
Changing Capital Markets: Implications for Monetary Policy A Summary of the Bank's 1993 Symposium

By Gordon H. Sellon, Jr.

Financial markets throughout the world have changed substantially in recent years as capital markets have become deeper and broader. In many countries, financial intermediation is increasingly carried out directly in capital markets rather than through such traditional intermediaries as commercial banks. Moreover, complex linkages among global financial markets have increased capital mobility to the point where considerable amounts of funds cross national borders each day. These developments have potentially important implications for monetary policy in the United States and other countries.

To explore the implications of these financial market trends, the Federal Reserve Bank of Kansas City invited central bankers, academics, and financial market participants to a symposium entitled "Changing Capital Markets: Implications for Monetary Policy." The symposium was held August 19-21, 1993, at Jackson Hole, Wyoming.

This article highlights the issues raised at the symposium and summarizes the papers and commentary. The first section of the article provides an overview of the main issues and identifies areas of agreement and disagreement among program participants. The remaining sections summarize the viewpoints of the program participants and their policy recommendations.

SYMPOSIUM HIGHLIGHTS

Over the past decade, two significant trends have emerged in financial markets around the world. First, there has been tremendous growth in domestic capital markets in terms of the volume and value of transactions and in the development of new types of securities. Associated with this growth in capital markets has been an apparent decline in the traditional role of commercial banks, as both depositors and borrowers have sought alternative sources for investment and financing. Second, in response to financial market liberalization around the world, international capital mobility has risen dramatically.

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Evidence of the significance of this trend can be found most strikingly in the recent turmoil in the European Exchange Rate Mechanism (ERM) but is also apparent in the increased inflow of investment into Latin America and the volatility of Japan's overseas investment.

As Federal Reserve Chairman Alan Greenspan noted in his introductory remarks at the symposium, both of these trends have important implications for monetary policy. If banks play a smaller role or a different role in the financial system, the monetary transmission mechanism may be altered. If so, monetary policy could become less effective or the impact of policy on economic activity may be different than in the past. In addition, it may become more difficult to implement monetary policy. These financial market changes may distort the information provided by traditional policy indicators such as the monetary aggregates. And, the greater capital mobility resulting from increased linkages among financial markets may make it more difficult for central banks to balance domestic policy considerations against international obligations. Finally, both trends have implications for financial stability. Regardless of whether they tend to enhance or diminish the inherent stability of the financial system, these changes in financial markets may complicate the task of central banks in assessing and controlling systemic risk and in responding to financial crises.

Symposium participants debated the significance of these trends and, in the course of their discussion, reached broad agreement on a range of issues. Most participants felt financial market changes have altered the channels through which monetary policy affects the economy but have not impaired the overall ability of central banks to affect economic activity. At the same time, however, there was general agreement these changes have caused operational difficulties for monetary policy by reducing the usefulness of monetary aggregates and by making it more difficult to operate a fixed exchange rate system.

Participants also concurred that while new methods of hedging risks could promote financial stability, problems of assessing and limiting systemic risk have become more complex.

In contrast to broad consensus on the major issues, significant differences of opinion emerged about the appropriate response of central banks to these challenges. Some participants stressed institutional differences among countries that might require policy responses to be tailored to individual circumstances. Disagreement also surfaced over how the monetary transmission mechanism has changed and how much emphasis should be attributed to bank credit, interest rates, and exchange rates as policy channels. How central banks should respond to the diminished usefulness of the monetary aggregates was a particularly controversial issue. Some participants recommended using a broad set of information variables. Others advocated the use of policy rules. Still others proposed direct targeting of ultimate policy objectives. Views also diverged on how the ERM should be restructured in light of the recent crisis. While there was little support for proposals to restrict international capital mobility to reduce realignment pressures, there was less consensus on whether a broad or narrow set of exchange rate bands is more consistent with further progress toward European monetary union.

THE TRANSFORMATION OF DOMESTIC CAPITAL MARKETS

The first day's sessions focused on significant structural changes in domestic financial markets and their implications for monetary policy. Topics examined included the changing role of banks in the intermediation process, the impact of financial market changes on the channels of monetary policy, the implementation of monetary policy without intermediate targets, and longer run prospects for financial change.

The changing role of banks

According to Franklin Edwards, dramatic changes in financial markets have occurred worldwide since the 1980s. Two developments are particularly noteworthy. First, in the United States and many other countries there has been an apparent decline in the share of commercial banks and other depository intermediaries in the intermediation process. Bank deposits have declined as a share of household assets, and businesses have turned from banks to capital markets to finance their investment spending. Second, nonbank intermediaries, such as pension and mutual funds, insurance companies, and finance companies, have played an increasingly important role in the financial system.

In Edwards's view, this growing institutionalization of savings has been associated with a number of important trends, such as increased trading activity in financial markets, rapid growth in the use of financial derivatives, and increased cross-border equity holdings. Behind these developments are a variety of causes, including greater inflation and interest rate volatility, improvements in information and communications technologies, and the end of capital controls and the advent of flexible exchange rate systems.

Edwards stressed the potential importance of these changes for monetary policy. He noted banks have historically played a key role in the intermediation process. Banks are heavily regulated to promote financial stability and serve as the fulcrum for monetary policy. Thus, it is important to understand whether the changing importance of the banking system undercuts the effectiveness of monetary policy or results in a less stable financial system. In designing possible policy responses, Edwards emphasized the importance of knowing whether these changes were due to the natural evolution of financial markets or to inappropriate financial regulation.

In his discussion of Edwards's paper, Kumi-haru Shigehara indicated he was in general agree-

ment with the analysis and data presented by Edwards, but certain qualifications should be made. In particular, he noted important differences in the form and speed with which financial market changes are occurring. Thus, Shigehara thought Edwards's analysis tended to reflect U.S. events more accurately than changes occurring in other countries. He also thought focusing too heavily on traditional balance sheet measures tended to overstate the decline in banking to the extent that banks were heavily engaged in off-balance-sheet activities. Finally, Shigehara emphasized a second trend of potential concern to policymakers, a trend in a number of OECD countries toward financial conglomeration due to mergers of banks with securities firms and banks with insurance companies.

Implications for the monetary transmission mechanism

Christina and David Romer examined whether these financial market changes have altered the effectiveness of monetary policy or the way that monetary policy affects the economy. They identified three possible channels for monetary policy: an interest rate channel, a bank lending or credit channel, and a "credit actions" channel. That is, central banks can affect the economy by influencing market interest rates, by controlling bank lending through control over bank reserves, or by imposing credit controls or other types of direct restrictions on bank lending.

Based on a historical examination of several episodes of tight monetary policy in the postwar United States, the Romers suggested direct credit actions have played a very important role in the monetary transmission mechanism. They argued, however, the Federal Reserve has become less willing to directly control bank lending in recent years. Apart from direct controls, they found no evidence in their empirical work of a bank credit channel for monetary policy. As a result, they felt

monetary policy would work exclusively through an interest rate channel in the future. In their view, this channel will continue to operate as long as there is a demand for high-powered money. Thus, they concluded structural changes in financial markets are unlikely to affect central banks' ability to conduct monetary policy.

Charles Freedman found the Romers's historical discussion to be enlightening but was critical of their empirical work. He noted that in Canada, as in the United States, direct credit actions formerly played an important role in speeding up the response of bank lending to restrictive monetary policy. He thought both countries placed less reliance on supplemental credit restraints for various reasons: partly because of a belief the market's allocation of credit was superior to administrative allocation, partly because of the increased emphasis on monetary aggregates as policy indicators, and partly because of the rapid growth of nonbank sources of credit.

Citing concerns about the specification of their model, Freedman was not convinced the Romers had accurately measured the impact of credit actions on the economy. In addition, he noted the continued existence of an interest rate channel did not depend on the existence of reserve requirements. Even in the absence of reserve requirements, as long as payment settlement occurs on the books of the central bank, monetary policy will still have leverage over interest rates.

In his discussion of the Romers's paper, Mark Gertler emphasized the importance of a bank credit channel for monetary policy. Indeed, Gertler noted there are actually two bank credit channels: the channel working through reserve requirements which was emphasized by the Romers, and a channel involving a balance sheet mechanism in which borrowers with imperfect access to capital markets (small business) may be differentially affected by tight money. According to Gertler, this second channel does not rely on regulatory restraints and so should be operative

even in the absence of direct credit actions.

Gertler argued the Romers's empirical work did not rule out this latter channel and that, more generally, it was difficult to separate the effects of credit actions from restrictive monetary policy. He also suggested that while central banks may not have lost control over short-term interest rates, financial market changes may have affected their ability to influence long-term rates. At the same time, he complimented the Romers for their attempt to measure the effects of credit actions and suggested that, by ignoring these effects, the existing literature may have overstated the effects of monetary policy on real activity.

Conducting monetary policy amid financial change

In his presentation, Benjamin Friedman suggested financial market changes have profound implications for the operation of monetary policy. Citing considerable empirical evidence of structural changes in the relationship between the monetary aggregates and income and prices, Friedman argued it was no longer possible to implement U.S. monetary policy by following a rule based on a predetermined intermediate target.

In response to this problem, Friedman advocated increased reliance on information variables reflecting changes in real and financial activity. Because any one variable can give false signals, he suggested policymakers should look at a wide range of variables and should exploit the information from these indicators intensively through frequent re-examination of the data.

Friedman also expressed concern over the long-term implications of a changing role for banks. He thought a declining reserve base and increasing importance of nonbank intermediaries could undercut the Federal Reserve's ability to affect asset prices and nonfinancial activity in the future.

In his comments on Friedman's paper, Donald

Kohn indicated the declining reliability of the monetary aggregates has led the Federal Reserve to adjust its policy procedures along the lines suggested by Friedman, that is, to a more frequent use of a broader range of indicator variables. At the same time, Kohn was not as pessimistic about the future use of the aggregates by the Federal Reserve, citing a number of unusual factors affecting their behavior in recent years that might not be present in the future.

Kohn also warned about excessive reliance on either nominal or real interest rates in the policy process, pointing out while interest rates may function as information variables they are not good targets since they do not provide a nominal anchor for policy. Indeed, Kohn felt explicit emphasis on an ultimate goal of price stability was necessary to provide discipline to a discretionary approach to monetary policy. He was less concerned than Friedman that changes in the role of banks will reduce the Federal Reserve's leverage in conducting monetary policy.

Reiner König commented on Friedman's paper from the perspective of Germany, a country that has not experienced significant structural changes in financial markets. He noted Germany's monetary targeting strategy has recently been complicated by such special factors as German reunification and foreign capital flows. Still, the long-run demand for M3 continues to be stable, suggesting it will remain a reliable intermediate target. He pointed out, however, that it would be incorrect to say the German system of monetary targeting is based on a strict rule. Considerable discretion is possible in deriving the target and in permitting short-run deviations from the target in response to changing economic conditions.

As to the usefulness of interest rates as information variables, König stressed that neither the level of nor change in rates is particularly informative. In Germany, as in the United States, there is some evidence that interest rate

spreads have predictive content. He emphasized, however, that because of institutional differences in financial structures, different countries will necessarily come to different conclusions about the choice of specific monetary policy targets and indicators.

In response to Friedman, Allan Meltzer argued that change and uncertainty do not make the case for discretionary monetary policy. He observed that errors in the use of information variables or in economic forecasts could lead to costly, destabilizing policy actions. Instead of discretion, Meltzer advocated the use of an adaptive policy rule. According to Meltzer, an adaptive rule, unlike a discretionary approach, reacts to new information but does not base policy actions on forecasts. It also differs from a fixed rule that ignores new information. In Meltzer's view, use of an adaptive rule would guard against major policy errors, would provide a more stable planning environment by making central bank behavior more predictable, and would assure both reasonable price stability and enhanced exchange rate stability.

The longer term outlook for financial markets

In his luncheon address, Charles Sanford focused on the future evolution of financial markets. Describing his vision of financial markets in the year 2020, Sanford saw the continuation of technological change in communications and information management combined with new developments in financial theory as radically altering the way that financial services are delivered.

According to Sanford, the basic financial functions—financing, risk management, trading and positioning, advising, and transactions processing—will still be present. Traditional financial products, however, such as loans, borrowings, and securities, will be replaced with “claims on wealth” or “financial claims” that

will be actively traded around the clock and worldwide. Banks, as currently structured, will no longer exist, and there will be no need for separate financial branches as individuals become more directly linked to markets and financial service providers. To make this future possible, Sanford indicated further advances in financial theory will be necessary to identify underlying risks and their component attributes, to price these attributes, and to re-bundle the attributes into new investment products.

Sanford also traced out some of the implications of these changes for financial markets and policymakers. While the future financial system would tend to be more efficient in terms of lower transactions costs and better risk management, Sanford thought the task of managing financial institutions will be more complex. In addition, he stressed that to monitor and control systemic risk, central banks will have to understand and adapt to this new financial world.

CAUSES AND CONSEQUENCES OF GREATER INTERNATIONAL CAPITAL MOBILITY

The second set of symposium sessions focused on the growing integration of world capital markets. Topics covered in the presentations and discussion included the causes of increased capital mobility, the extent of capital market integration, and the consequences of greater capital mobility for monetary policy.

The integration of world capital markets

In their presentation, Michael Mussa and Morris Goldstein provided evidence of greatly increased capital mobility. They attributed increases in the volume and range of international financial transactions to a variety of factors including liberalization of capital controls, tech-

nological change, and financial innovation. According to Mussa and Goldstein, integration has proceeded farthest for liquid instruments traded in major financial centers.

At the same time, the authors cautioned it was premature to speak of a world capital market. They noted many countries still maintain capital controls or restrictions on international investments by banks and institutional investors. In addition, they noted evidence portfolios are generally not internationally diversified and investors still exhibit substantial home-country bias. Furthermore, as compared with earlier historical periods, there is less interest rate convergence and relatively small net capital flows.

Still, Mussa and Goldstein suggested integration has proceeded far enough and capital flows are large enough to have significant effects on exchange rate agreements and on domestic policy and reform programs in industrialized and developing countries. In the case of the recent ERM crisis, they argued the lesson to be learned was that greater capital mobility places more demands on participants to coordinate policies or make orderly adjustments in exchange rate parities. They opposed proposals to restrict capital mobility by re-imposing capital controls, suggesting a better approach is to improve market discipline, the understanding and pricing of risks, and supervisory coordination.

In discussing the Mussa and Goldstein paper, Martin Feldstein stressed the imperfect integration of world capital markets. He noted most of the recent increase in capital mobility is short term. In most countries, long-term investment continues to be largely financed by domestic savings. He agreed the increased availability of short-term capital plus the end of capital controls in Europe have made it more difficult to sustain artificial exchange rate levels. He also thought the recent widening of bands in the ERM has made the path to full monetary union more difficult.

Feldstein also emphasized the impact of

greater capital mobility on the monetary transmission mechanism. He argued the effectiveness of monetary policy has been strengthened with the addition of a trade and exchange rate channel to supplement the traditional interest rate channel.

In his discussion, Robert Johnson suggested the responsibility for the recent ERM crisis should not be assigned to speculative capital flows, but rather to flaws in the system. According to Johnson, German reunification required an adjustment in real exchange rates. Over time, financial markets concluded that realignment of nominal exchange rates was the only credible policy option and reacted accordingly. He thought an important part of ERM reform would be to develop a mechanism to preemptively adjust exchange rate parities when faced with similar shocks in the future. He also advocated wider bands than before to increase the cost of speculation and a better means of sharing the burden of maintaining parities among ERM members.

Johnson also identified two other challenges facing Europe and other OECD countries: increasing competition from newly developing countries, and fiscal imbalances resulting in continued growth in government debt. According to Johnson, the first development will cause downward pressures on real wages in industrial economies and industrial restructuring that will require changes in real exchange rates. He noted the continued growth of government debt could lead to concerns about credit risk. Johnson suggested that easier monetary policy may be necessary in many countries to bring about the necessary adjustments in real exchange rates and to support deficit reduction.

Monetary policy implications of increased capital flows

In his presentation, Andrew Crockett examined the implications of greater capital mobility

for three policy issues: the choice of an exchange rate regime, the implementation of monetary policy, and international policy coordination. He argued increased capital mobility has particularly important consequences for the choice of an exchange rate system. According to Crockett, capital mobility tends to exert a stabilizing influence on either a fully flexible or a fully fixed system but may destabilize a fixed but adjustable system, such as the ERM. As a result, Crockett suggested that an important lesson to be learned from the ERM crisis is that a gradual approach to monetary union may not be feasible. Rather, it may be necessary to achieve sufficient convergence of economic performance so that the need for exchange rate adjustments is eliminated before rates are fixed.

Crockett also noted capital market changes have complicated monetary policy by obscuring the meaning of traditional monetary aggregates. He thought adopting purely discretionary procedures put the central bank's credibility at risk. According to Crockett, a better approach is the new UK system of directly targeting the ultimate objective of policy, price stability.

In the presence of the continuing integration of world capital markets, Crockett suggested there may be benefits to increased policy cooperation. He noted, particularly in flexible exchange rate systems, cooperation may be superior to such alternatives as capital controls in response to extreme exchange rate volatility.

Antonio Borges agreed with Crockett's thesis that strong capital mobility and financial market integration make it difficult to maintain a hybrid exchange rate system that attempts to pursue conflicting policy objectives. He emphasized that while capital mobility does not prevent a fixed-exchange-rate system, it does impose serious constraints on policy and requires other objectives to be sacrificed to exchange rate stability. Moreover, he suggested that in the case of Europe, free capital mobility requires quasi-

perfect economic convergence and lower levels of public and private debt as preconditions for monetary union.

Borges also argued the apparent autonomy of monetary policy under floating exchange rates is largely illusory. He suggested, with strong capital market integration, most of the impact of monetary policy in an open economy is transmitted through exchange rates rather than interest rates. Indeed, changes in monetary policy that lead to small interest rate changes can cause large exchange rate changes. Thus, many countries may find it difficult to accept sizable exchange rate changes to get a small amount of policy autonomy.

In his discussion of Crockett's presentation, Alberto Giovannini focused on two issues: the underlying causes of the recent ERM crisis and future options for the ERM. He noted conflicting objectives inherent in the historical development of the ERM in its dual role as an exchange-rate-based stabilization program and as part of a convergence plan to monetary union. Under the former role, exchange rate changes were necessary, while in the latter role parity changes were not permitted because they might undermine convergence and anti-inflation credibility. Giovannini was also critical of the gradual approach to monetary union, suggesting it was not credible and provided the wrong incentives to participants.

As to the future options for the ERM, Giovannini outlined three approaches: returning to narrow bands with new parities, adopting a modified narrow band with a provision to accelerate the pace of monetary union in the face of speculative pressures, and widening the ERM band as proposed by Crockett. Noting that each approach has advantages and disadvantages, he concluded there is no obvious choice. In the absence of a return to narrow bands, however, he pointed out the difficulties for European central banks in conducting monetary policy without explicit exchange rate objectives.

OVERVIEW PANEL

The final sessions provided speakers the opportunity to give their perspective on the broad range of policy issues covered at the symposium.

In his remarks, Hans Tietmeyer examined financial market changes from the perspective of Germany and discussed some of the implications for European monetary integration. He noted two important general implications of recent trends in financial markets. First, while financial markets have become more efficient, they have also become more fragile. Second, monetary policy has become more difficult. Thus, in a number of countries the monetary transmission mechanism has been affected and intermediate targets distorted. In addition, Tietmeyer thought the effectiveness of policy has been affected by such factors as the expansion of variable rate debt, the ability of banks to avoid the restrictions of reserve requirements, and inflation impulses induced by exchange rate intervention.

Tietmeyer noted Germany has been less affected by changes in the intermediation process than by increased capital mobility. Because of less regulation and a slower pace of financial innovation, German banks have not experienced significant erosion in their position, and the long-run M3 relationship has remained stable. In Tietmeyer's view, however, greater capital mobility has made it more difficult to maintain a fixed exchange rate system in the face of differing domestic policy requirements and has undercut the effectiveness of sterilized intervention.

On issues related to European monetary integration, Tietmeyer favored a European strategy of money supply targeting, which he thought was necessary for policy credibility. He indicated the recent decision to widen the ERM bands gave European central banks more flexibility but made the task of maintaining long-run anti-inflation policies more difficult.

Toyoo Gyohten provided insight into recent financial market changes by highlighting Japan's

role in world capital markets. He noted the flow of investment funds from Japan has expanded greatly in recent years and the composition of the investment flows has changed considerably. According to Gyohten, from 1986 to 1990, Japan's trade surplus was financed by an enormous increase in private overseas investment by Japanese investors, partially offset by heavy Euromarket borrowing by Japanese banks. The capital outflow was stimulated by a number of factors, including interest rate differentials, a strong yen, and the boom in the Japanese stock and property markets.

More recently, Gyohten noted, speculative excesses in Japanese financial markets have been unwound and banks have become more conservative, in part, because of higher capital standards. As a result, the private capital outflow has ceased and Japan's trade surplus is being financed primarily by short-term lending by Japanese banks in the Euromarkets. For private capital outflows to increase again, Gyohten stressed the need for a more stable macroeconomic framework in Japan and abroad.

In his overview of issues raised at the symposium, Stanley Fischer offered a longer term perspective on recent capital market changes. He noted the recent liberalization of capital controls and deregulation of financial markets have largely offset restrictions put in place during the 1930s. Thus, while capital market integration has increased in recent years, the degree of integration is similar to that of a century ago.

Fischer suggested the implications of financial market changes for financial stability were unclear. While the development of new markets and financial instruments may be beneficial, he stressed it was important for central banks to have procedures in place to deal with financial crises.

Fischer also thought the financial market changes have more implications for the implementation of monetary policy than for the trans-

mission mechanism. Thus, he argued that in the presence of financial innovations central banks could not follow simple rules. He also disagreed with the view that rules are necessary for credibility. According to Fischer, credibility depends more on the predictability of outcomes than on the predictability of actions.

On the choice of an appropriate exchange rate regime, Fischer suggested the experience of the United States and Canada indicated floating rates are not inconsistent with a move to greater economic integration. He also thought Crockett's approach to the ERM, while logical, was not realistic and further moves toward monetary union in Europe are likely to be accompanied by a progressive tightening of the exchange rate bands.

In his concluding comments, Jacob Frenkel identified a number of consensus policy lessons flowing from the financial market changes in recent years. On regulatory and supervisory issues, he noted there was little support expressed at the symposium for re-regulation or "sand-in-the-wheels" attempts to restrain financial market developments. At the same time, he saw general agreement on the need for strengthened supervision. On monetary policy, he noted the importance of central bank credibility and the need for a nominal anchor to guide policy. Thus, according to Frenkel, while policy discretion is necessary in a rapidly changing world, discretion must be systematic, not erratic.

Finally, while there was no agreement on the choice of an exchange rate regime, Frenkel observed consensus on two exchange rate issues. First, in the presence of capital mobility, foreign exchange market intervention is not a good substitute for fundamental changes in economic policy. Second, countries must reach convergence before pegging exchange rates or must adopt a mechanism for allowing timely adjustment in exchange rate parities as convergence occurs.

***CHANGING CAPITAL MARKETS:
IMPLICATIONS FOR MONETARY POLICY***

A symposium sponsored by the Federal Reserve Bank of Kansas City

August 19-21, 1993

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Governor, Bank of Canada

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ALAN GREENSPAN, Chairman, Board of Governors of the Federal Reserve System

The Transformation of Domestic Capital Markets

FRANKLIN EDWARDS, Professor, Columbia University

Commentary

KUMIHARU SHIGEHARA, Head of Department of Economics and Statistics,
Organization for Economic Cooperation and Development

***Credit Channel or Credit Actions? An Interpretation
of the Postwar Transmission Mechanism***

CHRISTINA ROMER, Professor, University of California at Berkeley

DAVID ROMER, Professor, University of California at Berkeley

Commentary

CHARLES FREEDMAN, Deputy Governor, Bank of Canada

MARK GERTLER, Professor, New York University

***Ongoing Changes in the U.S. Financial Markets:
Implications for the Conduct of Monetary Policy***

BENJAMIN FRIEDMAN, Professor, Harvard University

Commentary

DONALD KOHN, Director, Division of Monetary Affairs, Board of Governors of the
Federal Reserve System

REINER KÖNIG, Director, Department of Economics, Deutsche Bundesbank

ALLAN MELTZER, Professor of Political Economy and Public Policy, Carnegie-Mellon
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The Role of Banks in the Global Financial System

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The Integration of World Capital Markets

MICHAEL MUSSA, Director of Research, International Monetary Fund

MORRIS GOLDSTEIN, Deputy Director of Research, International Monetary Fund

Commentary

MARTIN FELDSTEIN, President and Chief Executive Officer, National Bureau of
Economic Research

ROBERT JOHNSON, Managing Director, Soros Fund Management

Monetary Policy Implications of Increased Capital Flows

ANDREW CROCKETT, Executive Director, Bank of England (currently Director, Bank
for International Settlements)

Commentary

ANTONIO BORGES, Professor and Dean, INSEAD

ALBERTO GIOVANNINI, Professor, Columbia University and Consultant to Ministry
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Overview Panel

STANLEY FISCHER, Professor, Massachusetts Institute of Technology

HANS TIETMEYER, Vice President, Deutsche Bundesbank (currently President, Deutsche
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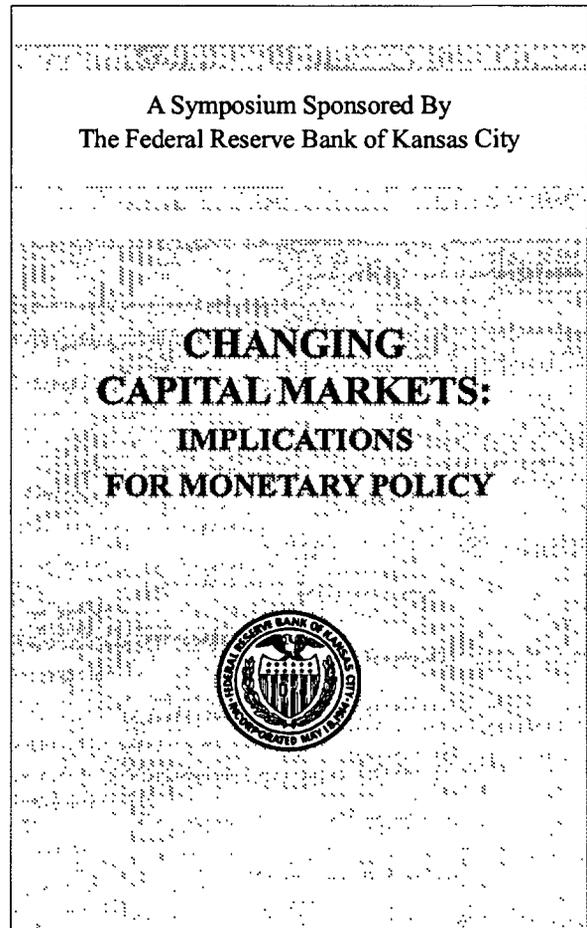
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IMPLICATIONS
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Financial markets throughout the world have changed dramatically as capital markets have become deeper and broader. Financial intermediation is increasingly carried out directly in capital markets, and complex linkages among global financial markets have increased capital mobility—with important implications for monetary policies in the United States and most other market economies. To evaluate such capital market trends, their causes, and their implications for monetary policy, the Federal Reserve Bank of Kansas City hosted a symposium on “Changing Capital Markets: Implications for Monetary Policy,” at Jackson Hole, Wyoming, on August 19-21, 1993. The symposium proceedings will be available soon.

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