I will first address the character of the individual currency markets and then describe what I consider to be the best "test tube" for considering a "harder" type of target zone system—the European Monetary System (EMS)—after which I shall discuss what it shows us, or doesn't show us, about whether a "hard" system can work. In conclusion, I will describe where I think we're moving with respect to currency coordination and changes in the international monetary system.

The paper lays out a very useful framework for analysis. The question now, I believe, is whether we can build on that analysis to try to develop the germ of the next generation of global monetary systems. A number of elements brought out in this paper can lead us to better understand the tradeoffs that we are going to have to make in order to modernize the monetary system and bring it to the point where it has greater credibility in markets, and perhaps greater credibility as a mover of fiscal and monetary policy within countries.

One interesting characteristic of currency markets in the last several years is that they have been heavily "expectation" driven. This paper points out what types of expectations drive the market. There's really no widely accepted equilibrium model. Even if there were such a model, it is not clear that it would govern day-to-day decisions by the participants in the market. Roughly 5 to 10 percent of transactions are trade or investment driven; that is, they have some relationships to goods markets or direct investment. Most of the other portion of the market is either derivative of some other financial transaction
or a transaction made by a trader for the purpose of making money or avoiding losing money on a very short-term basis. So even if the trader had the view that somehow the dollar was going to decline 20 percent over the next two years, he might still be buying dollars if he thought that between today and tomorrow he could make a profit on that trade. So you get a major discontinuity frequently between the short-term and the medium-term currency market.

Now what drives the market obviously differs from time to time. The currency market relates, in part, to the outlook for assets. And one would have to say that if you had to pick one variable that most determined individual currency decisions, it was that. Trade, which was the major factor moving currencies 20 years ago, plays a much smaller role now.

And then there is the underlying question of confidence. Obviously political confidence is very important. However, particularly in the last couple of years, it has been the markets' view of the policies of central banks that has been most critical. If you picked one reason among all the others—recognizing that there are many others—for the rise of the dollar in the early part of this decade it was confidence in Fed policy. Although interest rates played a very key role, it is useful to recall that the dollar went up even at a time when interest rate differentials between the United States and other countries narrowed—when interest rates were going down in the United States. This was true largely because there was a decline in inflation and substantial confidence that the Fed was committed to reducing the rate of inflation. And even though there was a very substantial amount of government financing, and even though the trade deficit was increasing, it was the credibility and the perceived direction of Fed policy that was the single most significant element in the dollar's strength. Therefore, if one looks at what the market pays attention to, that tends more often than not to be its perception of the direction of policy of central banks vis-à-vis one another. There's obviously, as I say, relative political risks, and then event risk, e.g. the prospects for oil prices in the Middle East. They play a role in determining whether the dollar or the yen or some other currency is a good buy at any given point.

Now I would like to address the question of whether it is possible to find some type of "test tube" to determine how a system of more fixed rates might work. Today we have globally what, in effect, is
a pragmatic "holding zone system" or, put another way, a very, very soft "target zone system." The European Monetary System is a "hard-target zone system" or as close as we come at this point. It's useful to look at how well it has done in order to give us a sense of where we might be going globally, or at least, what we should be avoiding. Obviously, there are certain characteristics of the EMS that are somewhat unique. And there are many reasons why we cannot simply transpose the EMS into an international monetary system. But it is useful to consider how a system of this sort works.

The first point is that the system, at its heart, is based on borrowed credibility from the Bundesbank. And without the credibility of the Bundesbank, it would be very hard for the EMS to operate in the stable, essentially noninflationary, way it has for the last several years.

What has the system done?

First, it has reduced volatility among the currencies in the EMS. Certainly when you compare volatility within EMS with volatility between EMS countries and outside countries, there's less within the EMS.

Second, there has been a convergence on a lower rate of inflation in Europe largely because other EMS countries have tried to come down to, or close to, the rate of inflation of Germany, and that rate of inflation is largely based on Bundesbank policy.

With respect to trade, and here's one of the interesting points that's brought up in the paper, and the EMS experience confirms it, there has not been as large an increase in trade within the EMS countries as there has between EMS countries and the rest of the world. One argument had been that if you have more stable exchange rates within Europe, that would create a greater degree of stability and, therefore, it would be easier for people to trade. In fact, it hasn't occurred. There are a lot of reasons for that, of course, which have little to do with the issue of exchange rates. The dynamic economies of East Asia, for example, are major and growing factors in world trade with the European Community (EC). And the most dynamic growth in intra-EC trade had occurred in the 1960s and 1970s. But the point, nonetheless, stands.

We've also seen that there's been no transfer of volatility from currency markets to the interest rate market within Europe. The argument had been made that if governments try to stabilize currencies, the volatility will come out on the fixed income markets. It hasn't
happened in Europe, largely because, in general, underlying fiscal and monetary policies in Europe have been designed to reduce inflation, and that has had a stabilizing effect on the interest rate markets. There's far less convergence on fiscal policy than on monetary policy, however. But one can make the argument that Italian fiscal policy and French fiscal policy (particularly in the early Mitterand period) were tightened up as a result of membership in the EMS, as well as recognition that overstimulation would lead to a sharp deterioration of their trade accounts.

There had been a feeling within Europe that to the extent the EC could be credible about currency stability, and about converging down to a lower rate of inflation, it might, through that additional credibility, reduce the unemployment costs and the foregone output costs associated with the fight against inflation. In fact, that has not occurred. Bringing down the rate of inflation in Europe has entailed a higher rate of unemployment and higher loss of output than in the United States, Japan or other countries. In part, this results from structural problems in Europe. This illustrates another point—if you're going to stabilize exchange rates, you can't simply do it with monetary policy or fiscal policy; there is need to increase the mobility of labor and create a system of internal resource transfer to help move economies toward greater equilibrium.

The last point regarding the EMS is that it has enabled the Germans to avoid the sort of domestic adjustment that the Japanese have undertaken. As a result of the higher yen, the Japanese have tried to stimulate greater domestic demand so that export reliance could be reduced. The Germans, as a result of the fact that other Western European currencies have floated upward along with the deutsche mark, have not had to go through domestic internal adjustment on the same scale as Japan; they have transferred some of that adjustment to their trading partners. They are running very substantial surpluses with most of their European trading partners, so that the higher deutsche mark vis-a-vis the dollar has not led to the sort of fiscal correction in Germany that it has led to in Japan. It's buffered the Germans from having to make that type of correction.

Where does the global monetary system go from here, recognizing that it's simply not possible to translate the EMS experience into a global experience. The first point essentially goes back to the most important strength of the EMS—that is, that the Bundesbank has
credibility in the markets, and others have tried to have their policies converge around that of the Bundesbank. Without some similar "rock" internationally, it's going to be very hard to make a system of "hard zones" work very effectively. There needs to be something to build around, some stabilizing feature. And that can be either the Fed or some type of very hard arrangement between the Bundesbank and the Fed and the Bank of Japan. Without that focus of global stability, without that center, it's going to be very hard to make a lot of the other elements work.

Second, within the European Community there is a greater recognition of the need to internalize the cost of volatility and distortions in currency markets than there is on a global scale. Trade is so closely intertwined within the European Community that Europeans understand the internal consequences of currency instability and divergent national economic policies. If they did not, they wouldn't be quite so willing to make the sort of policy changes that they have made to accommodate themselves to one another and to the degree of market integration required to establish a single internal market by the end of 1992. So that the EMS really goes hand in hand with a lot of other internal changes that are under way; it is not simply the end point of the process.

Then one gets to the question so often discussed in these sessions: what criteria do you use to determine whether an exchange rate is out of line? So far, in a global sense, the general judgment of an appropriate currency rate has been based on "optimality-sustainability" assumptions. That is to say, finance ministries and central banks try to determine what set of exchange rate relationships is going to lead in the medium term toward current account equilibrium. That judgment wasn't necessarily the triggering point for the Plaza Agreement in 1985. That was largely stimulated by the desire to avoid protectionism in the United States. But it gets you to the same type of judgment. The system is going to have to find a sustainable way of reducing the U.S. current account deficit and the very large surpluses of some of America's trading partners. This, of course, leads you to the question of what the right exchange rate is to do this and the right system for maintaining that rate. So far we've got a target zone system of sorts, or what I call a "holding zone" system that is based on the judgments of financial authorities as to what the right rate is for the moment in light of market circumstances, the pace of
adjustment, and domestic policies in the key countries. It's based on pragmatic criteria, e.g., a judgment as to what is reasonable. The problem with setting a "harder zone" is that we really are not sure that the zone we've got today is going to lead to the reduction in imbalances that is required. People say they want a target zone, but not yet. Even if such a system is deemed the best among other alternatives, there is the question of when you put it into place. Do you do it after a greater degree of convergence has been realized, i.e., after the big disequilibria in the system have been eliminated or dramatically reduced? Or do we do it now, with the objective of using that as a lever to get countries to take domestic policy actions to narrow these imbalances over a reasonable period of time?

My own guess is that at this point it would be very difficult to put a "hard target zone" system into place in light of the very large imbalances that exist in the global economy. But at some point—perhaps after the dollar has fallen farther—if we see sustained trade improvements and if the generally high level of public support that we've seen for more stability continues, and if there is a higher level of confidence in the then existing exchange rate relationships, the world can move toward a hardening of the system.

My last point is that we have learned over the last couple of years that exchange intervention can play a much greater role than we thought it could at the beginning of the floating rate process. When floating rates began, there was almost a sense of desperation that governments really could not do very much to control exchange rates even if they wanted to. This was probably true when exchange rates were way out of line; then it was hard for governments to exercise a significant role in moving currencies. But we've seen, over the last several years, a major increase in the sophistication of central banks about how to intervene. The more doubt there is in the market as to what the right exchange rate is, the greater the degree of influence central bank intervention can have.

Early in 1985, when the market was beginning to turn against the dollar, about $10 billion of exchange rate intervention had an enormous impact on the market. That gave the market the signal that central banks were interested in pushing the dollar down. If we combine the general notion of a greater effort to harmonize national policy with a continued effective coordination among central banks with respect to exchange rates, a lot of the instability that we've seen in
past years can be reduced. It's not the question of trying to create some kind of automatic formula for stabilizing rates because I don't think it's possible in this environment. A measure of flexibility is going to be required. But we can take some of the erratic character out of markets. And more importantly, we can use exchange rates as a prism which we can look through to try to influence domestic policies in the direction of a greater degree of convergence.