Lars Nyberg: Are hedge funds dangerous?

Speech by Mr Lars Nyberg, Deputy Governor of the Sveriges Riksbank, at a meeting at Nordea and the CFA Society of Sweden, Stockholm, 24 November 2006.

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I shall begin by thanking you for the invitation to come here to Nordea and the CFA Society of Sweden to develop some thoughts on the usefulness and risks with hedge funds. After several years of strong growth, hedge funds are a hot topic among market agents and authorities. Although hedge funds' percentage of the total capital managed is small, around five per cent, they account for a large part of the liquidity on certain markets. Many people express concern as to what effects hedge funds might have on financial stability and after the much-publicised collapse of the US hedge fund Amaranth in the autumn, the debate on regulation has gained new impetus.

As you may perhaps know, Amaranth primarily traded various gas and energy derivatives. After summer 2005, Amaranth held gigantic positions in the gas market – they believed in a price increase. Between August and October 2005 the price of natural gas rose by 50 per cent, partly as a result of the severe hurricanes. The fund earned substantial amounts of money and the fund managers were also expecting this autumn to see high energy prices during the winter. They bought futures for November and March and sold (sold short) contracts for October and April. However, this year did not develop as expected. During the period from August to mid-September the price of natural gas fell by 40 per cent and in a couple of weeks Amaranth lost USD 6 billion, which corresponded to two thirds of its capital. Despite the size of the amount, the market effects were largely non-existent and there was never any concern in terms of financial stability. The private sector also managed to settle its positions without any intervention from the responsible authorities. Does this mean that the concern over hedge funds is exaggerated? Or is increased regulation necessary? Before I discuss these questions, however, I would like to take a brief look back at the development of hedge funds in recent years.[1]

A look back

Hedge funds are a relatively new phenomenon in the Swedish market. However, the first hedge fund was established in the United States 60 years ago. At the end of the 1940s, US journalist Alfred Winslow Jones bought shares he considered to be under-valued and sold short shares he considered over-valued. His idea was that the price of under-valued shares should rise relatively more on a rising market and the price of over-valued shares should fall relatively more on a falling market. If the fund managers made a reasonable selection, this meant that the fund would earn money regardless of whether the market rose or fell – in other words the fund was protected, or hedged, against systematic market risk.

In other words, the initial idea of hedge funds was to take positions based on the price relationships between securities, while limiting or eliminating market risk. Many people still connect the concept of a hedge fund with this strategy, but today this so-called market-neutral strategy is only one of many. Moreover, the concept hedge fund is misleading, as many of the funds do not hedge, but take large net positions.

A common factor for hedge funds is that they have absolute earnings targets - rather than relating earnings to a benchmark index. They are also subject to much fewer restrictions concerning investment strategies than traditional funds. In addition to buying securities, the hedge funds can go short, that is to say, they can sell securities they do not own. Moreover, they can use pledges or derivatives to increase or decrease the risk in their fund management. Investments in hedge funds are often tied over a long period of time, which means that the fund can take on fairly illiquid positions. The charges are performance-based, which gives the fund managers a clear incentive to strive for good earnings. It is also common that fund managers themselves invest substantial amounts in their own hedge fund.

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1 For a more detailed review of hedge funds, see the article in the Riksbank's Financial Stability Report 2006:1.

However, hedge funds are far from a homogeneous group. One may roughly distinguish three overall investment strategies: market-neutral, directional and event-driven. Market-neutral strategies attempt, as I mentioned earlier, to exploit differences in the valuation of various securities, while trying to protect themselves against overall market risk. Directional strategies entail finding macroeconomic trends and trying to predict future market movements. Event-driven strategies aim to identify securities whose prices will be affected by specific corporate events, such as acquisitions, mergers and bankruptcies. Neither of the latter two investment strategies is thus hedged in Jones' original sense. Many hedge funds describe themselves as "multi-strategy" – they combine different strategies over time to achieve the highest possible earnings. This also applied to Amaranth, but the fact was that half of the fund's assets were invested in forward contracts for natural gas. Many hedge funds also use complex trade strategies, where they try to find discrepancies between different derivative prices or maturities and their theoretical values. The well-known hedge fund Long Term Capital Management (LTCM), which crashed in 1998, was this type of fund.

Developments internationally and in Sweden

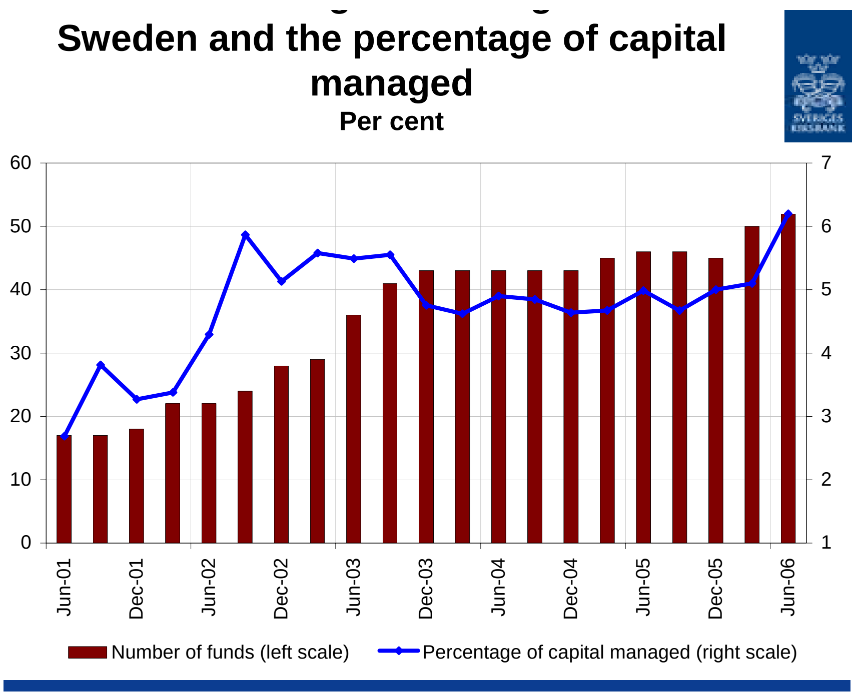
Over the past ten years, hedge funds have grown considerably, both in terms of number and the amount of capital managed. Internationally, the capital managed has grown by almost 30 per cent a year since 1998. Today the hedge funds manage approximately USD 1,000 billion, corresponding to around 5 per cent of the total capital managed internationally, divided between 8,000 funds. Most hedge funds are relatively small, most have fewer than SEK 800 million in managed capital and almost half of them have less than SEK 200 million. However, there are exceptions. LTCM – which was gigantic – had at most a capital of around SEK 70 billion. This can be compared, for instance, with the state pension funds in Sweden, which each manage capital amounting to around SEK 150 million.

The hedge fund market has also developed rapidly in Sweden. Brummer & Partners were first in Sweden, with their hedge fund Zenit, in summer 1996.Nektar, which operates in the fixed income and foreign exchange market, and originally followed Jones' ideas completely, came soon after. Since then around 60 more funds have been established and the capital managed has gradually increased. Today, hedge funds account for a good six per cent of the total capital managed in Swedish-registered funds. This percentage has more than doubled over the past ten years and now corresponds to just over SEK 85 billion.[2] The size of the Swedish hedge funds varies substantially. The largest Swedish hedge fund had at the end of June 2005 a market value of a good SEK 26 billion, which is a considerable sum even in an international perspective. The smallest fund at the same time had a negative market value of SEK 5 million. The median fund had a market value of around SEK 225 million. [Figure 1]

The hedge funds' earnings over the past ten years may not appear that fantastic at first glance. One of the largest hedge fund indices, Credit Suisse/Tremont has over the past twelve years had an average increase in value of around 8 per cent, similar to the S&P 500. However, if one takes into account the low risk in most hedge funds, the picture is entirely different. For instance, the Swedish hedge fund index shows a much lower volatility than the general index. [Figure 2 and 3]

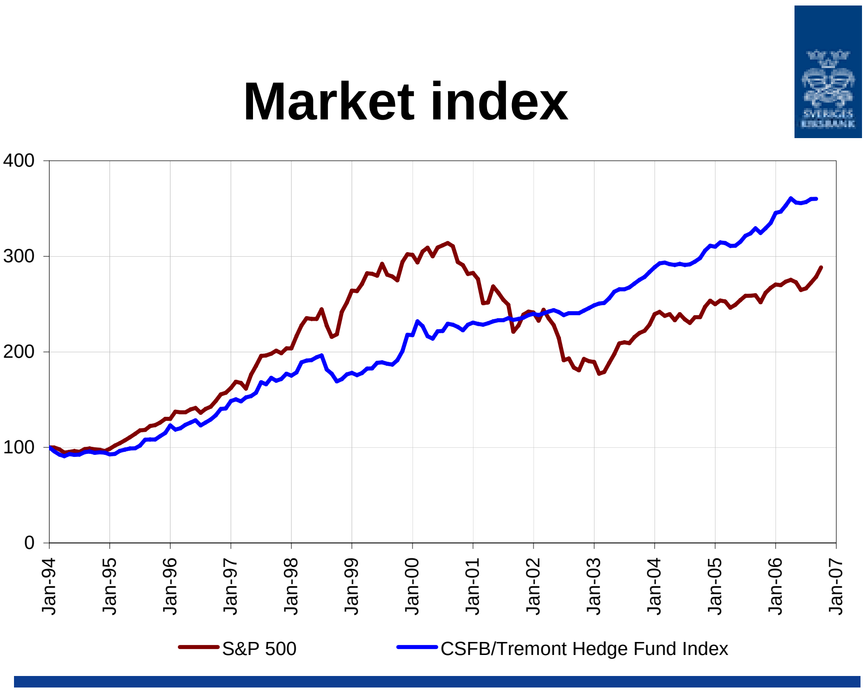
2 The data on Swedish hedge funds is taken from the Swedish Investment Fund Association.

Figure 1



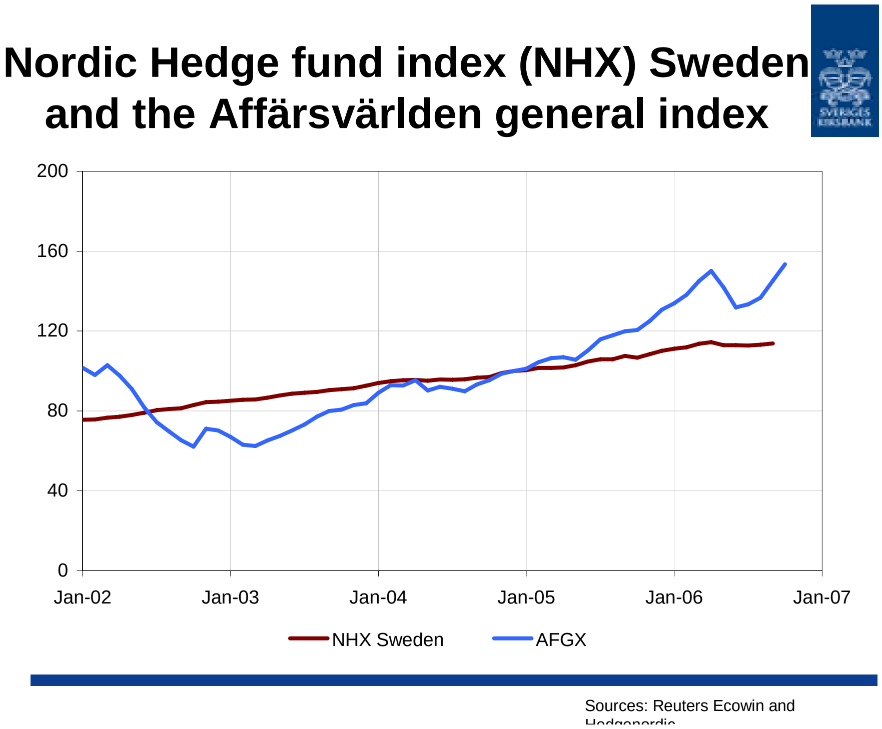
Source: Fondbolagens förening

Figure 2



Source: Reuters Ecowin

Figure 3



Initially, the investors consisted almost exclusively of wealthy individuals. Gradually, institutional investors such as pension funds, foundations and insurance companies have also begun to invest in hedge funds. Some time back the market also opened up to small-scale savers, as a number of hedge funds now have lower minimum requirements for the capital invested. In addition, a large part of the capital inflow today is through funds that invest in other hedge funds, known as Funds of Hedge Funds (FOHFs), which also allow relatively low investment amounts. These funds also entail an advantage in that the investor does not need to have specific knowledge of each individual fund. On the other hand, the investment is more expensive as these funds generally take out an additional fee on top of the hedge funds' own fees.

What, then has driven and is driving the explosive development in hedge funds? One important explanation is, of course, that the hedge funds, as I recently described, have become more accessible to a wider circle of investors. Hedge funds have a number of positive characteristics, one of the most important being that they help the investors to diversify their portfolios. By supplementing an existing investment portfolio with a hedge fund, the investor can both reduce risk and increase earnings, which may appear as a contradiction. However, the reason is the hedge funds' low correlation to traditional asset types such as shares and debt securities. With the aid of hedge funds, the investor can both protect his/her portfolio during downswings and dampen the effects of a fluctuating market. The heavy stock market decline immediately after the turn of the millennium gave hedge funds an additional boost, as many people were looking for alternative forms of investment. In recent years, long-term interest rates have gradually fallen to historically low levels, which has led to a search for yield, investors seeking new asset types, which initially also benefited the hedge funds.

Hedge funds and the financial markets

Hedge funds fulfil several valuable functions in the financial markets; they provide liquidity, they improve pricing and they increase transparency. The fact that hedge funds contribute to better liquidity is particularly noticeable in new and more complex markets, such as the market for credit derivatives, where the hedge funds currently account for an estimated 25 per cent of the activity among primary dealers. The hedge funds that have specialised in identifying mispriced assets – that is, classic arbitrage – often contribute to more correct market pricing, which in turn leads to a more efficient allocation of resources and better risk management. This is an important contribution to the efficiency of the financial markets.

However, as I observed at the beginning of my speech, the rapid growth in hedge funds has created an international debate on the risks entailed in their operations and potential negative effects on the financial system. There is concern both for the role of the hedge funds as counterparties to other agents and for the hedge funds' own activities. With regard to counterparty risks, these mainly concern the banks' exposures to hedge funds and indirect risks through contagion effects in the markets. Large and complex positions in certain markets may make the contagion risks difficult to distinguish.

With regard to the hedge funds' own activities, the concerns are based on three beliefs:

- Hedge funds' activities are opaque.
- Hedge funds borrow substantially.
- Hedge funds are speculative and prone to herd behaviour.

Let me comment on these points one by one. It is true that in most countries hedge funds' activities are less than transparent (although not in Sweden). The authorities in many countries have little or no information about the funds' activities or the persons active in them. This applies in particular to funds that are located off-shore, such as in Bermuda or the Cayman Islands. This creates not only a risk that risk concentrations build up, but also facilitate illegal activities. The number of cases where hedge funds are suspected of being involved in various forms of fraud has grown dramatically in the United States in recent years. My opinion on this point is clear: Hedge funds should of course be subjected to the same disclosure requirements as other financial institutions.

The second source of concern concerns indebtedness. Unlike more regulated institutions, hedge funds can in principle have unlimited leverage. This may be worrying from a stability perspective. A high level of indebtedness naturally increases both the probability of and the effects of a failure. The debt/equity ratio varies, but the fact is that most hedge funds are not heavily leveraged. To get a rough idea of the indebtedness of a fund one may simply divide the fund's market value by its equity. Calculations show that for the most indebted Swedish hedge fund this measure is 320 per cent, compared with a median of 80 per cent. An international study from 2003 shows that the debt/equity ratio was less than 200 per cent in more than 80 per cent of the funds examined. These are modest levels in comparison with financial institutions. For example, the major Swedish banks have a debt/equity ratio of 2,300 per cent on average.

Thirdly, hedge funds are often accused of engaging in herd behaviour, that is, of imitating one another's behaviour and taking similar positions. This type of strategy risks reinforcing market fluctuations and having a destabilising effect. This applies in particular to macro funds, which take positions and investment decisions on the basis of an expectation of macroeconomic developments. For example, it is often claimed that hedge funds were involved in and reinforced the effects of the ERM crises. The evidence is not clear-cut. I believe that it is difficult to claim that hedge funds follow the prevailing trend to a greater extent than other investors. Traditional investors often have limits that force them to sell when there is a sharp fall in the price of an asset. This could in turn lead to a self-reinforcing spiral. The absolute, rather than relative, required rate of return on hedge funds should reduce the incentives for herd behaviour. On the other hand, it is true that the hedge funds are very quick to take advantage of mispricing and imbalances in companies' finances or countries' economies, such as an unsustainable exchange rate – but this is of course difficult to be critical of.

When we discuss the effects of hedge funds on the financial markets, I believe it may be useful to compare the crisis at Amaranth, which I described in the beginning, with the crisis at LTCM. The effects on the financial markets were very different. Despite the fact that Amaranth's losses were much greater than those of LTCM, no authority needed to intervene; Amaranth was able to close its positions of its own accord and in a smooth manner. The large positions were sold (at a substantial discount, one assumes) to JP Morgan and Citadel, another large hedge fund. The situation with LTCM was quite different. A number of events during 1998 (including the Russian debt crisis) had created considerable unease in the financial markets and LTCM had entirely the wrong positions for such a development. When the investors' assets had fallen from USD 5 billion to USD 1.5 billion in the space of six months, the US central bank intervened. The size of the fund, combined with the fact that so many financial agents were involved, meant that the Federal Reserve saw a threat to financial stability. To avoid an uncontrolled collapse, the Fed called together a group of LTCM's largest creditors, who took over the fund's positions.

One important difference between the two hedge funds was how much they had borrowed in relation to their capital. The debt/equity ratio at LTCM was between 25 and 30, while that at Amaranth was around 5. A further problem for LTCM was that the fund was partly involved in very complex positions on the derivatives market that were difficult to close. Many other funds and banks held the same types of positions. Amaranth, on the other hand, was largely alone in its part of the market – most others had no positions, or contrary positions, in energy derivatives. This made settlement easier, if not cheaper. A further explanation is probably that Amaranth's losses occurred under very favourable economic and financial circumstances, where the market had good access to capital. This was far from the case when LTCM tried to settle its positions in the midst of the Russia crisis. Under more strained conditions, perhaps the sequence of events for Amaranth would have been entirely different and the risks to the financial system much greater.

However, the fact that the financial system could manage the problems in Amaranth may also imply that it has become more resilient. The markets have demonstrated that they can manage a number of major strains in recent years, both macroeconomic shocks and unexpected market events, without any tangible effect on their functioning. The banks' management of risk and their collateral requirements do appear to be stricter than they were in 1998. We will return to a further discussion of the resilience of the financial system when the Riksbank's Financial Stability Report is published at the beginning of December.

Does the hedge fund market require further regulation?

As the hedge funds have grown, voices have been raised calling for more extensive regulation of the funds' operations. Ordinary investment funds are regulated by the UCITS directive. UCITS regulates, for instance, the type of assets a fund is allowed to invest in, the information that should be given to investors, and the diversification of risks.[3] Hedge funds, on the other hand, are completely unregulated in many countries. In return, the authorities often require that investments in hedge funds should exceed a certain minimum level.[4] The purpose of this requirement is to limit the hedge funds' investor circle to wealthy and, presumably, well-informed individuals and thereby to protect "ordinary" consumers. Most hedge funds are constructed so that the investor, under unfortunate circumstances, may lose all or at least large parts of his capital.

In the United States the Securities and Exchange Commission has long attempted to increase transparency in hedge funds. In February this year they introduced a new regulation that entails a registration requirement for most large hedge funds – even those invested off-shore. However, this regulation was declared invalid by a Federal court in June.

In Sweden, hedge funds are obliged to register with Finansinspektionen, the Swedish Financial Supervisory Authority, and to regularly report any measures that describe the risks in the fund, such as value-at-risk measures or measures of liquidity risk and indebtedness. The main rule is that the fund's resources, as in the case of securities funds, should be invested according to the principle regarding risk diversification. Given this, it has not been considered necessary to set a minimum requirement for investment. Previously, Swedish hedge funds were obliged to report all of their holdings to Finansinspektionen, but this was not considered particularly meaningful.

There are two main arguments for regulating hedge funds' operations. The first is based on protecting the consumers from funds that take excessive risks. Amaranth's gigantic losses affected several pension funds, for instance. However, in my opinion, this type of argument is rather strange. If one wants to protect pension savers' investments, one should limit the pension funds' investment opportunities, not the hedge funds' operations.

The second argument is linked to financial stability and the increasing role played by hedge funds. If a large number of funds were to fail and at the same time be highly indebted, there is a risk that the financial markets would be affected. However, this scarcely constitutes a reason for limiting the hedge funds' investment freedom or for introducing some form of capital adequacy requirement. As I see it,

[3] See "Hedge Funds Regulation in Europe – A comparative study", European fund and asset management association, November 2005 and "The regulation and distribution of hedge funds in Europe – Changes and challenges", Pricewaterhousecoopers, June 2005.

[4] In Italy the minimum limit for investment is EUR 500 000, in Ireland it is EUR 250 000 and in Spain it is EUR 50 000.

such regulation could result in liquidity disappearing from the markets where the hedge funds operate just when it is needed most. Increased disclosure of funds' risks, on the other hand, could help the market to function efficiently. If the hedge funds' risk positions can be assessed externally, market discipline ought to improve.

I consider that both LTCM and Amaranth are good examples that transparency rather than regulation is the problem. As I have already mentioned, LTCM was a very large fund and at the same time had heavy loans. The fact that the banks concerned accepted such a high level of indebtedness is in itself remarkable – one explanation was probably confidence in the prominent figures behind LTCM, who included Robert Merton and Myron Scholes. However, the banks did not have any overview of the fund's size and total risk position. In their own interest, they should have required greater disclosure, and the authorities should have required this of the banks.

With regard to the positions in Amaranth, there are similar questions. Why didn't the markets and clearing institutions react to the large build-up of risk? And why didn't the lenders adjust their margin calls to correspond to the risk concentration? Better disclosure of Amaranth's risk profile, from the authorities, the markets, the clearing institutions and individual lenders would probably have increased the chance of detecting the risk positions being built up.

Conclusion

New financial crises will occur and hedge funds, which have become an integral part of the modern financial markets, will probably be involved. The large capital flow to the sector has meant, not unexpectedly, that profitability has declined and it is not unreasonable to expect that a number of funds will consequently be forced to close down after more or less substantial losses. However, the advantages of the hedge funds' operations exceed the risks from a welfare perspective. The Riksbank's view as regards further regulation is that the focus should be on the hedge funds' counterparties - particularly the systemically-important banks - being able to manage their risks. Improving the banks' risk management with regard to hedge funds has been the objective of a number of initiatives by the Basel Committee on Banking Supervision and other organisations ever since the LTCM crisis in 1998. From a stability point of view, the central issue is that the systemically-important banks should manage their counterparty exposures correctly – take sufficient collateral, have appropriate limits and be capable of managing potential liquidity problems. The arguments for further regulation of hedge funds are in this context weak.