

Timothy F Geithner: Hedge funds and their implications for the financial system

Keynote address by Mr Timothy F Geithner, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the National Conference on the Securities Industry, New York City, 17 November 2004.

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I want to use this opportunity to share some perspectives on hedge funds and the policy implications of their evolving role in the financial system.

The term hedge fund is used to describe a diverse group of financial institutions, which together play an increasingly important role in our financial system. The rapid growth in their numbers and their assets under management suggests they provide, or are perceived to provide, significant economic value to investors that is not available in other investment vehicles. If hedge funds demonstrate continued value as investment vehicles, then given the relatively small share of the world's savings they account for today, we could see meaningful further increases both in the aggregate size of the hedge fund sector and in the relative significance of their role in financial markets.

In the conventional wisdom, hedge funds are conspicuous more for their perceived risks to the financial system than for the positive contribution they make to how financial markets function. In fact, however, they provide a variety of very positive contributions to our financial system.

Hedge funds play a valuable arbitrage role in reducing or eliminating mispricing in financial markets. They are an important source of liquidity, both in periods of calm and stress. They add depth and breadth to our capital markets. By taking risks that would otherwise have remained on the balance sheets of other financial institutions, they provide an important source of risk transfer and diversification.

They don't perform these functions out of a sense of noble purpose, of course, but they are a critical part of what makes the U.S. financial markets work relatively well in absorbing shocks and in allocating savings to their highest return. These benefits are less conspicuous than the trauma that has been associated with hedge funds in periods of financial turmoil, but they are substantial.

Hedge funds combine the classic mix of factors that have been associated with institutions at the center of past instances of stress in financial markets. They can be highly leveraged and can be vulnerable to pressure to liquidate assets quickly if they sustain significant losses. They can be active in complex instruments, and assessing the risks in their exposures is formidably challenging. Additionally, they are not subject to the public disclosure or regulatory reporting requirements that apply to a range of other financial institutions. And they operate largely outside the framework of other requirements established by regulatory authorities to protect the stability of the financial system.

They are not unique in these attributes. Some of the same things are true of other types of financial institutions. It's the combination of the capacity for leverage, the complexity in assessing the risks they present, together with their apparent importance in many markets, that makes hedge funds an important focus of attention from a systemic perspective.

For policy makers, the concerns associated with hedge funds range from investor protection, to market practices and potential manipulation, to the potential conflicts and reputational risks they present to the financial institutions they transact with, and to potential risks to the stability of the financial system. I want to focus on the latter set of concerns - those associated with systemic risk.

These systemic concerns have two dimensions:

First is the possibility that the behavior of hedge funds in periods of market stress could amplify rather than mitigate the shock, induce larger moves in asset prices, or cause broader damage to the functioning of markets when it is most important they function well.

Second is the possibility that the failure of a major hedge fund or group of funds could significantly damage the viability of a major financial institution, both through direct exposure to the fund and losses resulting from the impact on other market risks to which the institution is exposed.

These concerns existed before the events associated with Long-Term Capital Management (LTCM) in 1998, but that episode provided a powerful example of both sets of risks, and how the erosion of counterparty discipline can magnify those risks.

How significant are these risks today? This is not a question that can be answered by a clear set of facts that can inform a judgement of probabilities. And of course how the financial system responds to a shock is substantially dependent on the nature of the event.

In assessing this question today, there are numerous factors to consider:

- The number of hedge funds, and their total assets under management, have increased dramatically since 1998, significantly more rapidly than total financial assets. Although they still represent a relatively small share of total financial assets, they play a significant role in some market segments. Total exposure of the major bank and non-bank financial intermediaries to hedge funds as a group may be larger today, but that exposure is probably more diversified than in 1998. Market participants seem to believe that average leverage in the hedge fund community, and the extent of leverage for the more highly leveraged hedge funds, is lower than in 1998, but clearly it is difficult to assess these issues with any precision.
- On balance, the quality of risk management by counterparties to hedge funds has, we believe, improved substantially since 1998. This is important, given the gaps revealed in market practice at that point. More on this later.
- Capital in banks and in the parts of the financial system affiliated with banks has increased significantly in absolute terms - that is, the major intermediaries are significantly larger than in 1998. However, when bank capital is measured relative to the risk of the activities it is intended to support, the resulting measures - while strong - are not significantly different from 1998 levels. The earnings capacity of the largest institutions has increased substantially and in some cases the volatility of those earnings has declined with the increased scope of their operations.
- The infrastructure of the financial system, meaning the clearing and settlement system, is stronger and seems better able to handle much larger volumes, which is an important source of resilience in periods of stress.

Our overall judgement is that the U.S. financial system today is significantly stronger than it was in 1998. It has proven to be quite strong in the face of a number of fairly substantial recent adverse events. And there is some evidence that hedge funds have helped contribute to this resilience, not just in the general contribution they provide by taking on risk, but as a source of liquidity in periods of increased stress and risk aversion in the rest of the financial system.

And yet, hedge funds – and financial leverage more generally - still present a source of potential risk to the financial system. The nature of these risks are worth reassessing, given the rapid growth in the hedge fund sector, the increased complexity of their interactions with major dealers, and concerns about unevenness in risk management practices and some recent possible erosion in the quality of counterparty discipline across the financial sector.

How can these risks best be mitigated in practice? Let me comment on the range of possible options that stop short of direct regulation. Prudential regulations, in the form of capital or leverage requirements, have not been considered a necessary or desirable step to date within the official sector in the United States, and are not on the horizon.

Investors in hedge funds have a compelling direct interest in ensuring they are well managed. A more discerning and pro-active approach by investors in hedge funds should help to reduce the risk of failure by a major fund. The increasing share of institutional money allocated to hedge funds and the growing role of funds of funds could help reinforce the ability of the investor class to provide such market discipline, in particular if these types of investors undertake more extensive due diligence.

There has been and continues to be a lot of interest in inducing or requiring hedge funds to disclose information that would make it possible to know more about the scale of leverage in particular funds, the risk of concentrated positions that could amplify volatility if unwound quickly, and other aspects of the risk profile of the fund. These efforts are motivated in part by discomfort about what we do not now know and a sense that knowledge itself, by reducing uncertainty, could reduce risks. And they are also

motivated by the view that greater disclosure would act as a desirable restraint on risk taking, and make it possible for market discipline to work more effectively.

There have been several significant efforts to induce greater disclosure since 1998, notably by the President's Working Group on Financial Markets, by a committee under the auspices of the BIS, and by private sector groups in the United States. These efforts have fallen short of their objectives, in significant part because of the difficulties in designing a disclosure regime that would provide meaningful information about potential systemic concerns, without undermining the ability of hedge funds function profitably and provide the important benefits that I mentioned earlier.

Thus, while the potential benefits of meaningful progress on hedge fund disclosures could be material, we must also be realistic about the inherent difficulties associated with such a challenge. Even if additional efforts are mounted in this area, progress is not likely to come easily or quickly.

The most constructive avenues for mitigating concerns about systemic stability lie in the areas of comprehensive risk management of potential exposures to hedge funds, the overall strength of capital and risk management in the major financial institutions, and the resilience of the market infrastructure.

And we believe there is room for some further strengthening of market practice in these areas.

To begin, let me acknowledge that the events of 1998, and the resulting recommendations of the private-sector Counterparty Risk Management Policy Group (CRMPG), and other groups, were followed by very significant improvements in risk management practices, including those related to hedge fund counterparty exposures. At a general level, these changes were significant because they offered the promise of limiting the overall hedge funds could take on, as well as the direct credit exposure of firms to hedge funds.

Specifically, firms put in place stronger internal due diligence regimes to manage hedge fund exposures. They imposed stricter credit terms, required more collateral, adopted daily margining and more conservative practices for valuing collateral. They put greater emphasis on measuring potential future credit exposures, while adopting more sophisticated ways of measuring and stress testing those exposures. Firms have also sought to obtain more information from hedge funds about the risks the funds are taking on, although more often than not this seems to have taken the form of periodic onsite visits and informal discussions rather than through a regular and frequent flow of detailed risk reports.

These improvements are notable, but a few qualifications are in order. First, progress has been uneven across the major dealers. Second, there are signs of some erosion in standards in response to competitive pressures, reflected in some lowering of initial margin requirements and a relaxation in other credit terms. In addition, changes in the market, specifically increasingly complex relationships that firms have with hedge fund counterparties, suggest the need for higher standards in some areas relative to what seemed appropriate in the wake of the events of 1998.

Let me emphasize a few specific areas that my colleagues and I believe should be the focus of attention by market participants:

First, firms need to give greater attention to the full range of exposures they face in the different, and often multiple, relationships they have with hedge funds - including those related to prime brokerage and counterparty credit extensions, proprietary investments in hedge funds, the provision of structured hedge fund products, and the offering of external funds of funds and in-house managed hedge funds as investment products, among others things.

An important part of this involves managing the potential conflicts that arise from these multiple relationships and the legal and reputational risks entailed. Hedge fund-related activities need to be integrated into the broader compliance discipline.

Second, improving the overall discipline of the stress testing regime is critical. This is an area where we see the greatest divergence in practice across firms and the greatest gap relative to the achievable frontier of best practice. Potential future exposure measures produce what can be misleadingly low overall measures of counterparty credit risk. Because they are based on value-at-risk (VaR) calculations, and reflective of recent historical market conditions and correlations, they do not necessarily provide an effective measure of vulnerability to loss under more severe conditions of market stress and illiquidity.

Stress tests must be designed and applied to compensate effectively for these limitations. Designing an appropriate set of stress tests that can capture the underlying pressure points and concentrations across a broad range of relationships with many different hedge funds is not easy, but it's necessary.

And, the results of these tests need to inform judgments by the firm on the scale of exposure that it is willing to take to individual funds, groups of funds with similar strategies, and to hedge funds as a whole. Moreover, firms need to find ways to consider assessments of their stress-level exposures to hedge funds in tandem with stress tests of their own market risks to inform an overall judgment on the extent of capital market trading-related risks that the firm is taking on - especially in relation to low probability but high impact events.

Third, and especially in light of the current competitive climate, we believe it is appropriate for dealers to have more exacting standards for the overall due diligence process, and to adjust credit terms on the basis of those higher standards. This is particularly important in those cases where there has been innovation in the manner in which credit is extended. For example, it is much more common today than in 1998 for hedge funds to seek arrangements that provide contingent credit and thus provide the hedge fund with protection against the need to liquidate positions too rapidly. Similarly, many hedge funds are today seeking to base margining agreements, including initial margins, on the results of VaR calculations that incorporate the effect of netting across multiple products. While both of these developments have their basis in sound risk management principles, firms extending such credit should carefully examine the impact of these and other innovations on their potential exposures to hedge funds in stress conditions, and set the terms for such credit accordingly.

A reinforced due diligence process also is critical in assessing the operational capabilities of the hedge funds, the quality of their risk management process and execution and compliance infrastructure.

This may sound self evident, but it is not as common as one might think. Timely access to forward looking measures of risk by hedge fund counterparties is obviously important for assessing the risks in firms' exposures to hedge funds as a group, and for assessing the impact of hedge funds' activities on a firm's own positions. To the extent that information is not made available, and there seem to be a number of legitimate reasons why hedge funds may resist providing it and are sometimes successful in doing so, then it makes sense for the dealer to reduce the exposure it is willing to take to that fund. In general, credit terms should be calibrated to the quality of the information provided by the hedge fund counterparty. To the extent this is done generally across those funds that are less transparent, have weak risk management disciplines and/or inadequate operational infrastructure, they will be able to take on less leverage, which would limit the potential risk they may pose in a disruptive event.

As these points suggest, it is not enough to simply manage the firm's direct potential future credit exposure to hedge funds within prudently low limits. This has to be complimented with a more exacting approach to the evaluation of a firm's overall vulnerability to market risk that includes full consideration of the potential impact of a large shock, including one that involves hedge funds.

Alongside these enhancements to risk management practices, we believe that market participants should also intensify their efforts to improve the underlying infrastructure of the markets in which hedge funds are important. Weaknesses in close-out procedures for OTC derivatives were among the areas singled out by the CRMPG for collective action in the wake of LTCM, and important progress has been made in this area since. In addition, there are potentially valuable efforts underway to standardize documentation and improve the confirmation and execution process in these markets.

But looking forward, given the size of the OTC derivatives markets and the participation of hedge funds in those markets, it is worth reflecting on whether central counterparty clearing arrangements for the more standardized portion of the OTC derivatives market could play a useful role. Certainly, there are many challenges associated with such a project, and its potential to mitigate risks effectively would have to be clearly demonstrated, but surely it is worth looking carefully at whether that or similar efforts could provide meaningful improvements to the core infrastructure of what is undoubtedly a systemically important set of markets.

Taken together, these areas of focus are important to ensure that there is adequate capital not just against growing direct exposures to hedge funds, but the indirect exposures that could affect market conditions and firms' positions in a more stressful environment.

We believe that the dealers that act as major counterparties to hedge funds have a collective interest in improving market practice in these areas. This is a good time for them to reassess how practice has evolved against the standards set out by the CRMPG in 1999, and to examine whether the bar established at that time is appropriate for the conditions that exist today.

It took a major market event to expose the extent of weaknesses in market practice that prevailed prior to 1998 and to catalyze improvements across the financial community. Those reforms have played an important role in reducing risk in the system, alongside the overall improvements in capital, risk

management, and the financial infrastructure. Further progress in strengthening risk management practices is an investment worth making, particularly at a time when the markets appear to be pricing in a relatively benign view of risk in the financial system and in the economy overall.