General Discussion: The Causes and Propagation of Financial Instability: Lessons for Policymakers

Chairman: E. Gerald Corrigan

*Mr. Corrigan:* We are starting to get a lot of hands here, so the questioners have to be brief. Jacob Frenkel.

Mr. Frenkel: I want to underscore one point that Rick Mishkin spoke about concerning the relation between disinflation and the exchange rate. I think that one theme is that the choice of an exchange rate regime in and of itself, cannot offset the effects of bad policies. Therefore, the idea of focusing the discussion on the policies is indeed key. The question about the disinflation process, and the positions that Rick took about the danger of fixing the exchange rate I think are well-warranted. But here one should draw a distinction between the first phase of stabilization and subsequent phases. In the first phase it makes great sense to fix the rate for awhile in order to break the inertia that links the past to the future. But you must be ready to have an exit policy. If you go to the exit policy, you must make sure not to hold the fixed exchange rate for too long a period, because the inflation of the nontradeable goods sector brings about a real appreciation, with its well-known consequences for the economy, mainly an export-led slowdown. And finally in this regard, the more you fix the rate, the more you create difficulties for the development of a genuine foreign exchange market in your own economy. And as you integrate the economy

into the world system, the lack of a well-functioning foreign exchange market will prove devastating. I think that all of this tells us that there is no way to get away from the conventional medicine, which means that as you disinflate, the capacity to use interest rate policy without being constrained excessively by commitments with regard to the exchange rate, is a very important one. And this brings me to the final conclusion which I strongly underscore. If the banking system is fragile, then this may prove to be a very serious obstacle for disinflation, because you will be constrained in using interest rates in the way you ought to just because of the urgent concern and—from the system's safety point of view—appropriate concern for the banking system. This means that as we look at stabilization programs, it is not good enough, as we design them, to say, "Well, what should be the fiscal policy? Should the budget be cut? What should be the monetary policy?" I think much greater attention should be given to the soundness of the banking system, and I think this has not been done in many, many stabilization programs.

*Mr. Corrigan:* Well, let's start over here.

*Mr. Eichengreen:* I just wanted to follow up on what Jacob asked by questioning Morris Goldstein and asking whether in these early warning indicators he looked expressly at the nominal exchange rate regime, whether that had a statistical association with subsequent banking crises.

*Mr. Goldstein:* No, we haven't yet, but I think that is high on the list. It is clearly a structural characteristic that we ought to look at.

*Mr. Mishkin:* One thing quickly in terms of Jacob's comment. An additional benefit that comes from having a foreign exchange market is that it can help provide early warning signals about policy, just as the bond markets can provide an early warning signal to policy-makers in industrialized countries about what they are doing in terms of monetary policy. I think that was implicit in Jacob's remarks, but it is a very important benefit of a flexible exchange rate regime.

Mr. Corrigan: Okay. In front here.

Mr. Szapáry: I would like to bring one point to the attention of the panel that is characteristic of emerging markets—and particularly of Hungary. With the improvement in the fundamentals in Hungary, we have had a lot of capital inflows. And part of those capital inflows went into the stock market. As can be seen from this chart that I am showing around, the Hungarian stock market and the deutsche mark-dollar exchange rate have moved closely together. The same is true for the Dow Jones and the Hungarian stock exchange; they have moved closely together. Actually, econometric results show that about 70 percent of the changes over the past two years in the Hungarian stock exchange are explained by the deutsche markdollar exchange rate changes and about 43 percent by changes in the Dow Jones. I am not sure what the exact relationship between the two is, but this is the fact. And now there is another interesting fact: the capitalization of the Hungarian stock exchange is about \$8 billion, out of which about \$4 billion is in the hands of foreign investors. What kind of exposure and danger does this imply for the Hungarian economy? If for reasons beyond the control of the Hungarian authorities this capital begins to move out, we might have a potential crisis on our hands. Along the line of what Rick Mishkin said, if we have a big devaluation, a lot of companies that are exposed to foreign exchange will get into difficulties. And additionally, which was not mentioned, when the capital came in, we had to sterilize at least a good part of it. The sterilization mainly took the form of issuing short-term debt by the government and the central bank. If the capital outflow also has to be accompanied by an increase in interest rates, it will have a very important effect on the budget—all this because of developments beyond the control of the authorities. What are the best policies to cope with this or to prevent this from happening?

*Mr. Corrigan:* Rick, why don't you take the first cut at that?

*Mr. Mishkin:* I just don't know enough about the situation that you have in Hungary. Capital inflows are not by themselves a problem, but they can create other problems, particularly if capital inflows help lead to lending booms—help lead to a situation where the financial situation is taking on too much risk—that can be very

dangerous to the economy. On the other hand, if capital inflows are occurring because they are being used to finance good investment projects, that's a good thing for the economy. So, I think again, one of the things we always want to do is to look at the deeper fundamentals to ask whether these situations are causing problems or not.

*Mr. Dugger:* First, thank you Rick and Morris for an outstanding paper and thorough comments, and second, an apology in advance to my private-sector colleagues for a question I would like to pose. Morris, your outline of an early warning system is very helpful. It is very much what proprietary trading companies attempt to do though in a more simplified way, as we attempt to discern where trading opportunities exist. It also may explain an important insight into the difference between what Jerry Corrigan said when he commented that the market understood the implications of Thailand, and Chairman Greenspan's comment to the effect that it did not. It depends on which market you are talking about. Credit, securities, and currency markets are occasionally quite segmented. The dollarization of Thai banks suggests that lenders to Thailand began to be concerned about Thai baht risk quite early on. The slowness of currency market response suggests it was less aware. To improve stability, I would like to note that we take many regulatory, supervisory, and operational steps in industrialized country markets to slow the adjustment speed of, for example, banking and securities markets. I would like to ask, is this a time to consider using position disclosure or taking other regulatory steps to increase transparency and thereby slow the speed at which money managers can drive an economy to a new equilibrium?

*Mr. Corrigan:* This is another point where I'm glad I don't have to answer. Morris?

*Mr. Goldstein:* I guess I'm not so sympathetic to that view. If hedge funds lose money, so be it. I'm more concerned about what the repercussions of that would be. If banks are lending to hedge funds and those loans are not properly collateralized, that would be more of a problem. But I guess I don't find the case persuasive for instituting new restrictions or speed limits.

Mr. Dugger: Let me clarify my question. Stan pointed out correctly, I believe, that policy intervention in a situation like Thailand is justified because 60 million people are involved, not just four or five policymakers. My question is, is it appropriate at this time to consider, as you have proposed with respect to an international banking standard, a set of criteria, conditions, or operating rules to increase disclosure and market transparency, which would enable the exchange rate adjustment process to take place and properly signal the need for policy changes, but which would reduce the likelihood that the adjustment would be so violently fast that it drives the economy down unnecessarily hard?

Mr. Goldstein: I guess I still don't find the logic of new regulatory/supervisory measures on traders as compelling. I think the tougher issue with providing rescue packages, as a number of speakers expressed this morning, is the moral hazard question. The Fund provides a loan; that helps cushion the size of the recession. But we also have the case of large, uninsured creditors—of say, the Thai finance houses. If they don't take a hit at the end of this crisis, then we are really going to have a problem. When we had this recent G-10 report on the resolution of sovereign liquidity crises, one of the pieces of advice mentioned there is that governments should not assume the liabilities of their own private financial sectors. Yet, some of that will apparently go on in Thailand. I think it is fine to protect the small depositors. But large, uninsured creditors have to take a hit; otherwise there won't be enough money in the world to handle these kinds of crises.

*Mr. Corrigan:* Let me do a couple others, Jeff, and I'll get back to you. Over here first.

*Mr. Makin:* Rick Mishkin, I think very appropriately, raised the issue of symmetric financial instability problems, that is, inflation and deflation. In addressing the issue, Morris seems to have constrained it a little bit to emerging markets and I take it, incipient inflationary problems. I'm thinking specifically of the issue of incipient deflation in a large industrial country that begins with "J." In this situation, we did have a very interesting, an abrupt apprecia-

tion of the currency in the summer of 1995. A question to Rick: How appropriate is it to raise the issue of an incipient, serious deflation in a major industrial country, thinking of all the problems that were raised by Andrew Crockett and Stan Fischer? And to Morris: What would your filter system have said about Japan in 1995 and even perhaps this year as bond yields go below 2 percent and the currency has actually appreciated on a trade-weighted basis as the economy slows?

## Mr. Corrigan: Rick, first.

Mr. Mishkin: I think, first of all, that this issue of deflation is one that is important, particularly so as central banks have become more successful in industrialized countries in lowering inflation. You don't have to worry as much about deflation when you have doubledigit inflation and you're trying to get it down. I think the example of Japan does illustrate that deflation in the situation of a weak financial sector can be problematic because it makes it harder for the balance sheets of firms to recover. It's not as extreme an example as the debt deflations that occurred in the United States in 1930-33 or in some of the other episodes like 1873, for example, or 1907, but it does illustrate this point that as central banks actually become successful in lowering inflation, they then have to realize that the symmetry of an inflation target is extremely important. It is as damaging, or maybe even more damaging, to undershoot your inflation target as it is to slightly overshoot it. I think that is part of the lesson that comes out: that the word "price stability" is the right way to describe what central banks should shoot for. The key point is that you want to be in a situation where firms don't have to worry about what's happening to prices, and therefore can get on to the business that they really should be concerned about: producing goods. Also the financial system doesn't have to worry about this either and can do its job well. So in that sense, I think, the problem of deflation is now relevant, and that is because central banks in industrialized countries have done a lot better in recent years. And so now we can actually talk about this issue as being one that is important.

*Mr. Corrigan:* Morris, do you want to add to that?

*Mr. Goldstein:* Just briefly to John's question. I don't know what would happen. We didn't put the larger industrial countries in the sample. I should throw the question to Barry Eichengreen who has done recent empirical work on the determinants of currency crises in industrial countries. We don't have inflation explicitly as one of the indicators. We have real interest rates. We have excess money creation. I don't know how it would come out.

*Mr. Mishkin:* Just to add to Morris' comments. He didn't mention this, but clearly one of the things in my paper is an important distinction between industrialized countries and emerging-market countries. Therefore, it makes complete sense for Morris' work to actually differentiate them and focus more on emerging-market countries. You may have to have a different matrix for two different types of countries, and not put apples and oranges in the same basket together.

*Mr. Corrigan:* Jeff, you have a 30-second intervention.

Mr. Sachs: Okay, a comment on Robert Dugger and Morris. I think the evidence is for the emerging markets that the big problem comes precisely in the inflows to banks and near banks because they are highly leveraged and because they do channel money to the property markets. It is not the stock market particularly, and it is not the foreign direct investment we know, or even short-term, moneymarket instruments. I think there are very strong reasons for prudential controls on bank exposure and floating short-term certificates of deposit in foreign currencies, and so forth, balance sheet restrictions that would do what Robert Dugger said: slow it down and get more time for the regulators to keep on top of the banking sector. I think there really are strong reasons. Overall, capital controls probably won't work and probably aren't needed, but banking sector controls almost surely are.

Mr. Corrigan: Yes, go ahead.

Mr. Brinner: I'd like to ask Rick Mishkin to reanalyze one of his key exhibits, in which he labels "Increases in Interest Rates," as one of the factors causing financial instability. I really think of those not as causes but as consequences. Chairman Greenspan actually set the stage for this remark, because if you look at the true causes of instability, you discover fundamental factors such as excess liquidity. Indeed, excess liquidity produces temporarily suppressed interest rates as the central bank pursues an unsustainable target. The factors that Rick Mishkin listed as causes are really eventual consequences of either this kind of wishful thinking (that is, pursuit of unsustainable targets), or the reversal of temporarily positive factors. For example, as excess liquidity is finally withdrawn, then you see the increase in interest rates. Then you see the other consequences. Rick did point out one of the factors very strongly in his paper that is a true cause, namely, inadequate information. But I think if you complemented that true cause with excess liquidity, inadequate capital requirements, and other things discussed in other papers, then you'd have a more comprehensive, accurate schematic.

*Mr. Corrigan:* Thank you, Roger. Rick, do you want to speak to that briefly?

Mr. Mishkin: I agree in one sense, but not in another. Certainly some of these factors have exogenous components, particularly when increases in interest rates come from abroad, and that was certainly true in U.S. financial crises that occurred in the nineteenth century. And clearly, when interest rates were rising in the United States in order to contain inflation, that was not Mexico's doing. So there is a sense in which these factors have some exogenous influence. On the other hand, going back even further, there are reasons these factors happen. For example, the deterioration of bank balance sheets just doesn't come out of the blue. But it is important to talk about the factors that are very proximate and which give you some signals about where the problems are developing and then give you an idea of what you may want to do about it. So we can always go into mega causes, but that sometimes can obscure what is going on.

*Mr. Corrigan:* Thank you. We are going to run out of time here. Now I'll take this question here, then Art's, then here.

*Mr. Rey:* I just wanted to ask Morris whether he had contemplated testing his early warning indicators on a different sample of countries where no banking and no currency crisis has occurred over a period? Thank you.

*Mr. Goldstein:* Well, there is a potential adverse selection problem. As such, it would be useful to have more non-crisis countries in the sample. But on the banking side, there virtually aren't any. Very few emerging economies have entirely avoided banking crises. If you take the last fifteen years, I don't know if you can find more than four or five. So what you're doing in this kind of exercise is using the *non*-crisis periods as the implicit control group. On the currency side, you may be able to find more non-crisis cases and that would be worth doing to make sure that adverse selection is not biasing the results.

## Mr. Corrigan: Art.

Mr. Rolnick: This question is for Rick Mishkin. It is well known that when a government provides a safety net (like deposit insurance) in order to protect bank depositors, it creates a moral hazard problem. The savings and loan and banking problems of the 1980s demonstrated just how costly that problem can be. The Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 tried to address moral hazard. Did FDICIA fix the problem or can we expect another large taxpayer bailout in the future?

Mr. Mishkin: There is actually a whole section in the paper which I didn't go into on this issue of the lender of last resort and the resulting moral hazard problem and also on the whole issue of the government safety net. First of all, one of the key things that is important to understand is that deposit insurance is not the government safety net. The ultimate government safety net is that the central bank basically has to stand ready to back up the system if there is a crisis. In fact, that has occurred in many other countries

and also the United States, for example, during the 1987 stock market crash. So the problem is that no matter how good FDICIA is—and I think FDICIA was an important improvement in terms of the way we do regulation—there is still always going to be this moral hazard problem that's lurking in the background because the government safety net comes not just from the things that are written down, but also from the lender-of-last-resort role of the central bank. That is always something that we must worry about. It is one reason I think that it is very important for a central bank to be worried about financial stability and to be given the mandate that promotion of financial stability should be an important part of its role. I think we can't escape that. The central bank will never be out of that business no matter what legislation is written down.

*Mr. Corrigan:* Thank you, Rick. Allen, yes please.

*Mr. Sinai:* My question is mainly for Rick, but also for Morris. Suppose an early warning system which looks very good is out there. What then can central bank policymakers do with it? We know what markets would do. They would be part of the propagation process that Rick describes. It's a lot easier for the central bank to raise interest rates pre-emptively on perceived inflation risk than for policymakers to react to an early warning system of financial instability. What do you do if you have something like what Morris has described? How could that be implemented or used to minimize the propagation of instability?

*Mr. Corrigan:* That sounds like the essence of the point that Stan raised earlier, the so-called "going public" dilemma. I'd be interested in Morris' and Rick's reaction to it.

*Mr. Mishkin:* I think the issue that Stan raises is absolutely critical. But I think also, when you do have more information provided, it will change behavior. And that could be good, so it's not just a situation where the situation is as it is and then all of a sudden this information produced tells you to be scared about some country. If countries know this information is going to be out there and people are going to act on it, it constrains them in what they do. That's one

of the benefits of having more information disclosed. On the other hand, you're never going to escape the problem that there are always going to be incentives for people not to give information exactly the way the markets really need it. And so having disclosure is never going to solve the problem completely. And, again, that's a point that Stan made that is quite right on this issue.

## *Mr. Corrigan:* Morris?

Mr. Goldstein: Well, it's a tricky issue, no doubt. If one has the indicators out there, some of them—for example, overvaluation of the real exchange rate—you could do something about. If you're entering into what historically has been dangerous territory, a country that has a fixed currency can devalue it and reduce that overvaluation. Now it's true if you make this information public, you are going to have a market reaction. In some cases, the official sector could be accused of precipitating the market reaction. But the relevant question is: Are you going to have a smaller reaction now in the financial markets, which is going to be inconvenient for the country, or are you going to wait and have a bigger market correction later? I guess I lean toward putting a little more of the warnings out in the market. Even if that causes some market reaction, I think it would be better in the long run.

Mr. Corrigan: Okay, I think we're going to have to move to break. But just to leave a couple of thoughts on the table, one thing I would say is that better information has changed behavior, notwithstanding the unhappy experience in Thailand and so on. You can look, for example, at the way many countries have substantially stretched out the average maturities of both their internal and external debts since the Mexico crisis, and there are other examples that could be cited. So despite the tone of this conversation, I think the fact of the matter is that better information does help. But on the other hand, as somebody mentioned—it might have been Jeff—data on nonperforming loans, even in industrial countries, much less in emerging-market countries, often aren't worth the powder to blow them to hell. First of all, they are backward looking. Second, there are many different definitions, even among the industrial countries. So anyone who thinks he

is going to rely on "published data on nonperforming loans" to be able to make assessments as to the condition of domestic banking systems in most countries, industrial and emerging markets, has got another think coming, which, Alan, I think gets back to your point, and Stan's as well, that we have a lot of building to do here. And the building point that I think is particularly relevant in this context is that the only way you are going to have good data on nonperforming loans is if the supervisory system is strong enough to back it up. Not that people are out to deceive anybody, but in the face of trouble, banks will tend to give themselves the benefit of the doubt. And of course to get a supervisory system to the point where it can do that job well is a huge task in institutions building. And I think we all have to recognize that, even in emerging-market countries, for example, like Chile, that have done a pretty good job here, this is a multiyear task involving an enormous commitment of time and resources. One of the questions is: What do we do with the banking systems in these countries, again say in Argentina, where a tremendous effort is being made? But yet, under the best of circumstances, we're talking about three to five years to build the institutions that are necessary to bring these systems up to standards that at least would provide some assurance against being blind-sided. Again, these are very, very, very difficult questions, but I don't think we should walk away with the impression that we aren't gaining ground. We are. On that note, we will break for coffee. Let me just also mention that we are very privileged for our next session that the panel and the group will be augmented by the presence of Yoshio Suzuki, who is a member of the Diet in Japan. Yoshio is an old Bank of Japan hand, and I've avoided references to people's biographies and so on, but there is something in Suzuki's bio that struck me. He is the author of 41 books, 27 in Japanese, seven in English, five in Chinese, and two in Korean. That is impressive! On that note, we'll break for coffee.