Mr. Taylor: There is time for some good comments from the audience. Actually, I have one person who already asked and that is John Makin.

Mr. Makin: I wanted to return to the issue raised by Lars Svensson’s paper today with respect to the Bank of Japan, because we all agree that the situation in Japan is very important. The topic of this conference is stabilization policy and market bubbles. Japan is facing a market bubble issue and has to make a decision as to whether to burst the bond market bubble. The nominal yield in the ten-year JGB is 1.17 percent and on two-year notes in Japan is less than 10 basis points. So, if Japan does follow the foolproof solution and aggressively pushes up inflation expectations by adopting an aggressive currency depreciation policy, it will be bursting the bond market bubble. This becomes a significant problem because the major absorbers of Japanese government bonds over the past five years have been Japanese banks and insurance companies, and their balance sheets are already quite weak.

I would just point out that one of the things that needs to be addressed in conjunction with any kind of a reflationary solution for Japan would be the issue of a large transfer from holders of bonds probably to holders of equities. In the event of a rapid reflation in
Japan, the equity market would respond positively and rapidly and the bond market would sell off hard. That said, the problem is that the difficulties implied by Japan’s deflation rate only get larger, given the steady-state deflation that is present in Japan. That doesn’t mean we shouldn’t follow a reflationary solution in Japan; I just think some specific addressing of the problem that is implied in bursting the bond market bubble would be appropriate and manageable. But, it needs to be addressed specifically.

**Mr. Taylor:** Thank you. Ilan Goldfajn, please.

**Mr. Goldfajn:** I was actually trying to make a comment in the last session. But since this is an overall session, I will just make my comment regarding fiscal dominance. I am from the Central Bank of Brazil. My country was mentioned in vain in the last session, so I want to make a few comments.

The discussion in this session and the previous session regarding fiscal dominance and the relationship with monetary policy, Sebastian Edwards mentioned that he believed the case of Brazil is an intermediate case where there are relatively strict intermediate restrictions to monetary policy. I argue that I don’t think this is the case. Let me tell you why that is. If you look at what happened—let me digress a little bit on Brazil just a bit in the last few years—you’ve seen a lot of things happen. Some reforms have not been done, but a lot of things have happened. Since 1994, inflation, which was in three and four digits, has come down. We now have an expected inflation rate for next year of 4½ percent. It follows the depreciation. We have a banking system that was cleaned in 1995 and is relatively strong. We have a fiscal primary surplus that until 1990 was zero. It was adjusted to 3.75, and this year it will probably close to 3.9. So, in the previous paper, it seems that fiscal policy reacts to the level of the debt.

Of course, we don’t have the major themes that people put on crises, for example. We don’t have a fixed exchange rate. We don’t have fiscal irresponsibility. We don’t have banking problems. We don’t have short-term external debt. Our public debt is held by domestics. Our external debt is mainly private. I know all the caveats and I know what
people are thinking. I don’t have a paper like Lars’ that contains all the
caveats, but I am available to talk about this later. What about the sus-
tainability, which is what I think Sebastian was mentioning? If you
actually do the calculations, instead of just thinking and looking at the
market numbers and assessment, you realize that the current primary
surplus is enough in the medium term to have a differential, \( r \) minus \( g \) times the level of debt of almost 7 percent. So, we can have real inter-
est rates 7 percent above our growth and still make it at the current pri-
mary surplus. So, what is the problem? Why is it that we still have mb
for Brazil at 1,600?

I have two interpretations. One, we have elections. It is a democracy.
Candidates left from this government are less known and have said
stupid things in the past. After you say stupid things, it is probably
harder to convince people that you are not going to do stupid things in
the future. This has made markets more nervous. Since then, things
have changed. We have an International Monetary Fund program that
has dealt smartly with the incentive structure of the candidates to actu-
ally choose the right direction. I think it is even more important than
the money is the incentive structure of getting the continuity of poli-
cies. What else? If this has been done, why are markets still nervous?

One reason is that this is a learning process. The second is related to
Alan Blinder’s comment regarding fiscal sustainability. How do we
judge it? In the United States, long run or the infinite run as you men-
ton or even the transversality condition, or the Keynesian long run,
where everybody will be dead. In emerging markets, especially after
several shocks, the long run is very short. People die very fast. Their
bodies decompose even faster. The judgment of what is sustainable is
not in years, not in months, sometimes it is just what happens with the
exchange rate. If this affects your debt, that is the judgment. Sebastian
Edwards mentioned that he actually was a little more benign. He actu-
ally gives us one year, until 2003. He said that if in 2003 you reach real
rates of 9 percent—we are actually at 9 percent—but, if we reach 9
percent, if you grow then it is fine. But that is the maximum I have
heard in terms of long run. When you actually do the calculations that
is sustainable. When you look at the real variables that matter—real
interest rates and real exchange rates—real interest rates have gone
down in the last few years. The real exchange rate is more depreciated than ever. Probably it has overshot. I have worked with real exchange rates. I haven’t seen a real depreciation of 40 percent. They don’t happen. Eventually, you get an appreciation. That is probably what will happen. Real depreciation means a very steep decline in the debt. I just wanted to make these points, given that you missed me in the previous session.

Mr. Taylor: Thank you very much. We have quite a few people who would like to speak, so let’s keep it short. Lars Svensson is next.

Mr. Svensson: Three quick points: First, I am afraid that Rick is deeply inconsistent when he first emphasizes the importance of having explicit objectives and then refuses to specify the loss function. Furthermore, potential output is a crucial concept in monetary policy, but it is a very difficult one. But that is no reason for not being explicit. That it is a crucial concept is precisely why central banks have to explain what concept of potential output they are using, why they are using it, and how they measure it. All these objections about being explicit reminds me of ten years ago, when almost everyone was against having an explicit inflation target. We all know where that debate went.

My second point is on Japan, on the problem of a fall in bond prices if you would do the foolproof way: There is a solution, because that fall is a capital gain for the Japanese government, a reduction in the value of the outstanding debt. The government can use that gain to compensate bond holders—for instance, by increasing the coupon on the outstanding bonds.

My third point concerns the issue that Stan raised. Is there a risk that taking output into account means fine-tuning? I argue that the process of forecast targeting handles that in the right way because essentially all the incoming information is filtered through the forecasts. Only if the information it has an impact on output and projections inflation one or two years ahead do you respond to that information. Most of the information coming in would have no impact on those projections and would hence not induce any monetary policy response. So, you
won’t be reacting. Most often it will have a very little impact, so you practically don’t react to it. Occasionally something big happens, for instance, 9/11—which has big impact on the projections. Then you respond forcefully.

**Mr. Taylor:** David Romer.

**Mr. Romer:** I found a lot of the discussion this morning bizarre. Lars started out by saying that central banks should care somewhat about output stabilization and should say so. Let’s stop with that statement and forget about the details. Much of the morning has been spent jumping on that idea. People are saying very strongly that central banks shouldn’t try to stabilize output. And then they say, “Well, they certainly shouldn’t admit it if they do do it.”

There are two arguments here and they both seem obviously wrong. One is that central banks should focus on what they can do and not on what they can’t do. That is fine. But, central banks do have some ability to stabilize real output. They are not perfect at it. They are also not perfect at producing price stability. So, that argument seems completely off point. We have no other policy mechanism to provide stabilization policy in a world where, as I think, the general consensus is still that fiscal policy is not of much use. The second argument is that we shouldn’t admit it, because if we admit to the stupid politicians and public that we care at all about their jobs, they will make us live through the 1970s again. The 1970s were traumatic; they were terrible. We have lots and lots of knowledge of that experience and no one wants to replay that. We don’t have to worry about that. Of course, we should be cautious. Of course, we should worry that we can’t measure potential output well.

But those aren’t reasons to refuse to try to stabilize output at all. The problem is clearest in Rick’s comments. Rick spent awhile objecting to the idea of using potential output, and then his next subject was about flexible inflation targeting, which is exactly doing that. We should be willing to say the obvious, which is that central bankers, in some form or another, should pay some attention to the real economy and not just through what it means for inflation.
Mr. Taylor: Pam Woodall.

Ms. Woodall: One of the main reasons that is given for why central banks shouldn’t prick asset price bubbles is the uncertainty—you don’t know whether it is a bubble. But is that uncertainty really different from the uncertainty that central banks deal with every day—namely, the size of the output gap? Might I suggest that actually one of the real reasons why central banks are very reluctant to get involved in the game of pricking bubbles is that, unlike holding down inflation (which is publicly popular), pricking asset-price bubbles would be publicly unpopular and, hence, it would be very hard to win a political mandate to do that.

Mr. Taylor: Thanks. We are going to have the panelists respond at the end. That is a good question. Martin.

Mr. Barnes: Jacob Frenkel made the point that if you are in an asset bubble situation, at a minimum you should make sure that the economy and the financial system are sound to deal with the fallout from the inevitable bust. That obviously makes sense. The problem is that a weakening of financial oversight and increased risk-taking by a broad range of financial institutions are an endogenous part of the bubble process. It is only when the bubble bursts that you expose all the excesses that occurred, and you then deal with them, like corporate governance in the current cycle, and when it is a bit like closing the stable door after the horse has bolted. In theory, this should make you better placed to deal with an asset bubble in the future. But the reality is that asset bubbles are infrequent; by the time the next bubble is ready to begin, those new controls that you put in to deal with the past one have weakened enough that the next bubble takes off. This is straight out of Kindleberger’s Manias, Panics, and Crashes. So, it is a nice idea, but the bubble process seems to recur regardless.

Mr. Taylor: Allan Meltzer.

Mr. Meltzer: I don’t want to comment on the excellent summaries. I want to comment and, perhaps, try to prick a bubble about bubbles. We all recognize that stock prices rose rapidly. And Bob Shiller told
us in 1996, 1997, 1998, 1999, 2000 that the market was overvalued, “Well, we know that economists are not very good about timing,” so maybe he was right to tell us that. I think not. The bubble theory at least needs some caveats about it. First, it is an elegant working of modern finance theory. Like much of modern finance theory, there are no transactions in the bubble theory. That is, prices rise because of rational expectations. People know that the price has to be higher, and therefore the price gets to be higher. But that isn’t exactly a description of what goes on in financial markets, particularly U.S. financial markets where 1 billion to 2 billion shares a day are traded and people are selling. Now, we need an explanation to complete the bubble theory. We need to have an explanation of what the expectations are of the people who are selling those shares. They can’t all be thinking that the prices are going to go higher. There are people who are selling. They must have different expectations. It becomes particularly difficult because very large parts of the trading are being done by professional traders who presumably possess similar kinds of information, although they may draw different inferences from it. So, it is not possible—at least with the existing theory—to explain both the volume and price. One possible way out is to say, “Well, there was a new-issue market and therefore there were gainers from the new-issue market—the people who were selling new issues to the other people.” But, that is far, far distant from being able to explain the movement of both volume and prices, which is a necessary part.

I don’t deny that asset prices are important and I argued earlier that asset prices are a transmission mechanism for monetary policy, among other things. Among the other things are, of course, they are a transmission mechanism for real policies and real events. And, of course, the central bank, like the rest of us, has difficulty separating real and nominal effects on asset prices. In short, there are other and better ways to think about what happened from 1995 to 2002. People who keep using the bubble explanation really need to worry about its great, interesting implications but also its strong shortcomings.

Mr. Taylor: Okay, there’s a question way in the back, next to the last row.

Mr. Breimyer: The question I have to ask myself as a practitioner is
“How does the Federal Reserve actually set policy?” I am sure there are many answers to that. One simple approach is to go back to Otmar’s distinction yesterday—that one eye should be placed on money and credit, and the other on everything else. On the money and credit side, at least over the past fifteen years—and that’s important because fifteen years ago Chairman Greenspan became Chairman Greenspan—it has been less about money than about credit. With regard to credit, it has mainly been about business use of credit, especially business use of short-term credit when combined with other factors, such as measures of inflation and economic activity, business short-term credit usage provides a remarkably good explanation for changes in the level of the federal funds rate over the fifteen-year period, this is especially true if acceleration/deceleration in these three concepts is also included in the relationship with the federal funds rate. If you look at it from this standpoint, including the dynamics, and go back to basic concepts such as safety and soundness, the soundness element basically says, “Keep inflation low,” whereas the safety element—again given the dynamics—says, “Have some inflation in the system so you can have adequate room to make adjustments when necessary.”

Mr. Taylor: Diane Swonk.

Ms. Swonk: I guess my comment is in reflection of something Jacob said that I think is really important to monetary policy today and that is, “We are operating in a world of uncertainties rather than one where we can price risk or just back to our comfortable risk-pricing models. In that environment, one of the things I worry about is that the Federal Reserve, particularly in the United States or any central bank, is overburdened with the expectations—particularly in financial markets—of what they can and cannot do to deal with those uncertainties. For instance, with the accounting scandals, it would have been ludicrous to think that the Fed could ease to cure the problems ailing the markets through the accounting scandals. Yet, that was actually suggested by many people in financial markets. The other issue during periods of uncertainty is not only is a central bank overburdened—and it is a very fine line for them to walk to have to keep policy reasonable in dealing with risks and yet not overcompensate for uncertainties—but on the
flip side of it, fiscal policy has a risk of becoming even more irrational in terms of how it is dealing with it or reduces its credibility quite dramatically. I think we’ve seen that quite clearly. So, the whole concept of a mix of fiscal and monetary policy becomes very muddled. That is just an observation, but one of its key issues is: How does the central bank operate in a world of uncertainties rather than just one of risks? It raises a whole new level of long-term consequences that may come out from it.

Mr. Taylor: Okay, thank you. Michael Mussa.

Mr. Mussa: I very much appreciated David Romer’s remark in what has been a central issue: How much and how explicit should central banks be about output stabilization as an objective? There have been a number of empirical studies, that rightly have revealed what is visible to the naked eye—that the Bundesbank, in the conduct of its monetary policy, has been concerned with output stabilization as well as price stabilization, and that characterizes the behavior of the ECB, as well—maybe not as concerned as the Fed but the coefficient is certainly positive. To deny something that is obviously true in the conduct of monetary policy seems to me to be a mistake.

On the other hand, there is an important reason to give greater emphasis to the price stability objective in the rhetoric of monetary policy than may be the case in the fact of monetary policy. Why? Well, as a practical reality, when a central bank raises its short-term target interest rate, generally speaking that is not a particularly popular activity. It needs to have a good rationale for doing that. On the other hand, when the economy is weak and inflation is not a problem, it may not be passing below the lower acceptable bound but it is not a problem. If the central bank cuts interest rates, why do we applaud it without too many questions being asked? In that type of environment, I would say, “Well, give the central bank the edge of a little more emphasis rhetorically on the low-inflation objective.”

There is, however, a problem with that. Japan in the late 1980s illustrates that problem. Inflation was very low, but a big problem was building up in the real economy as well as in financial markets. An
earlier move to a tighter monetary policy could have averted at least some of the catastrophe of the collapse of the bubble by restraining the growth of the bubble in the first place. So, there is a problem when the economy is becoming unbalanced in an upward direction, but you are not seeing it in evidence about inflation. What do you do as a central bank? It is helpful in that circumstance to be able to say, “We are concerned with stabilizing the economy. And there is evidence that the economy is becoming unbalanced in an upward direction and we need to act in that direction even though there is no clear evidence that inflation is yet or will soon become a problem.”

Mr. Taylor: Okay. Bill Poole and Bob Eisenbeis.

Mr. Poole: Rick Mishkin made a comment about the interest rate assumptions that would be built into a staff forecast. I want to disagree with him on that and explain what I think is an alternative way to proceed. There is a lot to be said for building in a baseline forecast for the staff forecasting document that has as much market information in it as possible. So, if the market is forecasting an increase in the policy rate, you can read that out of the term structure. Indeed, the same argument goes for foreign exchange rates, for oil prices, and for every other scrap of information that you can extract from what you observed in the marketplace. That seems to me the right way to construct the baseline staff forecast. Then, you may go on to consider various alternatives from there. Not to do that means that you are starting out with an internally inconsistent forecast, because investment, for example, is based on the actual, say, ten-year rate, which then might not be consistent with an assumed constant federal funds rate. So, there is an alternative procedure, which is perfectly feasible for the FOMC—in our case—to understand, which is to base that baseline forecast on as much market information as you can.

Mr. Taylor: Bob Eisenbeis and then Henry Kaufman, and then I am going to have to just stop.

Mr. Eisenbeis: I’d like to raise an issue with regard to the discussion yesterday about fiscal issues that wasn’t considered in Alan Auerbach’s paper or in the one today. That has to do with the failure
to consider the role of state and local governments, particularly when it comes to the automatic stabilizer component. Europe has only state and local governments and no federal deficit. The United States has both a federal fiscal authority and state and local fiscal authorities, the latter playing a major role as far as automatic stabilizers are concerned. Sebastian Edwards hinted that the role of state and local governments may have been very, very important, even if you have federal balance. So, you need to consider both. That is an omission that needs to be corrected.

**Mr. Taylor:** Thank you. Henry.

**Mr. Kaufman:** We have just ended or are in the middle of the largest bubble in the post-World War II period. Probably combining Japan and the United States, we haven’t seen anything like this since the 1920s. Nevertheless, in our discussions here, we more or less come to the conclusion that there is very little that monetary policy can do to address this kind of an issue, to mitigate it, and so on. That is kind of disturbing, considering what has happened. We have seen a huge increase in debt outstandings. We have seen a massive deterioration in corporate credit quality. We have seen household participation in open-credit market instruments that is unprecedented as such. And the speed with which money flows back and forth and across borders is unprecedented, certainly in the post-World War II period. There is also the issue of what the role of a central bank is—perhaps not for all central banks—in the supervision of financial institutions. The failure of effective supervision contributed to the bubbling. We haven’t discussed this.

Finally, there is another aspect we used to hear about when it came to monetary policy in the past. What is the role of moral suasion? What should central bankers be saying at appropriate times to really try to reverse attitudes, procedures, particularly if the statements that were made here that central bankers are highly popular? If they are highly popular, they would be listened to. If so, moral suasion should be utilized.

**Mr. Taylor:** Okay. I am sorry to have to cut off. There are still sev-
eral people on the list, but we need to have the panelists respond and then conclude. In the same order, David.

Mr. Dodge: I just want to respond to two issues. First of all, I really think that it is extraordinarily important to stay focused on the inflation target. Your estimate of the output gap, in fact, gives you some indication of where, indeed, you think inflation is going in the future. An appropriate response to deal with that expected movement in inflation is the right thing, generally speaking, to deal with the variation in outputs. So, they work in the same direction, but you have to be able to explain to the public what you are doing. It is much clearer, easier to do it in terms of the inflation side.

Second, the issue of the world of uncertainty: In the case where uncertainties mount, as they clearly did last September, then central banks can step outside the normal procedures they might follow in order to take that into account. The great advantage of doing that through the monetary side, as opposed to the fiscal side, is that once the uncertainty clears up—indeed, if you have overshot—you can move rates back more quickly.

Mr. Frenkel: I’ll make three quick remarks. First, to Pam. I don’t believe that the reasons for the reluctance or question marks of dealing with the bubble in the interest rate mechanism is because of unpopularity compared with the popularity of lowering inflation. First, if somebody were engaged in lowering inflation, let me tell you what is popular is to have low inflation. What is not popular is to lower inflation. But, in any event, that is not an issue. The issue is really the cost of bursting a bubble that should not have been burst. The issue is the cost of systematically upsetting a corrective market mechanism that might have dealt with it, as well as the cost of diverting attention from the ordinary business of monetary policy to deal with issues that, at the end of the day, would become focusing on output gaps, asset prices, not to mention the moral hazard associated with it of taking responsibilities for what happens in the stock market by somebody who cannot take the responsibilities.

It does not mean that these issues are not of concern. I want to draw
a distinction between taking into account and dealing with. Neither of them ignores. So, the output gap, the asset markets, all of those are ingredients into whatever objective function is and here we had the discussion. But, it is a very different thing than saying, “There is a big thing,” as Henry Kaufman said. If it is such a big thing, it is not acceptable that monetary policy cannot deal with it. Well, first of all, it is not an issue of acceptable. The question is feasibility. Can you deal with it? I would claim, at least that is what Alan mentioned and I think I agree, interest rate policy probably is the wrong instrument to deal with it. It does not mean that monetary policy does not have the mechanisms to deal with it in the direction that you mentioned. It is strengthening the banking system, the supervisory, the regulatory, and the prudential. I would only note that not all central banks have these functions under their jurisdictions. Some have and actually most of them have, and that is the direction to go.

Final remark concerning the overburdening of monetary policy: That was a topic that was very popular in the late 1980s when large fiscal imbalances overburdened, so to speak, the conduct of monetary policy. The question at the time was, in the context of policy mix, if you have an orchestra and one of the instruments—the violin—plays the wrong tune (call it a fiscal authority), what should the other instruments do? Should the orchestra stick to its music and then you would have a very disharmonious outcome? Should it readjust its music to adjust to the fault instrument that does not play the song? Or should it look up to the conductor to put some order in the thing? Now, who is the conductor? The conductor today, fortunately, is the market judgment. Markets do know to tell you which instrument is wrong. They don’t only look at the final outcome—output gap, asset prices. They also know to allocate the responsibilities, so it will be, therefore, the price of the bonds of the country or this kind of thing.

Finally, in this regard, I like the language of the ECB mandate, which basically does speak about price stability as the objective. And output gap is there in terms of creating the environment within which you operate your interest rate. Therefore, if there is softness in the real economy, you can lower interest rates as long as it is not in danger on the inflation front. Now again, a Martian coming down to Earth, look-
ing just at the regression will say, “Gee, these guys have lowered inter-
est rates when they saw the output gap rising.” But that is the wrong inference. Output begat pricing enabled lowering interest rates because it did not endanger the inflation front.

Mr. Mishkin: The first thing I would like to talk about in terms of Lars’ comment is what lens you are looking through in terms of flexible inflation targeting. I have been looking through a lens in which the key benefit of doing inflation targeting is the communications strategy. Then, the question is: Does it help to be more explicit in the communications strategy? You can be too explicit and actually hurt communications. One example occurs sometimes when I go out to dinner with my wife, and she dresses up and looks great I find it very helpful to say, “Sweetheart, you just look fabulous tonight.” It’s when I go into details that I get into big trouble.

The issue that Romer raised is a very important one, which is that you don’t want to have the disconnect of actually caring about output stabilization but not talking about it. There are two issues here that are important. One is the recognition that we really don’t know what the output gap is. If we don’t know, we want to look at a lot of information to tell us what it might be. A key piece of information to look at is what is happening on the inflation front. That is exactly what the Fed has done in recent years. When you look at the last five years of Federal Reserve policy, the reason they didn’t worry about unemployment falling below NAIRU which was thought to be below 6 percent is because they were reading the tea leaves and saying, “We don’t see inflationary pressures.” That was happening at the Board; that was happening at the New York Fed where I worked. The second issue is that you do want to be very explicit about saying you care and how you care. There are times when it is absolutely clear that you have big output gaps. So, in Japan, we don’t have to sit there and say, “There is a lot of subtlety.” In that sense, you can raise these issues in an appropriate way. But we have to be sort of humble in the sense that we don’t really know exactly what the output gaps are.

In terms of the issue of bubbles, let me just make very brief com-
ments. One issue troubles me when people discuss Japan: Is it true that
the collapse of the bubble caused a big problem? It is likely that the reaction to it is what caused the bigger problem. In the United States we had bubbles going on too in terms of the real estate sector and problems in the financial sector in the late 1980s and early 1990s. We didn’t wait ten years to clean it up. I think that is very, very important. Furthermore, there is this issue about pricking bubbles saying, “Well, we have a lot of uncertainty about the output gap. We have a lot of uncertainty about whether bubbles are rising.” I would say two things. One argument I’ve made is: Because of the uncertainty about the output gap, we have to pay less attention to it. But, for bubbles it is even more complicated to figure out when we are in a bubble or not. A lot of people say, “Wouldn’t it have been great if the Fed had tightened in 1996?” At a time people began worrying about stock market values.

That would have cut off a lot of very good high-tech investment. I always get very nervous when government officials think they know what appropriate market prices are—even when they are brilliant central bankers (which I think all central bankers are).

Mr. Taylor: Okay. Well, that concludes things. Let me say the first time I came to one of these conferences was 1982—twenty years ago—and they keep getting better (not uniformly) but this reaches a new peak. I appreciate all the work you and Craig Hakkio and all the staff have done. So, anyway thank you very much, Tom.