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**COOPERATIVE APPROACHES TO REDUCING RISKS  
IN GLOBAL FINANCIAL MARKETS**

remarks by

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**COOPERATIVE APPROACHES TO REDUCING RISKS  
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Let me begin by thanking Hugh Patrick and Frank Edwards for providing me an opportunity to participate in this very timely and important conference. You who are attending this conference are, of course, keenly aware of the extent to which economies as well as particular markets have become increasingly interdependent. You are aware also of the benefits we all derive from that integration, such as enhanced growth, greater efficiency in production decisions, improved resource allocation, and an expanded range of choices for consumers and investors.

In my remarks today, I will first describe what I see as two basic threats to the benefits that flow from an integrated, global trading order and second identify cooperative efforts that I believe can address those threats successfully. I will conclude my remarks on cooperative efforts by focusing on reduction of credit and liquidity risks in the foreign exchange markets.

**Challenges to the Global Trading Order**

One force that quite clearly threatens the global trading order is protectionism. I see that threat in the United States, where we have protectionist policies with respect to some goods and financial services and where some have argued for more widespread and substantial protection. I fear it also in other parts of the world. World trade has managed to overcome these threats and has expanded strongly, but I would be even more comfortable looking to the future if the current Uruguay Round were to reach a successful conclusion. Prospects for the

global economy, including those countries seeking to move toward more market-oriented systems, would be enhanced if all countries pursued reductions in all forms of barriers to trade.

The other set of challenges is quite different. It relates to the volatility and associated risks that arise in international trade and, especially from the perspective of this conference, in international financial markets. The root causes of volatility are varied. For example, a good deal of volatility in the past has been associated with unsound or divergent monetary policies. Uncertainty concerning the priority attached to stable prices permeates the market's determination of exchange rates.

One way to reduce risks in global financial markets involves international policy coordination aimed at greater macroeconomic stability in the global economy. In this policy process, central banks have a clear role to play. In particular, their first assignment is to achieve price stability.

The liberalization that has taken place in individual financial markets and in international capital flows fosters greater integration of financial markets around the globe. Holders of wealth, whether individuals or official holders of reserves, can diversify more easily their portfolios across currencies and countries than they could previously. New financial instruments in the United States and developing markets outside the United States have offered increasing depth and breadth to investors in markets outside their own country that usually involve the use of another currency. The opportunity for such diversification is a desirable consequence of the strengthening of the

world's financial markets. It is an irrevocable reality that imposes new disciplines on market participants as well as on central bank behavior. Until market participants expect central banks to be permanently successful in controlling inflation, we will not have reached the condition for nominal exchange rates to be stable over the longer term . (I am disregarding, because it is unappealing, the theoretical possibility that exchange rates can be stable in a world of high inflation rates so long as the rates are the same in all countries.)

#### **Credit and Liquidity Risks in Foreign Exchange Markets**

International diversification of portfolios imposes a second discipline on central banks--the need for coordinated action to address the credit and liquidity risks associated with the explosive growth of foreign exchange transactions. Participants in foreign exchange markets have been aware that trading entails significant credit and liquidity risks since 1974, when the failure of a relatively small German financial institution, Bankhaus I.D. Herstatt, temporarily caused substantial disruptions in both the foreign exchange markets and in national payments systems. Such risks arise primarily because there has been no mechanism available to ensure simultaneous settlement of both legs of a foreign exchange transaction. During the interval between the settlement of each leg, the party that has made the first payment risks losing the full value of the second payment if its counterparty defaults on its obligation. In the Herstatt case, it had purchased various European currencies in exchange for U.S. dollars. Herstatt's counterparties paid out the European currencies during European business

hours. When Herstatt subsequently failed to meet its obligations to deliver dollars, its counterparties were left with unsecured claims on a bankrupt institution.

Since Herstatt's failure, the foreign exchange markets have expanded enormously. A survey conducted by central banks and released recently by the Bank for International Settlements revealed that average daily foreign exchange trading volume had reached at least \$640 billion in April 1989. Moreover, trading had doubled during the previous three years in the United Kingdom, the United States, Japan, and Canada, the four major centers for which comparable data are available. This surge will undoubtedly continue as exchange and capital controls are eliminated in Europe and are generally reduced worldwide.

The credit and liquidity risks associated with foreign exchange activities may have outpaced the growth of trading volume. Given the time differences between the Tokyo and New York business days, settlement risks in foreign exchange trading--now commonly termed Herstatt risks--are perhaps greatest for trades of Japanese yen against U.S. dollars. A party that sells yen in exchange for dollars must irrevocably pay out the yen at least eight hours and most often fourteen hours before it receives payment in U.S. dollars. With the removal of capital controls in Japan and its emergence as a major economic player, yen-dollar trading activity now accounts for an important share of overall activity in the foreign exchange markets. Indeed, the BIS survey revealed that yen-dollar trades account for 75 percent of foreign exchange volume in Tokyo, which has emerged as the third largest center for foreign exchange trading, after London and New York.

### **Cooperative Efforts by the Private Sector to Reduce Risks**

During the past several years, market participants have begun to focus on the credit and liquidity risks they face in existing bilateral trading relationships. Along with central banks, they are considering legal arrangements that are designed to reduce these credit and liquidity risks in the foreign exchange markets, as well as to reduce transactions costs. Market participants and central banks now understand their mutual vulnerability to these risks, which can strain national payment systems.

Dealers in foreign exchange typically enter into successive contracts to pay or receive a particular currency, often for the same delivery date and with the same counterparty. The legal arrangements that are being developed are designed to net out the amounts due between counterparties by currency and delivery date. If a market participant defaults, these agreements are designed to ensure that the credit exposure to any of its counterparties on unmatured contracts is the net of unrealized gains and losses on those contracts rather than the gross value of unrealized gains.

Existing arrangements for netting operate bilaterally, that is, between a single pair of counterparties. They are designed to reduce risks by pulling together all contracts, whether spot or forward, into a new agreement. For example, FXnet, a London-based partnership formed by several major international banks, has developed an agreement under which trade confirmations for transactions between two banks are matched and netted into a running account maintained between them for each currency and delivery date. Payments are to be made for the net

balances, due to or from each participant, in each currency on each delivery date. Twenty banks from four different countries are either currently participating in FXnet or will begin to soon. The benefits of participation reportedly have been substantial--payment obligations and associated credit exposures reportedly have been reduced by 50 to 60 percent.

Market participants and G-10 central banks currently are studying the feasibility of multilateral netting arrangements for foreign exchange contracts. The proposals under consideration achieve multilateral netting through creation of a central counterparty or clearing house, whose legal structure is similar to existing clearing houses affiliated with futures and options exchanges. For each contract submitted by a pair of participants, the central party would be substituted as the counterparty to each participant. The central counterparty would maintain a running, legally binding net position vis-a-vis each participant for each currency and delivery date. For a given set of contracts, this process would leave each participant with net amounts due to or due from the central counterparty that equalled its multilateral net positions vis-a-vis the other participants in the system as a group.

Specific proposals for such clearing houses currently are under development by three groups of bankers in Canada, the United States, and Europe. At the moment, none of these proposals is fully developed and implementation appears at least a year away. Nonetheless, important progress appears to have been made during the last year by each group of bankers. Moreover, I am pleased to note that a dialogue has been

established among the three groups and, as a result, certain key features of the proposals have converged. These bankers have recognized that international cooperation in this area is essential. Banks participating in more than one of these systems obviously would prefer to avoid maintaining multiple communications, confirmation, and other back-office systems. Preliminary studies by these groups of banks suggest that multilateral netting could reduce gross payment obligations by 80 percent or more.

#### **Cooperative Efforts by Central Banks**

The central banks of the G-10 countries have been studying the public policy implications of netting arrangements for foreign exchange as well as other types of financial obligations and for payments. Early last year the BIS released a preliminary report by a working party of payment experts, which I had the privilege of chairing. That report confirmed that netting arrangements have the potential to reduce significantly the credit and liquidity risks in foreign exchange markets. However, it cautioned that the legal effectiveness of netting agreements required careful study. If participants should come to rely on a netting arrangement that is not legally valid, they might allow the true gross credit and liquidity exposures to exceed prudent levels. Also, multilateral netting arrangements, in particular, require the development of risk management systems that protect the financial integrity of the clearing house. Should the financial condition of a clearing house become impaired, the report warned, serious systemic credit and liquidity problems could develop. Finally, the report also identified a range of broader financial policy issues that would be

raised by implementation of foreign exchange clearing houses, including the appropriate approach to their oversight by central banks and supervisory authorities.

For the past year another G-10 committee has been thoroughly reviewing the legal and risk management issues raised by netting arrangements. These studies should make possible a cooperative approach to oversight of multilateral foreign exchange netting systems by central banks and national bank supervisory authorities. Cooperation in this area clearly is critical, since both the host central bank for such a system and each of the central banks whose currencies are accepted for netting would have a vital interest in its operations.

For my part, I believe central banks should seriously consider taking additional steps to facilitate the reduction of risks in the foreign exchange markets. The private sector, through well-designed netting systems, can greatly reduce the risks associated with settlements of foreign exchange obligations. Central banks could facilitate implementation of such systems by providing accounts through which final, irrevocable settlements could be completed. Central banks also should consider more fundamental changes in central bank operations that would allow simultaneous final settlement of both legs of a foreign exchange transaction and thereby eliminate Herstatt risks.

There are a variety of measures that central banks could adopt that would allow creation of such a delivery-against-payment mechanism. One possibility is for central banks to extend their hours of operation in their domestic currency. Participants in the foreign exchange markets could then discharge their payment obligations through

synchronized transfers of central bank balances. Another possibility is for a single central bank to offer accounts in multiple currencies. Both legs of a foreign exchange transaction could then be discharged through simultaneous transfers of credit on that central bank's books.

The offering of such services by central banks raises a number of important issues, including the potential impact on the operation of national money markets and the conduct of monetary policy. In my view, in considering any of these changes, coordination and cooperation among central banks are essential. With regard to those options that involve one central bank offering accounts denominated in the currency of another central bank, I feel that due consideration needs to be given to the views of the central bank of issue. Implementation of such options should be considered only after thorough consultations.

As many of you may know, my preference is for central banks to extend their hours of operation. Indeed, I have already proposed that the Federal Reserve operate its Fedwire system 24 hours a day. Some have felt that extended hours would require further extensions of daylight credit by the Federal Reserve. However, I see no reason why an active intraday market in federal funds would not develop that would allow participants to meet their intraday credit needs without resort to the central bank. The pricing of federal reserve credit should induce netting arrangements to develop that would privatize the risks currently borne by the Federal Reserve. If netting arrangements adopt loss sharing agreements that create appropriate incentives for participants to manage their counterparty risks, a far more efficient allocation of intraday credit should result.

Not only would 24-hour operation of Fedwire allow Herstatt risks to be eliminated for foreign exchange transactions involving the dollar, but it also would allow timely final and irrevocable settlement of other dollar-denominated obligations. With financial markets moving rapidly in the direction of round-the-clock trading, the availability of a mechanism to achieve final settlement promptly has, in my view, become increasingly urgent.