



Remarks by Governor Edward W. Kelley, Jr.

Clearinghouses and risk management

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It is a pleasure to be with you this morning to discuss private-sector payments risk management in our changing financial environment. Private-sector clearing arrangements, including numerous clearinghouses, are an integral part of the payment system in the United States, and now is an appropriate time to encourage further debate and action on important risk management issues. I would like to bring some perspective to this topic by first, outlining some of the broad forces affecting clearinghouses and other parts of the payment system; second, discussing the major risks and the different risk management techniques that clearinghouses employ; third, raising some key questions about risk controls for different types of clearing arrangements; and finally, highlighting recent policy developments in this area.

First, the broad forces shaping clearing arrangements both now and in the future. To date, the growth of electronic payments has been an important force shaping our clearing systems. In the large-value sector, the volume and value of electronic payments has continued to grow rapidly, heavily influenced, of course, by the growth of trading in the international markets, and electronics now dominates this activity. In the small-value sector, ACH payments have also grown rapidly, although from a very low base. An important issue is how fast electronic payments will grow in the near-to-medium term and whether they will begin to replace the check as one of the major payment instruments in the retail sector. If this were to happen, there would presumably be corresponding adjustments in our clearing institutions.

One important phenomenon affecting the risks in check clearinghouses has been the trend toward converting different types of larger-value payments to electronic form, and processing these payments in environments with stronger risk controls. The latest example of this trend came earlier this year when the money settlements for most stock trades were converted from checks and drafts to Fedwire fund transfers.

Another broad force that will affect clearinghouses is the advent of interstate branch banking. Most directly, widespread interstate branch banking over the next few years could increase the number of checks and other items cleared as so-called "on-us" items, reducing the number of payments flowing through clearinghouses, and indeed, through correspondent banks and the Federal Reserve. To some extent, such developments would tend to reduce interbank risk in the payment system. As interstate banks participate in more and more clearinghouses, they may also begin to look for higher and more uniform risk management standards in the clearinghouses around the country.

In addition, interstate banking may well contribute to pressures to reduce the number of clearinghouses, with those remaining covering broader, even nationwide, geographic areas. We have already seen evidence of this trend in check clearinghouses in a number of regions. Of course, the prospects for clearinghouse consolidation would be heavily influenced by the degree to which economies of scale exist in current operations and whether new

technologies and organizational techniques can be brought to bear on traditional practices.

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To the extent new clearing arrangements and technologies are adopted, there may also be significant new opportunities to improve risk management. For example, technological improvements and declining computing costs might help increase the use of automated risk management systems in clearing arrangements for retail payments, which have not traditionally employed strong risk controls.

Let me turn to the types of risks that exist in clearing arrangements. One key type of risk is interbank credit risk. In the clearinghouse context, this is the financial risk that a bank or other participant will default on its payment or settlement obligations to the clearing group when they are due, causing losses to other participants.

There is also liquidity risk. If settlement payments are delayed or otherwise not completed on time, one or more banks in a clearinghouse, for example, might be short of cash, which would prevent the completion of other transactions. The significance of this risk will usually depend on the size and intraday timing of clearinghouse settlements.

Further, there are legal risks. There has been much discussion over the past few years, for example, of the need for strong legal foundations for bilateral and multilateral netting arrangements, including clearinghouse arrangements. I would note that significant progress has been made on this front in the United States with changes in netting law.

There are also operational and security risks. Concerns about these risks are often greatest in the wholesale payments area, where the dollar flows are largest. However, operational and security breakdowns could pose very significant problems for retail payment systems, especially if large numbers of payment items were involved. You are no doubt aware of publicity surrounding these risks in connection with the development of emerging payment technologies, such as stored-value cards, Internet-based payment systems, and new retail banking technologies generally. Discussions have centered, for example, on the use of the Internet or other "open networks" for delivering banking services and making payments. One can also imagine that clearinghouses or other multilateral arrangements might be developed for some of these new payment technologies. Risks related to operational and security failures could be a very important component of the risks faced by such new clearing arrangements. I would urge that all banking organizations take these operational risks seriously and act with great prudence in evaluating and managing them.

A fundamental concern of central banks, of course, is systemic risk. This can involve risks that one bank's problem will spill over onto others, risks that whole clearing systems may cease to operate effectively, and even more broadly, risks that unexpected events will destabilize the banking system as a whole. It is this type of concern that has motivated a sustained effort by the international central banking community in a number of areas. In the payment field, concerns about systemic risk have led central banks to call for reductions in settlement risk, in general, and stronger clearing and settlement arrangements, in particular.

The usual focus of concern is on payment systems that are explicitly designed to handle large-value payments. But the same types of risk -- credit, liquidity, legal, operational, and systemic -- are often present in clearing systems for smaller-value payments; only the scale of risk is different. It is also important to recognize that although the average dollar value of daily clearings and settlements may be relatively low, the number of checks or other items in the daily clearings may be very high. These payments may include paychecks, corporate payments to suppliers and securities holders, and other routine but very important payments

whose completion we take for granted as part of the normal functioning of the economy. Thus, a settlement failure in a check clearinghouse, for example, could be extremely disruptive to the banking system, and even to segments of the economy more broadly, if many thousands of payments were returned or not completed on time.

Let me turn now to a variety of techniques for risk control commonly used by clearinghouses in the wholesale financial markets to control interbank credit, liquidity, and systemic risks. These are clearinghouses for payments and securities as well as futures, options, and foreign exchange contracts.

Their risk control techniques often encompass membership standards relating to operational expertise and creditworthiness. Most clearinghouses also designate a risk manager along with a risk management committee. Further, the clearing rules and operational systems typically implement some type of credit and liquidity risk limits, such as caps on net debit positions. For many clearinghouses, limits are enforced in real time. In some, certain limits are enforced after the fact, provided members remain in good standing. To ensure that settlement can occur even if a member defaults, clearinghouses typically employ backstop liquidity resources, such as margin or collateral deposits, participants' funds, and lines of credit. Loss sharing rules are intended to allocate credit losses unambiguously to surviving members, in the event that a participant's default would not be covered by its collateral or other funds at the clearinghouse.

For what we traditionally think of as "small-value" payments, however, the clearinghouse has often been treated simply as a convenient way to exchange bundles of checks and other items and to administer settlements. Although a handful of check and ACH clearinghouses use some more advanced risk controls, the vast majority seem to take the approach that if anything goes wrong, clearinghouse participants will take two aspirin and return payments in the morning. While this point of view is not necessarily wrong, and may be quite cost-effective when amounts at risk are low, it also should not be defended simply because we have always done things this way.

Instead, we need to ask ourselves some basic questions about the reasons why risks and risk controls have been viewed differently for different clearinghouses. First, does the type of instrument determine the types of risk and appropriate controls? For example, is one method of risk control appropriate for credit transfers and another for debit transfers? Second, does the technology matter? Is one type of risk control appropriate for paper-based instruments such as checks, and another for similar transfers made electronically, such as ACH debit transfers? Is one type of risk control appropriate for batch-processing systems and another type for real-time processing systems?

Third, does scale matter? Are stronger risk controls appropriate if large systemic risks are generated by huge daily values of payments and settlements, but not if daily payment flows are relatively small? If you believe that only the amount of dollars at risk matters, what about the potential disruption in the banking system that could occur if one of the larger check clearinghouses were to fail?

Fourth, do the participants matter? Is one standard of risk control appropriate for highly creditworthy institutions and another for less creditworthy institutions? Should risk controls vary by institutional type of participant? In addition, since many institutions participate in more than one clearinghouse, do we get too limited a picture of risk and risk management if we analyze clearinghouses individually?

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Finally, are there minimum risk standards that all clearing houses should meet or do risk profiles vary across different organizations, making such standards awkward and unnecessary? And if there are minimum standards, can they be met by different risk control methods?

Without endeavoring to give specific answers to these questions this morning, let me turn to the development of central bank policy toward private clearinghouses over the past few years. Clearinghouse risks and many of the risk management techniques I have mentioned have been analyzed in a series of reports prepared by the G-10 central banks and published by the Bank for International Settlements. The key report on clearing arrangements that employ multilateral netting was the 1990 "Report of the Committee on Interbank Netting Schemes," known as the Lamfalussy Report. This report depended heavily on earlier work on netting arrangements by the Federal Reserve and the U.S. banking industry. In late 1994, the Board formally adopted the Lamfalussy Minimum Standards for controlling risk in netting systems by incorporating it into our policy statement on large-dollar payments risk. At that time, however, the Board announced that, for the time being, it would not apply the large-dollar policy statement to clearinghouses that use batch processing operations.

Since the Board's large-dollar policy statement was adopted, we were pleased to see that the NOCH/NACHA Task Force on Settlement Risk Management has used the type of risk analysis employed in the policy statement to evaluate the risks in check and ACH clearinghouses. This is an important step in establishing a firm consensus on the risk analysis framework that is appropriate for such private-sector clearinghouses. The report does not identify significant systemic risks or call for more highly developed risk controls in these clearinghouses. However, the report does urge the private sector to take more definitive steps to evaluate the risks in clearinghouses and stronger actions to strengthen risk management where needed.

The emphasis in the report on voluntary efforts by the banking industry and clearinghouse associations is welcome. In the United States, it has often been the clearinghouse participants themselves that have designed and pressed for the most innovative and effective tools for risk management. We would welcome further steps along these lines.

The Task Force Report also raises the question of whether the Federal Reserve could offer improved net settlement services to the banking industry that would also serve to reduce interbank risk. This is a question that I believe has become increasingly important, particularly with the advent of interstate branch banking and the growth of clearinghouses offering nationwide services.

Currently, the Federal Reserve offers a same-day net settlement service to national clearinghouses in which banks use the Fedwire to execute the fund transfers necessary to complete their multilateral net settlements each day. This model has three very significant virtues from the point of view of risk control: It is fast; it has the strongest real-time risk controls employed by the Federal Reserve; and settlement is normally final soon after the settlement process starts. These characteristics greatly speed up the final transfer of funds and the successful completion of settlement. The result is that the duration of interbank risk exposures, typically overnight exposures in check clearinghouses, is shortened significantly. Over the past few years, these risk reduction benefits have helped increase interest in the Federal Reserve's national same-day settlement service.

Some have asked whether the beneficial risk reduction characteristics of the national Fedwire-based net settlement service can be retained but offered in a somewhat more convenient format. The Federal Reserve staff is actively reviewing this possibility along with the Board's general risk policies relating to smaller-dollar clearing arrangements. I expect that there will be good progress to report on these issues relatively early next year.

Let me conclude with three observations. First, it is encouraging that the banking industry is becoming more sensitized to issues of risk in check, ACH, and similar clearing arrangements. Too often, our attitude has been that if there are strong risk controls on the large-dollar systems, we can simply ignore risk in the rest of the clearing infrastructure.

Second, those with a direct stake in individual clearing systems need to act on their growing sensitivity to risk and address the need to strengthen risk management. The types of concerns that I outlined above need to be analyzed in the context of specific clearinghouses and specific control systems. We believe that this is an important job of the owners and participants.

Finally, we need to ask ourselves why, in an era when electronic technology has made instantaneous communication and final fund transfers possible, we still incur the risks of conducting multilateral interbank settlements that are not final until the next banking day. Clearly we should not allow long-standing operational conventions to dictate the design of interbank settlements, and thereby increase payment-system risk, if these conventions are now obsolete and improvements are possible.

As I noted, the Federal Reserve is actively analyzing clearinghouse developments and reviewing its small-dollar netting policies. To date, the work of the private sector has been encouraging. However, it is clear that the job of improving risk management is not finished. All of us have more work to do. Indeed, improving payment risk management in a changing environment is an ongoing responsibility.

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