## Overview: Central Bank Perspectives

## Alan Greenspan

Much of this conference has focused on the fact that our markets and financial systems are evolving at a pace not fully envisioned only a few years ago. They are enhancing the avenues of credit available to borrowers and the convenience of efficiency of financial markets and services. However, the changes are also adding immensely to the complexity of our financial system and are accordingly closing the risks. Now, if this is a side issue to the central focus of this conference, monetary policy will not be functioning in a vacuum during the 1990s.

With the memory of October 1987 still fresh in our minds, it is important that we stand back, not only to take stock of what has happened, but to understand better the economic causes of financial innovation and globalization and to identify potential accompanying risks and ways to limit such risks. Fending off such risks will be one of the roles of central banking in the 1990s.

Contributing to the evolving of our financial markets is a process that I have described elsewhere as the downsizing of economic output. That is, the creation of economic value has shifted increasingly toward conceptual and intangible values with decidedly less reliance on physical volumes. In fact, if the weight of all materials (the tons of grain, cotton, ore, coal, steel, cement and so forth) we produce were added up, their average volume per capita might not be much greater today than it was say 50 or 75 years ago. This would mean that increases in the conceptual components of GNP, that is, those reflecting advances of knowledge and ideas, would explain, by far, the major part of the rise in real **GNP** in the United States and presumably, the industrial world as a whole.

Downsizing has largely been a response to the need to reduce the costs of moving goods and services to their most highly valued use, thereby conserving on energy, labor, and other valuable resources. Reinforcing this process has been quantum advances in technology spurred by economic forces. In recent years, the explosive growth of information gathering and processing techniques has greatly extended our analytical capabilities of substituting ideas for physical volume. Since irreversible conceptual gains are propelling the downsizing process, these trends almost surely will continue into the twenty-first century. The purpose of production of economic value will not change. It will continue to serve human needs and values, but the form of output will be increasingly less palpable.

Understandably, downsizing is having a profound impact on international trade. Obviously, the less the bulk and the lower the weight, the easier it is to move goods. Clearly, as cross-border trade grows irreversibly over the long run, worldwide surpluses and offsetting deficits on current accounts can be expected to grow as well. That is, owing to the forces that are acting to boost the share of output going to trade, net cross-border financial claims relative to **GNP** can be expected to continue to rise.

Moreover, new technology, especially computer and telecommunications technology, is boosting gross financial transactions at an even faster pace than the net transactions required to finance current account deficits. Rapidly expanding data processing and virtually simultaneous or instantaneous information transmission capacity are facilitating the development of a broad spectrum of complex financial instruments which can be tailored to the hedging, funding, and investment needs of a growing array of market participants. Some of this has involved an unbundling of financial risk to meet the increasing specialized risk-avoidance requirements of market participants. Exchange rate and interest rate swaps, together with financial futures and options, have become important means by which currency and interest rate risks get shifted to those most willing to take it on. The proliferation of financial instruments, in turn, implies an increasing number of arbitrage opportunities which tend to further boost gross financial transactions volume in relation to output.

Portfolio considerations also are playing an important role in the

globalization of securities markets. As the welfare of people in the United States and abroad becomes more dependent on the performance of external economies and exchange market developments, it is natural for both individual investors and institutions which directly or indirectly manage the assets of individuals to acquire or raise the share of foreign securities in investment portfolios. Such diversification provides investors a means of protecting against depreciation of the local currency on foreign exchange markets and domestic economic disturbances affecting asset values on **local** markets.

Clearly, as international trade continues to expand more rapidly than global output and domestic economies become even more closely linked to those abroad, the objective of diversifying international securities portfolios, will become increasingly important. Moreover, since the U.S. dollar is still the key international currency, such diversification has been and may continue to be disproportionately into the dollar as a proxy for all nondomestic currencies. This, of course, presumes the continued role of the dollar as the key international currency, which I do.

As international financial trading and transactions have surged, demands for clearing services across a wide range of financial instruments have expanded rapidly, placing pressures on clearing and settlement systems. Partly as a consequence, volumes on payment systems, both domestically and cross border, have mushroomed. As the magnitudes of transactions escalate, monetary authorities will have to become increasingly concerned about systemic risk. Existing schedule settlement and payment delays raise the **spector** of defaults in any of the myriad of uncovered transactions which can ricochet through the financial markets both domestically and across borders.

The various clearing, settlement, and payment systems have been endeavoring to reduce the systemic risk by shortening the time lags between commitment and final settlement, in effect, endeavoring to reduce float. Obviously, if all financial transactions were completed concurrently and with finality, float would disappear and systemic risk resulting from the time differences in settlement, clearing, and payments, would be eliminated. Perhaps in 20 or 30 years, computer technology will have advanced to the point where such an overall world financial system would be feasible. But in the period **immedi**ately ahead, this is clearly not yet practical.

To be sure, technology exists today to maintain a real time con-

current settlement, clearing, and payment system which would reduce levels of float to zero. The reluctance to introduce such a system presumably implies that the cost of implementation exceeds the present cost of the risks of systemic failure. Hence, pending the ultimate rationalization of financial transactions and the elimination of float, one of the major concerns of monetary authorities in the 1990s and the early part of the next century is going to be the substantial acceleration of float. Since this will be a factor in the stability of the world financial system, it will, of necessity, impact on our various monetary policy strategies.

It is worth noting that computer and telecommunications technology, while an important factor contributing to the globalization of securities markets and to certain financial system risks, can be used and is being used to limit risk. Information systems increasingly are permitting securities firms to monitor their global positions on a timely basis and virtually around-the-clock trading in some securities enables market participants to shed unwanted risk promptly. Such technology also permits clearing systems to monitor member positions in their own markets on a timely basis and to share member position information with other clearing systems, thereby enhancing control of overall risk to clearing and settlement systems.

To an important degree, more standardization in the areas such as clearing and settlement and capital standards holds the promise of enhancing efficiency while, at the same time, strengthening market structures. Moreover, international coordination of policies in these areas will act to reduce the scope for so-called regulatory arbitrage; that is, artificial reasons for investors or securities advisers to favor one national market over others.

At the present time, a considerable amount of effort is being expended to coordinate within and across borders in these various areas. In some cases, this involves regulatory authorities; in some other cases, it involves the private sector and still others, it involves the combination of both. For example, there are a number of bilateral discussions between the SEC and securities market regulators in other countries on issues relating to the exchange of information and enforcement of securities market laws. Also, central banks within the context of their responsibilities for national payment systems have been addressing risks associated with securities, clearing and **settle**- ment and are working to coordinate policies on payment system netting arrangements.

In closing, the stability of our financial markets must, of course, at root, rest on the performance of the world economy. Thus, at the very top of our consideration in maintaining a **sound financial** structure is the pursuit of sound economic policies both domestically and, to the extent relevant, on a coordinated international basis. In this regard, conferences like this, by identifying and addressing important policy issues, can make a valuable contribution.

At the same time, we must seek to strengthen that financial structure through appropriate market performance, recognizing that even systems with formidable safeguards will be unable to ensure against the disruption resulting from a massive speculative imbalance. Through the cooperative efforts of the private and public sectors we can go a considerable distance in improving the safety and soundness of our financial markets systems but we cannot realistically expect to eliminate all risks in these systems.