

Hedge fund flurries

**Introductory comments by William R White,
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1. Some context

This Session will focus on the growing importance of hedge funds in the global financial system. However, it is important to note that the expansion of the hedge fund industry has occurred against the backdrop of two complementary sets of developments, one structural and the other related to the conduct of monetary policy. The increased liquidity created by these two processes combined has been mirrored in sharp increases in the price of virtually every category of illiquid assets, and sharp declines in the price of obtaining access to liquidity (eg implied volatility).

The first development has been a secular pattern of rapid change in the financial system more generally. It has become more globalised, in many respects more consolidated, and increasingly reliant on market driven processes. Risk transfer instruments have come to play a particularly key role. In this last regard, securitised loans of various sorts have expanded enormously. Leveraged loans to low rated (or unrated) corporate credits, often in the context of merger or acquisition by private equity companies, are only the latest variation on this theme. The second complementary development has been a global environment of extremely low real interest rates, driven largely by expansionary monetary policies in an environment of continued low inflation. Moreover, incipient policy rate increases have been telegraphed to market participants to an unprecedented degree.

Against this background of broader change, it is difficult to isolate the specific role played by hedge funds. Yet, there is a sense that hedge funds have been the “grease” that has contributed to many of the interrelated phenomena referred to above. However, the associated concern this raises is that hedge fund activity might somehow be transformed from grease to “sand”, with equally widespread implications. Without attempting to assess the probability (or expected costs) of such extreme events, I present some facts about hedge funds, then possible implications and concerns, and finally a range of possible policy responses.

2. Some facts

Unlike the hedge funds of the 1940's, today's hedge funds are far from hedged. Rather, operating with very few investment restrictions but different "styles" (principal investment strategy), they commonly take speculative and leveraged positions in the pursuit of absolute target rates of return to which the manager's compensation is generally related. Whereas, hedge fund investor's were originally wealthy individuals, in recent years hedge funds have attracted the interest of institutional investors, including pension funds and insurance companies. This has led to greater professionalism and "institutionalisation", especially of larger hedge funds.

Both the number of hedge funds and the amount of invested capital grew very rapidly through the first years of this decade, reaching levels of around 8500 and \$1 trillion respectively. In 2005 hedge funds experienced net outflows in a number of months before rebounding somewhat in 2006. While hedge funds account for only around 5 percent of global financial assets, they are responsible for a much higher proportion of turnover in many markets, including plain equity, fixed income, emerging markets, and in particular those new markets (eg for credit default swaps and related products) trading the highly complex instruments in which many hedge funds specialise.

As the volume of funds invested in hedge funds has grown, average rates of return have declined over all "styles" of funds. Moreover, evidence is accumulating that Beta returns are gaining at the expense of Alpha, and that the latter may itself increasingly reflect the purchase of illiquid assets rather than exceptionally smart investing. As stylised facts, the correlations between hedge fund returns and equity indices have been rising sharply, and the exposure of hedge funds to emerging market economies and other kinds of illiquid assets (like higher risk tranches of structured debt and loans) has been rising. It also seems that funds are becoming more homogeneous as the correlations of returns across funds has been rising and style "drift" has become more pronounced. Finally, and perhaps unexpectedly in the light of fading returns, there is no clear evidence that traditional measures of leverage have increased in recent years. Nevertheless, the opacity of most hedge funds (particularly with respect to off balance sheet exposures) limits the solace this observation might imply.

3. Some possible implications and concerns

Before turning to some possible concerns, it must be stressed that most commentators feel that hedge funds have played a positive role in providing market liquidity and in enhancing

the price discovery process. As well, they have contributed importantly to new products that have allowed better risk diversification within portfolios and a better transfer of risk across portfolios. In this fundamental way, they might well have reduced systemic risk rather than raised it. This said, a number of commentators have pointed to a wide range of remaining concerns.

The longest standing has been that hedge funds could contribute to macroeconomic crises by enabling the protracted build-up and rapid unwinding of asset price misalignments. The most readily available examples come from the foreign exchange market. Thus, George Soros's Quantum fund was clearly implicated in the ERM crisis of 1992 (though many viewed this as a desirable equilibrating process), while hedge funds were repeatedly accused (but never convicted) of precipitating the Asian crisis. While we have seen fewer speculative attack episodes in recent years, thanks to the more widespread use of floating exchange rates, hedge funds do seem to have played a role in the tendency for the exchange rates and asset prices of smaller high yield countries to be buffeted by the waxing and waning of the carry trade. We can find evidence for this in the fact that the flow of money into certain styles of hedge funds (global macro and fixed income arbitrage) seems highly correlated with movements in Yen and Swiss franc interest rates.

More broadly, the concern is that hedge funds disrupt the macroeconomy by channelling flows into risky, illiquid assets over the medium term in a way that does not reflect their risk and liquidity characteristics. This could encourage imprudent behaviour on the part of other risk taking entities. This leads both to misallocations of capital as the bubble builds up, and to damaged balance sheets as investors rush for the exits once they began to suspect more difficult times ahead. Particularly in illiquid markets, like those for EME assets, the real effects could be severe, given that stable sources of demand for these assets continue to be relatively thin.

I would emphasise that these effects, while present, should not be overstated. Whatever the merit of these concerns, the recent role of hedge funds in asset price increases is likely to be small compared with the role played by changes in the backdrop conditions noted above.

A second concern has been that the operations of hedge funds increase short term volatility in financial markets and, presumably, the likelihood of disruptive financial incidents, including sharp erosions of market liquidity. A number of earlier empirical studies failed to make this case convincingly, and recent developments point clearly in the direction of rejecting this hypothesis. In recent years, volatility has actually fallen to record lows even as the influence of hedge funds has grown substantially. However, similar to the medium term asset-price misalignment problem noted above, a new concern has surfaced. There is some anecdotal

evidence that hedge funds, insurance companies and others have been writing large numbers of out of the money options (notably credit default protection), to raise revenues in the “search for yield”. The question is, what happens should circumstances change and the options be exercised? Then, those who were makers of liquidity could well turn into takers of liquidity, with wider adverse market implications. This is more or less what happened to LTCM in 1997. In our times, conditions in credit markets could well be upset by hedge funds (or other proprietary traders) having gotten correlation assumptions wrong. A further intriguing complication is that the margin requirements of the primary brokers are in some cases apparently related to estimates of the hedge fund’s VaR. This creates a potentially worrisome positive feedback mechanism: should VaR spike in response to higher volatility and margin requirements rise, then the need for hedge funds to withdraw from their investments would be further exacerbated.

A third concern, and perhaps the most important from a systemic risk perspective, is that problems faced by hedge funds could feed back on their creditors, particularly the large broker dealers. On the one hand, the big banks seem extremely well capitalized relative to their direct exposure to hedge funds, and these exposures are generally collateralised. On the other hand, according to some measures the correlation of returns across hedge funds has been rising, implying a larger likelihood of correlated hedge fund losses. There might also be indirect exposures at large banks if proprietary trading desks were mimicking the strategies of hedge funds. Finally, it is worth noting that the clearing, settlement and derivative trades of hedge funds are all concentrated in prime brokerage houses, and that the infrastructure supporting these activities has recently been criticized on a variety of grounds. While these issues are being addressed aggressively, there is still a lot of work to do.

A final set of concerns has to do with hedge funds’ growing role in credit and capital markets, and the implications for formal and informal bankruptcy procedures. One concern is that, unlike traditional bank creditors, hedge funds will not try to orchestrate the orderly work out of troubled corporate debtors but instead stand to gain from their break-up. In a recent report, Dresdner Bank warned of a potential “bloodbath” among highly indebted firms. Others, however, would regard this as a good thing in that it would preclude an overly timid corporate response to underlying realities. Another concern has to do with the potential knock on effects of bankruptcies within the hedge fund industry itself. The recent failure of Amaranth (after losses totalling \$6 billion, more than LTCM) can be used as an example of a big failure with essentially no repercussions elsewhere. However, many knowledgeable commentators have pointed out that this was the result of a series of fortuitous circumstances that might not be so supportive in the future. And finally, one might speculate on the possible implications of

the industry as a whole being threatened by further structural change. Goldman Sachs and Merrill Lynch have announced the imminent availability of investment instruments which replicate the risk return profile of the industry, at a tiny fraction of the fees currently being charged by most hedge funds. This could threaten the financing sources of a large number of such funds simultaneously.

4. Some potential policy responses

My comments will be confined to policies designed to reduce the likelihood of **imprudent** behaviour on the part of hedge funds, behaviour that might threaten their own survival or that of their creditors. This leaves moot the different issue of how **disruptive** behaviour might be dealt with. For example, large inflows of capital into EMEs, followed by a sudden stop, might be enormously disruptive to the recipient while leaving the investors nursing losses that were only marginal for each. This was essentially what happened during the Asian crisis.

As an approach for curtailing imprudent hedge fund behaviour, the framework suggested by Basel 2 has attractions. That framework relies on three pillars to enhance risk management at banks. First, there must be good internal risk management. The fact that the bank has capital which imprudent behaviour puts at risk is a central consideration here. Second, there must be efficient regulatory oversight. Third, there must be enough transparency about the operations of the bank to allow market discipline to be applied. The principles underlying these pillars could, *mutatis mutandis*, also be applied to hedge funds, with the further possibility of using regulatory oversight of creditors to enhance "market" discipline.

On internal risk management, those managing hedge funds normally have invested their own money in them and would presumably wish to keep it. Yet, the management fee structure could at times encourage excessive risk taking. For example, losses early in the year which threatened required rates of return might trigger bigger bets and more leverage. At Amaranth, as losses mounted, the management added significantly to their positions. When one considers that the bet essentially came down to a forecast on the weather, one has to conclude that internal controls were inadequate. Perhaps a more fundamental reason for not wanting hedge funds to constrain themselves too tightly is that it would also threaten their capacity to increase the efficiency of the financial system, as described above.

A second possibility would be outside (official) regulation and supervision. A number of problems with such an approach immediately present themselves. The first is the complexity of what hedge funds do, and the challenge for supervisors in keeping up. A second is the speed with which positions (and leverage levels) can be and often are changed. Real time

information would be required, and that is not likely to be practical in the foreseeable future. A third problem is the cross border nature of much of this business, whereas regulation is essentially national. The danger would be that too stringent oversight might simply encourage hedge funds to move elsewhere. There have in fact been a number of recent initiatives by regulatory authorities in the US, UK and EC, but they share the assumption that regulation should be kept "light".

The third possibility is that of enhanced transparency and more market discipline. Some have suggested that the more active involvement of pension funds and other institutional investors is already resulting in both better reporting and better behaviour, as well as contributing to the recent increase in the correlation of hedge fund returns. It has even been suggested that central banks might join such investors, in order to both monitor hedge funds better and to gain information that might be useful in crisis management.

Recognising the drawbacks of a heavy-handed approach, regulators in the US, UK and elsewhere have been focusing on ensuring that investors are provided with an appropriate level of transparency, and, where necessary, on improving the risk-management practices of prime brokers and other large hedge fund counterparties. Regulators have also been trying to improve the operational aspects of fast-growing markets where hedge funds (as well as proprietary trading desks) have been active and to increase their understanding of the operational and risk-management policies of the largest hedge fund groups,

Despite these efforts, many knowledgeable commentators seem to feel that the monitoring behaviour of creditors, in particular the big broker dealers, is often still inadequate. How was it possible for both LTCM and Amaranth to have done what they did? Moreover, there is a sense that in recent years, banks have become more accommodating with respect to the terms and conditions of their lending to hedge funds. Apparently the profits made by banks from business with hedge funds is so attractive that it invites this kind of competition for clients.

A number of suggestions have been made as to how counterparty oversight might be improved. One possibility would be for regulators to limit the number of prime brokers a hedge fund could use. This would provide creditors with a fuller information set, and reinforce the message that creditors have a crucial monitoring role to play. However, recent analyses by the UK FSA have found that the use of multiple prime brokers by hedge funds is in fact limited to the largest, most sophisticated groups. Another proposal is that the operations and risk controls of large hedge funds should receive a rating from a rating agency, as has already been done in a few cases. Given how fast portfolios can change, this presumably means a rating of the funds internal risk management processes. Supervisors might

encourage such a trend by being stricter in their supervision of banks that do not require such ratings from their hedge fund counterparties. The associated danger of course is that hedge funds might then turn to less regulated or even unregulated sectors to obtain their financing. While it is not obvious today what those alternative sources might be, the creativity of those searching for profits should never be underestimated.

Suggested reading

Financial Services Authority (2005): "Hedge funds: a discussion of risk and regulatory engagement", *FSA Discussion Paper 05/04*, June.

Higasho, Naoto, Terada Tai and Tokiko Shimizu (2006): "Changes in hedge fund investment behavior and the impact on financial markets: position concentration, expanded scope, and market liquidity risk", *Bank of Japan Review*, December.

Hildebrand, Philipp M (2006): "Recent developments in the hedge fund industry", *Swiss National Bank Quarterly Bulletin*, 1/2005.

McCarthy, Sir Callum (2006): "Hedge funds: what should be the regulatory response?", *SUERF Annual Lecture*, London, 7 December.

Nyberg, Lars (2006): "Are hedge funds dangerous?" Speech to the CFA Society of Sweden, Nordea, Stockholm, 24 November.

Stevens, Glenn (2006): "Risk and the financial system". Remarks in response to the Distinguished Lecture by Timothy F Geithner, President and Chief Executive Officer of the Federal Reserve Bank of New York, co-organised by the Hong Kong Monetary Authority and the Hong Kong Association of Banks, Hong Kong, 15 September.