

## Timothy F Geithner: Challenges facing the global payments system

Remarks by Mr Timothy F Geithner, President and Chief Executive Officer of the Federal Reserve Bank of New York, at the SIBOS 2004 Atlanta Conference, Atlanta, 14 October 2004.

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I am pleased to have the chance to address SIBOS 2004. This is an important forum for us because a strong and efficient payments infrastructure is a vital strategic asset for the U.S. and the global financial system.

I want to take this opportunity to talk about some of the forces shaping the evolution in this strategic infrastructure, the challenges they present, and the implications for participants, system operators, and the central banks who oversee them. In this context, I will try to identify some of the major priorities we see over the medium term in strengthening the safety and soundness and the operational resilience of the global payments and settlement system.

Over the past 15 years, we have brought about a major global effort to reduce the potential for systemic risk emanating from the key elements of the payment infrastructure - the large value payments systems and the securities and foreign exchange settlement systems. Particularly notable are the 1989 G-30 standards on clearance and settlement systems, the Lamfalussy Report, the launch of CLS bank, and the paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System. These, and the series of internationally agreed standards for payments, securities, foreign exchange settlement systems set by central banks, securities regulators, and the private sector, have engendered a remarkable set of changes to improve safety and soundness and operational resilience in this increasingly global system.

These are the types of efforts where the return is almost never quantifiable, for the pay-off comes in the avoidance of crisis and a better balance between efficiency and risk. By reducing settlement periods and moving more of the world to real time gross settlement, delivery versus payment and payment versus payment systems, these changes have made a major difference. They have significantly improved the capacity of the financial system to absorb shocks, to handle stress, and to reduce the risk of broader damage or contagion from financial failure in any part of the system.

This is and must be a collective effort. It requires collaboration between the official sector and the private sector here in the United States and in the other major economies. And it requires collaboration among the major central banks. Because of the shared interest of participants and the central banks in finding the right balance between efficiency and risk, and because of a widespread recognition of the more integrated nature of national financial systems, success in this area would not have been possible in the past and will not be possible in the future without continued close cooperation between the official and private sectors, within and across national borders.

I am very pleased to be part of an institution that has been at the center of these initiatives. We expect to continue to play that role in the future.

It is worth stepping back a bit to describe some of the broad forces shaping the payments system that need to inform our priorities going forward.

- We expect to see very rapid growth in the overall volume of financial transactions and the accompanying burdens on the payments infrastructure. In the mature economies, particularly in the U.S. and the U.K., we have seen the volume of financial transactions increase much more rapidly than GDP. This trend, which has much to do with the nexus of technology and financial innovation, shows no sign of slowing. With the bulk of world GDP and savings outside the United States, a significant share of it in countries growing more rapidly than the United States and with substantial financial development still ahead of them, it seems reasonable to plan for a world in which this extraordinary trajectory of growth in financial transactions continues.
- As national financial systems become more integrated and financial institutions more global, payments systems increasingly operate across countries and legal regimes, and the scale of cross-border financial transactions has increased dramatically. The payments infrastructure of the global financial system is a complex patchwork of national and cross-border systems, not seamless, not uniform, but closely connected. This increases the exposure of any

settlement system to developments across borders. And it means that the major international financial institutions face a substantially greater diversity of exposures, given the multiple systems in which they operate.

- Payments activity has become more concentrated in a smaller number of global financial institutions; fewer major participants in payments systems now account for a larger share of volume and exposures in those systems. This has important implications for how we think about the vulnerability of the system to a financial or operational failure and about the financial resources that system operators need to maintain.
- The growth in the over-the-counter derivatives market has advanced much more rapidly than the speed of improvement of important parts of the infrastructure that support the market, including contract documentation and post-trade processing, and the certainty of the legal arrangements for cross-product netting. This introduces a potential source of uncertainty that can complicate how counterparties and markets respond in conditions of stress.
- The increased risk of terrorist attacks and increased sophistication of cyber attacks on electronic networks have added new dimensions to the traditional concerns of safety and soundness and operational resilience.

These broad forces present significant challenges for payments participants, system operators, and central banks. Deciding how we meet these challenges raises the classic tension about how to balance the public benefits of greater stability and the increased costs that are the price of the additional margin of safety.

We believe the systemic importance of the payments infrastructure means that central banks and system participants have a common interest in acting together to address the evolving risks.

Let me identify some of the major priorities we see in this area that require further collaboration.

### **Higher standards for the core of the system**

During the past few years, central banks and securities commissioners have developed new standards for the design, operation, and oversight of payments and securities settlement systems. These new standards have been proposed for incorporation in the Federal Reserve's Policy Statement on Payments System Risks. We are in the process of working, together with other U.S. supervisory and regulatory agencies, to assess the extent to which the affected U.S. systems meet these new standards.

We feel that it is especially important for the entities that form the heart of payments and settlement systems to work toward higher standards for safety and soundness and operational resilience. Given the increased scale of activity handled by these entities, the greater concentration among the major participants, and the increased exposure to cross-border activity, these systems today need to meet a more exacting set of standards, and of course this is also true for entities that are less systemically important.

More specifically, we would like to see a greater focus on strengthening risk management practices and ensuring that the financial resources of system operators are adequate to deal with the risks to which they are exposed. We also would like to see a more determined effort to provide more transparency and clarity in these systems' procedures and settlement activity, so that participants and members have a heightened understanding of their obligations and exposures in a situation that would test a system's risk controls.

The safety and soundness standards for payments and settlement infrastructure have been complemented by sound practices for operational resilience. During the past three years, core clearing and settlement organizations in the U.S. have come a long way toward meeting more demanding objectives for recovery and resumption. Going forward, it is important that the major firms maintain a level of resilience that is commensurate with their essential positions in the financial system. Over time, we expect firms will take advantage of cost-effective improvements in technology and business processes to increase, where needed, the geographic diversification of their back-up sites.

We also expect senior management at each firm to assure itself through rigorous testing that their firms can, in fact, rapidly recover or resume their important settlement activity. We also need to continue to pay more attention to how to reduce the threat of cyber-attacks. Beyond the direct financial

losses from criminal activity, these threats pose a broader risk to confidence in the integrity of financial institutions, payments systems, and ultimately, the global payments network. This is a growing challenge, and it will require a major ongoing commitment of resources.

Within the Federal Reserve, we have worked very hard to raise the resilience and security of our own operations. We have made major investments to enhance the back-up facilities for Fedwire. We hold ourselves to very high standards, subject our systems to exacting contingency tests, and coordinate these efforts closely with other U.S. payments systems.

We are also continuing to work on ways to improve the security and availability of the telecommunications network that is so vital to the functioning of the financial sector. A private sector group sponsored by the New York Fed, the Payments Risk Committee, has enumerated best practices that financial institutions and payments utilities can adopt to avoid telecommunications outages and to facilitate rapid recovery should an outage occur. We are also working closely with the telecommunications industry, through the Alliance for Telecommunications Industry Solutions, to help improve network diversity and avoid single points of failure for voice and data lines.

### **Payments risk challenges facing system participants**

The reliability of a payments or securities settlement system depends not just on the system's design and operation, but also on the quality of the risk management exercised by the participants themselves. The combination of individual and collective efforts to manage exposures, a discipline that must be performed both by the participants and the system operator, is necessary to achieve reliability.

The increased specialization of the back office operations of the largest financial institutions makes this challenge more difficult to meet. To realize greater economies of scale, global banks often separate their payments and securities business into tightly confined specialties.

To ensure that the various risks that arise across these specialized payments functions are pulled together and managed on an integrated basis, banks need to bring the same discipline to payments risk they have brought to the management of credit and market risk, where best practice aggregates risk on a consolidated basis across the full range of activities of the institution. We believe that it is important for banks to carefully monitor a comprehensive profile of their payments system exposures, and to assign clear responsibility for that function in one place in the institution.

I noted earlier the value of transparency of rules and procedures for payments systems, but this is useful only if participants make use of that transparency. Both the operator and the participants should know the rules of the road. In complex clearing and settlement systems, each firm should fully understand its exposures and how they are changing across the board, and not just on a business line by business line basis. Participants need to understand how the system's procedures would affect them in the event they came under stress, and how these procedures would be applied to others in the event a major firm had difficulty settling on the system.

Transparency is important also to ensure that the major system participants play their appropriate role in holding the operators of payments systems to high standards. Participant or member discipline should complement the work of payments system overseers, in a role analogous to the market discipline applied by counterparties to financial institutions.

### **Clearing and settlement arrangements for OTC derivatives**

As we look at the evolution of the global payments system, one critical area that deserves further attention by market participants and central banks is the clearing and settlement arrangements for the over-the-counter derivatives market. This is an area where the innovation that has driven rapid growth has not been matched by a comparable investment in the infrastructure for post-trade processing.

Because of the relatively slow development of clearing and settlement services for the OTC derivatives market, dealers and their counterparties have been forced to assume and manage risks that are largely avoidable. Unexecuted confirmations create unnecessary legal risk for counterparties and can add to replacement cost risk. Delays and errors in settlement add cost and liquidity risk.

There are a number of important efforts by the private and official sectors that offer the promise of progress. The effort underway by the industry to standardize documentation, automate confirmation

procedures, and match and reconcile payment flows is very important. The Fed has played a role in shaping recommendations for close-out netting on a cross-product basis, and has been strongly supportive of efforts to put these provisions into U. S. law. Adoption of the Hague Securities Convention by countries around the world will improve legal certainty for cross-border collateral arrangements, which is important for bilateral counterparties, clearing and settlement systems. And there are new market-led initiatives underway to bring some utility-type clearing services to the present bilateral arrangements for OTC derivatives.

These efforts to improve the clearing and settlement infrastructure for the OTC derivatives market are important because they help make it easier for firms to understand and manage their bilateral risk exposures. Markets work better, particularly in times of stress, when firms are able to operate with greater certainty about their direct counterparty exposures.

In this context, it is worth reflecting on whether it makes sense to build on these efforts by developing and utilizing central counterparty clearing arrangements in the more standardized part of the OTC derivative market. To be sure, poorly designed central counterparties can increase risk, and they necessarily concentrate operational risk. But well designed central counterparties can play an important role in reducing systemic risk in markets.

This is a complicated challenge for instruments that are inherently complex and constantly evolving, and for which calculating exposures can be difficult. And attracting a critical mass of strong participants can be daunting. But it makes sense to think about whether use of a centralized clearing utility could provide significant advantages over the present bilateral arrangements by increasing transparency, enabling multilateral netting, and providing centralized risk controls, collateral management, and margin requirements. To the extent these advantages can be realized, a centralized utility can reduce the risk of damaging contagion from a failure of a financial institution affecting overall market liquidity. By making some types of losses more predictable, they can reduce the incentive for firms to withdraw liquidity from and reduce exposure to other counterparties that they believe might have credit exposures to the failed institution.

### **Global integration of payments systems**

The increase in cross-border financial activity, the global reach of the largest financial institutions, and as a consequence the greater transnational scope of many payments systems have provided a compelling rationale for cooperation to set a higher level of international standards for payments and settlement systems. These same dynamics may lead eventually to a more uniform international platform for payments and settlement concentrated on a much smaller number of systems. But we are not there yet.

The myriad of different systems that make up the global network means that payments now cross a complicated mix of legal, technological, and supervisory borders. And this means banks are exposed to settlement risk in a remarkably large number of different value transfer systems. One large U.S. internationally active financial institution now operates in 400 separate payments systems around the world.

Differences in legal regimes mean different netting arrangements, collateral requirements, close-out procedures, and bankruptcy implications. Differences in operating platforms and communications standards can increase operational risks.

To meet the challenge of ensuring that this global network of individual payments systems is reliable, resilient and efficient requires a more integrated and comprehensive approach. This is true for the participants that are most exposed to the diversity of risks in this network of systems. And it is true for the official entities as well, because the growing number of cross-border payments systems require an effective framework of cooperation if we are to provide effective oversight.

One important challenge faced by banks that operate across many different financial centers is how to meet their global liquidity needs.

To meet the rising expectations of their customers, and simultaneously fulfill their own internal needs, the largest and most active banks in the payments business would prefer to mobilize their liquidity globally. But the reality is that the total liquidity available to a global bank is fragmented.

Surplus liquidity in one currency at one location cannot always be readily converted into liquidity in another currency or in another market. An institution's liquidity at a specific location is dependent, to a

large extent, on the size of its payment flows, its capital, and the volume of marketable securities and other eligible collateral that is housed in that location. These factors often determine what is available either to gain access to daylight liquidity from a central bank, or to meet a clearinghouse's margin or collateral requirements, or to borrow overnight in an emergency.

In this context, we welcome the work underway in the private sector to develop better arrangements for the more efficient use of collateral globally including greater cross-border pledging of securities that can help meet liquidity needs, in normal times and in conditions of stress. Central banks have a range of options to help meet exceptional liquidity needs, and we have demonstrated that we have the capacity to move very quickly in extremis. But we think the banking community, securities depositories and global custodians can do a lot to take advantage of new technology to put in place stronger market arrangements to meet these needs.

## **Conclusion**

Let me conclude by emphasizing once again our shared interest in ensuring that our payments infrastructure meets the highest standards for safety and soundness and operational resilience. The design of payments systems is the product of different perspectives on how to balance the ideal with the practical. This balance needs to be revisited over time. The global financial system we live in today is a very different system than the present network of national systems was designed to support. Technological advances provide us with a new set of tools to make what may seem optimal from a systemic perspective more practical.

We will continue to work closely with the private sector in designing effective ways to deal with the full range of new challenges from increased financial integration and increased concentration, greater complexity, and new threats to operational security and continuity. And we will work hard, as we have in the past, to try to find the right balance between the broad objectives of stability and security and the efficiency of the system.