**Mr. Belka:** As a matter of fact, the paper is not so exotic or philosophical as Professor Ito described. This is exactly how decisions are made, especially by collective bodies, at least in my bank. The only problem is what kind of advice do you have concerning communication strategy? This is the weakest point in our monetary policy. While we have all kinds of models, we have nine independent decision makers who treat those models lightly. They proceed exactly how you suggest, and then as a chairman of this body, I have a problem in how to explain this to the public. Any advice?

**Mr. Meltzer:** I, of course, like the part of this paper about rules, and I have a question about the departure from the rule to try to augment the rule, and I believe it’s a problem that any central bank that tried to do that would face. I illustrate it by using an example that they use: Alan Greenspan and Ben Bernanke’s conundrum. An alternative view of what was going on when they had a conundrum was that they were raising the interest rate systematically every quarter; every time they met it went up a quarter of a point. The market, using rational expectations, took the long-term rate to where it would go on the basis of what they thought they knew. And therefore, it didn’t change very much after that because all the information they thought was needed about the long-term rate was already embedded.
in the long-term rate. I think that’s a different, perhaps better explanation of it and it raises the question about separating out permanent and transitory changes in what is going on. That’s a problem when you are going to try to include these dynamic forecasts or dynamic models, dynamic evidence. You know, how long is that trend going to go on? Is it a permanent thing or is it a transitory thing? And Alex Cukierman and I have a couple of papers where we say that’s going to make problems for you. So, the other comment I would make concerns your comment that 1923-28 and the later period of more or less following a rule ended in crises, and that’s correct. But I think it’s hard to make the case that 1923-28 ended in crises, because 1929, despite a very severe drop in output beginning in October, ends up as a year with above-normal growth. So it really is a case where policy error following that, for reasons that I can go into but won’t, I think you have a better conjecture when you talk about the Greenspan period because there clearly was enthusiasm on the part of people, particularly in the real estate market, but there was also a significant policy lapse, namely that banks didn’t have enough capital. I think it was the former chairman of the House Banking Committee that pointed out to me that some banks went into the crisis with 1 percent equity capital and they made their capital requirements by borrowing the money from people like AIG. So, they didn’t care about the risks they were taking, and that was a policy failure of the first order, and one which is partly corrected now by higher equity capital standards. But in my opinion, the equity capital standards are still lower than they might well be.

Mr. Bordo: I really enjoyed your paper. There is a very old debate in monetary economics that it reminds me of. It is the debate about whether you look at aggregates or disaggregate variables as determinant of inflation. I published an article in the Journal of Economic History in 1980 with Anna Schwartz called, “Did Monetary or Real Forces Cause Inflation? Was Thomas Tooke Correct?” It was related to some debates in England in the early 19th century: the Bullionist debate during the Napoleonic wars; and then the debate between the Banking School and the Currency School, about this very subject. The Bullionist debate was about the high inflation in the Napoleonic wars, which the
Bullionists attributed to an expansion in the money supply to finance the fiscal deficits, while the anti-Bullionists attributed it to real forces that influenced relative prices, e.g., the state of the harvest. That is where Thomas Tooke comes in. He listed a series of supply shocks and other real factors to explain the inflation. In the absence of price indexes, which were only invented in the 1860s by William Stanley Jevons, the Bullionists focused on the exchange rate, proxied by the market price of gold. In our paper we presented empirical evidence that monetary forces were the key determinants of inflation in nineteenth century England and not the real factors emphasized by Mr. Tooke. The implication of this history lesson is that, yes, disaggregated data do matter, and we want to be aware of them, but we still need the broad aggregates to really sort out the signal versus noise on inflation. One has to be extra careful in deeper disaggregation.

Mr. Kocherlakota: I enjoyed the paper, in part I guess, because it was philosophical. I had a couple of comments though. One is that, and this reflects the communication point that was raised in the first comment. There are a lot of variables we are going to end up looking at, and I agree with the authors that we should be aware of more complicated dynamics than sometimes we end up focusing on. But really for decision making, we really end up concentrating the problem down to two really critical parameters. One is what are inflationary pressures at a given moment in time, and how those are going to arc out maybe over the next year or two? The second piece is how does moving our tool influence those inflationary pressures? So, when you end up communicating, I think you end up taking all this information and trying to concentrate it down into those two pieces of information. My second comment is going to contradict my first one, and that is that I think the takeaway from forecasting exercises like the one Jon Faust described that he'd done with Jonathan Wright is the importance of long-run expectations, and how do our decisions and communications influence those long-run expectations? The big policy mistakes, not the little wiggles of maybe we were a little too high or a little too low, but the big policy mistakes, are caused by untoward movements in inflation expectations. Sometimes we get away with mismatches between our actions and our objectives, and sometimes we don’t. Knowing how to do better on that dimension
Chair: Erica L. Groshen

is really the critical one, not the kinds of misses I think that you emphasized in your presentation, Jon.

Mr. Frenkel: The paper and the discussion surrounding it bring up the important issue of what should be the appropriate policy response to deviations from target. It recognizes, of course that even under best circumstances a target can only be met on average, and deviations from the target are more the norm than the exception. In countries that aim to maintain price stability, it is sensible that deviations from the target will be responded to symmetrically, namely an upward deviation and a downward deviation would trigger a symmetric policy response. This symmetry however, is a characteristic of countries that have already achieved price stability and in which the central bank aims at maintaining that price stability. In contrast, however, in countries that have not yet achieved price stability and that have adopted an inflation targeting strategy aimed at a gradual reduction of inflation toward the long-run attainment of price stability, such a symmetric reaction to deviations from the target may not be optimal. This is the situation which prevails in many emerging economies. Specifically, for countries which adopt a multiyear inflation targeting strategy, a deviation from the target that brings the inflation rate closer to the long-run target need not be addressed in a symmetric way as a similar deviation to the opposite direction that brings the inflation rate further away from its long-run target. Accordingly, the former deviation does not need to be corrected in the same intensity as the latter deviation, since in the former case the deviation brings the economy closer to its long-run path whereas in the latter case, it takes it further away from its desired long-run path. Hence, the symmetric correction of deviations is more likely to be the appropriate characteristic of policy response in the developed world rather than in the emerging economies.

Mr. Leeper: First, I want to thank Takatoshi Ito for his mentoring over the many years and his comments today. He’s right that we don’t provide a detailed alternative. But I think the fact that we don’t present such a thing is a reflection of our view that the first step in trying to find a simple solution is to not look for one because what we’re trying to argue is that once you integrate all these disparate
confounding dynamics, it may well turn out that life isn’t quite as simple as in the nice view. And I think that’s a reflection of what Jacob Frenkel was just saying, that emerging market economies aren’t already in that nice view world, and therefore their communication is more complicated because they don’t even pretend to be fluctuating around a steady state. I also think that maybe it wasn’t clear, based on some things that Taka said, that we don’t take issue with the desirability of trying to maintain low and stable inflation. We’re not fundamentally questioning whether that’s a legitimate objective for monetary policy. But I think what we’re really asking for is a reallocation of resources at central banks away from focusing very much on slack and inflation, and toward trying to bring some of these other components that are obviously out there in the data into the analysis in a more systematic way. So, a good example of this, and this actually gets somewhat to Michael Bordo’s comment, is when we think about inflation, we often look through the effects of food and energy because they’re highly volatile. Well, we have a graph in our handout that shows services inflation has averaged about 2 percent, goods inflation has been negative on average. So, should we be looking through those also? We know that medical services inflation has been higher than the average inflation rate. Should we look through that also? And once you keep looking through all these things, you’ve got to wonder what it is that you’re actually seeing ultimately. What should the objective be that is being targeted?

One comment I would say about the Phillips curve, it is true that we tend to buy that the long-run Phillips curve is vertical. But then we pretend that the short-run Phillips curve isn’t flat. And as far as we can tell, it’s pretty darn flat, except in our models.

Mr. Faust: Some models.

Mr. Leeper: Some models, OK. One comment about the communication. I think there’s a tendency for central banks to think that clear communication means you have to say things in a very simplistic way, even when the actual policy decisions are not simplistic. And that strikes me as a bad strategy because you paint yourselves into corners. And I think we can see lots of examples of that happening where central banks have talked as though we’re living in that nice
world, and then it turns out not to be. And then you have to explain that, yes, there were these other things that came into play but we didn’t bring them into the discussion originally.

And then on Narayana Kocherlakota’s point, we agree completely that trying to nail down these long-run expectations are critical. That’s exactly where these disparate confounding dynamics come into play. I don’t think it’s the case that, I mean it is true that policymakers are aware that there are trends, but what do we do about it? Do we bring them into our analysis in some systematic way? Generally not, and so there’s a lot of work that could be done in this area, and I think it’s going to require a shifting of resources at central banks.

Mr. Faust: I just wanted to add one point. I wanted to thank Taka for bringing up my more famous uncle. You know, we had lots of family gatherings where we debated and I must say that I’m not at all like my uncle. As I hope I made clear in the talk, I’d like these factors to be brought in explicitly because I think we can do something about them. I talked about how you could take account of the labor share question. It’s really a matter of what’s the sideshow and what’s the main event, and I think the main event shouldn’t be these little wiggles and what we know about slack. And the main event should be some of these big underlying forces that really buffet the economy. I think we can learn about them, and that we should put more effort into doing so.