## Timothy F Geithner: Risk management challenges in a changing financial environment

Remarks by Mr Timothy F Geithner, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the New York Bankers Association Financial Services Forum Chairman's Reception, New York City, 5 April 2006.

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You are meeting at a time of greater confidence about the near-term world economic outlook and the stability of the financial system.

The expansion in global economic activity has become more broad-based. In the United States, underlying productivity growth remains strong and some of the structural changes underway in other mature, large economies offer the prospect of greater productivity growth in those countries, as well.

The gains of the past two decades in reducing inflation and stabilizing inflation expectations have been preserved in the face of a sustained and substantial rise in energy and commodity prices.

In many emerging markets, a combination of stronger external balance sheets, more flexible exchange rate regimes and better monetary and fiscal policies have produced stronger growth and an apparent reduction in vulnerability to financial crisis.

The world economy also faces some considerable longer-term challenges. These stem from a myriad of factors—the impact of demographic changes on fiscal sustainability, the evolution of the current pattern of external imbalances in the world economy, the political pressures induced by greater global economic integration, potential threats to energy supplies and many others.

These challenges are familiar, but they have produced few indications of unease in financial markets. This seems due, in part, to important fundamental improvements in policy credibility and economic performance. It may also reflect confidence that governments will ultimately act effectively to deal with these challenges. And it may reflect the inherent difficulty of assessing the risk in what may seem like low probability but very adverse outcomes.

A number of fundamental changes in the U.S. financial system over the past 25 years appear to have rendered it able to withstand the stress of a broader array of shocks than was the case in the past. The core institutions hold more capital against risk.

Risk management systems are more sophisticated and the internal control regimes around those systems are more robust. The earnings of many financial institutions are stronger and more diversified. Payments systems are stronger. Innovation continues at a remarkable pace, providing new ways to allocate and manage risk.

Confidence in the overall resilience of the financial system needs to be tempered by the realization that there is much we still do not know about the likely sources and consequences of future stress to the system. Uncertainty is inherent in any process of change, but uncertainty is greater because much of the recent innovation has occurred against the backdrop of general economic stability and a sustained period of low credit losses, low risk premia and low implied volatility across many asset classes.

This means that some aspects of the financial system today have not yet been subjected to the more exacting tests of macroeconomic or financial stress. This makes it harder for the conventional array of risk management tools to capture the actual risk faced by financial institutions today.

The challenge we face is not simply in determining whether we are better off today than we were at past periods of considerable stress in the financial system, but also in assessing how well positioned the current system is to deal with prospective sources of stress. That assessment is harder to make today because of the changes now underway in the nature of financial intermediation and the overall conditions in which these changes have occurred.

Several examples of these changes are worth noting:

The more critical role played by hedge funds and other nonbank financial institutions in credit and other markets has the potential to magnify the impact of distress in those institutions on market dynamics and liquidity if counterparty risks are not managed appropriately.

The proliferation of new forms of derivatives and structured financial products has changed the nature of leverage in the financial system. The addition of leverage imbedded in financial instruments to balance sheet leverage has made this source of potential risk harder to assess. New players, new products and more dynamic ways of intermediating and managing credit may increase the sensitivity of balance sheets and income-to-market volatility and potentially amplify the impact of a sharp change in perceptions about macroeconomic risk or credit on asset prices and liquidity.

The increased international integration of both capital and goods markets has brought a huge increase in the scale of cross-border financial activity. The largest global financial institutions now play significant roles in a large number of financial systems outside of their home market. These changes are likely to affect the manner in which financial shocks in one region are propagated to other regions.

Finally, we have witnessed an increase in the degree of concentration in some markets, a development that has the potential to make the system more vulnerable to the deterioration in conditions at one of the major bank or nonbank financial intermediaries.

The degree of systemic risk presented by these changes depends importantly on two things. It depends on the robustness of the infrastructure that supports these markets. And it depends on the level of reserves, capital, margin and collateral that the major financial institutions hold against risk, which is in part a function of the strength of risk management systems.

In both of these areas, market practice has made significant progress over the past decade, and further improvements are underway. A few quick points about two areas in which we believe further progress offers the highest possible return in terms of improving the overall resilience of the financial system.

In the broad area of market infrastructure, we think the greatest near-term imperative is to strengthen the post-trade processing systems that underpin the rapidly growing over-the-counter derivatives market. The major dealers and the buy-side investors are making substantial investments in improving the process around the credit derivatives market.

The overall strategy outlined in the public letter signed by the 14 major market participants on March 10, 2006, offers the prospect of a more automated confirmation and settlement process, with significantly less operational risk than has existed in these markets since their inception. Looking beyond the specific objectives for reducing confirmation times and backlogs, we hope to see agreement over the next several months on a new ISDA® protocol for net physical settlement in the event of default and progress toward adoption of emerging utilities for centralizing certain processing and information functions that can facilitate netting and matching of payments and collateral.

Alongside these improvements in what we call infrastructure, this is a moment where it is important to see more care and attention and greater conservatism applied to the discipline of risk management. This is most critical in the areas that are hardest to do well. The challenges seem most exacting in the firms' abilities to capture the exposure of the institution to stress scenarios that lie outside the range of recent experience, and to set exposure limits and calibrate margin and credit terms accordingly.

The challenges here are magnified by the changes I described earlier, including the rapid growth in complex structure products with imbedded leverage, uncertainty about liquidity in many instruments in less-benign financial conditions and other features of the present environment.

A credible stress-testing process has to try to account for not just the effects of a discrete change to some dimension of market risk or some constellation of asset prices, but the effects of those changes on, for example, the behavior of financial market participants and on the broader macroeconomic conditions that might affect credit. It is also critical that firms assess their concentrations not only under current conditions, but also determine how firmwide credit concentrations to names, sectors or counterparties could build up under more stressful economic and financial market conditions.

Of course, what is important here is not just that firms do a better job of capturing and valuing potential exposures, but that this information is translated into appropriately conservative judgments about limits and terms. Where uncertainty and complexity is higher, we should see this translate into higher cushions against potential loss. And senior management needs to be willing to lean against the erosion in credit terms and margin practice typically induced by competitive pressure during periods of low credit losses and implied volatility.

Overall capital is, of course, an important part of what makes financial systems stable. But the size of the margin above the regulatory minimum or the thresholds that might affect a financial rating is critical, as is the extent to which the initial margin is set at levels that are likely to be sustainable over

the cycle. The closer these cushions are to levels that reflect potential future exposure across a more adverse set of market conditions, the more resilient markets and institutions will be under conditions of stress, and the less likely the prospect that the behavior by institutions will amplify financial shocks.

Stress testing and scenario analysis is an important part of the process of calibrating this relationship between risk and capital and margin. The test of a sufficiently strong process is not simply the realism of the process used to measure potential losses, but the impact that it has on the decisions made by the institution on the size and type of exposures relative to earnings, capital and collateral or margin and the terms on which it extends credit.

Let me conclude by noting again that we are in a period of perceived strength in economic fundamentals in the United States and many countries around the world. This strength has helped to induce significant reductions in a range of market-based perceptions of risk. Much of this confidence may prove warranted and durable, but the extent to which it endures will depend in part on the degree to which those running the major financial institutions in the United States use the opportunity presented by this period of relatively high profitability to strengthen their capacity to withstand a less favorable overall macroeconomic and financial environment.

The balance between innovation and resilience that has characterized the U.S. financial system in recent years has played an important role in the improved performance of the U.S. economy. We all have a strong interest in preserving this balance.

Thank you.