

Timothy F Geithner: Perspectives on the US financial system

Remarks by Mr Timothy F Geithner, President and Chief Executive Officer of the Federal Reserve Bank of New York, before the Economic Club of New York, New York, 27 May 2004.

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It is a pleasure to join you today at the Economic Club of New York. And it's a pleasure to share the program with John Thain.

Today I want to talk about the U.S. financial system at this point of transition in the U.S. economy.

The U.S. financial system is currently enjoying a period of considerable strength. Financial institutions are strong. Financial innovation has spurred advances in risk management. Market practices surrounding key products such as OTC derivatives have been strengthened. And the industry's payments infrastructure has been improved by additional safeguards and new clearing and settlement arrangements. The system has been remarkably resilient in the face of a range of recent challenges.

The recent record is reassuring, but no financial system is without vulnerability. Periods of relatively favorable economic and financial conditions, such as we are experiencing today, are good times to reflect on the capacity of the system to withstand future stress. I want to focus today not only on developments that have improved the overall stability of the system, but also on some continuing challenges, and on the implications of these for risk management and supervision.

The history of shocks to the U.S. financial system is highly varied. Even over just the past two decades, we have seen a range of systemic events with a wide diversity in source and characteristics. We've seen credit booms and credit concentrations that resulted in substantial losses in the banking industry, in areas as varied as commercial real estate, energy, agriculture, and emerging market sovereigns. We have seen shocks reflected in sharp and substantial movements in interest rates, exchange rates, and asset prices.

Some of these events were associated with a deterioration in macroeconomic performance. Some occurred in periods of relatively strong economic growth. Some were driven by abrupt changes in expectations about inflation or about monetary policy and the associated changes in the level of interest rates and the shape of the yield curve. Often these events followed periods of accommodative financial conditions, rapid credit growth, sustained rises in asset prices, and low volatility in the prices of financial assets.

Many of these events had a self-reinforcing element, with initial changes in interest rates or asset prices being amplified by the subsequent actions of market participants in the face of unanticipated losses. Financial leverage was also an amplifying factor in many of these events. In some instances, there were unexpected patterns of correlation in the movement of asset prices and in credit losses across borrowers.

These experiences led to changes in risk management practices, in supervision, and in our capacity as a central bank to contain systemic risk. These responses have reduced the overall vulnerability of the system to the types of shocks we've experienced. Moreover, because we've experienced such a variety of different types of stress, overall risk may be lower. But this recent history also suggests that we need to maintain a degree of humility and caution about our capacity to anticipate the nature and dynamics of future stresses to the financial system.

How strong and resilient is the U.S. financial system today? Our sense is that the system is quite strong and resilient relative to the recent past.

The major financial institutions at the core of the system are profitable and well capitalized. The total risk-based capital ratio for the ten largest U.S.-owned bank holding companies has averaged more than 12 percent over the past two years, a slight increase relative to prevailing levels since the mid-1990s. At year-end 2003, nearly every bank in the country met the regulatory standards to be considered "well capitalized", with fewer than 100 - representing less than 1 percent of banking industry assets - failing to meet these standards. While risk-based capital ratios do not always provide an accurate picture of true capital strength, especially for the larger and more complex institutions, these statistics are nonetheless broadly indicative of a very strong underlying capital position of the industry.

Robust capitalization is important because capital, along with earnings, provides the first line of defense against losses. Counterparties and customers are less likely to lose confidence and pull back from a well-capitalized institution in the wake of a large loss or other negative event. Capital, in effect, helps protect firms against “runs,” both traditional “runs” where short-term funding and liquidity are at issue, and more gradual, but just as damaging “runs” on franchise value, where customers turn elsewhere for services because they question the long-term viability of a firm.

Consolidation has resulted in larger and more diverse financial institutions at the core of the U.S. financial system. Deregulation has enabled firms to better optimize the scale, geographic spread, and scope of operations. The result has been the creation of some extremely large and diverse financial institutions with high earnings capacity. In 2003, 18 U.S. bank holding companies and six securities firms each earned more than \$1 billion, with the five largest bank holding companies earning a combined total of nearly \$46 billion, over 40 percent of the banking industry total. Along with capital, these earnings provide a substantial cushion to absorb losses, significantly moderating the consequences of an adverse event. The wider scope of activities and greater domestic and international geographic diversification of these firms also provide a more stable revenue base.

Advances in risk management have also enabled firms to hedge risks more effectively and, in the aggregate, to disperse risk more efficiently across firms in the financial system. Given advances in data collection and risk modeling, banks and other financial firms are able to do better risk-based pricing. Firms now have the capacity to view credit and other key risks from a portfolio perspective rather than in isolation, leading to more efficient risk sharing and better capital allocation.

In concert with better risk modeling, securitization and credit derivatives have facilitated the dispersion of credit risk across firms and across sectors of the financial system. These changes have led to significant risk transfers within the banking system, as well as a net transfer of credit risk from commercial banks to other financial intermediaries. As a result, we believe we are seeing a more efficient risk allocation within the financial system as a whole, since risks can be transferred to firms where they will diversify, rather than reinforce, risks arising from core businesses and to parts of the financial system that are significantly less leveraged than banks and securities firms, such as institutional investors and mutual funds.

These risk management advances have been accompanied by the growth of key derivatives markets that have lowered the costs of hedging market-price-sensitive positions and activities. One important example of this is the growth of the market for long-dated swaps, which are now used by banks to hedge mortgage securities and whole loans. The notional value of long-dated interest rate derivatives (those with maturities of more than 5 years) has more than tripled since the end of 1998, considerably faster growth than for comparable shorter-dated instruments. The growth of these markets reflects a very substantial increase in hedging capacity, and this “wider pipeline” seems likely to facilitate the ease with which the market adjusts in conditions of stress.

Growth in these OTC derivatives markets has been accompanied by welcome improvements in market practice. Since the turmoil of 1998, financial firms have made significant strides in the sophistication with which they assess and manage counterparty credit exposures arising from OTC derivative transactions. Rather than using the broad “rule of thumb” methods that were once the industry norm, OTC derivatives dealers now commonly assess counterparty exposures on a portfolio basis using more sophisticated approaches to capture both current mark-to-market exposures and the potential future exposure that could arise from changes in the contracts’ underlying rates and prices. These models make possible - but they cannot of course guarantee - an appropriately conservative assessment of the potential reduction in future exposure provided by netting agreements and collateral arrangements. Dealers have also made significant strides in developing and employing more sophisticated and exacting ways to stress test their exposures. Taken together, these approaches have resulted in more realistic measures of counterparty exposures and to better management of counterparty risk.

Beyond these improved exposure assessments, the use of collateral is much more prevalent than in the past. For instance, surveys by ISDA suggest that the share of fixed income derivatives exposures covered by collateral has increased from 40 percent to 55 percent just since 2002. Collateral is almost universally posted by all counterparties except those with the very highest credit ratings. There have also been significant improvements in the legal certainty surrounding these collateral arrangements. Among the legal advances are greater clarity on the enforceability of rights of netting and closeout in the event of default of a counterparty, better clarity in master documentation regarding rights and remedies, and better harmonization domestically and internationally of key provisions in different

master netting agreements for different products that might hedge one another. These, combined with the wider prevalence of collateral arrangements overall, provide derivatives dealers greater protection in the event of counterparty default and expand their capacity to enter into transactions under normal market conditions.

The development of new clearing arrangements has also strengthened the resiliency of the crucial payment and settlement systems that provide the backbone of the U.S. financial system. Existing payment and settlement systems also have implemented improved safeguards not only against the impact of the default of a system participant, but also against the potential impact of external events, such as those experienced on September 11.

Overall, these changes suggest that, at a fundamental level, significant strides have been made in enhancing the resiliency of the U.S. financial system. High levels of overall capital, greater diversification of credit exposure, increased use of collateral, and the stronger payment and settlement system infrastructure make our financial system stronger today than it has been. With these favorable developments, however, come a range of challenges. I want to discuss a few of these and their implications. This is not meant to be, and is not, a comprehensive list.

The first is the challenge of complexity. With financial growth and innovation, we have seen a dramatic increase in the complexity of the risk management challenge. The frontier of innovation inevitably advances somewhat ahead of the pace of improvements in the risk management and supervisory infrastructure. The models used to inform credit judgments, to measure exposure, and to price risk in the newest instruments and trading strategies are by definition less grounded in experience. The process of assigning fair or market value is much more subjective and less amenable to objective verification. Consensus on the appropriate accounting treatment is less well established.

As the complexity of risks has grown, so have the demands on firms to understand how exposures might evolve, especially in times of market stress. As an example, basis risk - in which hedged positions only partially offset one another - is an increasingly important concern for many firms, especially those that deal in complex products such as options. Assessing and managing these more complex risks requires risk management tools with a commensurate level of sophistication. In particular, the further development of techniques for stress testing and scenario analysis and of methods for translating stress test results into concrete risk management outcomes are important areas for additional progress.

The risk management challenge is complicated by the nature of the institutions at the core of the system. Large, diversified financial institutions comprise many separate, highly specialized business units, each of which can have its own approach to tracking and managing risk exposures. Integrating across these businesses to develop a firm-wide, portfolio risk perspective is an important challenge, one that has many guises within a large, complex firm. For example, managing the complex pattern of risk exposures that derive from membership in multiple payment and security settlement systems, each of which has loss-sharing arrangements that generate contingent exposures among and between their members, is just one small facet of the broader challenge facing such firms today. The difficulty of managing the conflicts in dealings with customers is also significantly enhanced for these large, diversified institutions, given the multiple roles that they play.

More generally, it is increasingly challenging for many large, diverse financial institutions to get an accurate picture of their aggregate exposure to individual creditors when their business contacts can come through so many different sources within the firm. This difficulty is compounded when different types of exposures that are functionally equivalent are managed in different ways in different parts of the firm. Different units within a single firm frequently trade with and transfer risk to one another, adding a further layer of difficulty in assessing the aggregate exposure to a given creditor or counterparty.

The increased scale and scope of operations of the institutions that are the core of our system and the rapid growth in complex transactions place an extraordinary burden on the internal control, compliance, and risk management infrastructure. This is the "arms race" in finance. It is the challenge of ensuring that the strength of the infrastructure of controls within financial institutions will stay abreast of the pace of change in the complexity of risks and the tools we have to manage them - a process that we as supervisors will actively reinforce.

A second issue relates to the degree of concentration in some core financial intermediation functions. The two largest government-sponsored enterprises in the mortgage market now hold 36 percent of Agency mortgage-backed securities, as compared with less than 10 percent at the end of 1993. The

exposure of banks to these GSE's, primarily through holdings of the GSE debt funding these MBS positions, is as a consequence very large. Two institutions now account for essentially all of the market for the clearing function for government securities and agencies, as well as for tri-party repo activity. A relatively small number of institutions now account for a large share of activity in the over-the-counter derivatives business generally, as well as in certain categories of risk-transfer instruments.

These developments have different sources. Some are the result of public policy choices. Some are the consequence of the economies of scale inherent in these businesses. Overall, we have a very competitive financial system, with a larger diversity of institutions, and therefore a stronger overall system of financial intermediation. As a general matter, however, the increase in the size of some institutions relative to some parts of our financial system necessarily magnifies the potential consequences of a mistake or an infrastructure failure in these institutions. They are sufficiently large that they have less room to maneuver in adjusting positions in response to changing risks without adversely affecting the markets as a whole.

Increased concentration in some markets should reinforce the incentive the largest institutions and their counterparties have to manage risk with a greater degree of caution. Supervisors have a role here, too, providing additional reinforcement in those cases where private incentives do not seem to be generating appropriately judicious responses.

A third challenge is the increased opportunity that exists today for risk and leverage to migrate to, and build up in, parts of the financial system that are not subject to direct supervision and regulation of their capital and leverage ratios. According to some estimates, assets under management at hedge funds have doubled, to \$750 billion, since 1998, as has the number of funds, which now stands at 6,000. We have no reliable overall measures of the degree of leverage in these institutions, though it is interesting to note that the intermediaries serving as prime brokers to hedge funds believe that overall leverage in these funds is lower than in early 1998. Given the growth in this market, credit exposure by banks and securities firms to the overall hedge fund sector may be higher than in 1998, but is likely spread more widely across funds. While there may well be more diversity in the types of strategies hedge funds follow, there is also considerable clustering, which raises the prospect of larger moves in some markets if conditions lead to a general withdrawal from these "crowded" trades.

Overall, hedge funds can play a beneficial role in the U.S. financial system. They contribute to one of the defining strengths of our financial markets: the ease with which we match capital to ideas and innovation. They represent one aspect of a broader, quite favorable, trend toward a greater diversity of participants in U.S. financial markets and in that respect, they contribute to a broader spreading of risk. But they also present risks to the financial system. The extent of the risk they present to the system as a whole depends significantly on the prudence of the institutions that enable them to increase leverage. The improvement in market practice in managing counterparty credit risk since 1998 is encouraging, but it is important that firms continue to strengthen those disciplines. At the most fundamental level, intermediaries providing credit to hedge funds need to ensure that the terms and conditions of their provision of credit - including the contingent credit that is an increasing feature of prime brokerage arrangements - appropriately reflects the risks involved.

What are the implications of these challenges or qualifications to what is, overall, a favorable picture of the strength of the U.S. financial system? One of the more persistent features of financial history is that discipline tends to ebb and flow to some degree with changes in financial and economic conditions. Even though we have seen a broad-based, secular improvement in risk management practices over the past decade, competitive pressure and the search for return in a low interest rate environment can lead to a relaxation of internal disciplines even as potential risk in the balance sheet increases.

There are a number of factors that suggest these forces have not led to the build up of major imbalances that would present a major source of strain as these incentives diminish in a changing financial environment.

Net borrowing by the non-financial corporate sector has been quite moderate, especially as compared with the late 1990s. The financial position of this sector is very strong, with declining leverage, particularly for smaller firms, which tend to be more highly levered. Credit to the household sector has of course risen quite considerably, but debt service burdens still look relatively manageable. Net credit growth to emerging market sovereigns has been quite moderate relative to past periods. While growth in commercial bank assets has picked up in recent quarters, it also remains below the pace of the late 1990s.

As the financial markets have built in expectations of a gradual return to more normal monetary and financial conditions, we have seen some adjustment in a range of credit spreads. A range of surveys has been reporting for some time that dealers and other financial intermediaries have generally reduced their exposure to rising interest rates.

These adjustments are healthy. That their impact has been relatively contained so far may suggest that borrowers and lenders were less overextended relative to past periods, despite the sustained period of accommodative financial conditions. The fact that this process of adjustment has been relatively modest in overall impact also reflects the fact that it has occurred in an environment of growing confidence in the sustainability of the expansion and a consensus forecast for quite moderate inflation. Even so, risk managers need to continue to be attentive to the implications of further evolution in monetary and financial conditions.

This overall picture suggests the supervisory community should continue to focus on the following priorities:

- Ensuring that overall capital levels provide a sufficiently strong cushion against risk.
- Encouraging firms to continue to strengthen the internal management and control infrastructure as it relates to risk management, the compliance function, and systems and technology.
- Improving the quality and integrity of public disclosure.
- Continuing to work toward a more integrated framework for supervision across the functional lines of financial activities within our markets, and globally as well.

For the Federal Reserve, this means that we will devote even greater attention to the institutions that now constitute the center of our financial system, as well as to the clearance and settlement backbone. It means we need to make a greater investment in looking at risks in the financial system as a whole, not just those that have their origin in banks. And it means that we will have to continue to intensify our cooperation with other supervisory and regulatory authorities.

The U.S. financial system is of course only as strong as our economy as a whole. Overall, the fundamentals of the U.S. economy look quite strong. But the size of our fiscal deficit, and the risks posed by our large external imbalance, place a greater burden than would otherwise be the case on the credibility of U.S. monetary policy. In this context, it is particularly important that we preserve the high degree of confidence that now seems to exist that U.S. monetary policy will respond appropriately to the evolving balance of risks in the overall economic outlook, and particularly that we will maintain price stability. This is critically important to sustaining the current expansion, and to sustaining confidence in U.S. financial markets over time. And getting monetary policy right is one of the most important things we can do contribute to financial stability as well.