

General Discussion: Monetary Policy and Real Stabilization

Chair: John B. Taylor

Mr. Taylor: Thank you, Matti. We have some time for comments and questions.

Mr. Freedman: As always, I find Lars' characterizations interesting. When we introduced inflation targeting in Canada in 1991, we talked very explicitly about the fact that if there were a shock to the system and inflation moved away from the target, we would bring it back gradually because of the need to avoid the kind of volatility both in output and the policy instrument that would come from trying to get it back too quickly. It was only in 1996 or 1997, when I read Lars' first published piece on this question, that I realized that we had been minimizing the loss function all along. That was a very nice way of characterizing it.

There are two points about this paper I'd like to make. The first relates to the mean versus mode debate, and I'd like to tie that to the asset price issue. One of the real challenges to central banks is how to deal with small probability cases. If we have a situation where there is, say, a 10 percent probability of an asset price collapse and a 90 percent probability that it is not going to happen, do you then go ahead and focus on what one would call the mode, which is the appropriate path for policy in the 90 percent case and say, "If the 10 percent case happens, we'll try and deal with it later."? Or do we try to deal with

the mean? In that case if the small probability outcome doesn't happen, you are going to have an interest rate path that is not appropriate. But even if it does happen, you will not have moved interest rates enough to deal with the collapse of asset prices in any case. So, it is very much an open question of how to deal with such a situation.

My last point is a technical one. The chancellor's letter in the Bank of England arrangements should not be interpreted as a characterization of what lambda is. Rather, it is a point more related to accountability. Charlie Bean talks about the relation between the Bank of England and the chancellor as an incomplete contract—i.e., the chancellor is not specifying to the Bank of England how quickly to come back to target. Rather, the letter, as I said, is a question of accountability, and it is up to the central bank (and this is true for all central banks) to determine the speed of return, which in your model is the lambda. I tend to think of lambda as relating to how quickly you want to get back to target.

Mr. Taylor: Thank you Martin.

Mr. Barnes: I have a question about the foolproof way to escape from a liquidity trap, which obviously makes sense for a one-economy situation like Japan. But an obvious question would be: What happens when you have two or more major countries in that situation? In the context of the United States, it may be an outlying forecast to make, but the reality is we have a 1 percent inflation rate, a 1¾ percent interest rate, and an economy that is operating below capacity. The possibility of a U.S. liquidity trap should be in the distribution somewhere. How would you escape from that situation?

Mr. Taylor: There are a number of people who would like to speak, so let's go through a few and then Lars can comment. Allan Meltzer is next.

Mr. Meltzer: First, I have a couple of comments. One is to pick up a comment that Governor Vanhala made and amplify it. There are real influences on prices such as oil shocks, excise tax changes, and other one-time effects. To lump those together with the monetary part of

inflation is, I believe, to lead yourself into trouble. You really want to think about those separately because you may want to respond to them separately. You may, in fact, not want to respond to the oil shock increases at all because you think those are one-time changes. That is a continuing problem in the discussion of inflation, and inflation targeting is to really think about separating out one-time changes from the steady-state changes that come from monetary policy. When Milton Friedman used his famous expression, “Inflation is always and everywhere a monetary phenomenon,” he didn’t mean that oil-price shocks couldn’t occur. He just meant that those were not part of what he wanted to call inflation. It is important that that distinction should take a larger part. I know you have written about this before, Lars, but in this paper where you are giving instructions to the central bank, you skip over that.

Second, I would like to comment on the standard model. This is not a comment so much on you because your paper really expositis very well what is pretty much a standard model. But, that model cannot explain the recent past at all well because there is a channel missing. That channel is the channel by which monetary policy directly affects the demand for assets, and asset prices are affected by monetary policy. There is no reason, in either practice or theory, why increasing money cannot directly affect asset prices. If we think about the recent experience, asset prices rose. When asset prices rose, those prices are the value of existing assets. When the value of existing assets rises relative to the cost of producing new assets of that kind—called investment—we get more investment. And, when asset prices collapse, we get less investment. I don’t think you can explain what has happened unless you bring in the relative price of assets to output, as in much earlier models by Tobin, by Brunner, and me that emphasize the role of asset prices, as in Tobin’s “Q.” That is missing from these models, and it is misleading for central banks to think they can explain what is happening. It doesn’t change what the nature of their objective is, but it very much changes the way in which they are going to respond to that objective. In my view, that relative price mechanism is not a wealth effect. It is a relative price effect. It tells us the next steps in the recovery are that people are going to borrow at low interest rates and buy existing assets. That will be one way in which the transmission

mechanism—raising asset prices—and thereby stimulating investment, the production of substitutes for those assets.

Finally, there is an interesting issue of political economy, which you don't address but which you weren't asked to address. That is, why do some countries and central banks become more explicit in the way in which they announce their targets? Others practice something very much like the framework that you and others have elaborated but don't explicitly say it. Then, there is a third group, which neither say it nor do it. There is an interesting question there about what kind of political structures generate the kind of framework that you talking about.

Mr. Taylor: Why don't you quickly react to where we are now because there are a lot of other people who would like to comment.

Mr. Svensson: I'll do my best to be brief. In response to Matti Vanhala, he questioned whether one should mention additional objectives for monetary policy at all. I think they are already there. In the U.S. Reserve Bank Act, there are more things mentioned than stable prices. In the PTA in New Zealand, there are more things mentioned, as in the chancellor's letters. So, I propose a way to take it into account rather than pretending that they don't exist.

In explaining the loss function to the general public, you can say that you want to achieve a long-run average inflation target, but you also want to achieve a good compromise between inflation variability and output gap variability, as indicated by the relative weight, λ .

In response to Chuck Freedman, I agree that the issue of low probability events is a very interesting one. The standard view is that you should use the mean and this way, anticipate the event. But, some people have suggested there are some low probability events for which you may want to wait and see whether this event occurs and only handle it then. I don't think it is completely clear what one should do. Regarding the chancellor's letter: An explicit loss function would be a precise interpretation of the chancellor's intent. It would be appropriate if the Bank of England made such an interpretation explicit.

About the foolproof way: Certainly, if both the United States and Japan are in a liquidity trap and a deflationary spiral, it wouldn't work. The foolproof way assumes that the rest of the world is in reasonable shape. Then the one country can pursue this policy. I proposed the foolproof way two years ago at a conference at the Bank of Japan. At that time, the United States was in a boom. It would have been the perfect time for the Japanese to do it. Now is, from the point of view of the U.S., a less good time to do it, but it is still better to do it now than to wait until later.

Allan Meltzer always raises deep and interesting points. He is also so generous that he has told us his questions in advance. But they are still so deep that I need to think a bit more about them before having good answers. Most or all of the wealth effect is actually included in these models because one works with an Euler condition, which takes into account the, intertemporal budget constraint.

The political economy question of Allan's I find fascinating. Why do some countries central banks become so explicit and others not? However, in countries with not-so-explicit central banks—like the Federal Reserve—people like Alan Blinder have argued for transparency and openness for a long time. So, it is not a simple picture.

Mr. Taylor: Matti Vanhala would like to make a quick comment on one of Allan's points.

Mr. Vanhala: On Allan Meltzer's last point: He wondered what these unholy alliances may have been that created these overly specified inflation-targeting regimes. That is a very good question. But there is a clear answer as well. When these regimes were designed in the beginning of the 1990s, when it was realized that we need solid emphasis on price stability and on results, some central banks were given independence and, of course, part of the political bargain—with the strong support of academia—was that the mandate should be very precisely specified. Therefore, we have all these limits, midpoints, ranges, etc. through which the central banks have boxed themselves in. That again, of course, provides the fertile ground now for these same unholy alliances to try to fix a mix of objectives. Here we go again!

Mr. Taylor: Larry Meyer, please.

Mr. Meyer: Lars, you make a very interesting point about the asymmetry in the two targets. That is, the inflation target is a choice variable and it can be set very precisely, whereas the output target is given by the structure, we are uncertain about it, and it changes over time. Having said that, your distinction between “level” and “variability”—one being hierarchal and the other being consistent with a dual mandate—is totally artificial. I look at your equation 3.1. It looks to me like output and inflation come in exactly the same way. One has a star and one has a bar. Does that make them different? They both look like they come in levels. It seems to me that you have written down the dual mandate. I would like you to tell me what the loss function looks like in the hierarchal mandate.

I can't imagine a central bank making explicit its loss function, but it does raise some interesting questions that we could have some broad discussion on. That would be: What should a committee agree to agree on when it sets policy? I would put an explicit numerical inflation target in that list. And what should they agree that they could have differences of opinion on and that should be reflected in their votes? For me, the λ and the loss function or the nature of the loss function would be something that one would allow the individual committee members to differ on. But that is an issue.

I just have to raise a comment about Matti's remarks. It reminds me of the first Jackson Hole conference I attended. I heard a lot of central bankers giving me advice as a new governor. They were telling me, “If you want to be credible as a central banker, you should never admit you have another target other than inflation, because you lose your credibility.”

My response was, “Okay, that's very interesting. I'm new at the game.” I need to lie about what my goals are to build my credibility that I am an inflation fighter. That didn't seem to make any sense to me. Now, I agree with Lars that most central banks are flexible inflation targeters in one form or another. The difference is that some admit it and some don't. You can't be transparent by pretending you only

focus on inflation when you focus on both. You can't communicate to the market.

Mr. Taylor: Bill Poole, please.

Mr. Poole: This is a very sound paper and I agree with almost all of it. But I do have a very deep disagreement on the proposal for an interest rate plan. Let me explain why. I want to start with a fact, an observation, which is that in the United States since 1994, the market has been very accurate in its forecasts of Federal Reserve policy actions—extremely accurate. Now, what do you make of that?

What I make of it is that as a first approximation, the United States is in what the journal literature would call “a full rational expectations equilibrium,” in which the central bank and the market receive the same information at the same time and draw the same conclusions from that information. It is a first approximation. Bob Rasche and I have written a couple of papers on this subject, and I don't have time to go through all the details obviously. But if you accept that point of view, then a couple of things flow from it.

First of all, longer-term interest rates fluctuate and do a great part of the stabilization work for the central bank. You can see that in the data for the United States if you look at how stable the federal funds rate is compared with the fluctuations in longer-term interest rates. So, the market is doing a great of the stabilization work.

Secondly, the interest rate adjustments are driven primarily by the arrival of new information, not by anything that can be specified at the time that you were to spell out an interest rate plan. If you spell out an interest rate plan, true transparency requires a probability distribution on all these possible outcomes, which would reflect the probability distribution on all the information that is arriving that is going to drive the interest rate adjustments.

It seems to me that what the central bank has to do is to try to provide a sense of the response function, how the central bank is going to respond to the array of events that might occur. That is the main com-

munications problem, not trying to explain what is already built into the plan.

Mr. Taylor: Marty Feldstein, please. We still have quite a few people, so if you could limit your remarks it would help a lot.

Mr. Feldstein: I want to focus on Japan. I agree with Lars that it is one of the major problems facing the world economy, not just because of what continued lack of growth in Japan means for Japan, but also what could happen more generally as a result.

But, I worry about Lars' "foolproof" suggestion. Essentially, what it is is a major currency depreciation, which leads in time to an increase in domestic inflation. But, while you emphasize the inflation aspect of it, it also has an important impact on neighbors and other trading partners—a destabilizing impact. While you are focusing on the advantages of the policy for Japan, it simultaneously could have very serious destabilizing effects on other countries as they try to match the exchange rate adjustment or, even if they don't, the consequences for their trade. I think about Thailand, Korea, even China. Therefore, why not seek something broader than monetary policy as a way of stimulating the domestic economy without these adverse effects on the foreign economy? It will not surprise you that what I have in mind is targeted fiscal incentives of the sort that I talked about yesterday, using the tax system to try to stimulate domestic demand in a revenue-neutral way.

Mr. Taylor: Michael Mussa, please.

Mr. Mussa: I'd like to reinforce what Marty had to say on this last point. What Lars is really prescribing as policy is accurately described as competitive depreciation. It is expressly illegal under international law. It is the one thing that the Articles of Agreement of the International Monetary Fund actually preclude using the exchange rate in this deliberate way to stimulate the domestic economy. You cannot do it as a matter of international law. Now, could you get other trading partners to acquiesce in this clear violation of international law? Perhaps so, if the rest of the world economy was performing rea-

sonably well. But as Marty emphasized, certainly the Koreans and the Chinese and others in Asia—in addition to various sectors in the United States—would not be entirely happy about this development.

Lars says explicitly in his paper that the Japanese could do this without the cooperation of anyone. I think that is just dead wrong. If a country is going to engage in this type of policy, it needs to gain clearance from its principal trading partners. And, as a condition for agreeing to allow a country to pursue this type of policy, it would be relevant to insist that the Japanese undertake other elements of policy adjustment that are in their interest and in the interest of the better functioning of the international economy as a whole—including a much more serious and timely effort to address the long-standing structural problems in the Japanese economy. It is one thing to advise them that they should do this; it is another thing to say, “Look, if we are going to agree to competitive depreciation as your way out of this mess, there are a lot of other things that need to be on the policy agenda as well.”

Mr. Taylor: Wayne Angell, please.

Mr. Angell: Lars, I appreciate very much your precise distinction between a macro channel, which we are all very familiar with, an aggregate demand through interest rates, and also a micro channel, which is the direct impact upon the exchange rate. But just as changing the liquidity of dollars alters the exchange rate even more so and more quickly, does it alter the exchange rate between dollars and copper? Copper, like exchange rates, has the advantage of being traded, so we can see immediately the effect. My question, Lars, is: Why not expand this micro channel to a direct channel and recognize that monetary policy has the power of affecting the pricing power of business decisions? You can make the scarcity of dollars different and that alters the scarcity of copper and all other commodities. Why not look at that channel as well as the exchange rate channel?

Mr. Taylor: Stan Fischer, please.

Mr. Fischer: I have just three comments. There has long been an embarrassment in the way economic theorists get to inflation target-

ing. They write down a loss function, which has inflation and output in it, and, in the end, they say to target only inflation. How exactly you made transition isn't clear. Lars has simply grabbed the bull by the horns and said, "You can't do that and you have to evaluate policy according to the original loss function you used." That would make life a great deal more complicated for the central bank, as several people have indicated.

One question it raises is whether the Bank of England's two-year horizon is, as Chuck Freedman suggested, the practical answer to the question of how you make that judgment.

Second point: Over what time period is this loss function being evaluated? It is written down atemporally, but it must be something of a long time period. It is going to be very hard to judge a central bank over what happens this week or this quarter in terms of how well it is doing in meeting its objectives.

Third point: Why do you say, "No fine-tuning?" As far as I can see, the procedure you recommend is one that will have the targets being adjusted every ten minutes or so, as new information comes in. So, on what basis would you rule out fine-tuning?

Mr. Taylor: Roderick Carr, please.

Mr. Carr: Lars is a great student of New Zealand and it is a privilege to have the paper. I sometimes think of myself as a graduate from the school of transparency and increasingly think of myself possibly as a refugee from transparency. But I have three areas of question for Lars to think about for us.

One is the idea that maybe when we enumerate ideas we lose some of their potency. I think about the way in which NAIRU, output gaps, the idea of the medium term, and even the concept of instability are extraordinarily powerful and useful concepts. But increasingly when we enumerate them and they get caught in the political debate, sometimes we then find ourselves unable to use them productively. I feel that with the enumeration and the loss function, we may find ourselves

in the same dilemma. So, the question really is: Does enumeration risk destroying some otherwise extraordinarily useful constructs?

Secondly, in the loss function, there is an assumption, it looks like, that is merely the distance away from the target that may impact on issues such as the speed of return. I also wonder whether it is as symmetrical as that—whether we have become concerned not only at the distance from the target but the direction of the movement. In thinking about a loss function, maybe it is even more complicated than that. And the increasing complexity perhaps poses real risks.

Finally, there is a question about whether the increase in enumeration of either targets or loss functions creates a pseudo science and expectations of precision around the conduct of monetary policy, which will inevitably lead to disappointment from political masters. New Zealand now has this extraordinary debate about whether we should be targeting precisely 2 percent or precisely something like $2\frac{1}{2}$ percent inflation. I just fear that we have created an expectation of precision, which will be disappointed.

Mr. Taylor: Philipp Hildebrand is next, and then Roger Ferguson, and then the list is closed.

Mr. Hildebrand: I have just a short question for Matti. Matti, don't you think that if you are too pure as a central bank, you run the risk that the parliamentarians you mention eventually force you into exactly the kind of framework you are trying to avoid?

Mr. Taylor: Roger is next.

Mr. Ferguson: Let me reinforce the point that Bill Poole made on this concept of interest rate plan. It strikes me as a highly risky concept for a central bank to publish or be very explicit about an interest rate plan based on unknown incoming information. It has two problems. One, as Bill indicated, it creates the possibility of a nominal anchor with respect to interest rates, which might then lead to a second problem—undercutting credibility of a central bank as it finds it has to move from what appeared to be one interest rate plan to another.

I agree with Stan's point: It is possible that with incoming information coming very quickly, the perfect interest rate plan may change quite rapidly.

Mr. Taylor: Thank you, Roger. Lars and then Matti will finish off.

Mr. Svensson: I have only been given three minutes, so I apologize for not responding to all these comments. However, some of the comments remind me about Milton Friedman's statement that Stan Fischer quotes in a one of his papers, "The two most important variables on their loss function are avoiding accountability on the one hand and achieving public prestige on the other."

About these controversial interest rate paths. A nice thing is that they are already used in New Zealand. They work fine. There are no problems with them.

Let me use my brief time on only two things. First, Bank of England's two-year horizon is an approximation and probably not the optimal targeting rule. This is discussed in some detailed in the paper.

Second, let me take up the foolproof way. Would it be a competitive devaluation? It certainly is a sizable depreciation. But it is the right thing to do. The fact is that you must reduce the real interest in Japan, and you cannot do that without also depreciating the yen. They are two sides of the same coin. So, expansion and policy reducing the real interest rate in Japan must result in a depreciation of the yen, and vice versa.

Furthermore, from a depreciation of the yen, there is both substitution and an income effect on the current account. If the depreciate gets Japan going, the income effect will suck in imports, which will be great for the neighbors. When I presented the foolproof way two years ago at a conference at the Bank of Japan, John Taylor was also there, and he reported simulations with his multi-country model, in which a depreciation of a similar kind actually had the substitution and the income effect on the current account roughly canceling themselves. So, the current account effects of the foolproof way would probably be very moderate. It still is the right thing to do, whether legal or not!

This is the most important current monetary policy issue in the world. The Japanese should do it unilaterally if necessary.

Mr. Taylor: Would you please address this hierarchical point that was mentioned by Larry and Stan?

Mr. Svensson: I do discuss this in the paper. First, regarding the average level targets, There is a unilateral mandate. You select the inflation target, but you don't select the output target. This is given my potential output. Second, regarding the variability objectives, there is a dual mandate. You want to minimize a weighted average of both inflation and output-gap variability.

Mr. Taylor: Okay, Matti.

Mr. Vanhala: There was a very relevant comment by somebody here about the illusion. Maybe it was from our New Zealand “graduate of the transparency school.” It is true that there are some elements in the debate about inflation targeting which don't exist in real life— excessive precision certainly is one. As Lars also said in his paper, “No inflation targeter seen so far applies inflation targeting in real time.” The debate tends to get bogged down in this question of how rapid the reaction should be, etc. In reality, there is a lot of flexibility in these regimes, as they are pursued. Of course, the ECB's way to define its price stability objective is different from most others. That regime also is very far away from the strict, doctrinaire, precise definition method. This is quite important.

Philipp Hildebrand questioned whether the parliamentarians might be very upset if the central bank insists on price stability only. What most central banks would say is that price stability is the primary objective. Whatever we do, the parliamentarians get upset and we get along very well nevertheless.

Mr. Taylor: Thank you very much for the great presentations, answers, and comments.