## General Discussion: Central Bank Communication and Policy Effectiveness

Chair: Malcolm D. Knight

*Mr. Bollard*: It's an interesting paper and a pity we didn't get more discussion at the end on the assumptions about future policy and inflation forecasting targeting. We have 15 years of inflation-targeting experience—partly conditioned by the fact that we are clearly a very small economy—so a lot of what we are doing as the central bank is trying to be a price maker in a world in which New Zealand is a price taker. There are very big questions about credibility, and, therefore, it is very important to us.

Secondly, we also run a single-decisionmaker model, although for those of you who think that is a walk in the park, it is not. Actually, we have to be extremely disciplined about it. That is probably the story that comes from single-decisionmaker models around the world. They try to simulate the advantages of committee decisionmaking. The main thing about a single decisionmaker is you are singly held responsible afterward.

That does give you an advantage on communication, which means you can certainly have a unified, single channel of communication with a single message going through it. It doesn't have to be from one person. Certainly, markets in New Zealand know if the Reserve Bank speaks. We are not putting out fliers. We are not demonstrating

different views. We have one particular view, although it might have a confidence interval around it.

We find the way we do that best is six weekly intervals, where we put a lot of information out. Then, we just shut up between the intervals, except in unusual circumstances.

We are transparent, although we are transparent on external communication. We are transparent on the process we use, but we are certainly not transparent on giving the details of how we arrive at that external information. I was mildly shocked this morning to hear from somebody at the breakfast table—one of the media people here—that he thought we ran an open monetary policy committee process, where people could come in and watch. No way! I watch with awe of what happens at the Bank of England and other places. Those thoughts are exposed out there.

What we are doing, of course, is putting out an endogenous interest rate track. I guess from me coming in from outside to the central bank a couple of years ago, that was a bit of a shock. First of all, that works *if* you have a framework that delivers an endogenous interest rate track that is credible. Of course, we would all hope that we would, one way or another. We have different degrees of just how explicit we are about that.

We are putting out an exchange rate track as well. Actually, we have found that the markets have been quite sophisticated as to how they have interrupted that. They look at our exchange rate track. They are quite capable of saying, "This isn't an open-ended forecast." There are a bunch of assumptions around this, and they will make their own assumptions around it.

They do the same on the short-term interest rate track that we put out, which is endogenous to our forecast. We would like to put out a fan chart, but we are not sure we actually can estimate that. They are quite capable of saying, "Well, that is the central bank's best view at a particular point in time."

They'll make their own decisions, and they'll change their own views as new information comes through. It has made it harder for us to be obscure when we might want to be obscure. That is not really a possibility for us. Just occasionally, I think, "Wouldn't it be nice if we didn't have to put this rate out?" We don't have that option, but generally it has worked very well for us.

*Mr. Dudley:* There are three points I want to make. The first is that the usefulness of transparency is directly tied to developments of the capital markets. That is because the transmission of monetary policy impulse now increasingly occurs through the stock, bond, and currency markets. The increased transparency is useful in order to reduce the errors the financial markets make in assessing the likely future path of short-term interest rates. So, it makes great sense to move to increased transparency.

The second point is that the transition from a very subtle Federal Reserve to a more plain-speaking Federal Reserve is not without a transitional risk. Market participants, at times, may exaggerate the importance of what is said during this transitional phase.

I will give you two examples. First, yesterday, Chairman Greenspan gave a speech. I sat here and listened, I thought, quite attentively to the speech. There was nothing in the speech that changed my views of the likely path of short-terms rates. I was quite surprised at the end of the day to see that the financial markets in the United States had sold off because of one sentence in the speech which read, "Our forecast and hence policy are increasingly driven by asset price changes."

This was viewed as significant. I am not sure how I should revise my interest rate expectations on the basis of that sentence, but the market did on that basis.

Another, more important example of this was the summer of 2003 when Chairman Greenspan gave a speech and used the word "firebreak" to describe the need to not hit the zero bound constraint. A lot of market participants, including myself, concluded that this

meant that the next move from the Fed was going to be a 50-basis-point reduction in the federal funds rate. The Fed just cut the funds rates at that time by 25 basis points. So, there is definitely a transitional issue.

The third point I want to make is that this is not a reason to forego the movement toward increased transparency. Just realize that, as you move to increase transparency, there are going to be misunderstandings between the central bank and market participants, and don't be deterred by those misunderstandings and to conclude from these misunderstandings that moving toward transparency is a bad thing.

*Mr. Issing:* This is just another example of Michael Woodford's very stimulating contributions to monetary policy in general and to communication in particular. Today, we all agree on the importance of communication in central banking. This was not always the case, to put it mildly.

Before the start of the monetary union in January 1999, introducing a new currency managed by a new institution (the European Central Bank) in an environment of great skepticism, we saw the major challenge for us in anchoring inflation expectations right from the beginning. So, we decided to publish a quantitative definition of our primary goal of price stability and the strategy by which we would conduct our monetary policy. Real-time information about the decision and the reasons behind it was a further important ingredient of our communication policy, as was stressed yesterday by Jean-Claude Trichet.

So, we already implemented major elements suggested now by Mike Woodford, and the result, considering the specific circumstances, was astounding. But Mike, at the same time, raises the stakes of the state-of-the-art central bank communication much higher, pleading for communication of the future paths of policy interest rates. We would need much more time to discuss this complex issue.

Let me just mention one aspect. This is the relation between the central bank, the sender of information, and the receiver side. Information theory tells us about the complicated relation between the two sides of the communication process. Central banks do not only communicate to people of the caliber of Mike Woodford. Markets, the media, and the general public are important participants. Considering the complexity of the Woodford approach, the conditionality of the communication of the future paths of interest rates—not to talk about the process of discussion and decisionmaking inside the central bank—I've still to be convinced about the practicability of this approach.

*Mr. Frenkel:* I thought my memory was relatively good, but I must say when I read and recalled that before 1994, the FOMC meetings ended with no explicit information to the market, it only caused one to realize how many changes occured and how much has changed during this last decade.

I very much liked Michael Woodford's paper. In the old days, the perception about policymakers, particularly in the monetary sphere and markets, was that of an adversarial relationship. So, you surprised the market, and you hit the market. If there was a leak, the policy failed. Succeeding in surprising was what you wanted to do.

Bill Dudley was right. The development of financial markets made that adversarial relationship futile. You needed to move to a new phase of a dialogue—a dialogue between the policymaker and the anonymous, vast marketplace. But in order to have a dialogue by definition, you need to have a lot of things to happen as corollary. You need to have communication skills. You need to have clarity. You need to have possible targets. You need to have plans. You need to have a model that is explained, and you need accountability.

This almost leads to an actual direction of targets. In this regard, the inflation report of the Bank of England that was followed by many other banks is a natural evolution. You move away from minutes of a

policymaking event that explains a policy action to an inflation report or something analogous to it that explains policy strategy.

I want to go to the issue of minutes for a moment. We should really be careful not to push it too far. Indeed, as the last remark about having an open policy discussion forum highlights, I like the idea of having minutes that explain and bring about the considerations that underlie the policies and explanations for diversity of views. I am not very excited with the personification of arguments in the minutes. On this very point, it was mentioned here yesterday that Mervyn King was outvoted and highlighting the role of the committee. Well, let's not go too far with it. This personification can be bad. It may direct attention to the gossip columns of who said what to whom, attaching labels to hawks versus doves, opening an issue to pressures. That is not the issue. The issue really should be in the communication to the markets. We need to explain how one does it, why, and what the ratio of arguments is.

I have one final remark. If you really want to explain the model and the explanation for the various arguments, then it also means that considerations of the budget deficit, the current account deficits, or anything else in the macrosphere have bearing on the consequences of monetary policy. The optimal direction of monetary policy is part of the domain of this communication. This brings me to Robert Rubin's remark yesterday that, indeed I don't think it is wise to focus *just* on the narrowly defined objective and not mingle in other spheres of the budget and the like. To the extent that the budget matters, then it is the task to speak about it.

*Mr. Svensson:* Mike has given us a great paper on the importance of central bank transparency, especially transparency about objectives and future policy. There is a lot of food for thought in this paper, and there are many details in it that Mike Woodford didn't have time to go through in his presentation that are worth reading and thinking about.

This paper leads to a related issue. As much as we admire Chairman Greenspan's monetary policy, the fact is that the Fed has not been—as far as I know—a model to the rest of the world. I know of no countries that have tried to emulate the Fed when they have reformed their central bank or their monetary policy. Instead, they have been looking at a few pioneers in inflation targeting—the central banks of New Zealand, the United Kingdom, Canada, and Sweden. Those are, and have been, the models for the rest of the world.

One can ask why this has been the case. One reason, I believe, is the relative lack of transparency at the Fed, the "secrecy of the temple," for instance, the fact that *Green Books* and *Blue Books* are kept secret for five years, whereas in other countries inflation reports are published within a week or two. One also can mention the fuzzy objectives of the Fed, the fact that there is no numerical inflation, and the fact that any improvements in transparency at the Fed seem to have been made fairly slowly and reluctantly. The Fed has been a follower, not a leader in this respect.

Especially, regarding information about future policy, in both New Zealand and Norway, the central banks publish graphs that show the most likely future interest-rate path—a big step up from what the Fed has been doing.

Finally, the personalization of monetary policy at the Fed has also most likely contributed to why the Fed has been less attractive a model for the rest of the world.

*Mr. Mishkin:* I would like to return to this issue about announcing an explicit policy path. I want to look at this from a political economy viewpoint. Mike Woodford didn't have a chance to discuss this, but he actually has quite a nuanced discussion of this issue in the paper. But I would like to put a little more emphasis in a particular direction.

When I think about the key thing we need to do in terms of monetary policy, 95 percent of winning the war is, in fact, establishing a strong, credible, and nominal anchor. When I look at communication strategy and transparency, I look at it through that lens. The concern I have here about announcing a specific policy path is one that Mike mentions in the paper. It is clearly a contingent path, but it is conditional on what happens in terms of economic activity.

Although we economists and the markets understand that the policy path is contingent, there is a real question about whether the public understands this. The following problem then can occur when you announce a policy path as the Fed has done when it announced it will tighten at a measured pace. We have been lucky not to have any big shocks that needed to move us off that measured pace. But let's consider a case where, in fact, the economy has been much stronger than we expected. The Fed would realize that the right contingent path would need to change. If it then changed policy from the previously announced path, it is very possible that there would be attacks on the Fed for changing its position, with accusations of flip-flopping. The problem is, of course, that these attacks could weaken the nominal anchor. In that context, it actually could mean that. Although from a theoretical viewpoint it makes sense to announce the policy path, and from a political economy viewpoint, it might not be the best thing to do.

The last thing I'd say here is this does not mean that central banks should not talk or give some indication about the path of policy because Mike is absolutely right that the management of expectations is a key element of doing monetary policy. The question is how far you should go. It is a nuanced issue. Can central bank transparency go too far? The answer is yes. Central banks have to be careful.

*Mr. Poole:* I've been interested in this subject for a long time, and the more I think about it, the more I come back to the title of a speech I gave on the subject, which was something like, "Transparency: Not Whether But How." There are a lot of very difficult issues here.

Let me also emphasize the importance of the evolution over time. If you think back to February 1994 and then compare with where we are today, we could not have gone to where we are today all at once in 1994. The FOMC could not have digested it all nor could the markets. So, there is an evolution and steps that need to take place. Many of the steps need to be thought through very carefully because if it turns out that a step is unsuccessful or creates unintended, unanticipated problems, it may be very difficult to reverse it and back off. One of the reasons why not everything is done all at once is the importance of not making mistakes as you go along.

Mike Woodford concentrated a lot of his time, very appropriately, on the extent to which the FOMC or any central bank obviously should be providing forward-looking information on the expected path, in our case, for the federal funds rate.

One way I like to think about this is if you take a four-quarter horizon—and you can use any horizon you want—at the beginning of the period, you have expectations from everything you know of where the appropriate federal funds rate might be at the end of four quarters. Now, think about the end of that period and how much of the actual change in the federal funds rate could have been well-predicted at the beginning and how much is a consequence of things that happened along the way. Most of the time, my judgment is that, at least on a four-quarter horizon, most of the change in the federal funds rate is a consequence of things that happened over the course of the period. That is a reason for staying away as a normal matter from trying to forecast the federal funds rate or the policy rate.

However, there certainly will be learning over time, to the extent that the market comes to understand the nature of the forecast of the policy rate over the horizon and understands that it will be subject to change for a good reason as new information arises. Then, if the market fully understands that and the public understands that, there ought not to be a problem. We can look forward to the market understanding increasingly sophisticated and subtle things over time.

One point that has not been mentioned in the paper or the discussion that I feel is quite important, transparency—in my experience—helps the FOMC tremendously in its internal processes to understand better what it is doing. I reflect on my initial experience in 1998 when I came to the FOMC. I didn't have the foggiest notion of what the so-called bias or tilt meant. As I talked to my FOMC colleagues about the bias, I found out that there were several opinions as to what it meant, even though the FOMC had been voting on the bias for some time. We have clarified that issue and a number of others as a consequence of spending some time talking it through. So, the internal coherence of the policy discussions within the FOMC has been aided tremendously by our effort to be clear in our dealings on disclosure of information.

*Mr. Woodford:* Thanks to everyone for the comments, not all of which I have time to respond to. I'd like to particularly thank Tiff Macklem for his very insightful discussion. I might clarify that I agree with a lot of what he was saying. In particular, Tiff talked about his hierarchy of things that he thought it was important to communicate. I agree exactly with the hierarchy he expressed. There is some discussion of that in the paper, maybe not the hierarchal nature of the priorities, but certainly emphasizing these issues, particularly the importance and the desirability of clarifying the inflation target.

The emphasis of this paper on the specific issue of the desirability of talking about the outlook for policy rates should not be interpreted as suggesting that I think that is the only or even the most important aspect of communication strategy. The reason for the emphasis on it here was, first of all, that it is probably the most controversial of the points on that hierarchy. There would be more agreement among people in the room on the desirability of transparency about the things higher on Tiff's list, and I thought it was interesting to try to say something about this harder question of what should we think about the desirability of talking about the outlook for policy rates. Also, recent U.S. policy is particularly interesting as something for other central banks to be discussing as a possible model in regard to the innovation here in communication about the outlook for policy rates. That also made it an interesting topic to take up at a conference

assessing the Greenspan era at the Fed. But I don't at all disagree about that basic hierarchy.

Tiff also had suggested that, from his point of view, one could deal with the zero bound in a way that would not make talking about the path of interest rates important. In my paper with Gauti Eggertsson on how one optimally would conduct policy facing the zero bound, we actually give a lot of emphasis to the desirability of the kind of thing that Tiff was talking about, namely, having a price-level target and talking about how it has changed as a result of disturbances. I see this not as an alternative, though, to talking about the interest rate path, but something that importantly amplifies it; we propose it as the best way of talking about the *conditionality* of the time at which the "considerable period" of low interest rates should end. This is, of course, a very practical issue, for example, in Japan right now, where there is a lot of discussion of exactly how to unwind the zero interest rate policy. My view is fairly close to what Tiff was saying, in that talking about the price-level target that you have in mind would be the best way to talk to the public about what should be the thing that determines the timing for the end of this kind of policy. I don't think, though, that that means, for example, that Japan's having talked about its commitment to maintain a zero interest rate policy wasn't very important and desirable.