Mr. Thiessen: Thank you Larry. My reaction to some of the comments is that I hope we don’t take too rigid a view of wage rigidity after a period of some twenty years of high inflation and only four to five years of low inflation. During a period of high inflation, not surprisingly, there is a lot of resistance to nominal wage reduction.

Mr. Sinai: When you look at the question asked by Stanley’s paper, “Why are Central Banks Pursuing Long-Run Price Stability?” I still don’t understand the answer. And I perhaps ask to have a little discussion of that. Because if you look around the world today outside of the United States, on average, there have been very low inflation rates by the standards of the last twenty some odd years. Unemployment rates are very, very high and I know the answer about hysteresis and the rest of that. But really, what are we waiting for in terms of the optimal results in the world economy and the sacrifices made in the short-run tradeoff? How long is that? And really, why are we pursuing this goal which we have gotten so much closer to in terms of such low inflation rates?

Mr. Fischer: We are pursuing it because there is not much evidence and very little belief that if you ran at a higher inflation rate of 4 or 5 percent, you’d be getting significantly lower unemployment. That’s the fundamental reason. There are also the allocative
costs of inflation. I believe your basic view is there is a significant tradeoff that lasts a very, very long time, and what we are seeing now is that tradeoff. The bulk of the evidence is not in favor of the existence of such a tradeoff at rates of inflation of 1 to 3 percent. The question you may be asking is what if interest rates were pushed down much lower in Europe in particular. And what would then happen to unemployment? I don’t doubt that lower interest rates in Europe now would reduce unemployment somewhat without raising inflation. So I think that’s fine. That particular policy prescription which you might have in a variety of countries where inflation is very low and unemployment is very high is one I would agree with. But if inflation in those countries started rising above the 1 to 3 percent range, would you want to keep going? No.

Mr. Sinai: My question isn’t about running much higher inflation rates from where we are, but rather, what would be the benefits, and how long in coming would they be, of targeting at a 1 to 3 percent range? And, it is not just a question for you, it is also a question for central bankers, because there is a somewhat implicit but unexplained, I think, set of notions as to what the ultimate benefits would be and how long we would have to wait for them.

Mr. Greenspan: Allen, as you know better than anyone, we are testing some very new views as to the way economies are evolving. Extending on my remarks earlier, what we are looking at is a significantly changing economic structure, especially in the United States and in the industrial countries, in which so-called impalpable, or service-related, outputs have become crucially important. The issue at stake here, is the question of tradeoffs, which Stan and Larry raised, and which was also the issue of the Akerlof, Dickens, and Perry paper. These tradeoffs arise as you approach what we are calling price stability, even though we cannot define it explicitly—largely because of data problems. But I think it is evident from the overwhelming anecdotal data that, as inflation falls, there appears increasingly an endeavor at the firm level to reduce unit costs, largely because expanding profit margins amid overall low inflation becomes increasingly difficult. On a consolidated basis, one must infer that if everyone brings unit costs down, we see significant
reductions in hours per unit of output. And, therefore, if the data were to confirm this, we would conclude that as inflation fell, productivity growth would accelerate. The trouble, as you know, is that the data which we are using—whether it is cross-country or temporal—shows that issue only very vaguely. We do get some inherent correlation significance in our measured productivity growth adjusted for the business cycle, and the rate of inflation in the United States. It shows up in Canada, as I recall. But there are serious statistical questions as to just how robust these numbers are. And indeed, if you examine them closely, they stand as rather fuzzy. If the problem is data, there is some evidence that that might be moving toward a resolution. The new set of gross product originating data, which have just been released by the Department of Commerce, I suspect is going to show some very peculiar implied productivity trends in the two and three-digit SIC classifications. For example, you cannot have industries where productivity has been falling for years when it is terribly obvious that profit margins are holding up or rising. It makes no sense. So, you have the first important question as to whether we have a significant measurement problem. And, I think the unambiguous answer is that we do. What is unclear is how we are going to resolve it. The question that Larry and Stan raised on whether it is desirable to have negative real interest rates on occasion clearly is something we have to be aware of. So the tradeoff here, to a large extent, is the improvement implied in real productivity and standards of living from lower inflation against increased monetary policy flexibility. On top of that, we have the very interesting Akerlof, Dickens, and Perry article, which raises a number of provocative issues. One of them that needs to be resolved is whether incidences of a decline in earnings are very rare when you look at job slots—and remember it is the jobs not the people which determine unit labor costs. In their model they do endeavor to come to grips with this question. They argue, however, that the firm will be more successful in reducing average wage structures the greater the number of years of losses. And, I would raise the question, which is implicit in what Stan said, namely, as the inflation rate truly falls, does the adjustment process increasingly become more of a factor? In short, do you find the firm’s ability to move its wage structure to the left, so that it has a part-negative
tail, increases as the inflation rate falls? And clearly, if, indeed, we are getting rising productivity as the inflation rate falls, the nominal distribution of earnings will move to the right and, hence, even the issue of negative nominal changes in wages becomes less significant. These, I think, are the critical questions that we are all endeavoring to answer. I suspect that it may well be that the Jackson Hole symposium in the year 2006 will have the answers to all of these questions. It is correct to seriously question the desirability of bringing down the inflation rate. But I think that, merely observing the obvious hysteresis problem or other issues involved in Europe—which as you may recall we discussed here two years ago—it is an open question whether the problem has to do with inflation or labor market structure. I certainly agree with Stan. What evidence we have clearly suggests that the shift in the views of the economics profession either leading or following central bankers is probably right. But if you are asking for definitive proof without qualification, I don’t think our data system at this stage can handle that.

Mr. Thiessen: Thanks, Alan. Yoshio Suzuki.

Mr. Suzuki: As an economist from Japan where the inflation rate is zero in terms of consumer price index and negative in terms of the wholesale price index, I am very much interested in Stanley’s argument that tradeoffs may exist at the very low range of the inflation rate. In the Japanese experiences of the past five years, yes indeed, when the inflation rate was declining to zero, the growth rate was also declining and tradeoffs existed. But for the past three years, while the inflation rate has remained at or near zero, the growth rate has been recovering. So, my interpretation is that when the inflation rate was sharply declining, the expected rate of inflation lagged behind the actual one—in other words, the expected rate was higher than the actual one. But when the expected rate converged with the actual one, which was at or near zero, then a tradeoff disappeared. So, my conclusion is that the vertical Phillips curve works in the long run, even in the range of very low inflation. So, Stanley, this is an evidence which is different from yours. What is your response to this? Thank you.
**Mr. Thiessen:** Okay, I think I had Jacob Frenkel’s hand. Then, I will get somebody from the back.

**Mr. Frenkel:** A couple of comments. The first on Stan’s remarks indicating that basically all central banks behave as if they believe in one form or another of a short-term Phillips curve. Witness the fact that when unemployment is low, the rate of monetary expansion is typically faster; and when it is high, then there is monetary tightening. Here, an alternative interpretation would be that those central banks that expand more rapidly when they see low rates of unemployment do so because they believe that the environment of unemployment enables them to expand more rapidly to obtain their inflation target. In other words, they do so not because they want to affect unemployment, but rather because they want to achieve the target and realize they can do it with different rates of monetary expansion depending on the real environment. One remark about Larry Summers’ point on coordination. Larry indicated that monetary targeting, or rigid monetary targeting, may cause difficulties in coordinating monetary policy with fiscal policy, especially when the fiscal policy aims at deficit reduction. I am a little bit concerned about even this attempt at coordination, not because it is not nice to talk to governments, but because the time frame and mechanism by which government decisions are implemented are so different. It is very easy to alter monetary policy from one day to the next. It is very difficult to alter fiscal policy once you decide to implement it. So, what is the coordination with? Is it the implementation of monetary policy with the “decision” of fiscal policy? With the “implementation” of fiscal policy, and so forth? And, a final remark about specific words. Larry ended his remarks by saying there is no alternative to “wise discretion.” I assume everyone will agree that is better than “foolish discretion,” but the real question is, are we likely to gravitate toward wise discretion, or is it better to take the chances in sticking to the target, assuming that otherwise wise discretions will not always arise? Thank you.

**Mr. Thiessen:** Let me just take one more question/statement, and then I’ll let the panelists respond. Steve Grenville, Reserve Bank of Australia.
Mr. Grenville: Thanks. I wanted to make two comments about inflation targets, because they were seen by Stan Fischer as being the key. The first is that a case could be made that the true nirvana of central banks is not meeting an inflation target, but not needing an inflation target. If your reputation is good enough so that you don’t need a target, then that is a better position to be in still. And perhaps countries of Europe and Japan, and perhaps even America, are in a better position to make that case than I am. But it does seem to me that if you are not forced to protest your virtue too vigorously and too specifically, then there is a better chance of your virtue remaining unscathed when you are hit by the usual problems that life hands out. The second issue is also on inflation targeting, and I’m afraid it is a bit more parochial. It is close to the issue of how, as a central bank, you manage to put inflation in a prominent position in your rhetoric—I emphasize the word “rhetoric”—and yet retain some discretion to have issues of income in your consideration. In Australia we have found that a key element in doing that is when you set an inflation target, you put a time dimension in it. In our case, we say we will go to this 2 to 3 percent target over the course of the cycle. And, the virtue of having that critical time element is that I think it lets you resolve the two issues of retaining the medium-term and longer-run joys of price stability—while at the same time retaining enough flexibility to do something—perhaps not a lot but something—about the course of real income over the course of the cycle. And, it is that time element in inflation targeting that is important to us. When we set our target, we had the advantage of being able to see what other people had done first in trying to search for better elements to add. It was the time element that was very important to us in fixing our target. Thank you.

Mr. Thiessen: Basically, we have run out of time here, so I ask Stan and Larry to respond briefly to that. Stan, you first.

Mr. Fischer: Thanks. Very briefly. On Japan, I don’t doubt that Japanese monetary authorities would have liked to have cut the real interest rate, if they could have, and that the zero constraint on the nominal rate really did have an impact on the speed or lack of speed with which they are coming out of the recession. So that even while
I accept what Yoshio said about the way expectations have adjusted, it is still true that at the zero inflation level there have been constraints on policy. Two other comments. One on Jacob’s: I agree that, by and large, if you are dealing with demand shocks, inflation targeting allows you to do both things right—both the countercyclical policy and the inflation targeting go together, as long as you’re dealing with demand shocks. It is when you have supply shocks that you need to take some specific account of a tradeoff. On “wise discretion” or true nirvana not requiring an inflation target, that is true; but in the German case, say, there is still a feeling that they need some framework or some indicator. And there is still a reliance on a framework. In that connection, I quote Paul Samuelson, who says, “Given the choice between Bob Solow and an econometric model to make forecasts, I’d choose Bob Solow; but I’d rather have Bob Solow with an econometric model, than Bob Solow without one.” Well, I would rather have a very good central banker without a good monetary policy framework than a lousy central banker in a good framework; but I would rather have a good central banker in a good framework. And it is the framework we are talking about.

**Mr. Thiessen:** Larry.

**Mr. Summers:** Let me just make two observations. First, I agree with what Stanley said about the Japanese situation. My judgment is that if the underlying inflation rate had been slightly higher, it would have been easier for monetary policy to have been constructive, and that the situation in Japan would not have lasted as long and would have been less serious. There is, I think, a parallel in some ways between the view that people do not accept a wage increasing less than one percent and the aversion that exists to the thought of having a nominal interest rate below 1 percent. Someone could argue, but I think it would be a silly argument, “Look, it is not really a constraint; the interest rate could be brought down from 0.5 percent to .25 percent, so who is to say there is any constraint there?” I don’t think that is the way the process works in practice. I would be more comfortable with the view that we should have zero inflation as the target, or 1 percent as the strong target, if somebody were able to present me more happy examples of countries whose economies
grew robustly and strongly for periods of a decade with inflation rates in that range. And, it may well be that it could work and would work if it were established for long enough, but I think the evidence is not there and not strong. The second point I would make is, in regard to this question of expectations adjusting, there is no question that, ultimately in the long run, expectations will adjust to almost anything. There is no question in my mind that if you operated in a deflationary environment for long enough, any special taboo about zero on any nominal wage increase would go away. But, I think there is the question of how long it would take. Fundamentally, the output shortfalls happen at times when the amount of inflation is less than the amount that was anticipated. And I think it will be much easier, as I said before, to build credibility in support of a proposition that inflation will not be allowed to rise above a level where the vast, vast majority of relevant opinion thinks it should not be allowed to rise, than it would be to build credibility in support of levels of inflation where there is a large body of intelligent, sensible opinion that thinks it should be allowed to rise. And, that would just counsel caution. This is really just another version of the observation that I think many countries have found that it is like drilling for oil: The lower you get, the harder it becomes to just go a little farther down. And it is really the same phenomenon.

Mr. Thiessen: Thank you, Larry. Let me thank Alan Greenspan, Stan Fischer, Larry Summers. And let us move on to the next topic: “How Should Central Banks Reduce Inflation?—Conceptual Issues.”