaster is so small which can be neglected like the example of the plane Boeing 747 which made domestic flights in Japan. In 1985, this plane crashed to the land due to the microscopic cracks on the main body that can only be seen by x-rays. The probability of the crash was so little that there is even no need to worry. However this small probability event happened and the result was a certain disaster. The same situation is valid for the positions of hedge funds. Even though there is too little probability of default and until this small probability causes a disaster, the profits are tempting for market players. In addition to small probability, hedge funds or like in the plane example, the owner of the plane would not care of it if there has been any similar event. Therefore, the objective probability analysis fails to be valid in these situations. The subjective Bayesian probability analysis will come into the picture for the regulatory authority while assessing the systemic risk. The consequences of the LTCM and the airplane crash in Japan did prove this argument. The computer models neglected the probability of the adverse severe consequences due to the objective analysis and also due to the fact that there have been no similar situations which these models could take as a reference point. Therefore, those computer models do not calculate the risk of a disaster while calculating standard deviation; which is delusive for the investors of the hedge funds that track the arbitrage opportunities.
9. Conclusion

The collapse of the LTCM revealed the negative facts about the hedge funds that many investors were not aware of or did not want to discover. The dedication of the FED to solve this crisis was impressive however, the way how hedge funds came to this point of default was also very concerning. Therefore, many studies were conducted about how to overcome those problems and avoid a similar situation. In this paper, the possible costs and benefits are mentioned but is it so easy to regulate hedge funds about the costs that they may cause?

First of all, criticisms are about the level of the collaterals. President’s Working Group recommended regulators to increase the collateral levels and capital requirements for the banks and financial institutions that provide funding to hedge funds or do transactions on behalf of them. However, the real problem is how much of that collateral or capital will be eroded after a crisis occurs. Of course, increasing the level of collateral and capital requirements will help. Yet applying regulations like activity restrictions, required capital, or leverage restrictions will have some drawbacks. As Kambhu, Schuermann and Stiroh (2007, p. 14) discussed:

“…Activity restrictions that dramatically limit trading strategies such as short-selling or the use of derivative investments, for example, would likely diminish the beneficial effect of hedge funds on market liquidity and price discovery, thereby reducing the benefits along with the costs. Required capital ratios would be difficult to set optimally and would likely lead to increased regulatory arbitrage. Outright regulation might be expected to increase moral hazard if it increases the appearance of regulatory approval or simply the shift of activity to a less regulated jurisdiction. With a heavy regulatory hand, there is a risk of hedge funds moving totally off-shore; regulators might go from seeing little to seeing nothing.”

Moreover, regulating the hedge funds like other mutual and pension funds seems to be necessary due to the small investors but there are certain difficulties. As Hutson and Donabedian (2003) described the problems:

“…Many hedge fund investment strategies require considerable expertise. Even if regulators had a good understanding of the techniques, it is doubtful that they would be able to prevent loss or failure. After all, the Nobel laureates running LTCM (Robert Merton and Myron Scholes) did not see their own crisis coming! In addition, it would be easy for hedge fund managers to play the regulatory arbitrage game; new regulations can often be skirted by moving to a location with a more favorable regulatory environment.”
All in all, there seems to be two possible ways in order to regulate hedge funds. The first way is to regulate the hedge funds globally by imposing necessary requirements like semi-annual reporting and disclosure of the risk exposure of the portfolio. The second way is to increase the regulations on the financial intermediaries and institutions that provide funding, leverage and derivative contracts to hedge funds. The important point is managing the two ways of regulating hedge funds together. Otherwise, hedge funds will easily find an exit to escape from one of these regulations. Any regulation on the supply side of the hedge funds is necessary because of the small probability adverse effect of financial crisis on the economy. Regulatory authority cannot behave in an objective way because every crisis is unique and there is not a reference point for it. Therefore, subjective Bayesian probability approach should be taken into account.

However, while regulating hedge funds or the suppliers of them, there are things to do. First of all, all financial institutions, including financial intermediaries, hedge funds and other funds, which are important economic actors of the financial markets should be obliged to one regulatory authority like in England. In other words, there should be only one authority regulating the all participants of the financial market.

Furthermore, these regulatory authorities should share available data and information with the institutions in the financial markets and their colleagues in other countries, about the hedge funds to be able to understand the hedge fund industry as well as the possible risks associated with their investment styles. They should work together and try to improve the necessary regulations and also take the necessary steps together not to leave an open door for hedge funds. By this way, regulatory authority will be well aware of the risk exposures, understand the risks well and will have the enough financial sophistication to take the necessary steps to avoid a possible disaster.

However, regulating hedge funds globally, in other words a globally consistent regulation is a little bit problematic because of the emerging markets where growth needs to be funded. They need any kind of financing instrument that will boost their economic growth due to the positive effects of financial market developments on real economy. Therefore, hedge funds will always find safe offshore financial centers and tax havens. Moreover, informative seminars about the hedge fund industry could be beneficial for the regulators and investors. Meetings between investment community and regulators should be assigned to understand the recent developments about the hedge funds, possible risks and necessary steps that can be taken into account to protect the financial stability.
All in all, financial stability is a “public good” and every participant benefits from it. Regulatory authority and economic actors must inform each other about the possible risks that is concerning and take the necessary precautions unanimously. In the end, increased knowledge about hedge funds will give rise to the demand of investors for information disclosure, increase the incentive to monitor hedge funds and avoid excess risk-taking behaviors. As Fung and Hsieh (2006) summed up:

“…That, the identification of systemic risk factors inherent in hedge fund strategies. We believe that this identification is the key input to important questions such as optimal contract design between buyers and sellers of hedge fund products. These questions in turn have important implications for risk monitoring of hedge funds by financial intermediaries as well as regulators. In addition, understanding these risk factors helps to clarify seemingly complex and chaotic changes in the hedge fund industry…To this end, better transparency will help investors reshape their portfolios away from excessive exposure to factor bets.”

References


