

**Meeting of the Federal Open Market Committee on
September 15, 2003**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Monday, September 15, 2003, at 6:30 p.m. Those present were the following:

Mr. Greenspan, Chairman
Mr. Bernanke
Ms. Bies
Mr. Broaddus
Mr. Ferguson
Mr. Gramlich
Mr. Gynn
Mr. Kohn
Mr. Moskow
Mr. Olson
Mr. Parry

Mr. Hoenig, Mses. Minehan and Pianalto, Messrs. Poole and Stewart, Alternate Members of the Federal Open Market Committee

Messrs. McTeer, Santomero, and Stern, Presidents of the Federal Reserve Banks of Dallas, Philadelphia, and Minneapolis respectively

Mr. Reinhart, Secretary and Economist
Mr. Bernard, Deputy Secretary
Mr. Gillum, Assistant Secretary
Ms. Smith, Assistant Secretary
Mr. Mattingly, General Counsel
Ms. Johnson, Economist
Mr. Stockton, Economist

Mr. Connors, Ms. Cumming, Messrs. Eisenbeis, Evans, Goodfriend, Howard, Judd, Madigan, Struckmeyer, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

Messrs. Slifman and Oliner, Associate Directors, Division of Research and Statistics, Board of Governors

Messrs. Clouse and Whitesell, Deputy Associate Directors, Divisions of Monetary Affairs, Board of Governors

Mr. English, Assistant Director, Division of Monetary Affairs, Board of Governors

Mr. Skidmore, Special Assistant to the Board, Office of Board Members, Board of Governors

Mr. Luecke, Senior Financial Analyst, Division of Monetary Affairs, Board of Governors

Ms. Low, Open Market Secretariat Assistant, Division of Monetary Affairs, Board of Governors

Messrs. Fuhrer and Hakkio, Mses. Mester and Perelmuter, Messrs. Rolnick, Rosenblum, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Boston, Kansas City, Philadelphia, New York, Minneapolis, Dallas, and Cleveland respectively

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CHAIRMAN GREENSPAN. I realize that we all have to eat dinner, and we all shall. But it's pointless not to use this time for more important things. For example, Michelle Smith has volunteered to give us a lecture on the epistemology of the ancient Spartans, and I thought we might want to keep our ears tuned to her accent as she does it in the original Greek. [Laughter] But since she's eating, I decided it wouldn't be nice to call on her. So maybe we ought to get to less important matters like communication policy.

Let me start off by saying this: Just the fact that we are having extensive discussions on communication policy is an indication that our basic monetary policy, which is by far the most important thing we do, seems to be generally on track and not particularly controversial. Indeed, one can look back at our history and see a policy that since 1979 is about as good as a central bank can get it. Nonetheless, despite what has really been a long run of broadly successful monetary policymaking, we find ourselves confronted with what to some observers is a seeming inability to communicate. I find their argument less than persuasive, but I understand the problem. It stems essentially from an episode that arose in the last few months. I'd like to give you my view of what happened and why; others may have a different view. The experience puts at least some of the issues we will be discussing in the context of where we are and what we have to do.

It's evident that mistakes were made both by us in communicating and by the market in interpreting our message. It is interesting to note the nature of the mistakes. I must tell you that I was quite startled when I learned the reason that the ten-year note rate went up significantly after our 25 basis point cut in the funds rate in June and our related statement. The reason was that the market had anticipated a significant shift by us to nontraditional means of monetary

policy operations. Indeed, market participants obviously had discounted such a shift to a significant extent by driving the ten-year rate down to just modestly above a historically low 3 percent. I look back, and I say, “What happened?” How did they get the view that there was a sufficiently high probability that we were going to use such an approach to lead them to essentially discount it in the market? The market moved down almost to where it probably would have gone if indeed we had embarked upon an aggressive effort—for example, to buy long-term Treasury notes or bonds.

Two things are obvious in retrospect, and I must say only in retrospect. One is that there was a general view in the marketplace that we would not reduce the funds rate below 75 basis points largely because of the difficulties that would create for the internal dynamics of the money markets. The money market mutual funds issue was only part of those dynamics. Second, the belief was that not only would we start to engage in a further easing of policy but that we would do so at 75 basis points using a so-called nontraditional approach.

However, we in fact had concluded that we could go very significantly below 75 basis points on the funds rate. While we recognized that there would be impediments as we moved the rate downward, we felt that, with some diligence, these could all essentially be dealt with. We believed that, if we needed to go well below 75 basis points for economic reasons, we had the capacity to do so. Essentially we recognized—as a consequence of a number of excellent studies by the staff—what would happen to the repo market and fails and the implication of moving significant quantities of assets, including money market funds, to the commercial banking industry. We were aware of what that would do to leverage and of various other problems that would arise were the funds rate to sink well below 75 basis points. The general conclusion of the

staff, and I think of the FOMC members, was that this would create some difficulties but, if we needed to move the funds rate down further, it would be desirable to do so.

In light of the market's belief that we would couple a cut to 75 basis points with a move to nontraditional means of conducting open market operations, almost everyone in the market apparently was well positioned, having already bought bonds extensively. The truth of the matter is that (1) we did not view 75 basis points as a limit and (2) we had concluded on the basis of evaluations of probabilities that it was quite unlikely that we would need to go to nontraditional operating methods.

In effect, what we kept saying to the market is that the probability of deflation of a pernicious sort was remote; but if it happened, it would be a significantly dangerous event. Therefore, we felt we needed to have on the shelf plans for using the nontraditional means required to address that possibility. We decided to go all out to find the answers to a number of questions—answers we did not have, given the long period we'd had of fiat money in which inflation was rampant and deflation had never entered anybody's mind as a problem. The prospect of deflation in this country had not occurred to anyone until the Japanese demonstrated that it was possible to have fiat money and deflation—not necessarily of a pernicious type but definitely deflation.

As a consequence of that, we embarked upon a full court press to get as much information as we could on deflation and its implications. We thought about what types of policies would be required in order to implement an anti-deflation policy, and we engaged the financial community quite extensively in this effort. I gather that you, Dino, and others at the New York Bank and elsewhere communicated with market participants to learn exactly what the implications of deflation might be for various sectors of the marketplace. We learned a great

deal. At the end of the day, we made an assessment of the probabilities of various developments and what would happen if they occurred, and we thought about what we would do and how we would do it. Having concluded our research and brought our knowledge up-to-date, we effectively closed the book and put the general plan on the shelf. And we told the marketplace that we had come to two conclusions: (1) that 75 basis points was not, as the market had often suggested, the lower limit—that indeed we could go lower—and (2) that we thought the probability of our having to use nontraditional operational methods was remote.

Now, we used the term “remote” all the time. I noticed that every one of us who said something about the deflation issue started off with pretty much standard language—almost boilerplate—to the effect that the possibility of deflation was remote but this is what we would do if that very unusual event occurred. Even in elementary courses in mathematical probability a remote event remains remote irrespective of the number of times one mentions it. [Laughter] This turned out to be a misunderstanding on the part of many traders who have a different way of looking at the world. To these people, the Federal Reserve—indeed, every organization—is viewed as a conspiratorial organization; and since we continued to talk about deflation, the fact that we used the word “remote” was not the relevant issue, but the number of times we used the word was. Therefore, they thought the appropriate way to assess the probability of whether or not we would go out and buy long-term bonds was to add the number of times we said “remote”! Indeed, they did that and concluded that the probability was far better than 50 percent that we were going to engage in a very massive action in the long end of the market.

Should we have caught that? Maybe. I’ve been in these markets for years; I don’t even want to mention how long. It never entered my mind that that was the market’s interpretation. When I testified in July at the Senate hearing on our monetary policy report, somebody read to

me a statement that bond prices had declined because the market was disappointed that we had taken purchasing long-term notes off the table. And I naively said that I wasn't aware that we had taken anything off the table. I didn't know what they were talking about.

What this basically tells us is that the issue of communication is not simple. There are a lot of people who are telling us what we should do, as if they knew! I submit that even the most thoughtful people who are giving us instructions on what to do would probably have made exactly the same mistakes that we made in interpreting how the market would read our use of the word "remote." There's a tendency for people in the market to be surer about what they are saying than they could conceivably have reason to be. In the circumstances, I merely want to suggest as a preface to this discussion that it is important that we clarify what we are saying. It's important first to come to a judgment on how to communicate. I gather that most but not all of us are of the belief that we should be saying things over and above announcing the actions that we are taking. I personally happen to think that, indeed, there is value added in communicating not only what the Committee did at an FOMC meeting but what the reasons were and also, importantly, a general view of the economic outlook as we see it. I think it creates a more efficient marketplace if we can communicate that, whether we're right or wrong, so people can interpret where we're coming from. That's not always easy because our press statements are talking for nineteen people. So while we can get something of a central tendency view, it is quite difficult to do. But I happen to believe that there is value added, and by implication value to GDP, if we are forthcoming in trying to communicate our view of the future and the context in which we are making our decisions.

I'd also argue, however, that we are a very powerful organization of unelected officials, and we owe it to the public—to the electorate and everybody else—to be as transparent as we

can be, but with an important caveat. Namely—in part reflecting the fact that markets do not work wholly rationally—if we are too transparent, we will effectively reduce the capability of this organization to operate in a manner we are required by statute to do. I have no doubt that if we were operating under full transparency—which essentially would involve having television cameras on us at our meetings—we'd all end up reading prepared statements. We'd be very careful and noncontroversial, and we would not challenge the views of other members of the Committee. That, I think, would very significantly undermine the capability of the Federal Reserve System to carry out its responsibilities. So with those opening remarks, in lieu of a far more interesting discussion from Michelle, I will turn the floor over to Vincent Reinhart.

MR. REINHART.¹ Thank you, Mr. Chairman. I'll be referring to the materials that were at your seats when you came in, but you also received a copy of these materials from me last Thursday. Please bear with me, but I'd like to begin on a note of parliamentary procedure. It seemed to stretch to the breaking point any interpretation of the Committee's rules to argue that members and their alternates could gather to discuss its communication policies outside a formal meeting. The choice, then, was to view this as an intermeeting consultation or an early start of the September 16 meeting. If we had done the latter, our customary procedures would seem to involve informing the press tomorrow morning that the meeting had actually started early, risking the building-up of expectations that a major change in your communication policy was brewing. We opted for the former because it permits an ex post announcement of the meeting with the release of the minutes for the August meeting on Thursday. To do this, we will circulate a draft summary of this meeting to you tomorrow for inclusion in the minutes.

I shall focus the bulk of my remarks on what appears to be many members' immediate concern: the drafting and the content of the announcement. Those concerns have arisen, in part, because there have been notable changes in the announcement over the past four meetings. To facilitate your discussion on the subject, my briefing will have four parts. First, I will offer five general principles that the Committee may wish to weigh in choosing an announcement policy. Second, I will review precedents established by the experience of foreign central banks and the Committee's own history. Third, I will suggest some options you might want to consider on how to proceed with regard both to the process of preparing the announcement and to the substance of the announcement. As to the latter, I will then address some specific aspects of the language of the announcement, trying to keep the discussion general enough to be appropriate for this evening's discussion of the

¹ The materials used by Mr. Reinhart are attached to this transcript (appendix 1).

Committee's procedures rather than tomorrow's meeting on policy choice.

Since February 4, 1994, the Committee's discussion of communications with the private sector has centered on the announcements of its actions. I'd note that the first few such releases were explicitly billed as statements of the Chairman explaining the Committee's action. After mid-1994, though, this distinction disappeared. I am going to assert that five principles governing the process of producing the statement seem part of the received wisdom (or revealed preference) of the Committee, which I list in exhibit 1.

First, the process should respect the important role of discussion at the meeting. To circulate a single prospective draft announcement or several proposed alternatives that isolate a limited number of the current features of the economy before members have discussed their views of economic conditions and monetary policy generally might stifle that discussion. At the same time, it is hard to imagine how nineteen people around the Committee table could constructively edit a draft release after their deliberations. The most repeated sentiment across the past nine years of transcripts is that group editing cannot arrive at an acceptable result.

Part of the worry, as in my second point, is that the Committee has not seemed to want to complicate the forging of consensus on policy action. While words are important, it is only because investors have come to expect them to be acted upon consistently. The risk is that some disagreement in the future about a subordinate clause in the fourth sentence of a draft release might cause a rift among members who otherwise might agree on the policy action if not the exact words to describe its rationale. The events of this summer have shown that the words of the announcement can be powerful.

My third observation is that you might want to take the opportunity that this potential influence provides to increase the effectiveness of your policy actions. To settle on a stripped-down announcement because it is hard to compromise on anything more specific might represent an admission that the Committee is unable to use a potentially important instrument at its disposal.

Fourth, the Committee surely wants to avoid mistakes. From my experience, drafting a press release shares some similarity with juggling chainsaws, in that you mostly spend your time worrying about what can go wrong and then counting your digits when you're done. The less the time and the greater the number of last-minute changes, the more likely there will be mistakes.

Fifth, and this almost goes without saying, everyone should want to preserve the confidentiality of the Committee's decision until its release. I would not have raised this but for the fact that just in the past year there have been several instances in which we have read about the Committee's deliberations in newsletters less than twenty-four hours after the fact. Given that reality, the longer the time between the decision and the announcement, the more likely it may become that there will be

leaks, either inadvertent or otherwise.

In light of these five principles, the Committee might want to consider the five models for drafting an announcement presented in exhibit 2. Some members might consider the experience immediately prior to the introduction of announcements on February 4, 1994, as relevant to today's discussion. In those days, the Committee's decisions were signaled to markets through open market operations, and only those associated with changes in the discount rate were announced to the public. Except for discussions about the wording of the directive, which was released with a lag, concerns about words did not intrude on deliberations. However, the Committee did forgo a means of communicating with the public. A variant on this that you might find appealing would be to release information limited to the Committee's policy decision—the intended funds rate, perhaps a simple risk assessment, and the breakdown of the votes. The Committee would have to weigh whatever benefits are seen accruing to its deliberations against a variety of costs, not the least including the likely criticism that would be levied at perceived backsliding in transparency.

The Committee might hope to avoid heavy criticism of a reduction in the information content of its policy announcement by following the example of the Bank of England listed in the second row. The Monetary Policy Committee releases a short and direct announcement with its action and defers a more complete explanation until the publication of its minutes about two weeks after its meeting. While stripping the announcement of content beyond the policy action and, perhaps, a brief risk assessment might seem a step backward on the communication front, the quicker release of the minutes would provide a more nuanced description of policy choice than can be done even in the current statement. That is why I placed a question mark in the appropriate box in the third column on communications. I'm a bit more confident that the expedited production of the minutes introduces a greater risk of error. Because the minutes would be released while the circumstances they described were still relevant, market participants would likely pay considerably more attention to them than they do now. That raises the odds that news reports would latch onto any differences of opinion that were highlighted or aspects of the outlook perhaps underappreciated by the drafters and reviewers in the short window available to prepare the document. As a consequence, the attention members pay to draft minutes and probably the number of iterations in the drafting process will have to be stepped up, with obvious implications for the schedules of nineteen busy people.

If the Committee decided it was important that its announcement be accompanied by a more complete justification, it might consider the example provided by the Bank of Canada. As shown in the third row, policymakers at the Bank of Canada deliberate on rate-setting and then draft the statement *after* the policy decision. In their case, this means delaying the announcement until just before the opening of trading the next day. By pushing your announcement past 2:15 p.m., you might accommodate a drafting session after your policy decision so as to release an announcement the same day. That has advantages, in that the Committee's announcement would reflect its complete deliberations. However, an enhanced emphasis on the words of the announcement could raise the odds that words would interfere with the Committee's

achieving a consensus. Even more problematic, drafting on the fly risks making mistakes, and lengthening the time between the decision and its announcement raises the unwelcome specter of leaks.

The Federal Reserve's experience of the 1980s provides another model, shown in the fourth row. At that time, the directive to the Account Manager contained standardized concerns about the economy, but their order varied with circumstances. The Bluebook distributed to the Committee before the meeting discussed possible alternative orderings to give members a sense of likely possibilities. In current circumstances, the staff could identify potential themes for the description of the economy in the first full paragraph of the announcement consistent with the policy alternatives presented in the Bluebook (as we did in the section titled "Policy Announcement, Directive, and Assessment of Risks" in the most recent one). As a further step, the Committee could standardize the language of its risk assessment in the second full paragraph so that it would vote on what was to appear in the announcement. In circumstances when a more substantive change in the announcement was contemplated—say, as in March or May of this year—a memo could be circulated in advance of the meeting no later than on Monday afternoon. Given these indications of what would appear in the announcement, members might be more willing to defer consideration of the specific words until after the vote on the rate decision and the risk assessment. Putting consideration of the words of the announcement into play in advance of the vote on policy might complicate forging a consensus, and routinizing the form of the risk assessment might limit its effectiveness in communicating with the public. However, the Committee may well view doing both as a reasonable compromise to ensure that its decisions are based on full and complete information. This being the Federal Reserve, maintaining the status quo is always an option. The Committee could routinely review a prepared draft statement after the policy decision, with the advantages and disadvantages noted in the bottom row.

As to process going forward, of these five possibilities, implementing the models of your Anglo-Saxon counterparts would probably require the most lead time. If you decide to emulate the Bank of England, the Secretariat will have to speed up its drafting schedule, which may take a meeting or two to implement. If you opt for the Bank of Canada model, market participants would have to be given some advance warning that the announcement would be delayed past 2:15 p.m., perhaps in the minutes that will be released this Thursday.

Of course, the Committee could abandon or sharply reduce the content of the statement at any time—it is only a matter of deciding when you are best positioned to accept the criticism that may well follow. The rapidity with which you can make the risk assessment more routine so that you could vote on what is published (as in the fourth row) depends on whether you are comfortable with the current three-part structure that was adopted in May. That is the first of several questions about the content of the announcement that are flagged in your final exhibit. Again, are you satisfied with a three-part assessment that individually lists the relative threats to your

goals of maximum sustainable economic growth and price stability and that weight those threats in an overall balance? The decision in May to split the old balance-of-risk assessment into the first two components has seemed to serve the Committee well, as it appears now to cover all the relevant possibilities confronting the economy. But members have expressed differing opinions on the wisdom of then combining the two different judgments in the third sentence.

Individual words in the announcement also seem to have taken on different meanings for different members at different times. In particular, as in the second question, the Committee may want to settle on what it means by “sustainable” economic growth. In the report of the Ferguson subcommittee in 2000, sustainable growth seemed to serve as a stand-in for expansion at the growth rate of the economy’s potential to produce. In more-recent announcements, the same words may be read to imply the growth pace consistent with avoiding the creation of economic imbalances, thereby implicitly introducing a notion of the level of economic activity relative to the level of its potential. Members might also have concerns about whether the word “risk” carries negative connotations that might be avoided by speaking of the balance of probabilities or the odds of outcomes on both sides of their median forecast. Fourth, Committee members may have doubts concerning whether the “foreseeable” future is too slippery a concept to provide guidance to the public as to its view of the outlook. But being specific about that time dimension now may limit your options at a later date. Similar concerns may also be raised about “the considerable period of time” in the last sentence of the August announcement, which concludes my list of questions. I won’t speak about this issue beyond that because it seems woven inextricably into the policy debate scheduled for tomorrow and is unlikely to be a long-lasting feature of the announcement.

These may be too many options to tackle at once. One strategy would be to identify your main areas of concern and pick them off one by one in an incremental approach over time. Another would be to use this meeting to identify problems and charge the staff or a subcommittee to come back at a later date with more specific alternatives. Doing so, however, may delay progress in improving the announcement for a time. As to other issues not directly related to the announcement, the first day of next January’s two-day meeting has been reserved to talk about the Committee’s communication policy once again.

CHAIRMAN GREENSPAN. Let me just add to Vincent’s comments. The procedures we currently are using to communicate are essentially ad hoc. They have been working in the sense that we have succeeded in releasing by 2:15 p.m. on the day of the meeting a press statement on which we’ve gotten the general agreement of the Committee. This has nothing to

do with the issue of lack of communication to the markets. This has to do with our own internal practices.

It strikes me that we have been fortunate, because I think we in fact are trying to do something that in the long run is not possible. Namely, we are trying to craft a statement by nineteen people, which I hope everyone agrees is just not feasible. If we ever did it, no one would want to read it—or they shouldn't! The practice of releasing the press statement at 2:15 p.m. on the afternoon of the meeting puts us in a position of dropping on the table a draft statement that a significant number of the members of the Committee have not seen before. Fortunately, we have not had considerable divergences between the views held by individual members and those expressed in the drafts. But I can't imagine that that's a proper way to go about doing this because at some point we're going to run into a set of serious differences within the Committee and it's going to take a long time to resolve them. We could very well run beyond the self-imposed 2:15 p.m. deadline. That could create a lot of difficult problems.

In any event, it really isn't fair to drop on you a draft—granted it's only a paragraph or two—and ask that you make a judgment on whether it communicates what we are thinking. That's especially the case when the action is not something that is in dispute by the marketplace because the statement then becomes a critical vehicle by which we convey the substance of our discussion at the meeting. So we have to find a means to communicate somehow to the full Committee what the various options will be in the statement we will look at subsequent to the vote. There are a number of ways of doing that, and I think we do have to move in that direction. Otherwise we are taking too many risks that someday—when the decisions are getting difficult and the economy is changing in a manner on which we don't have full consensus—the way we currently forge the press statement will cause us problems. If it is not the general belief among

the Committee members that we're all looking at the same things on the economic landscape, we will find that this particular process is going to serve us quite poorly.

I would suggest that the solution to this problem, in my judgment anyway, has to meet several requirements. One is that we should not have every member involved in trying to draft a statement during the meeting itself. Two, we ought to have a form of communication in advance of the meeting that would enable individual members, should they see something in the contemplated wording of the announcement to which they cannot acquiesce, to so inform the Secretariat. That way we can try to capture a consensus from the Committee in advance of our endeavoring to draft the statement. I think that is feasible.

We cannot and should not try to draft a series of statements and send them out in advance for everybody to look at. First of all, I think that would be extremely time-consuming. Second, I have a concern that it would be the focus of the discussion at the meeting rather than a statement that reflects that discussion. In effect by sending out early drafts, we would risk the possibility that the drafts would distract us from concentrating on the areas of the economy we normally discuss, and I don't think that is a good idea. I don't know where we're going to come out today or, if we don't come out with a clear plan today, where we will come out when we talk again about our communication policy. Is that at our January meeting?

MR. REINHART. Yes, in January.

CHAIRMAN GREENSPAN. I do think that our experience of the last several years highlights the difficulties we confront in trying to reach a consensus when we have a range of opinions on one issue or another. We have to solve that problem. As far as I can see, the problems we've had in shifting to the kind of statement we've issued recently have caused very

little damage. But I think that's partly good fortune and not necessarily good management or good judgment. I don't think we can take the risk of leaving that type of problem unresolved.

As I said at the beginning, the fact that communication is the problem and not the fundamentals of what we do—namely, what the target funds rate is, how soon we move, and the size of any changes—suggests that we are handling those big things rather well. Communication should be a relatively modest part of what we do. The fact that we have the luxury to spend a good deal of time on it is an indication that the rest of our world, if I can put it that way, is running satisfactorily.

Let me call for a small break at this time so everybody can go get dessert. But let's come back as quickly as we can, and we'll resume with questions to Vincent. Then we'll go to a broad discussion of the issues. I might add for those of you who have specific points of view that differ from what Vincent laid out or from what I laid out, we will use the discussion period for you to expound on your views. If your commentary gets too extended, people will get up and leave! [Laughter] Why don't we take a short break.

[Dessert break]

CHAIRMAN GREENSPAN. What I'd like to do first is to open up the floor for questions to Vincent. Then I'd like to have those who want to make small presentations of their points of view, which are somewhat different from or in contradiction to Vincent's, take the floor for an appropriate amount of time. After that we'll have an open discussion, and you can put on the table various ideas or talk about your concerns regarding what we've done. Let's see if we can get most of that out of the way and completed this evening, if possible. Questions for Vincent?

MR. HOENIG. Mr. Chairman, I have a question about something you said. I'll ask for Vincent's interpretation of it so I can get this question on the table now. [Laughter] You were talking about wanting to inform the market about our outlook for the future. I think that's what you were saying in your opening comments.

CHAIRMAN GREENSPAN. Well, going all the way back, that's what the tilt does.

MR. HOENIG. That's what I want to clarify. Are we talking about the risks we see today and how we interpret those risks? Or are we talking about taking the statement further, as we did last time, in terms of policy in the foreseeable future? What is the intent?

CHAIRMAN GREENSPAN. It could be both.

MR. HOENIG. Okay.

CHAIRMAN GREENSPAN. First of all, there really is no such thing as an accurate forecast. We don't have any capacity as such to forecast how the economy will evolve. All we're doing is extrapolating current imbalances and assessing how they might resolve themselves in the future. I'm merely communicating that, in my judgment, we have to go beyond the individual actions we take and continue to indicate how we view the outlook. In that regard, what we do now I think we do rather well, frankly. My own view is that if we could somehow find a way to make what we have been doing in the last two or three months stable and functional, that would be ideal. I do believe that indicating our view of the balance of risks is wholly appropriate as a way for us to fulfill our obligation to the public in terms of being transparent. Making a forecast doesn't add anything because those forecasts, in my view anyway, aren't very valuable.

MR. HOENIG. I think it's important to be clear what we mean when we talk about the future. If we're talking about the balance of risks we see today based on the information

currently available, that's one thing. If we suggest that our assessment of the risks implies a future action on our part, then I think we've gone beyond what we can reasonably do as far as predicting the future.

CHAIRMAN GREENSPAN. I would say that we have to be very careful not to commit the Committee to any series of future actions, which would necessarily imply that we know how the economy is going to evolve. We may feel reasonably certain about it, but we've been wrong too often in the past; and I think the cost of a mistake of that sort is very large. That's my view.

MR. HOENIG. That's helpful to me. Thank you.

CHAIRMAN GREENSPAN. Let me say this. I think what we have been doing is fine. For example, I would not have changed anything that we've done in the past two or three months on the basis of what has been happening in the marketplace and what people have said. My own judgment is that, if the economy in June had looked the way it did in April, we would have made a 25 to 50 basis point adjustment in the funds rate, and probably half of it would have been unwound by now. The brouhaha essentially has occurred because we are right on the fulcrum of a change in attitudes in the marketplace. When we dropped our set of conclusions on the market, that pretty much exacerbated the significant increases that were already occurring, partly as a result of the ongoing convexity of delta hedging. The market proceeded to put everything together in one fell swoop and attributed it to us. Well, thank you, but no thank you. So, I think the answer to your question is that what we're doing now fulfills our obligation in terms of what we ought to be doing. In my view the problem is how we come to a conclusion on the particular statement we should make to the public at the end of our meetings.

MR. HOENIG. Right.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Mr. Chairman, if I may, I'd like to follow up on the discussion that Tom Hoenig—

CHAIRMAN GREENSPAN. Remember, these are questions for Vincent. We haven't gotten to members' views on the substance.

MR. POOLE. Okay. Let me try to sharpen this issue by saying that I think we need to make a clear distinction between two types of comments in our press statement. One type is a hint or guidance about the likely level of the federal funds target at our next meeting or the one after that and the other is a conditional statement about where the funds rate might go depending on how the economy evolves.

CHAIRMAN GREENSPAN. May I interrupt you? You're into part two of this discussion. You may have the floor after people have asked questions or clarifications of Vincent. There may well be some questions or clarification issues, so let's get those out of the way and then move on.

MR. POOLE. Well, I guess I'm saying that I didn't think that distinction was very clear in what Vincent had put on the table.

CHAIRMAN GREENSPAN. That's what you're going to tell us about in a few minutes after others have raised their questions! [Pause] Well, maybe Vincent has been perfectly clear. Does anybody else have questions for Vincent on the substance of what he said? If not, President Poole. [Laughter]

MR. POOLE.² I prepared two charts and, if I may, I'll pass them around. There are certainly enough for everyone at the table and probably for those sitting on the perimeter as well. I'll wait until the charts are distributed. The purpose of my exploration here was to try to get a sense of how frequently the economic situation has changed over the years, even over a span of

² The materials used by Mr. Poole are attached to this transcript (appendix 2).

three months, so that we decide to move the funds rate or the market anticipates that we will move it. That's the purpose of this chart. If everyone has a copy, I'll try to explain what it shows.

To try to keep things as simple as I could, the basic data I used were from the federal funds futures market. I've plotted the daily quote on the business day closest to the fifteenth of the last month of the quarter and the contemporaneous forecast in the futures market as indicated by the trading for the contract that is three months ahead. So for the March 15, let's say, the contract for March is the current, or actual, rate. Then there's the futures rate as of March 15 for the June contract. Okay? The red dots show what the market was anticipating on that three-month-ahead horizon. The black line shows what I'm calling the actual change. It's the difference between the current month's contract—let's say the March contract as quoted on March 15—and the June contract as quoted on June 15.

What is fairly clear is that most of the time the market predicts a rate change over this three-month horizon of about 25 basis points, and often it is quite a bit less. But over time there are many cases in which developments have pushed the rate a good deal more than that. The reason I used three months was that it—or something in the range of three months to six months—seemed likely to be what many people think of as the “foreseeable future,” in terms of the language that we've used in the balance of risks statement. So I'm saying that even over a three-month period, which is not all that long, historically lots of things have happened that have led the Committee to change the funds rate. The chart on the other side of the page is just a scatter diagram of the same data; it shows how far off the actual is from the predicted rate defined in this way.

The point that I'm getting at here relates to whether providing a tilt is helpful. When we talked about the tilt language—I guess it was in late 1999—I was one of those in favor of the decision we made at that time to announce the tilt at the conclusion of each meeting. I favored doing that because I thought it would provide guidance to the markets, looking ahead, as to where our policy might be going and what our thinking was. But I've since come to a different opinion on that because so often something happens in the meantime to change the situation to such an extent that providing that guidance has as much chance of misleading as of helping the markets.

I think this is a topic that we should spend some time on. To what extent do we want to provide information such as the tilt statement or a hint that is more or less specific about the future path of the federal funds rate in an unconditional sense? Trying to explain how we logically will respond to new information is an extremely important function, but I think that's a difficult concept to get across. That's the topic that I was chomping at the bit to talk about.

CHAIRMAN GREENSPAN. I'm surprised that the correlation is as good as it is.

MR. POOLE. It's only a three-month horizon.

CHAIRMAN GREENSPAN. I understand that, but actually I would have expected a wider scattering than your chart shows.

MR. POOLE. I think the reason the scatter is as narrow as it is reflects the fact that there are a lot of observations when not much is going on and the market doesn't expect much, if any, changing. The first part of 1997 was such a period, when the rate stayed in a very narrow band for a while. Obviously, the 1991-92 period was quite different, as was 1994, although the market anticipated some rate changes in '94 once the FOMC started to move the funds rate. In fact, the rate changes outran what the market had anticipated by a fair amount. Remember, what I have

charted here are changes. In the last year or so, the market has not expected us to change the rate very much, although on a couple of occasions we did a good bit more than the market anticipated.

When I read Dave Lindsey's history of FOMC communications, I was struck by the historical experience going well back. Dave covered a long period, and most of it was before we began to issue a policy statement; but hints about the future direction of policy were given at times—primarily by the Chairman in speeches or testimony. The instances when the FOMC got itself most tangled up had to do with setting up expectations in the marketplace about what future policy moves were likely to be. We had the biggest difficulties when those expectations were not realized or when they tended to put the Committee in a box because of a sense that we had made some sort of a commitment and circumstances changed so that following through didn't seem the wisest thing to do.

CHAIRMAN GREENSPAN. Anybody can jump in on the discussion. I'll just give my initial response to President Poole's observations. I think you're describing the way the markets work and raising the question of whether information helps the markets. Let me give an example of something not dissimilar to the markets we're dealing with, namely the long-term crude oil futures markets. Those futures markets are interesting in the sense that they are largely anchored to a long-term equilibrium price of crude oil six to seven years out. That price essentially reflects the conventional knowledge of the technology at the time and how long it would take to bring new sources of oil on the market. For example, the markets currently are saying that the equilibrium price is \$23 a barrel or thereabouts. What that has done, if you look at the futures markets, is that the contracts are all anchored out there in the \$20, \$21, \$22 area. As a consequence, irrespective of the short-term price, there are those—especially small, independent

drillers—who have to make judgments as to whether they should in fact drill. It will take a long time to drill, so they essentially sell in the forward market whatever amount of oil they think they will get. The futures price facilitates the decisionmaking that is involved at that particular time. But one thing about those crude oil futures markets is that they are awful forecasters. You will find that they project the market poorly because all sorts of events that affect the market occur in the interim. Does that mean that they are of no value to the functioning of the crude oil market? I would say on the contrary. They actually affect the future; they essentially distribute demand and supply not only in spot markets but over the future—even though their forecasting capability is very poor and, indeed, far less accurate than the predictive capability of the fed funds futures market depicted here in this chart.

So I think there is a value, even if it is incremental, in our communicating in a manner in which the markets can understand our thinking. You mentioned the 1997 period and the fact that nothing happened with respect to funds rate then. Well, the fact that nothing happened is important. To basically say that the economy is going to be dull for the next several months and that the federal funds rate is not likely to change is a profoundly important statement if you believe it. To say something is not going to change involves as much risk as saying that it will change because our ability to look out there and make that judgment is limited. You may consider your data to indicate a poor correlation. I think the fact that the quadrants are correct is essentially communicating some information to the market that it did not have previously. In that regard, I think we do a service to the market by endeavoring to communicate—as poorly as we do it—the general expectation of the balance of risks among the Committee members.

MR. POOLE. With regard to anchoring expectations, I absolutely agree with respect to the long-term inflation rate. I think anchoring those expectations is critically important. But

you've yet to convince me that anchoring expectations on the number of basis points the federal funds rate is going to move over a period of a relatively few months is constructive.

CHAIRMAN GREENSPAN. Well, if it were not instructive, this correlation would be a random distribution or it would be negative. Remember, it's not negative.

MR. POOLE. No, I don't draw that conclusion because even if we didn't say anything about the probable direction of the federal funds rate, the market would have some understanding of how the economy is likely to evolve. For example, there's a lot of persistence in real GDP and employment changes. So the market has some understanding as to the probabilities of where the economy is going to go and, therefore, where interest rates are going to go. And, of course, that's what is built into the term structure of interest rates at any moment in time. There is also an extensive volume of literature—and Governor Bernanke can help me with this—on exactly how the expectations model of the term structure of interest rates works. Clearly, the term structure reflects market expectations about where rates are going to go. That was true before 1994 and would be independent of anything that we might have said about that. But what I'm concerned about is that we want those expectations to respond to the incoming information as accurately as possible.

CHAIRMAN GREENSPAN. I agree with what you just said. Take as a given that the availability of factual information about the economy is an ongoing phenomenon and that the market is responding as it does in a fairly sophisticated way. The question is, if we superimpose on them our view of the outlook, do we do harm, are we irrelevant, or do we do good? In order to determine that I would create this sort of scatter diagram. If the data points were in the wrong quadrants, we certainly should stop because we're doing harm. If this were a wholly random distribution, I'd say that we're not doing harm and we're not doing good, but we're wasting our

time. I'm submitting that the evidence you're adducing this evening strikes me as confirmation that, while we may not be adding a great deal, we are adding something. This is a positive correlation, and it seems reasonably certain that you have enough observations here that the correlation is significantly different from zero. Is that correct?

MR. POOLE. Yes, of course.

CHAIRMAN GREENSPAN. I take that as evidence that we are making a contribution over and above the evidence of how the economy is doing because the market's assessment of that evidence is already built in when we make our statement. I grant you that part of what's built in is an expectation of what our statement will be, but this does not strike me as an indication that we are doing any harm. To be as conservative as I can in judging this, I would say that there is no evidence here to suggest that we are doing harm to the marketplace as a consequence of our actions.

MR. POOLE. I would say that providing guidance on our thinking about the direction of the real economy and the inflation outlook is constructive. What I am concerned about is providing guidance about the likely level of the federal funds rate at the next meeting or the one after that.

CHAIRMAN GREENSPAN. Well, I hope we're trying not to do that. I would agree with you on that. We should not be trying to communicate what we're going to do at the next meeting; if we believe that an action needs to be taken, we might as well do it now.

MR. POOLE. I'm trying to sharpen that distinction.

CHAIRMAN GREENSPAN. If that's the conclusion you're reaching, I'm on your side on that argument.

MR. BERNANKE. I also agree with you on that, Bill. The technical distinction you're making, as you mentioned in your remarks, relates to the idea that the economy is in a rational expectations equilibrium where everyone has the same information. In that case, anything the Fed says is going to be redundant. On the other hand, as the Chairman said, it would be harmless as well.

There are several reasons that we might not be in a rational expectations equilibrium. One is that the outside world doesn't have all the information we have. They may not have information about our objectives. They may not have information about our views on the economy, which may be relevant even if they're wrong. For those reasons, what we say might be instructive to the public. In particular, conditional information that we provide, which essentially gives insight into our rule, would be useful to the outside world.

I might add a further thought here. I attended a very interesting conference at Jack Guynn's Atlanta Fed in March about learning, which is a big area of research in macroeconomics these days. It looks at the way in which an economy gets to a rational expectations equilibrium. As you probably know, one of the most studied questions in that field is whether or not people, using all the information they have but without being given information by the central bank, can learn—with, say, least squares or other methodologies—the rational expectations equilibrium. What we often find in those models is that even very sophisticated players will end up in suboptimal equilibria—failure of equilibrium to exist, multiple equilibria. The notion is that because people do not know the true rule, they will behave in a very volatile way, which will induce volatile behavior on the part of the central bank, which in turn will make it very difficult to learn and so on.

The point is that there are a number of reasons to think that the Fed has useful information. I'm actually quite in agreement that we shouldn't be giving unconditional information about our interest rate setting. We should be trying to guide the market by providing conditional forecasts about which direction our policy will be going in light of our objectives, our views, or the nature of our rule.

MR. POOLE. And depending on how the economy evolves.

MR. BERNANKE. Yes, conditional on how the economy is likely to evolve.

CHAIRMAN GREENSPAN. I think you said "will be going." You didn't mean to say "will."

MR. POOLE. May be going.

MR. BERNANKE. Yes, may be going. For example, our "considerable period" statement was intended to say—and did in fact say as originally written and before it was amended—that we think inflation will be low for a long period and if inflation remains low, we should be able to keep interest rates low. That was in fact the way it was in the original draft and that's how it should be said—as a conditional statement about the way our policy is likely to be, not an unconditional statement about policy.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I was planning to comment on some of the points that were made by Vincent and by implication you as well. Is this the right time? [Laughter]

CHAIRMAN GREENSPAN. We're now in open session.

MR. PARRY. Okay. Let me start by noting that I have never thought it was clear that the post-meeting press release was a statement of the FOMC. I always considered it more the Chairman's statement than the Committee's, and I thought it was presented at the meeting

mostly for information purposes about how policy would be communicated to the public.

However, if the statement is to be used as an ongoing policy tool of the Committee, then in my view it should be drafted in a way that reflects the views of the Committee in setting policy. For example, if a risk assessment is included in the press statement, then it should be the same one that was voted for by the Committee and not a restatement or reinterpretation of it. If the wording in the Bluebook isn't suitable for the press release, then it probably should be changed.

CHAIRMAN GREENSPAN. I happen to agree with that and would recommend that heartily, as I've been doing for years without success. Sorry to interrupt.

MR. PARRY. Again, I'd feel more comfortable voting for a particular risk assessment if I knew in advance exactly how it would be expressed to the public. Given this general principle that the statement should be from the Committee, the remaining questions revolve around how the Committee will draft its statement. One choice to be made is whether various alternative wordings will be available to the Committee in advance or whether the statement will be composed and edited during the meeting. My preference is for the former. Another choice is whether to rely more on formulaic wording options or whether to use language basically tailored to each meeting. I prefer primarily formulaic wording. I think some of the recent press releases were too nuanced and inadvertently injected noise into the bond market. In general, I'm not convinced that including more words in the release necessarily advances the cause of transparency.

In terms of process, I suggest that we "routinize," to use Vincent's term, the wording options for much of the statement and circulate alternatives in advance. Editing should be a last resort in which wording changes are suggested and then approved or rejected by the Committee. In terms of content, the wording of the risk assessment is at times ambiguous to me and should

be considered a work in process. I feel it has been useful to separate the risks, but they still need considerable clarification. For example, the reference to the risks to economic activity should include a level concept in my view, and I don't think the current phrasing is up to that task.

CHAIRMAN GREENSPAN. By level you mean what?

MR. PARRY. Some idea that we're talking about the gap, sort of a Taylor rule.

CHAIRMAN GREENSPAN. If we knew what the gap was.

MR. PARRY. Right. But we know at times that it's getting larger or getting smaller. At least we have some views about that; otherwise it's a little difficult to make policy.

CHAIRMAN GREENSPAN. Well, we do have views. But you're going a little further than I think we actually can. Let me raise one question. Unless I'm mistaken, it seems that the actual statement of the balance of risks can be formulaic. I still don't see why it has to be different in the Bluebook and in our statement. What is the argument? I remember that the statement we used originally had unbelievably archaic language.

MR. PARRY. The "coulds," "woulds," and "mights."

CHAIRMAN GREENSPAN. It was bizarre. We got rid of the "woulds," "coulds," and "mights," and we were left with still partly archaic language, in my view. Is there any reason that we can't make the statement on which we vote the exact statement that is in the draft press release?

MR. REINHART. None whatsoever, Mr. Chairman.

CHAIRMAN GREENSPAN. What are the arguments against it?

MR. REINHART. I think we evolved into the current situation by working from what was an imperfect assessment of the risks—that is, the balance of risks language. We tried first to make that sow's ear into a silk purse, and it didn't quite work. Because the statements were

changing, it didn't seem possible to be able to present to the Committee the exact words that they'd be voting on. After the decision in May to split the risk assessment into two parts, with a third sentence providing the balance—if the Committee feels that's the appropriate structure—I don't think there's any reason you couldn't agree on a formulaic presentation of the risk assessment that could be in the Bluebook.

CHAIRMAN GREENSPAN. Well, let's break Bob's argument into two pieces. It seems to me, in the context of what you mentioned earlier, that there is no reason that we can't have in the Bluebook the exact language for various choices on which the Committee might vote, and then that language would appear in the statement. That does not require a good deal of effort. As we've been discussing, the other part of the statement is essentially the rationale for our decision, which we also need to describe. The language regarding why we came out in a particular direction cannot be formulaic because different reasons occur all the time. But I see no reason that the staff cannot paraphrase in the Bluebook different alternatives of what might be said in justification for a position that the Committee might ultimately adopt. Therefore, when we vote, the explicit language and a generic form of the explanation as to why we are voting that way is part of the vote.

After the vote, we would present the draft statement, which would be composed of the exact formulaic language and presumably a bit more stylized or nuanced language regarding why we did what we did. Undoubtedly people will have differences of view, but in that process we've created the possibility that two-thirds or three-fourths of all the information that a Committee member would want to know with respect to the statement is available in the Bluebook. If there is a serious question as to how the statement will come out, I think there's more than enough time to communicate with Vincent and indicate that there are problems. I'm

just trying to think about the timing issue a bit more. How much of the Bluebook is tied into the Greenbook?

MR. REINHART. Everything—in the sense that the Bluebook has to be produced after the Greenbook.

CHAIRMAN GREENSPAN. Yes, it has to be produced after the forecast, but I'm trying to get at the question of whether there is enough time to get back to Vincent. When does everybody receive the Bluebook? I know when it arrives on my desk.

SEVERAL. Thursday.

MS. MINEHAN. Thursday, now that it's sent electronically.

CHAIRMAN GREENSPAN. Everybody gets it at the same time?

MR. REINHART. It's posted electronically Thursday night.

CHAIRMAN GREENSPAN. Okay, I was thinking in terms of the nineteenth century and delivery by Pony Express! Then there's no problem. I do think we have to have a mechanism, if a significant minority takes issue with certain language, to communicate that by, say, Friday before the Tuesday meeting. We would need some formal mechanism to make a judgment as to how that affects or doesn't affect this process. Originally, when we started issuing a statement after the meeting, we made those statements in my name. I didn't think that was appropriate. If I go out and make a speech, that's one thing. But no matter what we do, the statement we make about the policy decision at an FOMC meeting should be a Committee statement. We may not be able to agree to language about the reasons that we took a certain action. The language in the press release, if it represents a Committee statement, basically says that twelve people came to a conclusion for the same reason, which is not always the case. So if we can't agree on wording about the rationale for our decision, then I think we are forced to go

back to plain formulaic language on what we did without explaining why we did it. In my view, that would be unfortunate; but it may be necessary.

MR. PARRY. When you say get back to Vincent, I want to clarify what you mean. For example, if we use the current Bluebook, the staff set out two alternatives. I assume there would be a discussion about each and the only question would be how the verbiage associated with one of those alternatives should be modified?

CHAIRMAN GREENSPAN. Yes, you would call up and say, for example, "I happen to be in favor of alternative 2, but the reasons you give in the Bluebook are not the ones I consider the appropriate reasons for coming to that conclusion." If the staff gives all the potential alternatives, then that's not an arguable issue. The only arguable issue is that the rationale for any particular position that we might take is not a valid one.

MR. PARRY. I would hope Vincent wouldn't have too great a burden as a result of that. I hope the language would stick to what I'd call the high points. I don't want to use the word "formulaic."

MR. REINHART. One thing I would point out is that there's a lot of inertia in the words of the first paragraph on the description of the economy. So I think the Bluebook could highlight that, if you decided to take this policy option, say, the sentence characterizing the labor markets presumably would have to change. Implicit in that is the assurance that there would be no reason to change a sentence that was still relevant given that policy choice. So it might not be that just two-thirds of the words would be predicable in advance of the policy decision but closer to three-quarters or more of the words.

CHAIRMAN GREENSPAN. Okay. President Broadus.

MR. BROADDUS. Mr. Chairman, I would approach this a little differently. I found Vincent's memo very useful in organizing my thinking about this. So, I'd start with his five principles, and I would add a sixth, which is that in communicating with the markets about policy and expectations it's important not to put too big a burden on the statement—or try to do things with the statement that are not feasible. I think we might have tried to do that a bit in this period, and I believe that might have been part of the problem. One can argue that point, I suppose. In particular, I personally feel that it's important to resist any temptation to use the statement to try to engineer expectations in the marketplace about what's going to happen to policy settings or to the funds rate at some point in the future. I don't think we can do that consistently. Even if we're not trying to do it, I believe we need to do what we can to avoid giving the impression that we might be doing that.

Let me emphasize that in saying this I am not arguing for reduced transparency but for being transparent about the things that really matter and about which we can be confident. With that in mind, it seems to me that the place to start in reducing the burden on the statement is to be more explicit and clearer about our inflation objectives. For example, we could announce our intention to hold core PCE inflation in a 1 to 2 percent target range while continuing to take account—as we do today—of both inflation and real output. I recognize that the proposal to introduce inflation targets has been controversial in this Committee. But in view of some of the problems we've had with communications lately, it seems to me that there's an argument for taking another look at that approach. If we tied inflation expectations down firmly with a target range, then markets could routinely and continuously make informed judgments about how sentiment in this Committee—whether inflation is a concern or deflation is a problem—is evolving over time. Market players could assess that by just looking at the behavior of actual

inflation in relation to the target range. We might need to add something to our policy statement about how we intend to get inflation back in the neighborhood of the target range if at some point it moves away from the range. But we would not need to rely on ad hoc additions to or deletions from the statement that run the risk of being ignored or amplified or generally misunderstood in the markets.

What that means to me is that we could have a statement that is more formulaic in character, along the lines of what Bob Parry was just saying, which I personally think would be a good thing. Also, just as an aside here, your suggestion for making the statement the basis of what we vote on is a good one.

Among the five alternative models you've shown here, Vincent, I suppose my approach would be closest to the Bank of England model. Obviously, clarifying the inflation objectives and expediting the minutes would take the pressure off the statement, which could then be reduced to its essentials. But it would put a burden on the preparation of the minutes. Norm and Carol are good friends, and I don't want to lose their friendship. So I would hasten to add that if we were to go in this direction, we would have to augment our resources for preparing the minutes to whatever extent necessary to make that a feasible and manageable process. I think the additional burden in that area would be justified by relieving us of the need to use the statement to send detailed—and at times potentially complicated or confusing—messages to the market. The market would be making its judgments based on a crucial, central phenomenon that it could observe in the context of a very clearly stated objective that we have announced.

CHAIRMAN GREENSPAN. Let me just comment that we do have an inflation objective. It's called price stability. It's not that we don't have a target; we just don't announce it. It's interesting that the discussion always seems to get to the issue of inflation targeting. The

issue is not the pros and cons of announcing a target that we actually have but what to do if that target is not being achieved.

I want to call to everybody's attention the most egregious form of that problem, which is the ECB's M3 problem. The ECB had concluded that an M3 target, if followed appropriately, would be the most effectual in stabilizing the European economy, so the ECB had a target for M3. M3 never worked. Most of the time in discussing policy the ECB had to explain why M3 was not doing what it was supposed to be doing. Now, I submit to you that it's one thing to get out there and say this is what we will do—that we have an inflation target of between 1 and 2 percent and this is what we're going to do to achieve it. That's all well and good. But what do we do when inflation is right at either 1 percent or 2 percent? Do we take action to make it stay within the range? More often than not, as history has indicated to us, that doesn't work. Then we'd have to explain why it didn't work. Or, if we chose not to take action to keep inflation within our target range, we'd have to explain why. Suppose the target range was 1 to 2 percent, and inflation was up at the 2 percent level. The policy would call for us—as in New Zealand, for example—irrespective of whatever else was happening, to literally raise rates. At that point in time, all other evidence might be indicating that the economy is in the process of sagging, and the last thing the central bank would want to do in those circumstances is to raise rates.

It strikes me that, if we had a 1 to 2 percent inflation target and had not announced it, we would be free at that particular point to make a judgment as to whether to tighten or not. It's not clear to me—and it has never been explained to me to my satisfaction—what the cost-benefit analysis is on announcing inflation targets. For a central bank not to have inflation targets is not to be a central bank. The question is not that. The question is, do you announce the target? If

you do, then you're confronted with the issue of whether you will absolutely adhere to that rule, and you face the distinct possibility that you will fail in achieving your end.

Now, presumably, we can always succeed on the upside. We can tighten enough to guarantee that we will bring the economy down far enough to prevent inflation from breaching the upper limit of the target. We cannot guarantee success on the downside—the Japanese have demonstrated that very clearly. As I think all of our discussion about the zero bound suggests, even an inflation rate of 1 percent creates serious problems. It's not clear to me what we'd gain by announcing a numerical target for inflation. Everyone says we'd gain credibility. I don't have a clue what that means. And there is no evidence of which I'm aware that tells me that announcing a target improves the performance of the central bank.

As I was mentioning to one of our colleagues the other day, I remember a wonderful little study that was done on the Bundesbank at the height of its "credibility." Somebody came up with a conclusion that the Bundesbank's sacrifice ratio was no better than anybody else's. I said to myself: Well, if that's the case, what is the value of credibility? What does it do for you? Most important, what does it mean?

As far as I'm concerned, putting together the issues of inflation targets and announcing inflation targets as one package makes no sense when they're obviously divisible. To me the cost-benefit analysis of announcing has never been demonstrated. Indeed, we don't even know for sure that those who are practicing that approach and announcing their inflation targets will do better in the next period of inflation. I will put it to you this way: If in the next inevitable period of inflation, those who announce their inflation targets do better than those of us who don't, I will change my point of view.

MR. BROADDUS. Can we get that in the minutes? [Laughter] Could I just make one response to that, Mr. Chairman? I certainly hear your comments, and I must say that I don't think that explicit inflation targeting is a silver bullet or that it's going to solve all the problems we face. But in the context of this discussion, I would like to use an example—and maybe I'm violating the admonition not to get too close to the current situation. Suppose we currently had a range of 1 to 2 percent for the core PCE. We are now at the lower bound and may be pushing a bit below it. Again, having an announced target wouldn't solve all the world's problems, but I think it would add something important—namely, that the markets and the public should have a very clear understanding that the risk in the outlook with respect to inflation is on the downside. They would know that it clearly would be a conditioning factor in some way in our policies going forward. It would eliminate any need for us to feel that we must elaborate our statement in an ad hoc way—I don't know that we're necessarily doing this now—at some point down the road. I would be very concerned about the longer-run type of steady-state communication relationship between the markets and the Fed that such an approach might create.

CHAIRMAN GREENSPAN. Let's take that example. Is there anybody in the marketplace today whom we have failed to convince that we're not going to do anything on the funds rate for a while? Look at the federal funds futures markets.

MR. BROADDUS. But we had to make an explicit statement to that effect.

CHAIRMAN GREENSPAN. Okay, but let me go further. The scenario is as follows: The core PCE, which is a monthly series, pops above a rate of 1 percent. We are highly accommodative. Do we go back to neutral at that point or when the PCE is at 1½ percent? What do we do? In short, supposing we do go back to neutral and then find that the next month the

statistic goes back down. You see, it's one thing to say we're going to do something, but operationally we have to deal with numbers.

If you have a rule, either you adhere to it vigorously and unequivocally, with no exceptions, or you deviate from it and give reasons that you are not following it. But in order to do the latter, you have to have a set of principles that determine when you will deviate from the strict rule. If you have a strict rule then you don't have to discuss deviations. You literally act in accordance with the rule. The rule says when the core PCE rate as published by the Bureau of Economic Analysis falls below 1 percent, the federal funds rate will be reduced by some formula. If it goes back above 1 percent, you reverse the action.

In other words, if we have a strict rule, the market will know exactly what we will be doing as a consequence of the rule. Indeed, we don't have to have any meetings because it's automatic. To the extent that we don't automatically follow the rule, then the question is what principle determines when we deviate from the rule and when we apply it. I submit to you that, if we have that sort of principle, then that is the rule, and the actual rule from which we deviate is not operative. That, indeed, is what we do today. I'm not clear what we gain by publishing targets that we say we are going to adhere to when we know we're not going to adhere to them. And when we are not following them, I am sure we're going to have to spend a considerable amount of time explaining why. If you think it's difficult to come to a conclusion of this Committee as to why we're doing something, try getting agreement on why we're not doing something! [Laughter] That is going to be even more difficult.

As I said to you, Al, I'm not against inflation targeting per se. If it can be demonstrated that it actually works—that the mere stipulation of a target that is announced actually conditions the marketplace so that indeed the target has an effect—I will admit that I am wrong. I will jump

to the other side on this issue, as Bill Poole did on announcing the tilt. But there has been no definitive test of this. I would suspect that, when inflation occurs, those central banks that have not announced inflation targets will do as well or as poorly as those that have. If that turns out to be the case, then the positive value of inflation targets doesn't exist. But the negative value—having to explain why we're not adhering to the targets—creates a very serious problem. I don't see what announcing inflation targets does for us.

MR. BROADDUS. Well, I don't want to take more than my share of time, but I would like to respond to a couple of things you said. The objections you raise are why I said inflation targeting is not a magic bullet; there are problems. If we were explaining why we use inflation targets, I'd say, yes, there would be issues and we would have to deal with those. As I view such use, though, we certainly wouldn't be reacting to one month's data. Presumably we would be looking at a longer period of time than that. To continue with the current example, in answer to a point you raised, if the measure moves back above the 1 percent lower limit—presumably it's a little below that by some measures now—that doesn't mean that we would have to react immediately to bring rates back to neutral.

CHAIRMAN GREENSPAN. Why not?

MR. BROADDUS. Because the inflation measure would still be close to the lower limit of its range. There would still be a risk. This would give content to the statement.

CHAIRMAN GREENSPAN. Suppose BEA revises the number from above 1 percent to below 1 percent in the middle of the month? They do revise the numbers. They could publish an initial number of a 1.1 percent annual rate of inflation and find out that they made a mistake. Suppose they then revise their data and move the rate down to 0.9 percent. What do we do?

MR. BROADDUS. I don't think we'd necessarily have to do anything in that particular scenario.

CHAIRMAN GREENSPAN. I hope not.

MR. BROADDUS. I think we could easily explain that.

CHAIRMAN GREENSPAN. If we're going to go with inflation targeting—where we actually stipulate what our targets are and say we will act to achieve them—I think we first have to go through a full court press of literally simulating all the situations that could arise and how we might respond. We need to decide what principle will determine our response and how we're going to convey that principle—the rule that would prompt us to move or not to move. Remember, if we have an explicit rule from which we never deviate, this Committee will adjourn. It has no function. Milton Friedman would have gotten exactly what he thinks a central bank ought to be! To be continued. [Laughter] President Hoenig.

MR. HOENIG. Mr. Chairman, I'm going to back off of Al's point. I have some sympathy for setting an inflation objective, but I think price stability is the objective. I'm more or less following up on Bob Parry's comments. Where I'm having difficulty with this whole issue is that, to my mind at least, we are introducing a new ambiguity—I think it happened at the last meeting—and that is this idea of market guidance. I feel very uneasy with it.

CHAIRMAN GREENSPAN. Do you mean “the considerable period of time” phrase?

MR. HOENIG. Yes, or anything like that. We've moved further away from our boilerplate language in trying to be more explanatory about our actions. As you started out saying this evening, we can't predict the future. None of us can predict the future. Another factor is that the markets receive as much data as we do, and they can judge our actions or our prospective actions based on those data and on our past actions. Over a long period of time, it is

the actions that really do speak better than the words. So that's where I'm coming from. Moreover, it's my experience—and I think others have found this to be the case as well—that people hear what they want to hear. Sometimes, and maybe often, the markets hear what they want to hear, so we cannot expect to convey conditional statements very successfully to the markets. People simply don't believe or accept statements as conditional in hindsight. Thus, we find ourselves having to surprise the markets, in a sense, when we try to be too prescriptive or forward-looking.

So I would focus on the statement—I think it's a good suggestion to bring the wording in the Bluebook and the language of the press release together—and say that this is what our action is today. We can talk about the risks we see today—the risks with regard to economic output and inflation and leave it at that. That means more boilerplate. My view is that, if we try to do any more than that, we will get into a very complicated pre-approval process on the press release because we'd be saying more than the action itself says. I think that's a very bad course to follow. In my view, outlining our sense of the risks is about as much guidance as we can provide. However, if we are going to try to use our press release to explain more—and I'll end with this—I have a very strong sympathy toward the Bank of England model. Vincent talked about the possibility of errors occurring if we use that model, but frankly, I think there will be fewer errors if we publish the minutes more quickly than if we try to write a press release that represents twelve views in two paragraphs. With the latter approach I think we really open ourselves up to errors and rough statements.

CHAIRMAN GREENSPAN. Well, that's a valid alternate procedure.

MR. HOENIG. It's one I think we ought to consider very seriously if we start going down the road of wanting to expand what we say in the press release rather than making it more

boilerplate. I have to tell you that I think focusing on those minutes and saying that they are an accurate representation of our discussion would be very healthy for the market. With the release of the minutes we are saying in effect “these are the facts.” The market can interpret our actions and our outlook based on those facts.

CHAIRMAN GREENSPAN. You would go back to announcing only our action, and you would publish the minutes fairly soon after the meeting?

MR. HOENIG. I would go back to announcing our action.

CHAIRMAN GREENSPAN. With no further comment?

MR. HOENIG. With no comment, right.

CHAIRMAN GREENSPAN. Then move up the publication of the minutes?

MR. HOENIG. I’d release them as quickly as we can—two weeks after the meeting if that’s reasonable—because they provide the explanation for our actions. The market can decipher the minutes. Yes, people may occasionally misinterpret them, but the minutes are our representation of the discussions that occurred at the meeting. And there’s no attribution, so there is no risk to an individual member. I would prefer that to expanding the press statement. Now, if we go to a boilerplate statement—this is our action, and these are the risks, with the risks clearly understood as those we see today and not anything that hints at our next move—I’m fine with that. But absent that, I think we ought to get the minutes out more quickly and confine the statement.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. Let me pick up where Tom Hoenig left off and discuss what I think you and Vincent were suggesting. First, I do think there will be some benefit in trying to standardize or routinize the so-called risk assessment. I’ll leave out the

issue of the “considerable period.” To me that’s rather close to policy. But as a general matter, I believe our risk-assessment language has evolved to where it seems as though it would work for a long enough period of time, and I think it ought to be routinized—and disclosed in the Bluebook in the way you and Vincent were talking about.

I would disagree with Tom on the content of the statement. In my view, we do owe it to the world, once we make a decision, to attempt to find the broad middle ground that supported that decision. To explain why we did what we did—in I don’t know how many sentences, maybe two, or three, or four as we do now—I believe is extremely valuable and, frankly, quite doable. We should put this problem into a broader context, as you suggested, and be a little careful not to be blown off kilter by two months of experience. After all, the Federal Reserve now has ninety years of experience. The FOMC may have made some horrific mistakes over the years, but I would say that, over the last twenty-four years or so, by and large the policy setting has been right and our ability to explain it has been good. So let’s not get thrown off by two or three months when a number of technical factors plus some communication issues created a problem. What you suggested in terms of changes to the process strikes me in concept as a step forward because it gets the Committee involved in the right way in the wording of the statement without undercutting some of the things we want to do.

To go further and address a point that Tom made, I feel pretty strongly—and by the end of this discussion I may be alone on this—that we shouldn’t move up the publication of the minutes. I have two reasons—one involves process and one, substance. First, we have to be very careful because, once we take such a step, we can’t walk back from it. Second, I think we would find that many times—as has occurred even with the minutes released on the timetable we use now—there is a phrase or sentence in there that the market latches onto. The thought

conveyed may have reflected a view expressed at the meeting, but even with the passage of two or three weeks it may no longer be accurate or it may never have been an accurate reflection of the central view. So, given the fact that I don't think we're in such horrific shape with the statement the way we do it now, I wouldn't jump to a new approach—assuming we can improve the process of formulating the statement—because I think the risks by and large outweigh the benefits. That's all generally a process issue. Let me talk a bit about the content.

As I've already indicated, in my view where we've ended up with this ad hoc approach with respect to the balance of risks is not so bad. With regard to the question of sustainable economic growth—I'm looking at exhibit 3—its meaning has evolved over time, and I think it has come to mean growth that doesn't create imbalances. It was originally, years ago, growth at close to potential, but it didn't contain any level concept or notion of imbalances. It has started to move in the direction of the latter, and I have no objection to that.

Vincent asked whether the word “risk” has a negative connotation. We got into this language, as you may recall, because we'd go out and make speeches and be asked—at least it happened to me often, and others may have experienced this, too—what the balance of risks was. So the answer was that we would tell the public about the balance of risks. I don't have a strong sense that risks for a central bank are all negative because there's an upside and a downside. There are risks in some directions that some people think are good but that we as central bankers think are not so good. So I wouldn't worry about that. But if the Committee feels strongly that we shouldn't use the word “risk,” so be it.

Vincent's fourth question was, how long is the foreseeable future? I give the same answer we always give—it's this. [Laughter] How the record is going to demonstrate the gesture I just made with my hand, I'm not really sure! In any event, it's an elastic concept, and I don't

have any problem with that. I think the markets have gotten used to it. I won't at this point answer your fifth question about whether we should make a commitment that policy will remain accommodative for a considerable period.

In sum, what I would say is that we need to clean up the process here. We need to create a way to use the Bluebook so the Committee can get more involved in the wording of the statement. But I'd be a little cautious about doing dramatic surgery on the substance based on two to three months of experience that we wish had been a little better. In the context of what we're trying to do, I think what we have been doing is not so bad. While taking a step forward from here may look nice on paper, I think it has more risks than benefits. Finally, somewhat surprisingly for me, I'm relatively conservative on this matter. In my view we're not far off from the proper approach. We just need to clean up the process.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I'm struck by how far we've come since December 1999. I was a relative newcomer at the table when Roger's working group gave its report. I didn't go back and pull the report, but I pulled a sentence from Dave Lindsey's document. It read: "All members of the working group share the objective of reducing the close connection between the choice of the bias and the perceived probability of near-term policy action." Maybe my memory isn't clear, but I recall that we were wringing our hands and hoping that markets would not interpret the bias as a policy forecast. For four or five years now we have let that go unchallenged and apparently have become more and more comfortable with that notion without having a substantive discussion on the issue. I think what we did at the last meeting in terms of "for the foreseeable future" was another major step down that road. To my mind that was more than just a communication issue.

I share the view expressed by several others who have spoken already about being somewhat uncomfortable with references to the timing of possible changes in policy. My sense—from the discussion that we had at the last meeting, a few remarks that have been made since then, and some comments in the Greenbook—is that a number of people wish that we could have made that wording more explicit. Some would have favored our saying that policy would be on hold for the next six, nine, or twelve months. That makes me really uncomfortable. Some of us at the last meeting had—and probably still will have at tomorrow’s meeting—a different view about fundamental issues such as productivity, potential growth, and the output gap. So the issue involved more than communication and the choice of words. To me there was an underlying discomfort with the kind of unconditional pre-commitment to future policy that I think we may have conveyed. In my view we need to have more discussion about whether we’re really comfortable with having gone that far with a policy forecast of that sort. I think that’s fundamental. If we are comfortable doing that, it raises some process issues, which is understandable. If we’re going to make that kind of commitment, it does become a part of the Committee’s action. So that should make us want to talk about the words that we use. It’s going to make us want to edit the minutes more carefully. I found myself already doing that on the minutes from the last couple of meetings and wishing that I could see everybody else’s comments and see what happened to the entire draft.

We had a last-minute discussion before I left Atlanta this morning about Tom’s idea of an earlier release of the minutes. My first thought was that it probably made sense. But the more I thought about it, the more concern I had about nineteen of us trying to comment one-on-one on minutes that all of a sudden become terribly, terribly important. I can’t imagine how that process would unfold. As attractive as the idea was conceptually when I first thought about it, I just

can't imagine that it would work well. Each of us could send in our comments, but we won't know how anyone else commented, and we won't have a chance to help with the process. I bet we're not going to be satisfied at all when the minutes come out at the end of that process.

CHAIRMAN GREENSPAN. What does the Bank of England do with respect to that?

MR. REINHART. They all sit in the same room and have an editing session. They go through the minutes line by line.

MR. FERGUSON. And how many members of the MPC are there?

SEVERAL. Nine.

MR. FERGUSON. We have nineteen.

CHAIRMAN GREENSPAN. I'd hate for us to spend our time doing that.

MR. HOENIG. Remember one thing I said. I said that I'd rather go through this challenge with the minutes than opt to expand the press release. I think there's more danger in the press release if we're going to get prescriptive with it.

CHAIRMAN GREENSPAN. As Roger said, there are certain things we can't come back from once we do them. This we can come back from. In other words, one of the reasons I feel somewhat comfortable with what we have been doing is that I think monetary policy is at a major fulcrum in the sense that clearly something different has happened in the world—general global disinflation. It is phenomenally significant, and it alters the normal historical response of a central bank to changes in the economic outlook. We've been trying to suggest to the world that the response time is different and that the normal pattern of the way a central bank ought to behave to maintain stability is different from in the past. But after having done that and, I hope, succeeded—and I think we are succeeding, frankly—there's no reason that we can't just go back to the preemptive policy procedure that we embarked upon a long time ago. But if we're always

going to be prescriptive—if we’re always going to forecast what we’re going to do for the next six months and lock it in, then we’re in real trouble.

MR. GUYNN. Thank you, Mr. Chairman. I had a few more comments but in the interest of time I’ll quit.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. This has been a fascinating discussion, and there are lots of things to say about a lot of issues, but I want to focus on just a few. First of all, I think anyone who has observed the Fed over the last three or four months—including any person in the markets who has criticized us about our communications—would find it a little odd that much of tonight’s discussion has been focused on what should be in the Bluebook rather than what should be in the press statement. I think the real problem is that we take the announcement out of the context of the wide variety of issues we all talk about at an FOMC meeting. The problem is not just the announcement. In fact, the problem probably isn’t really the announcement at all—though there are some things that we could do at the margin to improve it—but the context into which the announcement is put. To a large extent we create that context ourselves. I think you talked about that a bit.

Just looking at the period from January until the June meeting, there were 103 speeches or testimonies—public appearances—by members of the Board of Governors and Reserve Bank presidents. In those speeches and testimonies the term “deflation” was cited 200 times, and 116 of those references occurred between the May and the June meetings. Now, I ask you: Is that not an environment that’s just asking for people to over-interpret what was in our official statement? People in the market think that there’s a big communication machine here in Washington that tells us all what to say. Even when we tell them there isn’t, they still believe

that there is. So I think that's partly what fed into the market response and it reflects whatever degree we were responsible for the market's overreaction either on the downside or the upside.

CHAIRMAN GREENSPAN. They added up the "remotes," as I put it.

MS. MINEHAN. Well, it's not so much that they added them up.

CHAIRMAN GREENSPAN. No, we created a lot of them. The problem basically is that a number of those in the market don't listen to the subtleties; they just take note of how much time we are spending talking about a particular subject.

MS. MINEHAN. Exactly.

CHAIRMAN GREENSPAN. You're not suggesting that we have a Politburo here that clears everybody's speeches?

MS. MINEHAN. I am not suggesting that at all. I'm just saying that that was the happenstance. We inadvertently added to market volatility.

CHAIRMAN GREENSPAN. I agree with that. The question is, what are you recommending that we do?

MS. MINEHAN. My recommendation is to proceed very carefully. I don't think there's so much wrong with the current process and the statements we issue that we should jump immediately to a different solution. I have some sympathy for President Hoenig's comments and President Parry's, too, in terms of an easy-to-handle formulaic approach. Where Tom was coming out—on the side of the Bank of England approach—has some appeal to me, too, although there are clearly some downside risks to that. I would hate to see us move to either of those approaches overnight. I would like us to give this more thought and discuss it further, beyond tonight. I hope we will do that.

On the subject of inflation targeting I am very much in agreement with you, Mr. Chairman. Along the lines of looking at what might happen when the Treasury bond goes away or at what might happen if we had to use nontraditional monetary policy measures, if we kill a few trees looking at inflation targeting, everybody is going to think we're going to be moving to that. I personally feel that it would not be the right thing to do and it would not buy us anything. I would hope that sooner or later we could come to a meeting of the minds on that subject and not enter into a long, drawn-out process of trying to find out whether or not it makes any difference to any policy objective we care about. That's all I will say, though there are lots of other things I could say.

CHAIRMAN GREENSPAN. First Vice President Stewart.

MR. STEWART. Mr. Chairman, my approach to this question was to ask a number of top economists for Wall Street firms over the summer whether in their view, in light of the events of May and June, we have a fundamental problem with our communication policy. The answer has been "no." Their sense is that the system works and that it's the best relationship between the markets and the central bank in the world. There's a sense that we continue to have extremely high credibility. There were views on both sides on whether we should have inflation targeting. Some argued "yes," and some argued "no," but there was no clear consensus one way or the other. I think the only clear message was that they would like to see the minutes published earlier than they are now rather than have to wait so long. But I wouldn't say that there was an extremely strong feeling on that among those that Chris Cumming and I talked to.

The other interesting point that came out of these discussions was the difference between talking to this professional audience of economists, many of whom have worked at the Fed in one capacity or another over the years, and talking with traders. The economists listened to us

very carefully and understood what we are doing and the issues that we're dealing with. Talking with traders was a very different matter. That group is not a sophisticated audience in this arena. The economists in the top firms would say that they, too, have problems getting the traders to understand their point of view. In effect, they threw up their hands and advised us not even to try to use sophisticated economic arguments in dealing with that segment of the marketplace.

So I would end up agreeing with President Minehan in terms of feeling that the existing system is working well. The people in the markets that I think are the most important decisionmakers say we have credibility; they know exactly what we're going through; and they would not ask for a change of any significant nature.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I agree with the thrust of Jamie's and Cathy's comments. I certainly wouldn't suggest any significant change, though I would suggest some tinkering—some improvement in the processes that we follow and the language we use. On the big question about releasing the minutes early and just announcing our policy decision without commentary, after thinking about it a lot, I believe the market would view that as a major step backward on transparency. That's because, if we were to do that, all we'd announce on the day of the meeting is what we decided to do and there would be gap of, let's say, two weeks before we issued our minutes. What would happen during those two weeks? Right now we have a blackout period that goes until the end of the first week after the meeting. Would we extend the blackout period another week and not give speeches during that time? With no other information from us, market participants would look at those speeches very, very carefully. So I think announcing only our decision and then releasing the minutes earlier could lead to a lot of complications, and I would not go down that road at this point.

Actually, the sense of this conversation, as I see it, is that we seem to be going in the direction of Vincent's option 4 in his table. That involves putting language in the Bluebook that matches exactly the wording we would be voting on at the meeting, which I certainly agree with. I think the current Bluebook already takes some useful steps in that direction, which will be helpful in our preparation for tomorrow's meeting. Also standardizing the language of the risk assessment is, as Roger phrased it, a very good direction to go in. However, I would look very carefully at the language. I think we should make some changes in the language that we're now using and we should stress-test that language against a whole series of different economic contingencies and see what we would really say if X happened or if Y happened. I'd go back and look at some historical events, too. Maybe that has already been done; I don't know. But in my view, it would be a very useful exercise for all of us.

Let me mention a few problems that I have with the language after thinking about it carefully. First, there's the point about economic growth. The way the Bluebook is now worded it says, ". . . the Committee believes the risks to its outlook for sustainable economic growth over the next few quarters are weighted toward the downside, are balanced, or are weighted toward the upside." I would have serious concerns about our saying "weighted toward the upside" with regard to sustainable economic growth. We ought to explain that type of situation in a much more useful way, and I think there are ways to do that. I just don't particularly like that phrase "weighted toward the upside." Before we get to a situation—sometime in the future, I hope—that would call for a risk assessment of that sort, I'd like to find some better wording. Also, when we talk about our risk assessment we say, "against the background of its long-term goals of price stability and sustainable economic growth," and then we describe the risks to sustainable economic growth. But then we don't use the words "price stability"; we shift to the term

“inflation.” We should think carefully about that—whether we really want to talk about the risks to price stability as opposed to the risks to the outlook for inflation. I think that’s a question we should discuss as a group.

The other part of option 4 was that, when a substantive change is contemplated, this would be communicated to the Committee before the meeting so we would have some time to think about it. I think that’s in line with the conversation you were having about the wording in the Bluebook, and I agree with that very strongly. From a process standpoint, that will be much better for this Committee in terms of our operations.

The final point I would make is on the term “foreseeable future.” We did actually define it very specifically in the year 2000. We said that although the “foreseeable future” is “intended to cover an interval extending beyond the next FOMC meeting,” the concept is necessarily elastic. [Laughter]

MR. FERGUSON. What could be clearer!

MR. MOSKOW. It clearly refers to an elastic period that goes beyond the next FOMC meeting.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. First of all, I count myself among those who don’t think that our current policies are all that bad and in need of a major overhaul. I agree with most, but not all, of the comments that President Moskow just made. So let me offer a few quick suggestions and express a couple of concerns. As I understood your conversation with Bob Parry, one suggestion is to use the Bluebook more extensively to spell out some alternatives and give at least a rough idea of the language that would go with them. Whether that’s alternative 4

in Vincent's material, I'm not sure. In any event, I think that's a constructive suggestion, and we ought to think about trying to implement that over time.

Second, I think we should try to accelerate the release of the minutes whatever we do with the statement. In other words, I don't think moving up the publication of the minutes is contingent upon what we put in the statement. I believe the minutes are an underutilized asset. We spend a good deal of time and go to a lot of trouble to prepare them as it is, and then we release them at a time when people are no longer interested in them. It seems to me that they are an accurate representation of what has been discussed at a meeting, and we ought to try to get them out while they're still relevant. In my view they would do a better job of providing a description and conveying the nuances of what was going on at the meeting than anything else that we could do. So if I would urge anything strongly, it would be the earlier release of the minutes. I personally believe that whatever added resources it would take to accomplish that would probably be well worth it.

CHAIRMAN GREENSPAN. May I interrupt you for one second?

MR. STERN. Yes.

CHAIRMAN GREENSPAN. That's a very interesting point, and we need some factual information. In the event that we move the minutes up, a concern that has been expressed here—I think Jack raised the issue—is that we all will start to edit the minutes more than we do now. May I just ask for a show of hands on this? Those who would probably do more editing than they currently do, would you please raise your hand? Now those who would do the same amount? I presume nobody would do less! [Secretary's note: Those who expressed an opinion were about equally divided as to whether they would probably edit the minutes more intensively or not change their current practices. Several members expressed no opinion.]

Now, what we just saw was people's current intentions. But it is a very interesting question because, if Jack is right, it could be very difficult to produce the minutes more quickly. I hadn't thought about that. It always struck me that moving forward the publication of the minutes was strictly a staff resource question. But if an earlier release date indeed makes it more difficult for us to produce the minutes—not just physically doing them, but getting members to agree on the content of the minutes and especially that they accurately reflect the meeting's discussion—then I think we have a real problem.

MR. STERN. That could be. But if Jack is right, I won't take him fishing again!

[Laughter]

CHAIRMAN GREENSPAN. Continue.

MR. STERN. I have a couple of concerns, and one of them Michael just expressed. I don't know what it means to say "the risks to economic growth are weighted toward the upside." Presumably what we mean is that higher growth could lead to higher inflation. But that ought to be captured by the inflation statement. Now, maybe some other meaning is intended. If so, I must say that it's not obvious to me what that would be. If we stay with the language we have here, sooner or later it's going to come back to haunt us. So I'm concerned about the connotation of the word "risks."

My final thought is a response to one of the questions that Vincent raised: Can we sum up the risks to inflation or price stability and the risks to the real outlook? I'm a little uncomfortable with that. We've been doing it, and I don't think it has caused any serious problems yet. But Ned and a few others have raised some concerns about that at previous meetings, and logically I'm just not sure that it is the best of all possible approaches.

CHAIRMAN GREENSPAN. I agree with that. Eventually, we'll run into trouble on both of these issues. Not at the moment, though. We're okay for a while because the basic point here is that we're trying to convey why we did what we did.

MR. STERN. Right.

CHAIRMAN GREENSPAN. Some of the boilerplate language with variations—specifically splitting the Phillips curve into two—actually was essential for us to explain why we did what we did.

MR. STERN. I thought that was a very good idea at the time. But we might want to reflect earlier rather than later on how we may want to change this going forward because I do believe that it could get awkward.

CHAIRMAN GREENSPAN. There may be an exit strategy issue that we have to resolve.

MR. STERN. Right.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. I'm glad that you called on me now because, the longer this meeting goes, the more balls there are up in the air and we're going to have an unstable equilibrium! First off, on the process I'm a status quo man. I think the system we have is pretty good. We can fix it up, which I guess puts me somewhere between alternatives 4 and 5. I would like to leave the minutes alone. The one suggestion I've heard that I think could improve the process is to put more of the statement in the Bluebook. I think that's a good idea. It could be done without cost, and we ought to start doing it as soon as possible. Indeed, it was already done for this meeting.

On the statement itself, I view the “considerable period” sentence as a special addition that was appropriate for the conditions at the time. Although in general we ought to have a fairly formulaic approach to the statement, from time to time statements like that are useful. So I hope we don’t put ourselves in a position that we could never have them. We know we’re going to have to take that sentence out at some point—presumably fairly soon—and we’ll have to deal with that. But I thought that statement did work. So while I basically favor being fairly formulaic about this, I think every now and then we have to do something that is less standardized.

On the “sustainable economic growth” sentence, there may be an interpretation about economic growth that does not create imbalances, but that’s not how the sentence reads the way it’s written. It says, “The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal.” It’s entirely about speed limits and not about the size of the output gap. We may think the sentence means something else, but that just isn’t what the sentence says; and I think we can do better. I’d convert it to more of an output gap type of sentence.

I’ll make just one more comment, and that is about inflation targeting. That raises a whole new set of issues, and I think we shouldn’t talk about it now but maybe at the meeting in January. I will raise one issue here, however, and that is that I’m not sure it’s up to us to announce an inflation target—even a soft range—on our own. I think we might well have to go to the Congress for that. That does make me shudder but, on the other hand, we may be interpreting our charter a little too aggressively if we set an inflation target. I can see how having a clear target range could help us, but that raises a huge new set of complications, and I think we really have to put that subject off. Thank you.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Put me in the category also of the members who don't think we need to make a major change. Like a lot of other people, I've spent a good deal of time thinking about what we might have done differently in our past communication. As I've thought about our recent communication, it seemed to me that over the March/May/June time frame we went from having had a succession of two-part statements to a one-part statement and finally to a three-part statement. I remember very clearly that one of the themes running through our May meeting was that we didn't want to surprise the market. What happened was exactly the opposite—the market surprised us. It had the feel of a Steve McQueen movie! You may remember the one where he started out being chased and then very cleverly found himself being the chaser. It seemed to me that we were then in a bind because at the June meeting if we had been following that dictum—if we had acted in a way that would have pleased the market—it would have run contrary to the policy views of the people in the room. We seemed to have found ourselves in a perfect storm. It was at a time when we were talking about the possible need to use unconventional operational means that we made major changes in the statement. It was a time also when the economy was just beginning to respond to the stimulus that was in the marketplace. I think that situation was very much an anomaly, and in my view we should not overreact to the manner in which that communication was received.

Keeping on that theme—and recognizing that in January we're going to continue discussing this topic—I would hope that we do not make major changes between now and the next time we talk about communication issues. I want to make sure that we continue to be incrementalists on the subject. But in terms of this part of our deliberation and looking at the alternative methods of communicating, I would tend to support option 4.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I agree with President Hoenig and President Poole as well that it's very difficult for us to talk about the future. But actually I'm fairly comfortable with where we've gotten. In terms of the balance of risks sentence, in my view it has been useful to get to the three-part assessment. I think we gave some important information to the market when we said that we were concerned about inflation falling too low, and I believe that has helped the market interpret our actions and predict our actions better. In terms of President Poole's chart, it looks to me as if most of the problems occurred before we were making post-meeting announcements. The real misses are in '91 and '92, before we started issuing any statements. I don't see a deterioration in the predictability of the federal funds rate since we started announcing tilts or our assessment of the balance of risks. The markets have pretty much gotten the direction right. I think we can be fairly satisfied with the results depicted in that chart for the period since we started announcing. So I don't think it supports the notion that providing a balance of risks or a tilt hasn't been useful. I don't see that in the chart at all.

I think the summing up part of our statement is useful. As I've said before, it's part of the risk-management type of strategy that you've talked about, Mr. Chairman. Having that third sentence will give us an opportunity to tell the market how we're implementing that strategy and what we're most worried about over the foreseeable future—that elastic concept. To me the “considerable period” sentence is a different matter. There we did make more of a semi-commitment about policy for some future period of time, and I was uncomfortable getting into that. But I was comfortable doing it at that point because I thought it was, in effect, a kind of nontraditional policy. We had the funds rate at 1 percent. People were worried about disinflation, and it was important, particularly at that low interest rate, that the markets

understand a little better what we were doing. But I share everyone else's concern that, going forward, predicting a time dimension with regard to our policy actions should not be a part of our regular process. I don't think it needs to be. It was part of an unusual situation.

I agree with the dialogue that you had with President Parry, Mr. Chairman, regarding the balance of risks statement. I believe we can be more formulaic, and I think Vince's suggestion for putting more in the Bluebook is helpful. I also agree with President Moskow that we need to clarify our language. I happen to disagree with some of the statements about what "sustainable growth" means. I think it is about changes in the output gap, just as President Parry wanted, even though he wasn't interpreting the actual statement that way. So I completely agree that we need to start figuring out what we mean by this language and then make it clear to the rest of the world after we make it clear to ourselves. [Laughter] That's something that needs to happen sooner rather than later. These issues could come back to haunt us before too many meetings go by, so I think we need to work on that before the January meeting. I think I'll stop there.

CHAIRMAN GREENSPAN. You know, I've always thought that sustaining meant self-sustaining—in other words, a situation in which the gears are working in a perpetual motion. That's closer to the "imbalances" interpretation, I would suspect. But I never thought of it in terms of the two alternatives that you gentlemen mentioned. I always thought it meant self-sustaining.

MR. KOHN. That proves my point about needing to clarify it!

CHAIRMAN GREENSPAN. I'm a little puzzled by it.

MS. MINEHAN. It's not only the market that doesn't know what we mean! [Laughter]

CHAIRMAN GREENSPAN. The English language is wonderfully elastic. President Poole.

MR. POOLE. A point that I don't think has come up yet is the fact that we're talking to a number of different audiences. With regard to our political accountability—talking to the Congress and the general public—I think we do just fine, and I believe the current publication schedule for the minutes fully serves that audience. In terms of talking to the markets, Cathy and Jamie mentioned the traders, and I'd certainly like to draw a distinction between the traders and the portfolio managers. The traders make their money from reading tea leaves, hot tips, and understanding little nuances. What they really want to know is what our thinking is about the federal funds rate at the next meeting or the possibility of intermeeting changes in the rate. They don't very much care about why or the underlying reasons.

To speak to the point that Gary talked about, moving up the release of the minutes, I think the argument against that is that we'd really be speaking to the traders who are trying to divine what we are going to do at the next meeting. They care about the policy action rather than about the underlying rationale for the policy. So actually I think there's a real advantage in separating the minutes, as well as some of the logistic issues that we've talked about, from the specific meeting to which they apply. That allows the minutes to be interpreted by those who care about trying to understand the reasons for the underlying policy and not just the action we took at that particular meeting and a forecast of the action we're going to take next.

CHAIRMAN GREENSPAN. That's a very interesting point.

MR. POOLE. I would also emphasize that we've used the words "formulaic" and "boilerplate" in this discussion. Those words have negative connotations, obviously. What we're talking about is standard language with a standard meaning. So I want to be sure that we don't convey any of the negative connotations. I think that's quite important.

In my view, separating the balance of risks into the inflation part and the growth part is important, but I agree with Mike that we really need to stress-test the language. I think we're going to have a problem at some point saying that real growth is too high or the unemployment rate is too low. We have to make sure that we know what we're going to do when we get to the point that we're concerned about undue pressures on resources—or however we want to phrase it.

I have a lot of misgivings about the third sentence. I forget the exact terminology, but we use the words “on balance,” and I think the market reads that simply as our hint about what we're going to do at the next meeting. So I would like to take that out.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Let me make just a couple of comments. Some of these points have been covered, but I want to highlight the ones that hit me rather hard as I thought about them. First, when I think about what has happened with regard to our communications over the last couple of months, I think part of the problem was that we were in uncharted waters. We hadn't had inflation rates so low. We hadn't had wars or the possibility of war intervening with the economic process for some time. So as we sat around this table, we had a lot of Knightian uncertainty. But as we heard today, one can learn. As people learned about what the Fed was likely to do, the market adapted. Whatever we come out with on communication policy, I think we have to realize that in times like we've just been through we're probably going to have to get out of the box we've put ourselves into. Such times demand a different type of communication. When the market sees things that aren't normal, we may need to use something other than our standard type of communication.

I have become very uncomfortable with moving in the direction of giving a forecast, a point some of you have also made. I really think we need to talk about where we are at the moment that we come to our decision—that's the important point—without going any further with any kind of commitment in any sense of the term. For that reason, I think we should move up the publication of the minutes. The reason I come to that conclusion relates to what Cathy talked about, that some of us go out and give speeches between meetings. What do market observers do? They read the words of the people around this table who happen to give speeches on the economy and from them try to divine what the Committee as a whole is thinking.

CHAIRMAN GREENSPAN. And the speeches are scheduled three months in advance.

MS. BIES. So the market's interpretation is based on words from a selected number of those around the table who happen to have speaking engagements and talk about the economic situation. To me the minutes give a better representation of the diversity of views as well as the consensus and lay out why those who had different views felt the way they did. I think that before the minutes are released the market is not getting a full representation of how we got to the consensus and how dominant that consensus may have been. So I would prefer moving up the minutes. I also agree with some comments that were just made about the language. I would like to see us move to standard wording. But I also would like us to think hard about putting it in plain English. In other words, for economic growth, say, to indicate that we see it accelerating but we still see a large gap in unused resources in the economy.

CHAIRMAN GREENSPAN. That sounds like a forecast to me.

MS. BIES. Well, it's what we see today. It reflects how we got to our conclusion regarding policy. I'd prefer that, rather than to say that the risks are up or the risks are down—which I think can be read in many different ways depending on where the economy happens to

be. It's the first difference both in inflation and growth rates, and with inflation of 1 percent and going up or inflation of 1 percent and going into disinflation, we'd get very different reactions. So as we think about standard words, we need to consider the different sides. If our wording were more in plain English, that might take care of the last sentence because capacity issues and other developments we see in the economy would be tied together. Maybe that would get us out of that awkward final sentence. I still have trouble with that last sentence.

CHAIRMAN GREENSPAN. Let me get a clarification. If in clarifying the language we use straight declarative sentences, I think we'd be making statements as to what we think is going to happen and not what we see as a risk.

MS. BIES. Right.

CHAIRMAN GREENSPAN. My impression is, and I may be mistaken on this, that the very act of writing declarative sentences forces you to take a position of stipulating something quite specific. Falling back to a probabilistic Bayesian type of language seems to be fuzzifying up the statements, but that's exactly what we're trying to do to create a sense that these are probabilities and not certainties. I don't think there's any question that clear language is superior to Bayesian language, but can we be that clear without inadvertently making a forecast?

MS. BIES. Well, it's going to be very difficult. But the lesson I took from the last few months is that using the standard risk-assessment language in times like this, when we're going through a turn in the direction of the economy, sends confusing signals.

CHAIRMAN GREENSPAN. Let me make a request. Take the last statement and the one we're going to use tomorrow and rewrite them. Take a look at it because I'm curious about how you would do it.

MS. BIES. Well, that's why I agreed with the suggestion that was made earlier about trying to test any proposed language under different circumstances.

CHAIRMAN GREENSPAN. That's exactly the reason that I ask.

MS. BIES. Yes, I think we have to do that.

CHAIRMAN GREENSPAN. Take a shot at it and see what you come up with.

MS. BIES. Okay. Those are the main comments I had.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Mr. Chairman, I've always been confused by Bayesian things because it seems as if people still try to figure out the probability of something happening after it has already happened, which I have some trouble with! [Laughter] Since many of you probably would like to see the Dallas Cowboys get beaten up tonight, I'll be very brief. I'm with Cathy and Jamie, who basically said that they didn't think we had a major problem and certainly not one worth throwing out the baby with the bath water. In my view, misunderstandings—especially big ones—about what we are trying to communicate are rare. Frankly, this recent one is the first that I can recall. The market may learn from it just as we may learn from it, and the market may come to the conclusion that ten pinks do not a red make. So this problem may not surface again anytime soon.

As you know from my position over the last couple of years, if we are going to make changes in our communication practices, I would be in favor of letting the policy decisions speak for themselves. Market participants and other observers understand the context and the circumstances we're in when we make those decisions. So I don't think a lot of explanation as to why we took a particular action is necessary. We should keep things as simple as possible and have as few moving parts as possible. Ideally, I would like not to have to vote on a bias. Then

we would not have to report on it, and it would be one less thing we can get wrong. If that's a movement away from transparency, I think it can be offset by moving up the release of the minutes to an earlier date.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I was about to offer a comment several hours ago before Mr. Parry spoke, but I'm rather glad that I didn't because at that point I would have said that Vincent had laid out an impossible task for us. As far as I could tell, he was asking us to figure out what we should communicate, how we should fashion what we communicate, and how we should change our current communications. I figured that would take if not days at least hours more than we had. However, we seem to have come fairly close to a convergence on a number of interesting and I think valuable points. So let me just throw in my views on some of them.

First of all, I think the Parry contribution was to say let's try to get it simple and standardized and let's make it work. I think that's the right approach. We can move away from the term "boilerplate" or even the term "standard," and we'll still have a problem explaining exactly what we mean by the words we use because I think we all attach subtle nuances to them. I don't think we can make our statements all that clear because we need to allow for unexpected events as we go forward. In terms of our assessment, I think we should keep it simple. But I, too, have a problem with the balance statement. On each of the individual elements I think we need some wordsmithing. I'm not sure that the words we're using are exactly right, whether we're talking about sustainable growth or price stability. But in my view, making an assessment on the balance of the two risks involves trying to add up things that are virtually impossible to add up. The most it does is to tell people that, on net, here's what we want to do and not really

how the risks are balanced or add up. So I think that part of the statement needs some work going forward.

In terms of whether or not we need to change the word “risk” to “odds” or any such thing, our thesaurus works on our Word Perfect programs. If we change it to “odds,” we’ll put “odds,” we’ll circle it, and we’ll say that it’s Fed-speak for risks. So I think we just have to recognize that this recent experience involved an unusual circumstance, notably an environment in which a lot was changing. People were unclear about what we were saying in part because of the dynamic changes in the markets at the time we were trying to say it.

I would be quite cautious about how to deal with the minutes and moving up their release. In my view there are questions about whether we want a four-week blackout period because we’re waiting for the minutes to come out or whether we should be working on the minutes in real time. These are tricky issues, and I think we have to be cautious about moving in any direction there.

We got into the middle of a fourth subject, inflation targeting, which wasn’t even on my list. I’d be more than happy to talk about that, but nearly everyone wants to see the Dallas Cowboys get beat up! So I’m going to forgo comments on that for the moment and say that I think we have come a very long way toward a convergence of views on these issues. To me the comments thus far suggest that we need to take some subtle steps but not make massive changes. That gets us to something like option number 4 to 4½, and I think that’s a reasonable place to be.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I’d like to support the Washington consensus, option number 4. Broadly speaking, I think the form of the statement is rather good. In particular I think the breaking up of the output and inflation risks was a very useful step,

although we can do some fine-tuning there. I agree that we should do some process improvement via the Bluebook to get everyone's input a bit earlier and to get the information out a little earlier.

I'm as responsible as anyone for the confusion about the phrase "considerable period," so let me just say a word about that. Governor Kohn put it exactly right, I think. The words "considerable period" were part of a nonstandard monetary policy. When we get close to the zero bound, we run out of traditional tools, and the only way that we can influence interest rates is by manipulating expectations. So it's a very, very nonstandard and unusual way to address monetary policy. That was certainly what I had in mind when I was advocating that approach. We're now, I hope—and it seems to be the case—no longer at great risk of deflation with a zero bound. I certainly hope that's the case. So I imagine that the reference to those kinds of considerations will disappear from the statement. But let me warn you that, should we reach the zero bound again, we would be well advised to consider using statements of that sort again because they may become our only tool, not just an auxiliary tool.

Let me say something on the minutes. I don't think President Guynn's comment about the minutes taking on undue importance was in the context of eliminating the press statement. I think we would keep the statement as our central means of communication. Then moving up the minutes would in fact be useful because that document does, as President Moskow suggested, contain a lot of useful information. That would not require any kind of additional blackout period. One argument that has been made against moving up the minutes is that their release would create an unnecessary market impact. But my experience is—and I think a correct view is—that the market effects of Fed actions, speeches, and so on are more or less continuous. There's no singular impact. So count me as one who thinks that moving up the minutes would

be a relatively effective and easy way to increase our transparency and to provide more information to the market. Thank you.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. After the last two meetings and even after reading the transcripts of the last two meetings, when we spent a lot of time talking about the need to improve our communications, I expected to be supporting major changes in the way we communicate. But after getting the material from Vincent and also reading Dave Lindsey's paper, I found myself in the camp of wanting to make only some minor changes to what we're doing currently. I believe that we should have a statement that announces our action and gives the reasons for the action. I think we should continue to have language on the balance of risks, with some improvements such as those that have been recommended by Presidents Stern and Moskow. I noted in reading the minutes of our August meeting that the language about our action was clearer than that in the statement, which brought to mind the comment by Governor Bies that maybe we could be clearer in our language. The wording in the minutes still had the risk information in it, but the statement was just a little clearer to me. So I think the suggestions that have been made about providing some draft language in advance in the Bluebook and then tying that language to our press release will help to make our statements clearer.

I also agree with several of my colleagues, however, that we should stop short of hinting at future policy and refrain from either deliberately or inadvertently signaling to the markets what our next move is likely to be. So I would want us to stop short of trying to manage expectations about our future policy actions.

Finally, in regard to the minutes, I came in here thinking that it was a good idea to release the minutes earlier. But after listening to the comments tonight, especially the concern that we

could not readily reverse that decision and return to our current practice, I think the issue requires a little more thought before we make such a move. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Well, thank you very much. We've gone around the table, and I must say to you that my impression was that more substantive issues were put on the table than I had expected and, indeed, potentially more conclusions. I think it's fairly evident that there are generally two schools that are emerging. One is the de minimis alternative, which I gather we can do without objection, of making the language in the directive conform exactly to the language in the statement. That is something that everyone could acquiesce to, which would strike me as a way to solve one immediate problem. We thank the President of the San Francisco Bank.

Also, I believe we have covered the issue of the relationship between the statement and the minutes in a very productive manner—identifying the possible tradeoffs or alternatives and the like. Finally, the issue that has been raised on this side of the table about stress-testing is an important one. Tomorrow we will do what we have to do to have continuity from the previous meetings. But I do agree with the point that Mike Moskow raised—that when we begin to observe an economy that is starting to heat up, the language we have now isn't going to work. To be sure, we have a communication agenda topic scheduled for our January meeting, but I say to you that that's too late. I think we ought to ask the staff to indeed stress-test some language—not for tomorrow's meeting but for the meeting thereafter—so that we'll get some knowledge of alternatives as to how we might exit from the current situation under various scenarios. I never thought of the term “stress-test,” but it has a certain analogy to what we're looking at here, which I think actually works.

In conjunction with that, we ought to do what I mentioned to Susan, for example. I hope that she can find some words that do not have a probabilistic character—which is always confusing to the average person—and yet avoid a forecast. That's going to be a tricky problem, and I'm not sure that it is resolvable. My own view—and if it turns out that I'm wrong, that's all the better—is that we can't get away from the probabilistic language because indeed that's the kind of world in which we live. Trying to make a deterministic world out of a Bayesian world just isn't doable.

Therefore, I think we ought to implement as soon as we can the proposal to get the same wording in both the instructions to the Desk and in the statement we make to the public. As quickly as possible, we should try to formulate the actual phraseologies that we might use as the economic conditions evolve and in the event of certain developments in the marketplace. We're all presuming as a given, with no possibility of error, that so long as the output gap stays open the rate of inflation will fall. Well, as I've said to many of you, I remember well that people held that view even more strongly in the late 1960s; and it was only a very few years later that we realized it was wrong, when nobody could explain how it was possible that inflation was rising with a very large gap remaining. Indeed, stagflation was something that was not conceivable in the standard Keynesian models that we all adhered to before the 1970s. So we ought to recognize that, and as firmly as we believe we understand the way the economy is growing, we should make contingencies for it to move in exactly the opposite direction. I think that would serve us well

So I would suggest that we move forward and try to communicate between meetings, not necessarily with an actual meeting, but with memoranda from Vincent on various alternatives and soliciting people's views. This is not something we're going to have to implement at the

next meeting. But we have to start thinking about how we're going to phase out of where we are, as indeed we're going to have to do at some point.

So I thank you all for a very thoughtful discussion. It has been quite useful. Unless somebody has some closing remarks, let's call it a night and convene in the Board Room at 9:00 a.m. tomorrow.

END OF MEETING