

Meeting of the Federal Open Market Committee

December 15-16, 1987

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., starting on Tuesday, December 15, 1987, at 3:15 p.m., and continuing on Wednesday, December 16, 1987, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. Corrigan, Vice Chairman
Mr. Angell
Mr. Boehne
Mr. Boykin
Mr. Heller
Mr. Johnson
Mr. Keehn ¹
Mr. Kelley
Ms. Seger
Mr. Stern

Messrs. Black, Hoskins, and Parry, Alternate Members
of the Federal Open Market Committee

Messrs. Guffey, Melzer and Morris,² Presidents of the
Federal Reserve Banks of Kansas City, St. Louis,
and Boston, respectively

Mr. Kohn, Secretary and Staff Adviser
Mr. Bernard, Assistant Secretary
Mrs. Loney, Deputy Assistant Secretary
Mr. Bradfield, General Counsel
Mr. Patrikis, Deputy General Counsel
Mr. Truman, Economist (International)

Messrs. Lang, Lindsey, Prell, Rolnick, Rosenblum, Scheld,¹
Siegman, and Simpson, Associate Economists

Mr. Sternlight, Manager for Domestic Operations, System
Open Market Account

Mr. Cross, Manager for Foreign Operations, System
Open Market Account

1/ Present for Wednesday session; participated in Tuesday session via telephone conference from the Federal Reserve Bank of Chicago.

2/ Entered meeting after action to approve minutes of meeting held on November 3, 1987.

Mr. Coyne, Assistant to the Board, Board of Governors
Mr. Promisel, Senior Associate Director, Division of
International Finance, Board of Governors
Mr. Slifman, Associate Director, Division of Research
and Statistics, Board of Governors
Mr. Madigan,¹ Assistant Director, Division of Monetary
Affairs, Board of Governors
Mr. Small,¹ Economist, Division of Monetary Affairs,
Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of
Monetary Affairs, Board of Governors

Mr. Guynn, First Vice President, Federal Reserve Bank
of Atlanta

Messrs. Balbach, Beebe, Broaddus, J. Davis, T. Davis,
and Ms. Tschinkel,² Senior Vice Presidents,
Federal Reserve Banks of St. Louis, San Francisco,
Richmond, Cleveland, Kansas City, and Atlanta,
respectively

Messrs. Frydl and McNeese, Vice Presidents, Federal Reserve
Banks of New York and Boston, respectively

Mr. Guentner, Manager, Federal Reserve Bank of New York

Ms. Rosenbaum,³ Research Officer, Federal Reserve Bank of
Atlanta

1/ Attended portion of meeting on Tuesday.

2/ Attended Wednesday session only.

3/ Attended Tuesday session only.

Transcript of Federal Open Market Committee Meeting of
December 15-16, 1987

December 15, 1987--Afternoon Session

CHAIRMAN GREENSPAN. I think we are all present, with the exception of Frank Morris who, hopefully, is on his way from the airport and Si Keehn, who never was able to make it. I trust you're on the other end of the wire, Si.

MR. KEEHN. Mr. Chairman, I'm here with Karl Scheld and I hope you can hear us.

CHAIRMAN GREENSPAN. We can hear you quite well. I'd like to alter the order of the agenda and ask our Managers to report tomorrow morning rather than today and use this afternoon for the more generic discussions. I hope and I trust that Messrs. Kohn, Sternlight, and Lindsey are prepared. Is that okay? Without objection, I will request a motion to approve the minutes of the November 3rd meeting.

VICE CHAIRMAN CORRIGAN. So moved.

SPEAKER(?). Second.

CHAIRMAN GREENSPAN. No objection. The first topic of discussion, item number 4 on the agenda, is a discussion of borrowings and the federal funds rate as guides to open market operations. Mr. Kohn.

MR. KOHN. Thank you, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Mr. Sternlight, would you like to add anything to that?

MR. STERNLIGHT. I have very little to add to either what was in the memorandum or what Don has just outlined. Maybe the one point is that, as Don just mentioned in his comments, the market is fairly well aware of this current emphasis on the funds rate in the implementation of policy, with greater weight placed on day-to-day funds rates. From comments that I hear, the market seems to be fairly understanding of it. Some of the people I regard as more thoughtful observers in the market would be troubled, I think, if they thought there was a long-term reversion to something that could be called "pegging of the funds rate." That's exaggerated, but I think that's what it would tend to become to be known as. That carries with it the baggage of a past association with periods of what many regarded as inadequate policy responses in times of excessive money growth. I don't think that argues that one has to go back immediately to what was being done--particularly since in the very near term, we will have all the uncertainties associated with the year-end period--but it is something to keep in mind as we look a little further at it.

CHAIRMAN GREENSPAN. Are there any questions for either Mr. Kohn or Mr. Sternlight?

MR. HOSKINS. In your opinion, if we were to make a change, is the tenor in the market a lot different now than it was, say, right after October 19th?

MR. STERNLIGHT. Well, I think the market has calmed down considerably from the extremely turbulent and nervous state of late October. I would hesitate to say it's totally back to normal. I think there is still some background nervousness and we are getting into a period when there's a lot of uncertainty anyway, just because of the possibility of pressures associated with the year-end.

MR. PARRY. Well, that has been true in certain markets but in terms of demand for borrowing, things are still very different from the pre-October 19th period. In fact, it looks as though that difference now may be as great as it ever has been. Isn't that correct?

MR. JOHNSON. Yes, I agree with Bob on that. Borrowings actually have declined under the same spread, or even a wider spread for a while.

MR. STERNLIGHT. Borrowing has been very light, and we have scratched our heads about what the reasons for that might be. We do hear some comments to the effect that some banks are saving their recourse to the discount window, perhaps anticipating pressures around year-end. There may be some who just want to take extra pains to avoid the window because they are concerned that their own credit ratings could be coming under some review, and they just don't want to subject themselves to any additional attention that might come from using the window. Seasonal borrowing is just about at its low point. I know it doesn't stand up all that well in the correlations, but I still think that some--

MR. JOHNSON. Just a technical question: Based on the research, which has a larger variance in normal times--borrowed reserves or the funds rate?

MR. KOHN. Do you mean under which circumstance would the funds rate vary more?

MR. JOHNSON. Well, assuming that we're targeting borrowed reserves, is there more noise around borrowed reserves or the funds rate?

MR. KOHN. It's hard to compare them; one is dollars and one is basis points.

MR. JOHNSON. I know that, but I mean in terms of the percentage variation or standard error.

MR. STERNLIGHT. You can get a good deal of variation even when you're following a borrowings target more closely, just because one incident can bring banks in for some special reason and you have to make allowance for that. Even on a borrowings target, I have often had to report to the Committee that borrowing was considerably higher for this or that particular reason. But--

CHAIRMAN GREENSPAN. I'm not even sure that you could get an answer without adjusting for the fact that there is not a unitary elasticity between the change in the funds rate on the one hand and the change in borrowings on the other. I think it is mainly the case that a percentage change in borrowings would be a lot larger unless you normalize it to the--

MR. JOHNSON. I'm trying to think of some way to normalize it and I can't; I'm thinking apples and oranges but I'm just simply--

CHAIRMAN GREENSPAN. I think the answer is self-evident, if you think about it. It is feasible to peg the funds rate, but there is no possibility of pegging borrowing.

MR. JOHNSON. If we are trying to hit a borrowings target, I'm just asking whether we get as much variation around that target as we get around the funds rate that results out of that borrowings target. I don't know whether there is any information there, but I still think it might be interesting to know.

MR. KOHN. Okay. The standard deviation of borrowings around the path assumption from early 1984 through mid-1987 has been about \$170 million; excluding the year-end periods, it has been about \$160 million. The root mean square error of the funds rate around what the Desk thought it ought to be was about 20 basis points over that same period.

CHAIRMAN GREENSPAN. Unless you have [unintelligible] to answer that question.

MR. JOHNSON. I don't know how you compare the two, but it sounds like similar magnitudes of variations.

MR. ANGELL. [You could] use coefficients of variation, but it would seem to be smaller for the funds rate.

MR. JOHNSON. The funds rate? I guess what I'm saying is that if you could hit your borrowings exactly, it's really a loose way of targeting the funds rate. There's only a certain band in which the funds rate is going to vary under a borrowings target. And I guess the question is: Can you pursue the same goals by a lot of adjustments in the funds rate versus a few adjustments in the borrowings target?

MR. BOEHNE. You can, although pegging--or whatever word one uses--the funds rate is much more addictive than the borrowing because there is much less--

MR. JOHNSON. Well, the political risks are fairly--

MR. BOEHNE. But even in the decision-making process of the Committee, there is much less emotional attachment to a given borrowing level than there is to the funds rate, so it gives you a little more flexibility in the process. You're right, theoretically, that you can do it either way. But the way the decisions are made and carried out and perceived, you end up with more flexibility to change policy through this borrowing procedure than through the funds rate--not in theory but in practice.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. Don, there was one thing that surprised me. It seemed to me that after the first few weeks following October 19th banks would have had some excess reserves which they could carry over to the next period. But with \$150 million to \$250 million, I would presume that quite a few banks were running very heavy excess reserves and that the carry-over period for those excess reserves is lapsing, so that it's a financial cost. Is that true?

MR. KOHN. I think that was true in only one reserve period--right after the reserve period in late October and early November--when there were more excess reserves than could be carried into the new period. Since then, we have not observed that. Excess reserves have varied over a wide range, but on average--mostly because of the carry-ins and carry-outs--they have not really differed substantially from what we might have expected over time. But we can't see a real effect on excess reserves, and I don't think we see banks losing.

MR. ANGELL. So behavior will not necessarily be modified from these very low levels of adjustment plus seasonal borrowings then.

MR. KOHN. Of course, we have tried to estimate the excess reserves that banks want to hold and have built that into the path or made allowance for it in putting out nonborrowed reserves. So, in some sense, we are trying to compensate for this phenomenon that you are trying to identify. But the excess reserve behavior has not been unusual even though the borrowing behavior has.

MR. ANGELL. Okay.

MR. HELLER. Well, I found it a very interesting paper and helpful to have the options in front of us, some of which we haven't discussed for the last year, at least. The current period clearly is a very important period as we are coming off pegging the funds rate. It is the same sort of thing as taking off wage-price controls. You have to ask: Where do we go from here? I was wondering why you didn't give consideration to a broader array of options such as targeting total reserves, or targeting nonborrowed reserves, or other techniques that have been used in the past. Maybe you did and you rejected them. In particular, I'm wondering about this because during the last three quarters of the year--I think at virtually every FOMC meeting--we have had projections for increased reserve growth and we have had projections for increased M1 growth and in virtually all of those cases the projections haven't come true. So, maybe there is something in our operating technique that doesn't get us where we want to go. I was wondering whether the other techniques might be more suitable to get us to the targets that we actually want to reach. Obviously, a lot of people here have been through the periods when targeting total reserves or nonborrowed reserves was the technique and, being new to the game, I was wondering why you rejected them.

MR. KOHN. A decision to go to nonborrowed or total reserve targeting presupposes the decision to target the aggregates very closely and to accept very wide swings in interest rates, as we had from 1979 to 1982, as a result of allowing overshoots or undershoots in required reserves to be absorbed in the borrowing to keep on a nonborrowed reserve objective. We didn't have a sense that that's

what the Committee wanted to do; that was our presumption in writing the paper. Perhaps that can be discussed in item number 6 on the agenda. In discussing that item, if the Committee decided it wanted to target monetary aggregates very closely, we could come up with that kind of alternative. But an alternative of nonborrowed or total reserve targeting presupposes that you really want to hit the aggregates and you're willing to accept very wide swings in interest rates.

MR. JOHNSON. It assumes you know a lot about money demand.

MR. KOHN. Yes.

MR. HELLER. Not necessarily. You can also argue that your general path for nonborrowed reserves might be 5 percent, say, but you would be willing to tolerate quite a bit of variation to mitigate interest rates swings that would be implied in following it week by week right down to the "T." One probably can make compromises along that line, too, but it brings in the broader issue of the Humphrey-Hawkins testimony and setting targets. Why do we go through the motions if it isn't something that we take seriously?

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. On the question that Governor Johnson raised before, it does follow that if you use borrowings as the operational target, you will see more variability in the funds rate than you would see, obviously, if you target the funds rate. But from my perspective, that's a desirable result for two reasons. One reason is that the short-run variability in the funds rate often has very valuable informational content. It may be telling you something that you don't know or can't find out if you literally have the funds rate pegged. The second reason I think it's desirable is something of an extension of Ed Boehne's point: not only does pegging the federal funds rate tend to result in people being more inhibited about moving it than they perhaps otherwise would be, but neither borrowings nor the funds rate is what we are ultimately concerned with. What we are ultimately concerned with is the economy. The experience of the 1970s--a period that was much more tranquil in many respects than the 1980s--leaves me at least with a very bitter taste in my mouth, because the implication of an approach to policy that seeks to peg interest rates is that, in fact, we can do that with great precision. But we end up with an economic result that is far, far removed from what we are after.

MR. JOHNSON. No, my view would be that you'd only want to do that if you had the flexibility to adjust it very often in a way that met your larger goals. I think the problem before was that the interest rate got so politicized that the Federal Reserve didn't really feel it had a political--

VICE CHAIRMAN CORRIGAN. Well, I think it's more than being politicized. First of all, as I said, I think there is an inhibition to changing the federal funds rate, quite apart from the political side of it, but there shouldn't be. And Peter touched on this: once the market knows that that's what you are doing that's what the federal funds rate is going to be. It simply loses--

MR. JOHNSON. But I think that's true of the funds rate under the borrowing target. Once the market knows the borrowing target, the funds rate is going to move in a narrow range. It's only when you miss that borrowing target that you get a lot of variation in the funds rate.

VICE CHAIRMAN CORRIGAN. Well--

MR. JOHNSON. If you set a borrowing target, your ability to hit it depends on how good your estimates of other reserves are; if your other reserve estimates are off, then you're going to get a lot of variation in the funds rate, which is going to affect your borrowing and throw your borrowing off.

MR. ANGELL. But that reserve estimate being off can have information in it.

VICE CHAIRMAN CORRIGAN. It can be off for a lot of reasons.

MR. JOHNSON. Well, that's right, it can be off. One of the vulnerabilities to targeting borrowed reserves is that you have to estimate so many things in order to decide what your open market operation should be for the day. So you use the funds rate as information that your reserve estimates may be a little off.

MR. HELLER. But, the other way around would work, too. I'm not arguing for it, but if you fix the fed funds rate and then you see the borrowing fluctuating, that also gives you information.

MR. JOHNSON. Yes, you can do it either way.

VICE CHAIRMAN CORRIGAN. I don't think so.

MR. ANGELL. Mr. Chairman, Vice Chairman Corrigan expressed it just exactly the way I would. If there is, as I sense, a desire to return to a borrowing target, then it seems to me that the question is: How do we best get away from this situation in which the market is in danger of interpreting our actions as pegging the fed funds rate?

CHAIRMAN GREENSPAN. It's not "in danger of". They are making that judgment. Now the real danger is--

MR. ANGELL. Of course they are.

CHAIRMAN GREENSPAN. --how do you get off of it without creating--

MR. ANGELL. Having them think that means that getting off of it is somewhat problematic because, in the period following this meeting, if we begin to read things differently they may assume that we have made a policy change when we don't think we have made a policy change.

CHAIRMAN GREENSPAN. That's always the case.

MR. JOHNSON. Well, to even consider getting back to targeting borrowing, which I think is just as good an approach as targeting the funds rate, you have to have a predictable relationship

between borrowings and the funds rate. You don't have that now. You can't take any given spread right now and predict the level of borrowing that is going to result.

MR. ANGELL. It seems to me it has been very predictable; borrowings have been very close to a \$200 - \$250 million range and in these weeks we have had a federal funds rate very close to 6-3/4 percent. So, it seems to me, it is somewhat predictable.

MR. JOHNSON. Well, let's ask the experts.

CHAIRMAN GREENSPAN. Not from the context of the past.

MR. JOHNSON. Not from what I've seen.

MR. STERNLIGHT. These last few weeks borrowing has diverged from what we would have predicted based on experience, looking back a few quarters.

MR. PARRY. Borrowing would have been \$400 million.

CHAIRMAN GREENSPAN. Tom Melzer.

MR. MELZER. Don or Peter, the question I want to ask is this: Other than the experience in the marketplace, do we have any evidence of a shift in the borrowings function? I think we have to look at that. The reason I'm asking is that in the most recent reserve period we missed by roughly \$80 million, I believe. Isn't \$220 million where borrowings came in?

MR. KOHN. Right, relative to the \$300 million [in the path].

MR. MELZER. Okay. If we had forced the target at \$300 million, that would have meant only \$1 billion to \$1-1/2 billion in borrowings on the last Wednesday; I don't know that that would have produced disastrous results, being the end of a two-week statement period. Even if we had forced that level of borrowings on a Wednesday and had had that measure of volatility, generally over that period the equilibrium funds rate might still have been perceived to be 6-3/4 to 6-7/8 percent. My question about evidence stems from this: I asked our discount officer whether he had seen anything unexpected in our District, and he hadn't in terms of unwillingness to borrow. But the issue came up, I guess, at a recent meeting of the discount officers that you might have attended. They have seen a shift in the borrowings function, but it's not really associated with October 19th in particular; it has been going on for a much longer period of time. So, we are talking about an operating procedure here that was based on the response to October 19th, and I don't think the shift we are looking at was necessarily associated with that. I should give Don a chance to respond, but I have one final comment. If we were to go back [to a borrowing target], I think year-end would be an ideal time to go back because there will be seasonal pressures, as there often are at the end of a quarter. In fact, if we didn't, and we stabilized the funds rate through the year-end, we might encounter some serious technical problems in getting those reserves back out.

MR. KOHN. Let me address this question of the shift in the borrowing function. As I heard the reports from that discount

officers' meeting, they were discussing a kind of trend since passage of the Monetary Control Act in the way they have been administering the window over a period of time, rather than anything that had happened very recently. When our staff came back from that meeting we ran some equations trying to detect that trend and it was difficult to find. We also responded to their concerns and what we heard by trying to reinforce in their minds that there has been no change in Regulation A and that any tightening up on the supply side was inappropriate. This is a theme that we play constantly from this end. I think the most recent shift has been very large, as Governor Johnson said, relative to the \$400 million to \$450 million we might have expected. That really seems to have occurred very recently. I don't know if I can pinpoint October 19th, but I don't think it is related to anything that the discount officers were discussing at their meeting.

In terms of what we hear or see in the data, Peter has heard anecdotally from at least one large institution and they in turn thought they knew of other large institutions that were staying out of the market and saving up their chips for year-end. Secondly, in the data, we do see that the lack of borrowing is very much at the large institutions with deposits over \$3 billion. At small- and medium-sized institutions, regional institutions, the borrowing may have dropped a little but not nearly so much as you might expect, given what seems to have happened with the large institutions. That led me to think that it's not just the stock market decline, but the whole atmosphere around banks--uncertainties about their credit, quality of assets, and other such things--that has been making them be very, very careful. It's not related necessarily to the stock market; that just came in on top of a situation that was already bad.

MR. BOYKIN. That's also what we hear.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I was just thinking that it certainly would be very desirable to get back to where we were, with the emphasis on borrowing, but it seems to me that as long as we have the demand for borrowings along its current track that will be extremely difficult to do. With the relationship between the discount rate and market rates at its present level, we are so close to frictional levels, your alternative (4) probably ought to be deferred until we see something that would be more of a traditional relationship in terms of demand for borrowing.

VICE CHAIRMAN CORRIGAN. Higher interest rates.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I think there are two key questions here that we need to consider. One is whether or not the funds rate gives us the right signals if we target borrowed reserves, which has been addressed by the staff. The other is whether or not it's really easier--from a political standpoint, or to follow up on Jerry Corrigan's point, because of inertia--to [make a policy] move under the borrowed reserve procedure. Generally, the federal funds rate probably does move in the right direction to give the correct signal when we are using a borrowed reserve target. But there are times when

it doesn't. For example, in 1984, around the time of the Continental Illinois Bank crisis, Chuck Partee had to reassure the markets through an article in The New York Times that we were targeting borrowed reserves and that the rise in the federal funds rate did stem from banks' unwillingness to borrow--that it really didn't have anything to do with a tightening of policy at that particular time. Also, right before the market crash on the 19th, I think there was a perception in the market that we probably would tighten at a time when we really didn't want that to happen. In general, a borrowing target probably works [to give the right signal] but it doesn't always work that way.

There's a lot to Jerry's argument that there is inertia when operating under a federal funds target; the Committee, just because it doesn't know where the funds rate ought to go, is less apt to move. There is also some substance, I think, to the political argument that it gives us a certain degree of protection if we can say we really don't control the federal funds rate, we control borrowed reserves. At least at one time I think that did alleviate some of the concerns of Congress and gave us some protection. I'm not sure that's the case much anymore, except maybe in the case of some Congressmen. The market seems to look through this and be reasonably certain that we have in mind a certain level or range for the federal funds rate. Moreover, if the borrowing really doesn't change and the federal funds rate does change, they tend to think that's really what we want. So, I would be inclined to do something like alternative (3), which is to go back to borrowed reserve targeting but pay a little more attention to the federal funds rate when it is not behaving in the way we think it ought to, and deal with it on an ad hoc basis. But my real hope is that we can do what Bob Heller suggested--if we can ever get the aggregates behaving more normally--and that is, make some institutional changes and move toward a nonborrowed reserve target, which would have certain desirable automatic features that would enable us to ease or tighten without having to take discretionary actions. I would hope that at some point we can move in that direction because now what the market gets is largely demand-determined and I think there ought to be a larger element of supply-determined in there than we have now because of the misbehavior of the aggregates.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I'd like to think of this in two stages. One is what I think is useful in normal or typical times, if there are such things. In those times, I'm perfectly willing to support an approach that emphasizes a borrowings target, even though I have learned that because we don't have nice stable relationships, we cannot predict exactly what a certain level of borrowings will produce in the way of fed funds rates. But there are times when conditions are more unusual and abnormal, and I personally believe we are still in one of those modes at the moment. And in times like these, I think that we ought to pay a lot more attention to fed funds because the markets are very, very nervous and skittish--not as much as they were October 20th through October 26th or 28th or whatever, but I don't think it's back to normal. I would hate to see us give the message inadvertently that we were tightening or engineering a major policy change because fed funds rates shot up at the end of the year when we really didn't want to give that message. I don't think that everybody out there in the real economy and in the markets is that comfortable with what's going

on. Therefore, I would just urge us in the next few weeks to be triply sensitive, even though in two months or so we may go back to what we were doing prior to October 19th, emphasizing the borrowing targets. But I personally wouldn't feel comfortable with going back to business as usual starting tomorrow.

MR. ANGELL. If banks are saving up to have free access to the window, would they be most likely to choose the two-week period ending the 30th or would they choose that [next] four-day period?

MR. STERNLIGHT. The particular comment that I heard related to just that four-day period beginning the 31st.

MR. ANGELL. So, if that's the case, then you might expect a very large jump in borrowing--

MR. STERNLIGHT. That could be.

MR. ANGELL. That might also mean that borrowing could be at lower numbers during the period that begins the day after tomorrow.

MR. STERNLIGHT. Yes.

MR. PARRY. I think it's important to know that banks have been very poor at making estimates of what their demands would be at the end of the year. Typically, it has been almost a perfect, opposite indicator of what the demands were going to be. Last year there was a large demand that some people said was associated with the new tax legislation. To assume that that's going to carry on into 1987, I think requires some--

MR. ANGELL. But, Bob, people in the marketplace are making that assumption and have been positioning themselves for over a month.

MR. PARRY. Well, the mere fact that they are positioning themselves, for example, in the CD market to go out beyond year-end probably--

MR. ANGELL. That's right.

MR. PARRY. It probably indicates that you won't get the borrowing at the end of the year. That's what I'm saying.

MR. JOHNSON. That's right.

MR. STERN. But if you do, it should not come as any big surprise. This is certainly one of the most well advertised potential events in a long time.

MR. ANGELL. Then, the fed funds rate would tend to drop rather dramatically in that period.

MR. JOHNSON. I agree with that. That's why I'm saying that, with all these instabilities, we probably need to continue to focus on the funds rate for a while until we feel more satisfied that we are back to normal. I favor going back to a borrowed reserve target when we feel more confident about the relationship between the funds rate and the discount rate spread and borrowings. But I just don't see any

evidence that we are there, and it certainly seems to me that we are not going to get any closer to it between now and the end of the year.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I think a useful way to look at this question of whether you want to go back is, as Martha pointed out, to look at where you want to get to. There probably is general agreement, and I share that view, that we ought to get back to a borrowing objective. It's a question of when and how. My sense is that the longer we wait, the more difficult it's going to be. It may be a long time before we get back to normal times. While there clearly are still unusual pressures, I think the longer we wait the more difficult it will be to get back. And we have more at stake here than just the technical side of how we operate. Clearly, there are technical difficulties because it's hard to measure the demand and the relationships. But beyond that, there is this credibility issue in the marketplace; and my sense is that the longer we stay with this procedure, the more the credibility issue is going to come to the fore. Also, I think it's just good to have some specific kinds of goals, internally. So, I think we ought to begin the shift back and do something along the lines of alternative (3), which still gives a fair amount of emphasis to the funds rate but sets us on a path back toward where we want to be. That is where I come out on this for now.

CHAIRMAN GREENSPAN. I think that's right. In fact, I think we're already beginning to see the problem emerge. I have been rather struck that in the last two or three days the funds rate all of a sudden has been locked.

MR. ANGELL. That's right.

CHAIRMAN GREENSPAN. It hasn't budged at all.

MR. ANGELL. It's the 1970s all over again.

CHAIRMAN GREENSPAN. It's an extraordinary thing to watch the screen and see high: 6-3/4 percent; low: 6-3/4 percent; last: 6-3/4 percent. I know that the markets are not functioning. I think the more interesting question is the one that Ed Boehne has raised-- namely, that the longer you wait to effect the transition back to something else, invariably, the greater the jolt. What we have to think about is not only the question of do we, as I suspect everyone does, want to get off this procedure at some point, but also we have to figure out how we do it. If we have this very large "add factor" in our equations between the funds rate on the one hand and borrowing requirements on the other, the implication of shifting back before things have returned to normal is that we know what the phase-down of that add factor is going to be--unless Tom Melzer is right that this is really just a long-term trend and it's never going to go back. But, right at the moment, if we were to shift and not have the cover of the year-end period, the actual transition mechanism would have to be very subtle. And the longer we wait, the greater the length of the transition. I guess I come down pretty much where Governor Johnson does. I get the impression that we are not there yet; in other words, I think abnormal yield spreads are still there and skittishness is still there. But, frankly, I think we are now getting to the point where whatever benefits we are getting out of this funds rate

procedure are rapidly falling relative to the benefits of the stability it's creating. I think it has been very effective; it has created a great deal of stability in the market. But, very shortly, it's going to start to become counterproductive. The only question is when.

MR. JOHNSON. What would you try to do as a first step? Would you try to take current borrowings and the result from the current funds rate-discount rate spread and try to target that unless something really changes dramatically? Or what?

MR. KOHN. Well, I think that's where I'd start. It depends on the Committee's decision tomorrow. Suppose, for the sake of argument, that the Committee wanted to maintain something like current reserve conditions. I don't know what the outcome of this current two-week period will be, but I'd be tempted to write down something on the order of \$250 million of borrowings, or maybe a little lower--perhaps \$225 or \$200 million--and then be alert to see how things were coming in. That's very low, and I would expect it to be higher after the new year. I think you're right, Governor Johnson, that there's a lot of uncertainty; but I also think that we can interpret incoming information and adjust the borrowing objective if it looks like we are wrong. Now, there's a very fine line between that and [focusing on the] federal funds rate.

MR. JOHNSON. I guess I'd worry that what Bob Parry is saying is right--that everybody has gone to the CD market to lock up their funds and that all of a sudden, if there is no willingness whatsoever to borrow toward the year-end, we could get extreme funds rate pressures out of that scenario.

MR. PARRY. One of the interesting things, of course, is that 30-day CD rates are about 25 basis points higher than the 90-day rates.

MR. KOHN. Definitely.

MR. JOHNSON. Yes, that's right.

MR. BLACK. Unless the uncertainty is completely behind us, I think if we were to try to go in that direction, we'd have to make a public announcement that we thought enough of the uncertainty was behind us that we were going back to a borrowed reserve target. We should do that so the swings in the federal funds rate that would probably result would not be misinterpreted.

MR. PARRY. Don't you think the market will figure that out pretty quickly?

MR. BLACK. Yes, pretty quickly; but the first two or three days they would read all sorts of changes in policy into that, I would think.

MR. ANGELL. Well, this market is going to get just as fragile as we cause it to be; and the longer we cause it to believe that the fed funds rate is 6-3/4 percent, the more fragile it's going to be about getting away from there. It seems to me that we [unintelligible] variance in the fed funds rate and yet have a 50

basis point limit on it if we want. If we would like to have a 50 basis point limit on it this week, and we want it to be in a range of 6-1/2 to 7 percent, then we could do that. But at least we would get the market used to some variation. Then when we get to the first of the year the transition is not going to be nearly so abrupt.

MR. MELZER. I think you can use the cover of year-end, as I alluded to before. I think it would be a mistake to start right after the FOMC meeting; that's how you would get the misinterpretation that Bob's afraid of.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. I agree that the longer we wait, the more difficult it is. I agree with going to alternative (3), which I would interpret as a gradual move back, but certainly one with enough latitude to back off if we're not getting the right reaction. With respect to how to do it, I don't know that we can be this precise--and maybe this is an oversimplification--but I would say go for alternative (3) but postpone it until after year-end. I would stay where we are for the next couple of weeks, or certainly through the year-end, and then start the gradual move. At that point, there would be enough flexibility that we could back off if we're not getting the reactions in the market that we're anticipating.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Thank you, Mr. Chairman. As to the fundamental question of whether to stay with the federal funds rate or go to a nonborrowed or a borrowed reserve target, I think I would be one of only three or four here who sat around this table when we targeted federal funds back in the 1970s. And I can tell you that our experience was not very good, as everybody knows. There was a lot of tugging and pulling to go an eighth of a point on the federal funds rate. As a matter of fact, we even got to the point of setting a zone of indifference where the federal funds could move a quarter of a point between two established points. And the fact is that the information that came from that procedure was well behind the facts and got us into trouble, in my view. I think we have to move back to a procedure of targeting nonborrowed reserves. Also, I would join Tom Melzer in his proposal to do it, first of all, as quickly as possible, and secondly, under the umbrella of uncertainty that surrounds the year-end. I would opt for alternative (3) in the sense that we shouldn't totally ignore the federal funds rate over this next three-to four-week period. But I think the focus should be on the borrowing level and--

CHAIRMAN GREENSPAN. Well, you said nonborrowed reserves. Did you mean that?

MR. GUFFEY. No, no, I beg your pardon, I didn't. I should not have said that; I meant a borrowing target. And I'd do it under the umbrella, or the smokescreen, of the year-end uncertainty.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. It seems to me that nobody in the marketplace would expect the Federal Reserve literally to seek to

target the federal funds rate on an hour-by-hour basis over this year-end period. I think that would be a terrible mistake. I felt that we did too much even last year, in terms of the situation. So I would associate myself very strongly with Tom Melzer's suggestion that, given that people expect some movement in this period, we should take advantage of it. As I've mentioned to you before, it seems to me that one way or another we are probably going to have to remind people, no matter what we do with policy, that we are coming into a period in which we could see rather extraordinary amounts of churning and volatility in the money market. I don't think we should ever get ourselves to the point where we literally are going to run policy so as to avoid that kind of working of the marketplace, which I consider healthy.

CHAIRMAN GREENSPAN. I don't sense any desire around this table for that.

VICE CHAIRMAN CORRIGAN. Well, if you say you're going to continue literally day-in and day-out to target the federal funds rate over the next three weeks that's what you're saying.

CHAIRMAN GREENSPAN. Well, I don't know if we physically do that.

VICE CHAIRMAN CORRIGAN. Well, my point is--

MR. STERN. Pumping a lot of reserves in there.

MR. JOHNSON. We don't really know. We could see the funds rate collapse at year-end just as easily as we could see it soar.

MR. ANGELL. That's right.

VICE CHAIRMAN CORRIGAN. It doesn't seem to me that we would want to overreact in those circumstances either. There is at least a 50/50 chance that at some point over this interval, one way or the other, a very large aberration will set in. I don't know which side it will be on, but regardless, I don't think that the operating policy of the Federal Reserve should be to try to offset it literally dollar-for-dollar. But if we say that the funds rate is going to be at 6-3/4 percent, period, that's what we are saying, in effect.

MR. ANGELL. Today is the next to the last day of a two-week reserve maintenance period, and the fed funds rate is locked on 6-3/4 percent. If it locks on 6-3/4 percent through tomorrow, I think we would have told everyone that's where we are.

MS. SEGER. What if it comes in at 9-1/8 percent?

MR. ANGELL. It comes in at 9-1/8 percent.

CHAIRMAN GREENSPAN. Everyone will say it's the last day.

MR. ANGELL. People then say, well, it's the last day.

MS. SEGER. Yes, but having something like that in the context of having had flat reserves since April, a declining M1 in

December, and missing our M2 targets--. I think you have to look at it as the whole ball and not just--

CHAIRMAN GREENSPAN. Yes, but suppose it comes in at 2 percent; substitute 2 percent for 9 percent--

MS. SEGER. Yes.

MR. ANGELL. If you don't want to go to 9 percent, then put a ceiling of 7-1/2 percent on it; or put a floor if you want to. I just want to have more variance than we have been getting.

MR. GUFFEY. That would be the zone of indifference.

MR. ANGELL. That's alternative number (3) as a transition back to where we want to be.

MR. JOHNSON. It seems to me that we are arguing about pretty trivial issues. If you take a borrowing target and the possible variations of the funds rate around that--I don't know, maybe Don can help me--except in very extreme circumstances, where we grossly miss reserve estimates or something, there can't be much variation of the funds rate around that borrowing target.

MR. KOHN. 20 basis points is what we--

MR. JOHNSON. Yes. Don has quoted you the standard error: 20 basis points.

CHAIRMAN GREENSPAN. There are some possibilities in it.

MR. JOHNSON. Yes, but I'm just saying we're talking about angels on the head of a pin here.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, as Governor Angell was talking about the federal funds rate being what the market thought we wanted it to be, I remembered a day back in the early 1960s, which was before Peter Sternlight was Manager, when the open market wire said, in effect, that the federal funds rate was hanging at around 2-7/8 percent, or whatever it was at the time, out of respect for what the market thinks the Federal Reserve System's intentions are. That has always stuck in my mind and I think there is some of that right now.

MR. ANGELL. Well, of course. It is because people out there are saying, "My goodness, 6-3/4 percent is the rate. I guess maybe I'll sell funds. I'm not going to sell for less than that if that's what the rate is."

MR. BLACK. And I'm not going to get more.

MR. ANGELL. I'm not going to get more.

CHAIRMAN GREENSPAN. Si Keehn, do you have any thoughts on this issue?

MR. KEEHN. Mr. Chairman, I think I hear a consensus for moving away from what we are currently doing and in the direction of alternative (3), and I certainly would favor that; but in my mind, it's really a question of timing. I'm a little uncertain as to how the rest of the year is going to play out and what kind of pressures will be emerging. Rather than using the year-end as a blind, if you will, to accomplish a change, I'd favor going through that period, and then as soon thereafter as possible, begin to implement the change.

CHAIRMAN GREENSPAN. Well, I think that was one of the recommendations--is that right? Yes, that after the first of the year, coming off the instability of year-end, is an ideal time to phase in, if we're going to do that.

MR. KEEHN. I'd be in favor of that--in other words, alternative (1). Or more precisely, I guess, I favor alternative (1) for now, but moving to (3) as rapidly as we can after the turn of the year.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. It seems to me that we are struggling with the issue of trying to tell the markets where we are. Perhaps one way to do it--and I think Jerry has already referred to it--is simply to indicate that we are returning to an operating procedure that is more normal. There are a couple of reasons for doing that. We are trying not to give a miscue with respect to two things, it seems to me: first, whether or not we have tightened or eased policy; and secondly, whether or not we have moved to a different kind of interest rate policy. Because we don't want misconceptions out there about those two issues, it seems to me we're better off providing more information rather than less. Now, Peter did that before by protesting--by coming in early--and the market caught on very quickly. I'm not sure he can do that in reverse. So, I guess to some extent I would support Jerry. I'm not sure I caught the gist of his comments correctly, but [unintelligible].

CHAIRMAN GREENSPAN. Any further questions or issues that any one wants to discuss on this question? If not, why don't we move on to item 5 on the agenda, the definition of the borrowing objective and the appropriate discussion. Mr. Lindsey.

MS. SEGER. What was the decision on the first?

CHAIRMAN GREENSPAN. None.

MS. SEGER. I just wanted to make sure I understood what we decided.

CHAIRMAN GREENSPAN. Well, the point is that there is no need to make a decision on this. Essentially, that will be part of our decision tomorrow.

MS. SEGER. Okay.

MR. LINDSEY. [No transcript record exists of Mr. Lindsey's remarks, in which he summarized a memorandum (circulated to the FOMC

on October 29, 1987) that he co-authored with Mr. Gillum. See appendix for the memorandum and a covering note from Mr. Kohn.]

CHAIRMAN GREENSPAN. Mr. Sternlight, would you like to add anything?

MR. STERNLIGHT. I don't think so.

MR. JOHNSON. I understand what you said, but the only question I have is: If there is a seasonal component to seasonal borrowing of any sort, why have it in there? If it has no effect whatsoever on the variation, what is the point of having it in there unless it's just more confusing or more complicated at this stage to pull it out?

MR. LINDSEY. Don, do you--

MR. KOHN. Well, I think there is a certain amount of inertia.

SPEAKER(?). Well, it's a certain amount in a series.

MR. KOHN. Dave commented on the original reason it was in there: It was felt that seasonal borrowing behaved a lot like adjustment borrowing in that it was sensitive to interest rates. If you have more seasonal borrowing, other things equal, then you're going to have a little more pressure in the funds market. [Unintelligible] seemed to be just as good. So, given that you had something else that was also related to the funds-rate/discount-rate spread, why not include it in the target variable? Right now--

MR. JOHNSON. To me, that implies that you have decided that there is more of that [interest-sensitive] component to it than there is seasonal.

MR. KOHN. Yes.

MR. JOHNSON. If there is more of a seasonal nature to seasonal borrowing, it seems to me that you'd want to leave it out just because it's seasonal.

MR. KOHN. Yes, well--

MR. JOHNSON. There's a large seasonal component and whether it has any effect on the--

MR. LINDSEY. Given the results, my view would be that the [borrowing] relationships have been just as close under the current procedure as they would have been taking it out completely. It seems to me that there is a presumption on the part of those who would advocate taking it out that the [statistical] results actually suggested it would improve things to take it out. Since the results don't show that, I think the inertia you referred to--having to do with the market misunderstanding, that they've gotten used to what we're doing, and so on--would argue for just standing pat.

MR. JOHNSON. Okay, I buy it. I think a good argument for not taking it out is that it might be confusing to Fed watchers who

have gotten used to it being done this way. But that's the only argument I can think of for not taking it out.

MR. KOHN. Obviously, it could be done easily; but if it were out, our reserve projectors would then have an interest-sensitive factor that they would be projecting every week. It would become part of "nonborrowed reserves" the same way extended credit is. Generally, those factors affecting nonborrowed reserves aren't interest sensitive; they are market factors. Now, we would be putting a little interest-sensitive element in there and we would still end up estimating that seasonal relationship in order to help the reserve projectors make the right projections. So, I'm not sure how much you'd gain. Perhaps that's why there is no improvement on reserve things.

MR. JOHNSON. Another vote for funds rate targeting!

MR. HELLER. Well, in view of the fact that we are funds rate targeting anyhow, we can't possibly confuse the market by changing our procedure right now. So I think that argument doesn't hold at the present time. David, I read the paper a long, long time ago. You said it targeted only adjustment borrowing and there was no significant difference in the fed funds rate. Now, I know it wasn't significant, but which direction was it actually moving?

MR. LINDSEY. Well, actually it moved a little in favor of the present procedure. If you look on Table B-3 of the memorandum, using the spread as the variable the equation tries to explain, the R square is a little higher-- $.75$ versus $.70$; and the standard error of estimate is a little lower-- 32 basis points using adjustment plus seasonal borrowing versus, say, 35 basis points using adjustment borrowing alone. You could argue that that only comes about because we were examining a regime that had been generated under the current procedure. You could argue that if we really had switched some years ago to using only adjustment borrowing, then there might be reason to think that result might have reversed and adjustment borrowing alone might have shown up better. But that's pretty speculative and I'm not sure it would be true. I would view these as little to choose between, really.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Are there any advantages in your mind to making it more difficult for the market to understand the significance of the borrowing levels? In other words, would there be any disadvantages to publishing a special situation borrowing number?

MR. KOHN. Only if it were known that only one or two institutions were in the discount window and, therefore, we would be telling the public what those institutions were borrowing. It is our policy not to do that.

MR. MORRIS. But how would they know there are only one or two institutions?

MR. KOHN. Well, they might know that a particular bank in New York had a wire problem or that a particular bank in Oklahoma or Texas had just come in to the window. The [unintelligible] banks

would know. If there were a lot of banks involved, it wouldn't be a problem; but if a special situation involved one bank or another, I could see a confidentiality problem.

MR. MORRIS. I see.

MR. GUFFEY. I can tell you, Frank, having had several of these special situations, that the market knows about as early as the Federal Reserve does that a bank is in for special borrowing. They do discount it, in a sense, I think.

MR. STERNLIGHT. Much of it got into extended credit.

MR. GUFFEY. Pardon me?

STERNLIGHT(?). When it gets to--

MR. GUFFEY. Before it gets to extended credit, it's fairly well known and the banks are fairly well identified. But suggesting that we would actually--

MR. MORRIS. In that case, it doesn't make any difference whether we publish it or not.

MR. KOHN. They don't know the amounts.

MR. GUFFEY. Yes, the dollars--

MR. BLACK. Well, a New York press officer does announce that there is a special situation borrowing in there without giving an exact amount.

MR. ANGELL. So-called seasonal borrowing, it seems to me, is simply adjustment borrowing without a time limit on it for those institutions that qualify. It has all the characteristics of adjustment borrowing and it's not taken unless there is an ability to utilize the funds. That is, if banks could lock up that seasonal borrowing and sell it in the fed funds market, then it would be like extended credit. So, it seems to me, it's more like adjustment borrowing, as the statistical tests suggested.

CHAIRMAN GREENSPAN. Anybody else on this subject? Governor Seger.

MS. SEGER. I just have one question as I sit here listening to comments about why bankers borrow on a seasonal basis. Do we not administer the discount window in regard to requests for seasonal borrowing in the same hardnosed manner that we do for adjustment borrowing?

MR. ANGELL. No, no.

MR. KOHN. No.

MS. SEGER. Maybe we should. That's the answer to make sure that their--

MR. MORRIS. Well, it's hardnosed in the sense that we have certain standards that they have to meet.

MR. KOHN. They have to demonstrate a seasonal swing in the difference between their loans and deposits over the previous two years. And, on that basis--

MR. BOYKIN. It's one situation where we go out once a year and advertise come on in and see if you can qualify.

MS. SEGER. I'm surprised.

MR. STERN. Well, if I recall, the origins of that were that it was precisely to try to get--

MR. ANGELL. "Get"--that's right.

MR. STERN. --to get at banks that had these seasonals and so forth. That was very much an "eyes open"--

MR. ANGELL. Just a bit of populism peeking out.

MR. BLACK. It was in the days of trying to sell membership and this was one of the--

MR. BOYKIN. Also, we don't have very many takers on seasonal.

MR. ANGELL. That's right.

MR. GUFFEY. Some of you don't.

CHAIRMAN GREENSPAN. Si Keehn, do you have any comments on this?

MR. KEEHN. No. I very much agree with Governor Angell that it has all the characteristics of adjustment borrowing, and that being the case, it's appropriate to include it. But this certainly would be an inappropriate time to be making a change.

MR. JOHNSON. One last trivial comment: I agree that this is not the time to make a change, but is it too complicated to try to separate out the adjustment versus the seasonal component of seasonal borrowing?

MR. ANGELL. How many Johnsons on the head of a pin?

MR. LINDSEY. Actually, in a sense, we have estimated seasonal factors for the seasonal borrowing. Presumably then, one would call that the seasonal component with the rest being the adjustment component. That's what we adjusted the total for in the tests I referred to earlier.

MR. JOHNSON. Oh, that's what you--

MR. LINDSEY. That, literally, is what we did. And when we did that, it didn't make a dime's worth of difference in the results

in terms of the predictability of the funds rate. So, we actually made a stab at doing that.

MR. JOHNSON. Okay.

CHAIRMAN GREENSPAN. Anything else on this subject? If not, let's move on to agenda item 6, with discussion of the monetary aggregates as long-range policy objectives in 1988. Mr. Kohn.

MR. KOHN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions of Mr. Kohn? I can't believe he was that definitive!

MR. PARRY. Don, I was trying to remember a discussion that we had last February. My recollection is that the econometric work that was done by your staff, and obviously some of the other staffs, would have supported setting targets which were somewhat lower than the ones we did set and would have indicated a distinction between M2 and M3 growth of perhaps a percentage point. And, of course, that's the way things have worked out. But, the complicating factor is that the economy has changed a bit since we were looking at it at that time. Nominal growth in the economy has been higher; probably, if we had had that nominal growth when we did the analytic work, we would have expected faster growth in the aggregates. But I don't remember what we were assuming about interest rates.

MR. KOHN. I don't think we were assuming they would rise that rapidly. My memory of the February exercise was that we said that M2 would grow within its range, but in the lower part of it.

MR. PARRY. Right. Right.

MR. KOHN. Then, in July, I think we tried to make a strong case to the Committee that at that point there was a distinct danger that even without a further increase in interest rates the aggregates could well fall short of their ranges. And if interest rates rose--which, in fact, they have--the chances were pretty good of their falling [below the ranges]. So, perhaps the point here is that the models are not perfect, but they generally catch the drift. And they are not bad in that they can explain most of the deceleration in M2 and most of the deceleration in M1. So, we have a reasonably good, though not perfect, fix on the demand side; but the problem is that in order to target an aggregate, you have to know where interest rates and income are going--particularly interest rates. And, if it requires much higher or lower interest rates at the beginning of the year than you think, then you anticipate that in order to get the income growth you desire, you're going to have much lower or higher monetary aggregates consistent with that income growth.

MR. PARRY. Well, the point I wanted to make here is that the aggregates--or at least M2, in this case--are well below their current target ranges, but I don't fault our analysis. I think our analysis was leading us down the right track, but we were in some ways reluctant to make that kind of a change in the targets--at least in February and to some extent in July--because we thought that might be telegraphing to the markets greater restrictiveness than, in fact, we were trying to accomplish. Do you agree with that to some extent?

MR. KOHN. Yes, to some extent.

MR. PARRY. Good.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. First of all, in view of all this impressive evidence, I was wondering how people used to conduct monetary policy before we had all these high-speed computers.

MR. KOHN. Targeting the federal funds rate, I think.

MR. HELLER. Right. I'm looking at your chart 18, which in a way talks about what you can call the efficiency with which you know of the various measures. Especially for the first year or two, or the first six to eight quarters after your shock, M1A seems to be so much more superior to M2 than M1.

MR. KOHN. This follows page 16 in the thick memo.

MR. HELLER. Yes. One could argue that that is a very powerful argument in favor of M1A, especially over a horizon of a year or two. I was wondering, first of all, why you don't give a lot of emphasis to that particular measure. And, second, would you address the argument that the narrow aggregates are more closely under our control and therefore particularly suited as targets, rather than as broader indicators of what is going on in the economy?

MR. KOHN. Okay. With regard first to M1A, I guess we haven't given it more emphasis because we really didn't trust the results. This is derived from results over the 1970s into the very early 1980s and is specific to the model; that is the period over which the model is fit. Over that period, we find that the income elasticity of demand deposits, M1A--which was M1 for much of that period in any case--was very high relative to the interest elasticity. When we extend the models out to the last few years, we find fairly large misses in the demand deposit model. Furthermore, those misses seem to be correlated with interest rates--that is, we had much more growth in demand deposits in 1985 and 1986 than the model that generated this chart would have predicted. And we had much less growth in 1987 than the model that generated this chart would have said we should have. Our conclusion was that this ratio didn't represent reality in 1987--that interest elasticities were probably much higher than in the time period that went into this modeling exercise and the historic relationships it represented. That's why we didn't put more weight on it. In addition, we did look at a more complete exercise in which we ran the whole quarterly model assuming a certain path for money growth. And that helps; that puts in some of the errors in the equation that feed back into that modeling process, more so than just comparing elasticities. And that showed M1A as better than M1 or M2, but the superiority was not nearly as clear as this. So, even within the period of fit, the errors in the M1A equation are larger, and it looks like the out-of-sample errors are even larger. That's why we didn't put so much weight on it.

In terms of controllability, it seems to me that we have a tradeoff here in terms of what we can control versus what is related to income. Obviously, we can control currency and reserves very

closely, but the question is whether they have a reliable relationship to income. What we are finding is that the narrow aggregates, which I agree we can control more closely, are less well related to income. They seem to be more interest elastic than the broader aggregates, which I agree are more difficult to control. But, I do think that over a targeting period of a year, we could have hit our M2 target if we had wanted to. That is, if we had come to the middle of the year, and M2 was at the bottom or below its range and the Committee had said to Mr. Sternlight, "Operate to hit your M2 target", he could have done it. Interest rates would have been a lot lower. The whole world would have looked different, but we could have operated to control that aggregate if that's what the Committee had wanted to do, even though it doesn't fit with reserves very closely.

MR. PARRY. Are you saying that--

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Don, I think you made an excellent case for not targeting M1A or M1 for the coming year. Do you entertain any hope, as I do--although it's becoming a lingering hope, I guess--that at some point depository institutions are going to alter their pricing procedures on NOW accounts and OCDs so that they will reduce the interest elasticity of M1 and make it a better target? Or is there hope that the demand for M1 will become more stable as this adjustment process to deregulation goes further?

MR. KOHN. Yes, but I guess the honest answer is that a year ago, I had more hopes than I have now. We have had a year of additional experience with NOW account adjustments and part of what has happened is that they continue to be very sluggish. I harbored the same hope that you did a year or so ago. And, in fact, the Super NOW accounts used to adjust more rapidly; but now those accounts behave as one big lump and tend to adjust more slowly. It could get more rapid. Or if we do get into a noninflationary situation, or back into a situation in which interest rates fluctuate over a narrower range around a lower level, then you might have a situation in which these interest elasticities are less important. But if we have swings in rates of the sort we have had over the last 7 or 8 years, then I think we would have huge movements in velocity as a result. I haven't given up hope entirely, but I have to confess I'm less hopeful than I was.

MR. BLACK. I will confess to this group that, with considerable pain, I share that feeling.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. You used the wealth variable in your demand equations too, right?

CHAIRMAN GREENSPAN. In M2.

MR. KOHN. In the M2 demand equation that was used in this paper, which is not the same one that is used in the quarterly model, we used wealth only as a short-run adjustment kind of thing--that is, a big change in wealth will cause velocity to deviate for a short period of time from its long-run equilibrium. And, in fact, the

wealth variable that fit best here was one that didn't include stock market wealth. Now, in the quarterly model equation, which hasn't done as well as the one reported here, it builds up from M1 and adds the non-M1 part of M2 and then wealth comes into play more directly as the scale variable rather than income as the scale variable. But we have found the one reported here to be much more successful over the last few years.

MR. JOHNSON. What wealth variable did you use? What was the one without the stock market?

MR. KOHN. I think it was household wealth excluding land and stock market [holdings].

MR. JOHNSON. What kind of coefficient is on that?

MR. KOHN. It's a very low coefficient; it's not very significant and it's very transitory in its effect.

MR. JOHNSON. I see. But, it had--

CHAIRMAN GREENSPAN. That includes M2, then?

MR. KOHN. Yes.

CHAIRMAN GREENSPAN. And if you take the stock values out that would not be an insignificant part of the wealth variable.

MR. KOHN. You would have homes and consumer durables; I think that probably dominates the levels of the series.

CHAIRMAN GREENSPAN. But that means [unintelligible] taking the M2 out before you do the--

MR. KOHN. I'm not aware of--

MR. SMALL. We have to find that.

MR. KOHN. Excuse me, the model [expert] is here.

MR. SMALL. I believe that's right; M2 is still in that wealth variable as it exists in the model. We have tried excluding it and leaving in the stock market in some of our equations. [Unintelligible.]

I would add that that wealth variable is a little problematic, as was pointed out. It's something we would prefer not to have hanging around the edges of this equation. But, it has come in significantly [in the regressions] and until we can figure out how to handle it in a better way, in a structural sense, and figure out, for example, what is really determining money demand that isn't captured in services, food, [and other expenditures], it makes a lot of sense to leave it in and sort of--

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I have a couple of comments that I'd like your reaction to. As I understand what you're saying, one of the reasons

you're uncomfortable with the narrow aggregates is that this relatively high interest elasticity makes them, in some sense, not very good as automatic stabilizers.

MR. KOHN. That's correct.

MR. STERN. But I guess I would ask: What is the alternative? It still seems to me that these aggregates are preferable to targeting interest rates, for example, and trying to adjust interest rates if you get a positive or negative spending shock. Secondly, I agree that the body of evidence you have here doesn't demonstrate very convincing superiority of M1A or M1 relative to M2, but I think you can turn that statement around: I don't think it demonstrates the superiority of M2 versus M1 or M1A either. In fact, I view all this as somewhat of a tossup. I was a little surprised at Bob Black's negative reaction to this because I don't see any very strong reason for preferring one to the other on the basis of all we have here.

MR. KOHN. M1 does lose most of the horse races, however they are handicapped. But so far as M1A and M2 are concerned, I have to agree with you--there isn't much to choose from there. But the issue is whether the Committee wants to view this as a question of "Should we target interest rates or should we target the aggregates?" I think the exercise really [addresses the issue of] what weight we want to put on any one thing, given that we're looking at a whole array of things.

CHAIRMAN GREENSPAN. Don, if [unintelligible] implicit in both M1 and M1A is the required projection of the growth rate, which is a much larger number than in M2. Can you hear me?

MR. KOHN. Yes, of the growth rate, you said.

CHAIRMAN GREENSPAN. In other words, the trend.

MR. KOHN. Okay.

CHAIRMAN GREENSPAN. If one is dealing with a trend value of say 1 percent, or something like that, versus 0.2 or something close to 0 with M2, one should at least intuitively argue that the potential variation in any particular period in the trend value is more likely to be mis-estimated with the narrower monetary aggregates than a broader one. At least that's what history seems to suggest. I wasn't aware in the memorandum that that element was brought into the horse race evaluation.

MR. KOHN. It was indirectly, in the sense that the way the horse races were run, to the extent that the trend embodied in the equation was wrong, that would show up in the error. So we simply discussed--

CHAIRMAN GREENSPAN. Unfortunately, the problem is that you can't pick that up with the particular history you are dealing with.

MR. KOHN. I don't know that it would necessarily be the case a priori that one would have more confidence in a trend of 0 than in a trend of 1 or a trend of 1-1/2. I think in this case--

CHAIRMAN GREENSPAN. I would.

MR. KOHN. In this case, it's true because the nature of the narrow aggregates has been changing, with the addition of OCDs into M1 and the deletion of those deposits that used to be in demand deposits.

CHAIRMAN GREENSPAN. It has.

MR. KOHN. So, because of the changing character of the aggregates, I think you're right.

CHAIRMAN GREENSPAN. Well, I think what is relevant here is the time frame. If I would tell you 20 years, clearly the argument would have to be that it's more likely that the M2 trend would be more projectable than the M1A or the M1 trend. Therefore, if it's true with 20 years, then the argument really gets down to what time frame you're talking about. Well, I've always been worried about that because I was convinced that at some point or other, we would project and find out it went in the other direction. Bob Parry.

MR. PARRY. Don, when you were talking about chart 18, you made the comment that you thought the current interest elasticity on M1A was probably greater than what showed up in that statistical exercise. That's probably also true of the other aggregates as well, isn't it? My question is: What has happened to the relative elasticities of the three aggregates and do you have conclusions on that?

MR. KOHN. I think M2 is less of a concern because a lot of the [unintelligible] we are talking about are within M2.

MR. PARRY. Yes.

MR. KOHN. Surprisingly to me--and I think it's perhaps a touch of luck here--we haven't done all that badly projecting the OCD component of the M1 equation, considering that it has swung around by 10 to 20 percentage points in growth rates over the last few years. If I look at the errors in the equation, the largest ones are in the demand deposit portion of the equation.

MR. PARRY. The biggest change would be in M1A?

MR. KOHN. That would be my conclusion.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Well, I have another idea that I want to lay on the table. Would this be an appropriate time?

CHAIRMAN GREENSPAN. It depends if it's on this subject matter or not.

MR. MELZER. Well, it has to do with aggregate targets.

CHAIRMAN GREENSPAN. That's about it.

MR. MELZER. I have two comments about the environment we're dealing in. First of all, there is a lot of uncertainty about exactly

how policy is being conducted in the long run. It's not unusual, but I think this is one of those times when there are those kinds of questions in the marketplace. And the kind of discussion we are having right now is very, very healthy in terms of talking about different approaches. But, on top of the uncertainty that I perceive in the marketplace and some of the difficulties with the aggregates and with interest rate targeting that we have talked about, I'd say that we are now in a period--and I think it will be exacerbated--when there is going to be a conflict between the pressures we face domestically and the pressures we face internationally in terms of how policy is conducted. And, I think there would be no better time to have some kind of an intermediate target or guide.

What I wanted to put on the table was the idea that had been mentioned earlier of looking at a monetary base target of some sort. There is no question that we can control that, and I think it's a good indicator of the thrust of policy. I don't have any delusions about the ability to pick a specific growth rate of the base and say we therefore expect nominal GNP to do "Y". Some of the work we have done on the base and income relationships would indicate that the relationship is no worse than M2, for example. But, that's not really what I have in mind. I think it is possible to select a relatively narrow channel in terms of possible growth rates for the base that in the long run would be consistent with satisfactory economic performance and, at the same time, preserve in the short run the latitude to react to all the various types of incoming data that we react to now. In other words, this approach I'm describing would allow for discretion in the short-run conduct of policy but at the same time--assuming we were to stick with it --it would take away some of the extremes in possible policy results in either direction: that is, very simply, either too tight a monetary policy, or too easy a monetary policy.

Right now, I don't think we have a lot of confidence in the other aggregates and I don't think the marketplace pays that much attention to them. If we were to substitute some kind of a base target, first of all, I think the announcement of that would carry with it a considerable positive impact just because the market would know in general what policymakers are going to be looking at in the conduct of policy. And this channel that I have talked about would tend to eliminate uncertainty and increase credibility. I think the existence of a target like that--if I'm right about the type of environment that we are in and that we're apt to be in next year in an even more important way--could be used to diffuse domestic and international pressures, to do something in the short-run conduct of policy, particularly to influence rates. And in the long run, if pursued religiously, I think it would tend to result in more stable and more balanced economic results. So, I guess what I wanted to do was put the idea on the table. We've done some work, and I think we have to do a lot more work, but if there were any support for that kind of idea, maybe with more background work done it's something that could be discussed more thoroughly at the February meeting.

CHAIRMAN GREENSPAN. Would anyone like to comment on that?

MR. BLACK. Mr. Chairman, I share Tom's longing for something like that that we can anchor our decisions to; otherwise we have nothing but a series of ad hoc decisions that are disconnected to a

certain degree. I feel very uncomfortable with that because I don't think we're really smart enough to do it. If there is something we can hang our hats on, I sure would feel a lot better. That's why I'm so disappointed that M1 has lost some of that value that it once had. I would encourage experimentation along these lines. There has to be something out there that we can hang our hats on.

MR. JOHNSON. I'd like to comment on that.

CHAIRMAN GREENSPAN. Go ahead.

MR. JOHNSON. I think that's right. [It would be desirable] to have a sense of credibility that we could set a target and hit it consistently. But the problem is that I don't think the base velocity has done much better than the velocity of other aggregates. So, if we consistently hit a target set on the base, we certainly would have credibility in hitting the target, but would that credibility extend to economic performance? There is still the question of where to set the target, and whether or not the target is accurately set relative to what we want to achieve in terms of the desired results for the economy. And I think there is still a big problem with a base target from that point of view.

MR. MELZER. Well, just to repeat one thing I said: obviously, you would not use it in the short run to operate policy. But I think you probably could pick a band of something like 2 percentage points or so -- just looking at data for the 1980s, for example--that you could argue would give you plenty of latitude in either direction to get satisfactory economic results, to meet your long-term objectives.

MR. JOHNSON. Well, one of the problems is that the base is so dominated by currency; it's two-thirds of the base. We have a period right now where there's a big surge in currency; and to hit a base target, even with some variation [allowed], we probably would have to drain a substantial amount of reserves.

MR. MELZER. Well, this is an extraordinary time.

MR. JOHNSON. Yes.

MR. MELZER. It may be one of those times when we wouldn't stick with the target. But we would have to announce that and we could explain it very straightforwardly; it doesn't come down to explanations like, "Well, velocity changed", which is not all that credible after a while.

CHAIRMAN GREENSPAN. But you don't know what part of that currency item is drug money or what. That used to be a joke, but I suspect that it's probably getting to be something that would require some--

MR. JOHNSON. Would you believe it? I heard something on the radio that's just incredible: that samples of currency were taken and 9 out of 10 of them had traces of cocaine on them.

CHAIRMAN GREENSPAN. Is that right?

MR. JOHNSON. Yes. Did you hear that report? It's just incredible that you can find significant traces of cocaine on 90 percent of the currency.

MS. SEGER. See, I told you Wayne, it's too dirty!

MR. PARRY. That was in Berkeley.

CHAIRMAN GREENSPAN. A long time ago, before Tom dropped his bombshell, Governor Seger wanted to say something. Did we distract you or--

MS. SEGER. No, I just had a question.

CHAIRMAN GREENSPAN. Go ahead. Why don't you raise it so we get back on track?

MS. SEGER. I just wanted to ask Don what would happen if all of a sudden Congress saw the light and allowed interest to be paid on demand deposits. Individuals can go into NOW accounts and, in effect, receive interest on checkable accounts, but corporations or businesses can't. It seems to me that part of the problem is having these two groups treated in a different way.

MR. KOHN. I presume there would be a surge in demand deposits at that time. Interest is paid implicitly now, to the extent that firms get credits for their compensating balances in terms of services they receive. But, it is also the case that they don't get any credits for excess balances any more; and there are a lot of zero balance accounts, where the excess is put into RPs or whatever. The incentive to engage in that kind of deposit-minimizing behavior obviously would be very much reduced if interest were paid on demand deposits.

MR. MORRIS. Also, the Treasury doesn't collect any revenue when balances buy services.

MR. PARRY. But that would raise the interest elasticity, wouldn't it?

MS. SEGER. Secondly, didn't you say--I read so much for this meeting I may have just dreamed it--that within the demand deposit category most of that is, in fact, business accounts? If that's the case, then I think the interpretation ought to be different, because I've never met a big business or small business that decides to buy a new dump truck or put an addition on a building because they have more money in their checking account. I just don't think they operate that way. Maybe I would as an individual, or my cousin would, but I think we have to look at how we interpret these things because of the change in the ownership of the accounts.

MR. KOHN. I think only about 26 percent of demand deposits now are household deposits; and before the advent of NOW accounts, it was closer to 40 percent. So, the composition has changed and I think that accounts for some of the change in interest elasticity. I guess I was never a fan of that real balance effect--that you throw money at people and they automatically spend it. It seems to me that for households as well as businesses it was part of a complex process in

which the Federal Reserve changed the liquidity in the economy, and that changed interest rates, incentives for spending and saving, and exchange rates.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. I'd like to speak to Mr. Melzer's suggestion. I would have great difficulty with anything even remotely resembling a monetary base operating procedure in the immediate time frame.

MR. GUFFEY. Could you speak up a little, Jerry, please?

VICE CHAIRMAN CORRIGAN. I'm saying, Roger, that in the immediate time frame I would have great difficulty with anything even approaching a monetary base operating target. I say that for several reasons. First of all, I have never understood the base to begin with. I have read all the great work that has been done in St. Louis and every place else. But, to me, the thing itself is kind of a pig-in-a-poke. And since I don't really know what it is, I'm not about to put too much reliance on it as a steering mechanism for monetary policy. More importantly, in the current circumstances, I'm very skeptical that the market reaction would be the one that you are suggesting. Having said that, I certainly share the frustrations associated with the current approaches to policy. But, given all that has happened in the last few years, especially with any formulation of monetarism that I'm familiar with, including a base formulation, I think the reaction of the marketplace to a policy approach like that would be, "Oh no! This ensures a renewed and high degree of instability in interest rates." And I suspect that people would take to the hills rather than raise the flag, because of fears of a great deal of instability and volatility in interest rates that we haven't seen in many years.

Finally--I keep coming back to this--I, too, am frustrated by the lack of a nice firm handle for monetary policy. But let's not lose sight of the fact that despite all the limitations, the performance of the economy over the past several years has hardly been something we need to apologize for. I think economic performance, all things considered, has probably been as good as it reasonably could have been. Again, that does not mean that I am insensitive to the frustration that you're speaking from, Tom; I share that completely. But I'm very dubious that the base is a way out.

MR. MELZER. Jerry, the only thing I would say is that if you look back over the experience--and I just eyeballed it, this isn't econometric analysis--at the points in time where there were inflection points in policy in one direction or another, this sort of approach I have outlined would have been consistent with what I said. That indicates to me that, at the extremes, something like this could be helpful.

VICE CHAIRMAN CORRIGAN. But that's, in part, because you have an identification problem. One of the reasons you see that commonality in inflection points, of course, is that when you look at the base, or at least part of the base, you are looking at the same things that people were looking at anyway--reservable deposits, as they have changed over time. I could almost argue that what you

really should do is go to the opposite extreme. I don't really believe this, but to overstate it a bit, I could make a respectable argument that something like debt--to go the Frank Morris or Ben Friedman route--actually has been more useful in many respects than any of the other money or credit aggregates in recent years. I don't really believe that, but certainly I could make a point of argument out of that. In other words, if anything--forget about debt--it should be going in the direction of something broader rather than something narrower. As I said, the big worry I have is the market reaction. I really do think that if we went out and told the markets tomorrow, "Guys, come hell or high water, we're going to make the base grow by 5 to 7 percent, or 3 to 5 percent, or 4 to 6 percent" the marketplace would batten down the hatches.

MR. MELZER. Jerry, how about the European central banks that have a base target?

VICE CHAIRMAN CORRIGAN. First of all, in the notable case of Germany, it's different; it's not the same thing. Second, if you take Germany as a case in point, right now of course, they are missing the target in a very systematic way. That is part of their problem.

MR. JOHNSON. You can argue that they hated it being a miss.

MR. HELLER. Yes, but I think Tom wouldn't argue that you would stick to the target in the German situation right now. He would say that if circumstances make you believe that the demand for money has increased, you would be willing to go above the target. You would set a series of short-range targets so that you would accommodate that increased demand for money--an increase in demand for central bank money, in that particular case. I think that's what I heard Tom say: to handle it not in a rigid way by saying "here's the target and you are playing along with it", but to adjust it in the light of circumstances as you see the economy and prices evolving, and so on.

VICE CHAIRMAN CORRIGAN. That's what we're doing right now with the monetary aggregate targets.

MR. JOHNSON. It's the same problem: base velocity and monetary velocity itself.

MR. HELLER. Except that he says that some of that we can control more readily than the broader numbers.

MR. MORRIS. Yes, but if it's not reliably related to income, the fact that you can control it is not very relevant to policy. I've been sitting around this table for 19 years now, and I've concluded that the search for an indicator for monetary policy that will overcome this yearning is a complete waste of time. I think history shows that there is no suitable indicator for monetary policy that is going to give you reliable nominal GNP results. It's a waste of time to look; the world is too complicated; the world is just too complicated. What we really have to do is go back to the kind of thinking that was around the table when I first came to the Federal Reserve under Bill Martin, and that is leaning against the wind. And I think the--

CHAIRMAN GREENSPAN. Then the wind becomes the target.

MR. MORRIS. Really, leaning against the known wind when nominal GNP is really the target, except we don't want to admit that in public for very good reasons.

MR. ANGELL. I hope you wouldn't let the public know!

MR. JOHNSON. But it's the same problem. If you don't know how velocities behave, you still can't hit nominal GNP. You have the same problem.

MR. MORRIS. But you know what direction you want monetary policy to move. The amplitude is where the problem of judgment comes in.

MR. BLACK. But, if this is as unreliable as you say, suppose nominal GNP is not growing fast enough and you push interest rates down and the money supply slows down. You really haven't necessarily moved in the right direction, even though--

MR. MORRIS. Well, if interest rates are going down, you're going to have an expansionary movement in the economy regardless of what your money supply does.

MR. BLACK. Sometimes.

CHAIRMAN GREENSPAN. Roger Guffey has been trying to get a word in.

MR. GUFFEY. I've forgotten what I was going to say. Well, given the fact that we have to set growth targets for something under the Humphrey-Hawkins Act, what has come out of this paper, it seems to me at least, is that M2 is perhaps the best of what may be bad choices. M1A may be about the same, but given the fact that M2 is better understood by the public and the markets, I would continue with M2. There's one other aspect--and I'm not quite sure that this is correct, but my recollection is that Canada has in recent years set a target over a longer horizon than one year. I think perhaps it's a two-year target with a moving base and they use that merely for the purpose of determining whether they are above or below the trend line of growth that they were shooting for. That has some attractiveness to me, and I think that may be what we should be doing with M2 over a longer-term horizon. I think Canada abandoned that, simply because they determined that it was more important for them in current times to focus on exchange rates, relative to the dollar principally, rather than to hit a monetary target, however they defined it. So, it seems to me that we are talking about two different things. One is how we would manage monetary policy in the very short run through these intermediate periods; the other is what we should be focusing on, and that is a horizon, and probably for M2, over a one-year or two-year period.

MR. TRUMAN. With respect to the Canadians, part of what you said is certainly correct: they had a longer time period. They didn't adjust [each year]; they didn't always go from fourth quarter to fourth quarter.

MR. GUFFEY. Sure.

MR. TRUMAN. That is correct. They abandoned the target partly for exchange rate reasons, because it was so sensitive, but there also was the conflict between the relationship of the monetary aggregates to the economy relative to what they were [unintelligible] the exchange rates. The main reason they abandoned it was because the relationship between the aggregates and nominal GNP broke down for financial deregulation reasons. And, in fact--

MR. GUFFEY. And, in the short run--

MR. TRUMAN. Well, for a long period of time. They abandoned it in 1982, five years ago. I don't know if they can go back, particularly to something like an M2 target, because they have this financial deregulation in mind to play with. It is true that they had a somewhat longer horizon, though I don't think you described it exactly the way--

MR. CROSS. They were hitting the target, but nothing else was happening right.

MR. GUFFEY. Because of deregulation?

MR. CROSS. Probably.

MR. TRUMAN. They had different base points. And sometimes they extended the targets longer into a year, until they changed the base, and then they went back and picked up a new base. I think it would be rather difficult for us to do that, given the structure of Humphrey-Hawkins; I suppose it might be more difficult to do it for Humphrey-Hawkins. Also, the base period could be varied--like taking the base in the second quarter and projecting up to the end of 1988. That would put you partly in the Canadian-Japanese [unintelligible].

CHAIRMAN GREENSPAN. Tom, after hearing all those positive contributions, you may want to think about it and write a memorandum or something like that for circulation. Perhaps we could discuss it at the luncheon meeting the next time or something.

MR. MELZER. Okay.

CHAIRMAN GREENSPAN. I think Frank Morris is right in that it's a futile exercise, but I don't think--

VICE CHAIRMAN CORRIGAN. If you could rationalize--and this is a big if--the whole structure of reserve requirements and all the rest of it, that would make a base measure at least more understandable. In other words,--

CHAIRMAN GREENSPAN. It's the currency that's bothering you?

VICE CHAIRMAN CORRIGAN. Well, it's partly the currency, but it's also the crazy quilt pattern of the relationship between reserves and other things because of a crazy tiering of reserve requirements, and the reserves on nonpersonal deposits and certain Euro-liabilities, and all the rest. If you had a clean, plain-vanilla kind of structure of reserve requirements that would help a bit, because one problem you get into here that complicates it further--beyond the currency

problem--is the so-called multiplier between the reserve component of the base and "money".

CHAIRMAN GREENSPAN. Of course--because of the huge differences in the reserve requirements on the various different elements.

VICE CHAIRMAN CORRIGAN. That's what I mean by the crazy quilt structure of reserve requirements.

MR. MORRIS. But it was a politically determined structure of reserve requirements.

MR. STERN. I wouldn't want to dismiss the base too quickly, though. We have done some of these horse races in the last several months as well; and somewhat to my surprise, in terms of the stability of the relationship to income, the base tends to win, though not by wide margins.

CHAIRMAN GREENSPAN. Yes, but all horses lose.

MR. STERN. Yes, right.

MR. JOHNSON. Some are better than--

CHAIRMAN GREENSPAN. Some lose.

MR. STERN. I think Frank is right: we are not going to find one variable. On the other hand, if we're looking at a range of variables, I think the base deserves some consideration.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I guess this has been a nice trip back through Federal Reserve policy in the last 10 years. I think the only term I haven't heard was RPDs. Some of you may remember that one. Do you remember that? That [unintelligible] when I left the Federal Reserve System the last time. So, it was a fascinating trip, and the debate about the base certainly brings back the old fervor for everybody. But I don't think Tom's suggestion was that we ought to install the base as a target and use it right now. I think the suggestion was that we ought to take a look at it and maybe get the Board staff to take a look at it, too, since some new work has been done. We just had a paper presented at the Cleveland Bank by Ben McCallum that you might want to take a look at. From my point of view, policy has been wise for five years, but the inflation rate has not been down for five years. Not that the base is going to cure that, but if we're looking for a long-term message or consensus on inflation, then we may want to take a look at something like the base to help us get there, not as the end-all.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. It seems to me that the important thing that has been mentioned here is that even if we don't find something to stay with forever, it is certainly true--and we all recognize it--that price levels and inflation do have some long-run relationship to the money stock, however we define it. And I guess that's why I would

depart a bit from Frank's observations. It seems to me that it makes some sense to stay with some [unintelligible]. I get a feeling that the monetary base reflects a lot of the other, but it has a little of a true believer element to it and it may not be all that helpful at this point. The question I want to direct to Don would be this: Since the Humphrey-Hawkins Act does require, in a sense, that we think there is a long-run relationship, those long-run income and price level elasticities were very impressive, I thought.

MR. KOHN. Well, that's partly by assumption. I am completely up front about this. In the--

MR. ANGELL. Well, there's just no doubt; I think everyone accepts the fact that in the long run the rate of growth of the money stock is related to the rate of change of the price level.

MR. KOHN. Right.

MR. ANGELL. And that is important. The Humphrey-Hawkins Act, as Roger Guffey mentioned, does not require us to target M3, and we have not been talking about M3 here, yet we continue to target M3. If we are going to target two aggregates, would we be better off targeting M1A and M2 or would you suggest targeting M1A, M2, and M3? What is there to be said for targeting M3 over targeting M1A?

MR. KOHN. We haven't done as much work from the demand side on M3, which is a good reason why it doesn't get the emphasis here. That's because we consider M3 to be primarily a supply-determined aggregate [unintelligible] to the growth of bank and thrift credit. But to the extent that that credit has some relationship to underlying activity, then M3 would have some--

MR. ANGELL. Well, I'm not all that impressed by the fact that we can hit it; I'm more impressed with the fact that if we have a money stock target that we are aiming for and we miss it, we ought to be able to explain why we are missing in the direction we are missing. I suppose commodity prices might help to explain some of that.

CHAIRMAN GREENSPAN. And you miss [unintelligible]. Bob Black.

MR. BLACK. Mr. Chairman, I would just like to take issue with Jerry Corrigan a little about the reserve requirement system being irrational. It is rational if you think M1 is the thing that you ought to control because all the requirements are lagged except those against M1 deposits. So, if M1 were really what you wanted to control, you would figure out how much you needed in reserves for those other types of deposits, supply that, and anything else you put out would be used to support M1 and only M1. If M1 is your target, the only thing that would be more rational, I think, would be to have 0 percent requirements against everything that wasn't in M1; but, if M1 is of no value anymore--although I think it once was--then it is irrational. The reserve requirement system was set up that way because at that time the prevailing feeling was that M1 was really the best of the targets. And I think it was.

MR. MORRIS. I don't think that's the reason. The reason was that, in order to get the thrifts to sign onto the Monetary Control

Act, we had to have a system that didn't generate [unintelligible] with reserve requirements on the thrifts. And, that's the reason for the structure. It had nothing to do with--

MR. BLACK. No, I'm talking about the fact that we lag some reserve requirements and don't lag the others.

VICE CHAIRMAN CORRIGAN. That wasn't my point, though, in the first place.

MR. BLACK. Okay. I thought I finally understood something and now I find out I haven't understood that either!

VICE CHAIRMAN CORRIGAN. That's only one part of my point. My point simply is that the relationship between the reserve component of the monetary base and anything else, whether it's an M, or GNP, or whatever, is itself subject to a lot of distortion because of what I call the overall crazy quilt--not necessarily irrational--pattern of the structure of reserve requirements.

MR. BLACK. I agree with that on the monetary base. And when I said I had sympathy with Tom, it wasn't that I was favoring a monetary base. I meant that I had sympathy for some kind of an anchor to hang policy on, and if he could demonstrate [unintelligible]--

CHAIRMAN GREENSPAN. [Unintelligible] of the reserve requirements are on demand deposits. And hence, we assume that the required reserves are a proxy for demand deposits and currency in use. We have some noise, but substantially what we have now is reserves on M1A plus some reserve requirements on large CDs and a variety of other reserves on other things. It's interesting, when you take a look at the monetary base, to subtract those elements out and see whether, in fact, you're getting the M1A effect that Don was getting, or whether there is something independent there.

MR. MORRIS. The weight of currency is much higher in the monetary base and that's--

CHAIRMAN GREENSPAN. Of course, sure.

MR. MORRIS. That's a major difference.

MR. BLACK. Well, I don't think the use of the base as a target will necessarily imply a steady rate of growth in that. You would figure out what non-monetary liabilities were using up in the way of reserves, supply that and then supply the amount you thought was necessary to support whatever kinds of monetary aggregates you wanted. That doesn't say to me that it has to be a steady rate.

MR. MELZER. I think that's right.

CHAIRMAN GREENSPAN. Si Keehn, have you any thoughts on this that you'd like to express to your colleagues?

MR. BLACK. You might not want to ask him; he may have gone to sleep!

MR. KEEHN. At this point, I have nothing to add to the discussion that hasn't already been said a couple of times at least. But, hearing the conversations and reading the paper, I don't find any compelling reason to shift to M1A or to add it as a target. I would not be in favor of targeting a narrow aggregate. Jerry Corrigan made the point earlier that I think is very appropriate: whatever we are doing, we are doing pretty well. I think the economic results have been good. Utilizing, say, M2 and M3 in the way that we have has been an appropriate way to do it; the results have been good, and we ought to continue with that.

CHAIRMAN GREENSPAN. Anyone else have anything more to say on this subject? Si, are you going to be able to make it tomorrow?

MR. KEEHN. Well, while this conversation has been going on, we were told that it is snowing again and both airports are again closed. But, we're a bit hopeful that we can get out.

CHAIRMAN GREENSPAN. We wish you well.

VICE CHAIRMAN CORRIGAN. It sounds like M1.

MR. HELLER. Si, are you counting on me to come in tomorrow?

MR. KEEHN. I'm counting on you, Bob!

CHAIRMAN GREENSPAN. Why don't we do this? On the presumption that Si will be able to make it, why don't we adjourn the meeting as of now and reschedule for 9:00 a.m. Eastern time tomorrow morning, if that's okay with you. I don't know whether or not that makes it more difficult for you, Si.

MR. KEEHN. We'll work with it. It's either going to work for us both or not. And if it doesn't, if we could again participate on the phone tomorrow, I'd appreciate that. I'm not going to know for another hour or so whether or not we can make it out. I'll let Norm Bernard know.

CHAIRMAN GREENSPAN. Okay, 9:00 a.m. it is. Thank you.

[Meeting recessed]

December 16, 1987--Morning Session

CHAIRMAN GREENSPAN. In reconvening the meeting, the first order of business is Mr. Cross on foreign currency operations.

MR. CROSS. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Mr. Cross?

MR. GUFFEY. I would just ask Sam: How much do we have--I am talking about the System and the Exchange Stabilization Fund--as a cache of marks and yen that we can draw upon in the future without swap arrangements?

MR. CROSS. We have far more marks than we have yen for the Federal Reserve and the Treasury combined. We have about \$11.6 billion worth of marks, but only about \$1.6 billion worth of yen.

MR. GUFFEY. That means, if we were to continue [intervention purchases of dollars] for a very long period of time, we would have to use our swaps.

MR. CROSS. We would have to get some more yen from someplace; \$1.6 billion is not all that big. The fact is, for example, that we did \$1.6 billion in all currencies in the past six weeks.

SPEAKER(?). Sam, if the official intervention dries up--I don't mean totally dries up, but if it shrinks--what dynamics does that set in motion? The market still has to clear. Does it clear at a lower level by sucking in more private sources or--

MR. CROSS. I assume it tries to suck in some financing from some source. But that raises the question of on what terms and whether the dollar would have to become more attractive both through stability and through interest rates to attract any funds, official or private. We still have a pretty big deficit; we're predicting a \$135 billion deficit for next year in the current account. So, if you look ex ante and ask people how much they plan to increase their exposure to dollars next year, I doubt that it would come anywhere close to that number. Ex post, undoubtedly, somehow or other our current account deficit will get financed. It's a question of how.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. One of the reasons we haven't had a faster turnaround in our current account deficit is that the fall in the value of the dollar has not even come close to being matched in terms of increasing import prices. It seems to me that exporters to the United States can have shrinking profit margins and try to hang on to market share, but with the kinds of shrinkages in margins that are at least implicit in this kind of drop in the dollar-import price relationship, I think a lot of these exporters to the U.S. have to be hurting pretty badly. I don't know how one measures that--whether there's any anecdotal evidence or any evidence whatsoever. But do we have any sense that we might be seeing more of this dollar shrinkage showing up or coming through more in higher import prices?

MR. CROSS. Well, I'm sure everybody has his own experience on all of this. There are these factors: obviously, people who have markets don't give them up very easily; also, a country like Japan has a big import component in a lot of its exports and, therefore, the exchange rate can affect both sides of the equation. I agree with you that when a currency falls by 50 percent--and we're just about at 50 percent of the level of the mark and the yen--that can't be absorbed through lower profit margins. The people we talked to on the export side seemed to be sounding a lot better. Now, another problem is that some of the deficit is shifting, or is covered by countries such as Taiwan. Taiwan has a surplus of \$25 billion all by itself, and it's a tiny economy relative to that size surplus. So some of this deficit is coming from countries that have not had anything like that kind of change in the exchange rate vis-a-vis the dollar.

MR. TRUMAN. We have taken a look at this question recently in trying to get a better handle on domestic production costs and how they have been moving in some of these countries over the last several years. The work that we've done suggests that there probably has been more saving on domestic production costs than aggregate measures of prices in some of these countries would suggest. That, in turn, would suggest that there has been less of a [decline in] profit margins than a 50 percent decline in the dollar would lead one to think initially, though all things working together do produce the results that you'd like, President Boehne. As a consequence, we have had less price increase and less decrease in quantity on the import side, though most of the aggregate equations have price elasticities that are close to 1. So, in terms of the trade balance and what you have to finance, it washes out. You get less price and, therefore, you get less quantity adjustment. Anyhow, the mix is a little different. As far as our forecast is concerned, partly based upon these considerations and perhaps some reluctance to project these trends in the future, as well as some factors like the rise in commodity prices, which have increased more over the last eighteen months than over the previous eighteen months, we have projected a much more rapid rise in import prices in the forecast period than we've had to date.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Mr. Chairman, told me last
week that their new problem loan area is in loans to
which suggests that maybe some of these countries are beginning to
hurt in trying to maintain their market share in the U.S. market.

CHAIRMAN GREENSPAN. That's a very interesting piece of new information.

VICE CHAIRMAN CORRIGAN. Of course, a lot of those manufacturing and export companies, up until recently, were making up for their income losses in exports by their activities in the financial sector. There's no question that--

CHAIRMAN GREENSPAN. That's a euphemism; speculating is all part of the picture.

VICE CHAIRMAN CORRIGAN. There's no question about that. That works in the same direction, of course--and land.

CHAIRMAN GREENSPAN. Any other questions for Mr. Cross? Si?

MR. KEEHN. Sam, lacking intervention, what's the comment in the market with regard to the lowest level that the market would expect against the mark and the yen? How much more [decline] can we get here?

MR. CROSS. In what terms? Market pressures are down, and every time you pick up a newspaper, you have more economists talking about the need for x, y, z, including some who say it needs another 10 percent; while it was 12 and 15 percent they had been saying the same thing. I think the market people are pretty agnostic about this sort of thing. They look at these trade deficits, which are enormous; and they look at the government policies, which are ambiguous in this regard. They see the pressures and the consequences are pretty clear.

MR. TRUMAN. My sense is that the forecasts, essentially, [unintelligible]. If anything, the prognostications are for an increasing rate of decline. Last year you might have seen something projected in the 3 to 5 percent range; now you frequently are seeing it built into the international component of a blue chip business. They are talking about an expected 10 percent decline through the end of 1988, or whatever point they set, whereas a year ago they were saying in the 5 percent range. Forecasters were wrong about the turning point. If anything, in that part of the market they are projecting a more rapid decline than they had been before by maybe--

MR. PARRY. Ted, what is the futures market saying about the yen and the mark?

MR. TRUMAN. The rate of decline against the G-10 countries is something on the order of 1 or 2 percent over the next year. If you look at just the yen market, it's on the order of three or four percent. So that's not anything like this. Essentially, that's where we have been for the last 2-1/2 years.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I have one comment and one question. In the last ten days, I've been at two different embassies for dinners and the dinner table talk among business people involved how they thought the dollar had actually become undervalued vis-a-vis European currencies. Now, they were not talking [unintelligible], which I thought was interesting, because it wasn't a central banking group; it was a mixture of business people and embassy personnel. My second point is a question. You mentioned the Taiwan case and their gigantic trade surplus, etc. I'm mystified as to the process of getting some of those devils to adjust their currencies. What does it take? Does the Treasury have to lock them in a room? Does it take legislation or does it take negotiation of some sort? I honestly don't know the process.

MR. CROSS. Well, the Treasury has been working on it. I think the Treasury so far has used all of the above: they've locked them in a room and they've tried everything. There has been some movement.

MS. SEGER. But, it has been pretty pathetic, when you compare it to--

MR. CROSS. This will make it 20 percent in the past year.

MS. SEGER. What has Hong Kong's movement been then?

MR. CROSS. Zero. But, if you look at it in terms of the surplus, Taiwan stands alone as having the largest imbalance. And, in fact as everybody knows, they have a large reserve. The three largest reserves are Germany, Japan, and Taiwan; and I think Taiwan's is higher--

CHAIRMAN GREENSPAN. Not necessarily in that order.

MR. CROSS. No, not in that order. Taiwan, I think, is number two.

MR. JOHNSON. Isn't it true, Sam, that the dollar did not appreciate against those currencies very much?

MR. CROSS. That is true, it did not go up as much as they claim; it didn't [unintelligible]. Again, we are generalizing, but in terms of the Taiwanese dollar it did not appreciate as much when it was going up. But the surpluses have grown really unbelievably large. Meanwhile, there are these reports out there now that their dollar holdings have gotten to be so large that the governor of their central bank has been under enormous political pressure to get rid of these depreciating dollars and get some D-marks and so forth; and he seems to be doing that. So, that's not a very encouraging sign at all.

MR. PARRY. Isn't the decline since the beginning of the year of the Taiwanese dollar--

MR. CROSS. Twenty-two percent is the figure I have in mind, but it's--

MR. TRUMAN. A little less than 10 percent against the yen.

MS. SEGER. I still think that the trade statistics suggest that something has to be done about those currencies if we really are going to improve the situation with regard to imports without building walls.

MR. CROSS. Well, the Treasury is working on it.

MR. TRUMAN. Including the question of [unintelligible], the closest thing to getting legislation without legislation. [Unintelligible] that Taiwan in particular enjoys, [unintelligible] all the events you have cited [unintelligible] legislation.

MS. SEGER. I can send them some alley toughs from Detroit.

MR. TRUMAN. [Unintelligible] Mr. Volcker's speech.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. You used the number of \$100 billion spent for six months of this year by G-10 countries.

MR. CROSS. No, so far [this year]--11 months. That doesn't include Taiwan which is another and a lot of other countries. It includes only those that are on our concentration network, which is the G-10 plus some assorted European countries.

MR. HOSKINS. I'm just curious: Has anybody speculated as to what we bought with that \$100 billion and where we would be had we not spent it? And, secondly, you described a situation that seems to me to be indicating some strains amongst the G-10 countries regarding the notion of further intervention. Does that imply that we are going to alter fundamentally some monetary and fiscal policies? In other words, are we not going to sterilize?

MR. CROSS. What I was saying was that it's not going to be as easy, looking forward, as it has been in the past. Everybody has substantially higher dollar balances; countries are under pressure; there are public commentaries. For example, in London in the Financial Times, there's an article by Sam Britton asking why the British are holding all of these weak and depreciating dollars, and saying they should be moving into marks [unintelligible] in this story. There undoubtedly are going to be pressures on a lot of countries to be a lot more reluctant than they have been to add to their dollar holdings.

MR. BLACK. Has this switching to diversified portfolios had much downward effect on the dollar?

MR. CROSS. Well, it is one of the elements. I don't know how widespread it is. We hear reports of a few countries here and there.

MR. TRUMAN. President Black, President Hoskins' question is that if the intervention has no effect, then the switching from dollars to DM also has no effect, other than the effect on psychology. Essentially, if it doesn't work, it doesn't work.

MR. HOSKINS. Well, if intervention doesn't work, to me it's obvious, then, that you can draw any conclusion you want to.

MR. BLACK. I would say switching had to have had some effect, even though I'm not much of an interventionist.

MR. HOSKINS. I'm sure it has. To my mind, it certainly has an effect. It has an effect as one country sees another country shifting away. Every time we get into periods like this, certainly there is a tendency for Latin American countries--those that have any reserves--to switch a little; some of the Asian countries have a great desire to make the best of their reserve holdings and do some switching. I don't want to exaggerate what we have seen to date but there are some important [unintelligible] as the dollar has continued to weaken. It's not surprising that you see these kinds of pressures.

MR. BOEHNE. It has a clear effect on how we finance our external deficit.

VICE CHAIRMAN CORRIGAN. That's the crucial point.

MR. KEEHN. That's the main piece of it because the market discipline would have been much stronger on the U.S. to get the adjustment process moving forward more rapidly without this foreign official financing.

MR. CROSS. If they hadn't bought \$100 billion worth of dollars then I would ask the question: How would we have financed the deficit last year? There's a big hole there somewhere.

CHAIRMAN GREENSPAN. You can't finance it if it doesn't exist. Maybe it would have been small.

MR. CROSS. If we had adjusted and eliminated the deficit, that would be a different story.

CHAIRMAN GREENSPAN. Are there any further questions for Mr. Cross?

MR. JOHNSON. Nobody really knows which way this is going but currently there is some downward [movement] in oil prices. How is that likely to affect the currency markets? Last year it seemed to have put downward pressure on the dollar relative to the deutschemark and the yen, and some downward pressure on the pound sterling, too. I don't know if you have any idea about that, given these low levels, but--

MR. CROSS. It seems to have different kinds of effects. There is the fact that Germany and other countries are more dependent on oil than we are, for example. There is also the fact that oil is very heavily a dollar-financed phenomenon. So there have been times when changes in the oil price seemed to affect the dollar one way and times when it affected it another way. I would assume that the reluctance that we are seeing now might be, on balance, helpful.

MR. JOHNSON. How is it affecting the pound?

MR. CROSS. Well, sterling has been a little softer in the past few days. One possibility is that it has been reflecting what has gone on in the oil market but there are some other things going on, too. The British seem to have had this policy of trying to maintain the pound at 3 DM and they have held that pretty firmly and have undertaken an enormous amount of intervention [unintelligible]. Some people think that maybe the message that they are going to hold it is beginning to be accepted and that part of the decline in sterling reflects that.

MR. JOHNSON. Up until that oil price change, the pound had pretty strong upward momentum and they were really fighting to hold it down.

MR. CROSS. Quite apart from what they did recently,

There was heavy upward pressure on the pound during much of that time. And, there are questions about whether the British will, and should, reduce their interest rates.

CHAIRMAN GREENSPAN. Any further questions for Mr. Cross? If not, I'll entertain a motion to ratify the transactions of the Manager since the last meeting.

VICE CHAIRMAN CORRIGAN. So moved.

CHAIRMAN GREENSPAN. Without objection, approved. Mr. Sternlight on domestic open market operations.

MR. STERNLIGHT. Thank you, Mr. Chairman. [Statement--see Appendix.] I also have a leeway recommendation, Mr. Chairman.

CHAIRMAN GREENSPAN. Bring that in after [the questions].

MR. PARRY. I have a question regarding liquidity and quality concerns. Is central bank intervention in foreign exchange markets also a factor? And if it is, doesn't that imply that we will have to see not only quality concerns go away but also greater stability in exchange markets before we can see more traditional relationships reestablished?

MR. STERNLIGHT. I think that at the short end that probably is true and that a further factor is the Treasury debt management, which has been continuing to shrink the supply of bills very slightly recently. But that [unintelligible] also.

CHAIRMAN GREENSPAN. Do you think that's a big factor involved with the quality?

MR. STERNLIGHT. The quality concerns have been the more major factor there, I would judge.

MR. BOEHNE. Looking ahead to year-end, how do you go about dealing with a period like this operationally? We expect much more funds rate volatility; how do you proceed operationally through this period that we have coming up?

MR. STERNLIGHT. Well, it could take a certain amount of feeling our way as we go along, because every one of these periods is kind of unique unto itself. But just the way the calendar works, this time is particularly unusual. We have a maintenance period that ends December 30 and another that begins December 31. How much of the normal year-end pressures might work into that December 30 period right now is a big question mark in my mind. I think we just have to get a sense of it as we go along through that period. I'm sure there will be some particular pressure that is left for that December 31 date. That Thursday begins a long weekend. Right now our reserve estimates do not show a very large reserve need coming up to that period, partly because some of the weakness of money has brought down expected required reserve levels. We probably will have to make some allowance--maybe in the December 30 period and almost certainly in the next period that begins December 31--for additional demands for excess reserves. I think we will get clues from the money market itself as to how to respond as we go along.

CHAIRMAN GREENSPAN. Any other questions?

MR. HOSKINS. Given your reference to divine intervention earlier, would you figure that this is an appropriate time to think about starting option (3)? Would you be comfortable with that?

MR. STERNLIGHT. Well, I think it's appropriate to begin thinking about it, and letting it work if it didn't cause too great a swing in money rates. I would want to be a bit leery about it through the year-end period, and maybe just let a little show through--

MR. ANGELL. What was the question?

MR. HOSKINS. The question was that we have a fluctuation in the funds rate on the down side, and therefore, we could perhaps begin to move toward [accepting] more volatility in the funds rate right now since it moved in the right direction for us first off.

MR. ANGELL. Well, that very well may be due to the fact that we're so sensitive to any increases in the fed funds rate above the 6-3/4 percent level and we're not sensitive about it moving below that.

MR. JOHNSON. That's not true Wayne. Earlier, when the funds rate fell below the 6-3/4 percent level, we put off reserve add needs, giving a strong signal that we didn't want it lower either.

MR. ANGELL. Well, my view was that yesterday we had a need to take reserves out of the system and we didn't because funds were trading at 6-3/4 percent. So, we said we won't take the reserves out of the system that policy would have called for; we, in effect, put a ceiling--

MR. JOHNSON. But Wayne, what is policy? Policy was the funds rate range around 6-3/4 to 6-7/8 percent, not a borrowings target.

MR. ANGELL. If that was the policy, then this morning I presume we should have gone in immediately, acting to keep it at 6-3/4 percent.

MR. JOHNSON. Well, I think [unintelligible] postponed.

MR. ANGELL. How did the fed funds rate get to 6-1/4 percent this morning?

MR. JOHNSON. Float?

MR. ANGELL. Well, I know, but if we had a fed funds policy, what would you have done if it got to 6-1/4 percent?

MR. JOHNSON. Just what I said before: When funds were on the weak side earlier, we postponed an add need, and that was a signal in the markets that we didn't desire funds trading below 6-3/4 percent.

MR. ANGELL. My view is that we did have some notion about the amount of borrowing that would be associated with a 6-3/4 percent funds rate and the need came yesterday to drain reserves. And we didn't drain reserves, it seems to me, because we were sensitive to having the rate go above 6-3/4 percent. Is that right, Peter?

MR. STERNLIGHT. I think that's right.

MR. ANGELL. Okay, Peter says that's right.

MR. JOHNSON. Wait! I think you have to ask yourself what the policy is. What's the basis for adding or subtracting reserves under these conditions? The policy is to maintain the funds rate around 6-3/4 to 6-7/8 percent. There's not any other independent factor deciding whether we have an add need or a subtraction need. So with the funds rate trading at 6-3/4 percent, why would you? There is no add or subtracting need.

CHAIRMAN GREENSPAN. I declare this a draw. I don't care whether or not there are Johnsons or Angells on the head of a pin! Are there any other questions for the Manager? If not, I'd like to entertain a motion to ratify his previous actions.

VICE CHAIRMAN CORRIGAN. I will move it.

CHAIRMAN GREENSPAN. Without objection. Do you want to now [make a recommendation] on the leeway?

MR. STERNLIGHT. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Would someone like to move that provision?

VICE CHAIRMAN CORRIGAN. I move it.

CHAIRMAN GREENSPAN. Without objection, approved. Now we'll move on to Mr. Prell and the economic situation.

MR. PRELL. Thank you, Mr. Chairman. [Statement--see Appendix.]. Mr. Chairman, I think I'll conclude on that decisive note.

CHAIRMAN GREENSPAN. I thought you were going to go further. Any questions or clarifications for Mr. Prell?

MR. HOSKINS. I have a clarification on the National Association of Business Economists survey. Mike correctly reported that nearly half of them expected to see a recession in 1988. However, that's a general question asked to them about recession. But the data with respect to questions on their own firms are inconsistent with their forecasts of recession. In other words, most of them commented that the order books in their own firms were fairly strong.

MR. PARRY. Mike, you talked about the decline in interest rates and I wonder if you could give us some idea, in terms of numbers, of what kind of short-term rates you expect in the first half in that Greenbook forecast.

MR. PRELL. Basically, we have both long and short rates declining between 1/2 and 1 percentage point by the middle of the year.

MR. PARRY. That's fairly significant.

MR. PRELL. Given the elasticity of response of some of these sectors, that's not an enormous amount; but it's certainly noticeable in terms of the increments that we have been talking about around the table.

MR. PARRY. Yes.

MR. JOHNSON. I have a follow-up on that particular question. My understanding is that you have a funds rate change in there of about that magnitude. Is that right?

MR. PRELL. Yes.

MR. JOHNSON. What would the forecast look like assuming no change in the funds rate?

MR. PRELL. We used our quarterly model to try to answer that question and, essentially, if we just held the funds rate where it is, that tighter monetary policy would chip off a fraction of the GNP growth over the coming year. Most of the effect would be in the second half of the year, so that we probably would not see a very noticeable pickup in the second-quarter rate. For the year as a whole, growth would be somewhere approaching 1/2 percentage point less, according to the model.

MR. JOHNSON. Yes. I was looking at your linkage model estimates and I guess I would have the same sort of assumptions. Those estimates are -.6 percent for the first quarter, and that's a downward revision since the last estimate, since supposedly it incorporates trade and retail sales numbers. But I notice it has a standard error of about 3 percentage points around it, which means it could be anywhere from -3-1/2 to +2-1/2 percent, I guess; but the center of gravity is on the negative side. I was just wondering what kind of discretionary factors you have added to that to bring it up to where you are.

MR. PRELL. I wouldn't--

MR. JOHNSON. They have revised down and you revised up and that's why--

MR. PARRY. What is that forecast?

MR. JOHNSON. The linkage model forecast.

MR. PRELL. That is just an experimental tool that has been under development for a while and we don't approach our forecasting by add factors, so to speak, to that model. That model was done with a minimal amount of judgmental add factoring and tended to be very responsive to incoming data, and we've been working to moderate that. As a matter of fact, the one that you have doesn't incorporate the inventory data we received or the housing starts released today, and it has a fairly strong short-run sensitivity to the stock market. I think that is one of the factors that yielded the negative result for the first quarter. But let me just say that, given those confidence intervals, I wouldn't want to try to distinguish very much between that reading and growth in the 1 percent neighborhood in the first quarter of next year.

MR. JOHNSON. Sure.

MR. PRELL. I think that model has difficulty picking up such things as incentives in the automobile market and many other things. So, I wouldn't want to make much out of that difference. As I suggested, if you apply any reasonable confidence interval around our projection, you certainly can't rule out a negative quarter in the first or second quarters.

MR. JOHNSON. All right. On the housing numbers, I notice permits are still trending down. I realize there's not much of a correlation, but do you read anything into the fact that permits continue to trend down versus starts?

MR. PRELL. I think that the permits number was about unchanged in November from the October level.

MR. JOHNSON. It was down 0.7.

MR. PRELL. Given the volatility of these numbers, that's certainly an insignificant change. Basically, the number doesn't appear to be inconsistent with the starts level running somewhere between 1.5 and 1.6 million over the next couple of months. So, I think that's very much in line with our sense of not very much going on at this point in the housing market. Our forecast doesn't show much of a movement in coming months.

MR. JOHNSON. Right.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mike, as you're well aware, there's a school of thought out there that the economy has been running on the strong growth of the aggregates of a year or a year and a half ago and that the economy is about to go downhill as a result of the much flatter growth of the aggregates in the last 9 or 10 months. If that's not your expectation, then would you assess that expectation?

MR. PRELL. I suppose it is possible, if the outcome is similar to our forecast, that people who would want to read the money stock numbers as having those kinds of implications would feel that they had been vindicated; that would be a noticeable slowing from what we have seen over the first few quarters of this year. We don't approach the forecasting process with that kind of simple connection of money stock to nominal GNP and real GNP outcome. But obviously, if we had forced money stock growth to be faster this year, then we would have had, at least for a while, lower interest rates and possibly a lower dollar, and a number of other events which might have strengthened the outlook for nominal GNP in the coming months. So I don't see an inconsistency; but we're not putting a heavy weight on that monetary deceleration per se now.

MR. KELLEY. At what point in time would you start to give more weight to it? How long can the growth in the aggregates stay very modest without beginning to be a drag?

MR. PRELL. Well, I think much depends on money demand behavior. Our forecast is not built on an assumption that we will

continue to have that kind of slow growth. We have M2 and M3 growing at rates that are well within the target ranges tentatively set for next year. So that would represent, particularly in the case of M2, a noticeable acceleration from what we've been seeing.

MR. KOHN. I think the related point is that the aggregates just haven't been very good predictors of what's going on in the economy in the last couple of years. I have here a simulation of the Darby model using M1A, and it has the economy slowing down. It has much slower growth for 1987 than it looks like we have been getting and a picture for next year that isn't all that different, assuming some pickup in the aggregates, from the forecast in the Greenbook. But it has much more rapid inflation both this year and next year--on the order of 7-1/2 to 8 percent this year and 7-1/2 percent next year. I wouldn't put much confidence in that, because it plays off the very rapid money growth, which we never really saw feeding through in 1985 and 1986. Those aggregates in and of themselves have not been very good predictors of future developments in the economy.

CHAIRMAN GREENSPAN. When you're looking at the monetary aggregates, I think it's important to recognize that when they were working and you could see the plumbing operating--meaning you could see the effect of changing monetary aggregates reflected in real GNP and the price level--the relationship was in sync. The problem that we have now in evaluating these data is that, essentially, we have gone through a cycle and a half in which the plumbing has been disconnected. In a sense, we're getting very significant changes in these monetary variables, but we don't see any filtering through. The argument that slow money growth will inevitably lead to a recession may turn out to be true. The trouble is that there is no mechanism which can tie it together at this stage. We're caught in a situation where I suspect that the plumbing is going to get reconnected at some point and it's going to work again. The real trick is going to be figuring out when that's going to happen. The assumption that it is already happening is not verifiable in the information, at least as I see it.

MR. HELLER. It probably happened when we started our monetary targeting, because according to Goodhart's law, anything you want to control will get out of hand. But that isn't my question. According to your projection, the deficit is going to worsen by about \$20 billion to \$165 billion. According to the Administration, it's going to improve by about \$20 billion to \$123 billion. I was wondering what would happen to your forecast if the Administration were right.

MR. PRELL. I don't think we have a really current set of numbers from the Administration. I suspect that if the Administration is right, in essence it would be because there is a stronger [economic] performance. That's the answer itself. I think that's largely where we differ with the Administration in terms of their mid-session review prognostication for FY 1988.

MR. HELLER. Mike, your forecasts are quite far apart on the expenditure side, too. Some of that is cyclically related, so you wouldn't see much of a weakening of the economy if the budget cutters actually succeed in [unintelligible].

MR. PRELL. Well, we built into [our forecast] their succeeding, in essence, in what they agreed to in the compromise session. That is a moderate restraining influence on aggregate demand in the coming year, but it's not an enormous effect. It's one more ingredient that one wouldn't want to overlook. It's a magnitude of roughly half a percentage point on GNP.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I was quite influenced by an article I read in this morning's Wall Street Journal about Marshall Fields, where Si Keehn lives, in the suburbs of Chicago. He has to get out and do more shopping! Anyhow, it made me think about the retail sales report and your comment that the numbers were revised downward in September and October and showed only a modest gain in November. You said this is causing some downward revision in your real GNP estimate for just this quarter. You're not thinking of this as something that will spill over into the new year also? I wasn't sure I heard the--

MR. PRELL. I tried to suggest that if indeed we get that kind of greater weakness in consumption expenditures, there probably would be some higher level of inventories, which would tend to weaken the early part of next year. At this point, given the uncertainty of these numbers, I am more inclined to think of it as enhancing the likelihood of our getting the kind of deceleration that we forecast in the first part of next year rather than influencing the [unintelligible] level we forecast. But I think we had a rather brave forecast in that we were looking for a very noticeable slowing in production growth without having any real sense that there was an inventory accumulation going on to trigger it. Basically, we have a very rapid response of producers to that incipient weakening. If it turns out that consumption is weaker in this quarter than we think it has been, it's almost certain we would get that kind of slowdown.

MS. SEGER. That leads me to my next question. If that's happening--if there are inventories building up that are not planned--in the past that has often led to some sort of liquidation. Maybe it is just because I've been around for a long time, but that's typically what happens at the retail level, wholesale level, etc. So, at what point might that kick in?

MR. PRELL. As I said, we would expect a fairly prompt response in which production would slow down considerably in early 1988 if we do get that pattern. I must say, some of it would probably show up in reduced import demand, thus not affecting domestic production so heavily. But at this point I just don't have the feeling that the inventory position, by and large, is that uncomfortable. Certainly, it didn't show up in the Beige Book, which is the information from two or three weeks ago. While you hear these stories, and they vary in the retail sector, there isn't much else to suggest we're getting massive inventory accumulation.

MS. SEGER. My final question involves the trade statistics. I guess the numbers were disappointing on both sides, but the exports ran quite a bit below what we had expected. Again, at what point would you think that this might mean more serious trouble and not just a one-month blip on the screen? We have a lot of eggs in the one

basket next year--mainly an assumption of a strong trade turnaround-- in order to get the kind of real growth that we have for 1988, as I read the forecast anyway.

MR. TRUMAN. Well, Governor Seger, as Mike said, most of the disappointment was on the nonagricultural export side. The press was disappointed by the imports, and if there was a surprise it was in the oil. That seems to build up imports of products, which seem to fall into the inventories, and I could tell a better story [unintelligible] statistical effect in the first half of 1988. The surprise was on the side of the nonagricultural exports and if that's a true indication of the trend, then obviously they are much weaker than the outlook that we have [unintelligible]. I don't think there's anything in the anecdotal evidence that suggests that month is anything other than a fluke; but if the next two months of the quarter begin to look like October, then I would be worried about the outlook.

MR. PRELL. From my less informed standpoint, the anecdotal evidence and the manufacturing employment numbers and physical products data that go into our industrial production index just don't jibe with that kind of disappointment on the export side. I think everything is pointing to substantial export growth. In fact, that gives us some confidence that probably this will turn out to be noise and that there will be some offsets in coming months.

MS. SEGER. It's just that I'm a cautious person, and when you put a lot of eggs in one basket I think you really have to make sure you check the assumption very, very carefully.

MR. TRUMAN. Well, we think we will have something close to \$40 billion or a bit less in nonagricultural exports, in 1982 dollars, over the four quarters of 1987; and we have a little more in [our forecast for] next year. In percentage terms it is slightly less, but with a higher base it's essentially the same pattern of growth as over the four quarters of 1987. Now, there are people who have forecasts that are much more optimistic than ours. We have tried to be a bit conservative. That's not to say that we can't have a boom in exports, but not an explosive pattern. And the forecast, while it probably is off by several billion dollars one way or the other, is a reasonable projection, I think. I am much more comfortable about making the forecast for the four quarters of 1988 than I was a year ago when I was making a similar forecast for the four quarters of 1987.

MS. SEGER. Was \$40 billion what we estimated?

MR. TRUMAN. Essentially, we have had nonagricultural exports right on--plus or minus a few billion dollars--since the beginning of the year.

MS. SEGER. I know we expected a big turnaround; I couldn't remember the exact number.

MR. TRUMAN. There was some slight offset in GNP terms but where we have been wrong has been on the nominal import side because we haven't had the price, we haven't had the quantity trade balances [unintelligible]. We've had more imports; therefore, the statistical GNP has been not quite what we thought it would.

MR. PRELL. Just to cite the numbers: in our February Greenbook we had forecast 10 percent growth in real exports, and we have 15 percent at this point. And our confidence has definitely increased since [several] months ago.

MR. PARRY. How much of an adjustment would you make to the fourth-quarter net export number given October's rough order of magnitude? We have \$18.5 billion included in--

MR. TRUMAN. We went back maybe about \$4 or \$5 billion. Now again, part of that is in oil. [Unintelligible] because consumption picked up on that side; and on the export side, if you don't take the [unintelligible] out of production, the exports going into inventories might drop by a billion dollars, in 1982 dollars, in the fourth quarter; so we have [net exports] going down from \$18.5 billion to \$13 to \$14-1/2 billion GNP [basis]--

MR. PARRY. With a small change like that, it might be too early to give up on that 3 percent for the fourth quarter.

MR. PRELL. Looking at the labor market data, we could easily see 3 percent [GNP] growth. But I recall that a year ago in the fourth quarter we were looking at very strong labor input, and even after GNP revisions we only ended up with 1-1/2 percent. So there's considerable looseness in this; but there is the potential for it being strong if, as we hope, it wasn't all inventory.

CHAIRMAN GREENSPAN. Any further questions for Mr. Prell on substance? If not, let's now go around the table on our own views on the economy. Who would like to start off? Mr. Boykin.

MR. BOYKIN. Mr. Chairman, as far as the national economy, we certainly agree with Mike Prell's presentation. In our District, we're seeing some slight improvement, we think. Of course, with what little improvement we do see, we're growing at a slower pace than other parts of the country. There is considerable improvement in manufacturing employment; in fact, we're keeping pace with the national statistics in that regard. We don't see the possible \$2 or \$3 drop in the price of oil doing a great amount of damage to our District in terms of oil exploration, primarily because most of the planning has been done assuming an oil price of about \$15. However, there are implications other than just for exploration in terms of revenues to the state and subsidiary effects that could go along with that. The peso reevaluation is probably a somewhat neutral [event] because we've had diversification along the border, with not so much reliance just on the retail side. While that does affect retail sales [negatively], it improves the myceladora, the twin plant concept. So that turns out to be somewhat of a wash. We feel pretty good about agriculture; it has been considerably better this year. Energy, so far at least, has held its own. Construction, we think, is leveling out. Granted, energy is at the bottom and nothing is going on, but no further deterioration is indicated. Manufacturing plus services are remaining fairly even, although we may see more improvement in services than we are forecasting. So, while it's not a really bright picture, I do think and hope that, aside from the situation of our financial institutions, we are at the bottom and that there is improvement coming along.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Mr. Chairman, I don't have any particular new insights on the immediate outlook, but I have become more and more preoccupied with the longer-term question of how to deal with these fundamental imbalances in the world economy. What I've done, for a change, is ask myself the longer-term question rather than what's going to happen next quarter. And the way I went about that with my colleagues was to say, let's take the 1988 forecast as is--and there's no great difference between the Board staff and the New York staff forecast--but then superimpose on that by assumption, different patterns of behavior over the 1988 through 1991 period to see what kinds of conditions in that overall period can get us out of the box we're in. And there are really four questions that seem to me important: (1) Can we get out of that box without a recession? I think the answer is yes. (2) Can we get there without entailing very, very clear risks on the inflation side? I think the answer there is no. I'll explain these answers in a minute. (3) Can we get there with the current exchange rate structure? And the answer to that is yes. (4) Can we get there without a long period of subpar growth in domestic demand in the U.S. economy, and by implication, a slower rise in the standard of living than we've been used to? Unfortunately, the answer to that question I think is unambiguously no, we can't. No matter what you do, all scenarios that I can visualize involve, among other things, a large increase in U.S. market share abroad and also a large increase in our external financing requirement over the period. With my colleagues, the way I tried to get a fix on the dynamics of the long-term problem was to just take a couple of simple arithmetic examples and work back. The first is one that simply postulated a trade deficit of \$50 billion in 1991 and then asked what it takes to get there given a 1988 forecast like that in the Greenbook. What it takes is something like this: growth in U.S. domestic demand of about 1-1/2 to 1-3/4 percent over the entire period; growth in U.S. GNP of about 2-3/4 percent, growth in foreign domestic demand of about 3-1/2 percent and growth in foreign GNP of about 3 percent. And by implication, it will require, over the entire period, U.S. manufacturing output increasing by 4 percent and growth in capacity of plant and equipment in the United States from year-end 1988 levels of something like 3-1/2 percent.

CHAIRMAN GREENSPAN. That's annual?

VICE CHAIRMAN CORRIGAN. Yes. Achieving either one, in the context of the kinds of things that have been going on, is a long shot. But to put up an argument, even if all of those things worked right, the end-of-period situation, by assumption, would still leave a trade deficit of \$50 billion and using very conservative interest rate assumptions, a current account deficit of \$77 billion, or 1.3 percent of GNP. Our net foreign indebtedness at the end of the period would be \$900 billion, or 15 percent of GNP, and a country with a net foreign indebtedness of 15 percent of GNP--other than in war time or in the early stages of development--is quite unusual indeed. That's the kind of gradual adjustment scenario. Incidentally, that case also assumed no change in the real exchange rate from current levels.

Another way to think about it is to impose a constraint on our current account balance by the end of 1991, again assuming no change in the standard of living which means, among other things, no

change in the real exchange rate. In that case, U.S. domestic demand kind of by assumption is 2-1/2 percent but real GNP would have to be 4 percent. Now, here's the killer: foreign domestic demand would have to be 6.6 percent and foreign GNP would have to be 6 percent. The point, of course, is that I don't see any conceivable way to get from here to there under those kinds of assumptions--that is, maintaining domestic demand growth and expecting that the whole adjustment, in effect, is going to take place externally. That kind of scenario would require growth in U.S. manufacturing output of about 5-1/2 to 6 percent and growth in physical capacity of about 5-1/2 percent. Again, I just don't see how that could happen. But it would result in a trade surplus at the end of 1991, a \$25 billion current account balance, and our net external debt would be about \$785 billion, or 12-1/2 percent of GNP.

The third approach that one can think of is something that combines a little of both: to superimpose on case 1, if you will, a 10 percent further devaluation [of the dollar] that is front-end loaded--in other words, it comes mostly in the early part of next year. Then again, if the constraint is a current account balance in 1991, in order to get there, U.S. domestic demand growth would have to be something like 1.2 percent; GNP growth, 2.5 to 2.6 percent; foreign demand growth, 3.5 percent; and foreign GNP growth, 2.9 percent or so. That would require manufacturing output growth in the U.S. of about 4-1/4 to 4-1/2 percent and capacity growth again of about 4 percent. That would also get you a current account balance in 1991. These estimates are obviously nothing more than an exercise in arithmetic and there's no suggestion that they are anything more than that. Obviously, one could quibble with any one of them, or all of them, but I think the broad profile that emerges from that kind of an exercise is right. That broad profile says to me that any way you cut it, we have a situation involving a huge unfunded external liability sitting out there that is going to have to be attended to. It says to me that domestic spending, at least by historical standards, is going to have to be restrained and that there is considerable force to the argument to stabilize exchange rates sooner rather than later. I can see very little to be gained by further instability in the exchange markets and further downward pressure on the dollar. As a matter of fact, it seems to me that the risks of further downward pressure on the dollar are rather asymmetrically on the side of making things worse, not better.

CHAIRMAN GREENSPAN. Thank you, Mr. Vice Chairman. Do I assume, incidentally, that implicit in that is that if we are going to [unintelligible] some of these very large external funding liabilities, we may have to do it in currencies other than the dollar?

VICE CHAIRMAN CORRIGAN. If things started to rupture, that's right. There's a lot of risk, and I should say that right now, at this precise point in time, I think the risks are on the financial side. I regard those risks as a matter of particular concern. What I am trying to say is that, as great as those concerns are right now, I think the longer-term problem remains; and, in order to try to deal with the problems today, we need to do it in a way that recognizes what we are up against over a long period of time.

MR. PARRY. A point of clarification: Are you saying that policy today ought to be directed at preventing the dollar from declining?

VICE CHAIRMAN CORRIGAN. I didn't quite say that. But the question is what kind of policy would produce that result? I don't think that is totally within our control. I think it has a lot to do with the attitudes of the U.S. government as a whole. But if I had no constraints, and you asked me if my preference would be a policy that puts heavy weight on stabilizing the dollar, my answer is yes--not exclusive, but heavy--yes.

MR. BLACK. Would you go so far as to say that recession is almost inevitable to get a desirable result?

VICE CHAIRMAN CORRIGAN. No. In my mind, that's the value of doing this kind of exercise, because it does tell me that we can avoid a recession. It tells me that we have a very thin line to walk and very little maneuvering room. But the comforting thing is that it does say to me that there is a conceivable set of circumstances over a period of time that can produce a desired result without a recession. If we make too many mistakes, one of the biggest risks in this long term is that it involves a lot of inflationary pressures over a long period of time. Obviously, if those inflationary pressures escape us, that is one of the things that increases the risks of a recession. But the comfort I draw from this is that it does suggest you can get through this without a recession.

CHAIRMAN GREENSPAN. Where are the inflationary pressures coming from in this arithmetical scenario?

VICE CHAIRMAN CORRIGAN. Well, part of it is what's already built in. But when you have growth, say, in manufacturing output, in the ranges that are implied even in the gradual adjustment scenario, and the need to increase plant and equipment spending in sufficient magnitudes--

CHAIRMAN GREENSPAN. [Unintelligible.]

VICE CHAIRMAN CORRIGAN. That's true, but we're talking about a pattern of behavior over a number of years with a starting point of an unemployment rate of 6 percent, when the starting point in terms of capacity utilization--and in this scenario we use the rate forecast for the end of 1988--is 82-1/2 percent. The overall rate is [projected to be] up to 82-1/2 percent, but there are about 8 or 9 two-digit SIC industry groups that are big exporters where those capacity utilization rates are already pushing de facto full utilization. So, it does take a not inconsequential amount of hard investment to be able to sustain that kind of export-driven output in manufacturing.

CHAIRMAN GREENSPAN. Do you make use of sources and uses of investment and savings in this study?

VICE CHAIRMAN CORRIGAN. What it implies is that the budget deficit comes down in proportion to the reduction in the current account, in rough order of magnitude, so that in the so-called gradual adjustment case the budget deficit in 1991 is down around 1 percent of

GNP. But it also implies that the saving rate comes up more in line with early to mid-1980s experience as opposed to the experience of last year. Of course, if either or both of those things don't happen, then you have problems because if the saving rate doesn't come up, and then you superimpose a higher level of consumption spending than what it is already, then your domestic demand --

CHAIRMAN GREENSPAN. Then you won't get the adjustment in unemployment.

VICE CHAIRMAN CORRIGAN. That's right.

MR. HELLER. What are your inflation rates? You said they were increasing?

VICE CHAIRMAN CORRIGAN. In this? The inflation rate in this is basically held stable at 4-1/2 percent by assumption. That's one of the things that permits an orderly interest rate outlook here. Again, I want to emphasize this is just arithmetic; it's not a model or anything like that.

CHAIRMAN GREENSPAN. It's not exactly, but you do have relationships between foreign demand and U.S. exports.

VICE CHAIRMAN CORRIGAN. Oh, yes.

MR. BLACK. Is business saving rising as well as personal saving?

VICE CHAIRMAN CORRIGAN. Excuse me, the overall saving rate--

MR. TRUMAN. Mr. Chairman, the one thing I want to say about this is that it's got 1 percent more growth abroad than any foreign official is prepared to target.

VICE CHAIRMAN CORRIGAN. That's right.

MR. TRUMAN. And, if you put their growth not at 3-1/2 percent, but at 1-1/2 to 2 percent--which has been the experience so far--then I think you get a very different set of scenarios.

CHAIRMAN GREENSPAN. I hate to admit this but I find the scenario that the Vice Chairman has been outlining more benevolent than any of them that I've been contemplating.

VICE CHAIRMAN CORRIGAN. It's not without risks. But, Bob, to answer your question, it's not all that precise. The overall saving rate goes up, almost by assumption; it's the only way you can get that result.

CHAIRMAN GREENSPAN. But that is only arithmetic.

VICE CHAIRMAN CORRIGAN. That is right.

CHAIRMAN GREENSPAN. Because, if you start with the GNP that will relate to income, you have a consumption element fit in--

VICE CHAIRMAN CORRIGAN. It has to go up.

MR. BLACK. You almost have to have a rise in business saving as well as personal, I would think, under that scenario.

CHAIRMAN GREENSPAN. I think that's probably right.

VICE CHAIRMAN CORRIGAN. Well, as Alan said before, in this scenario--assuming there's no generalized outburst of inflation driving up wages--presumably the profitability in manufacturing would be fairly robust in these circumstances.

MR. BLACK. That's what I was implying: that you would have rising capital consumption allowances and profits.

VICE CHAIRMAN CORRIGAN. But, there's a whole bunch of things that have to work right. As Mr. Truman said, even this gradual adjustment case assumes foreign domestic demand growth of 3-1/2 percent and foreign GNP growth of 3 percent.

MR. BLACK. That's what really bothers me more than anything else, I guess.

CHAIRMAN GREENSPAN. Mr. Black.

MR. BLACK. I really don't have much to say. I think the staff did an exceptionally good job on the Greenbook, and Mike really covered all the caveats that we now are throwing out. I'm sympathetic with what Governor Kelley said about worrying about the aggregates. To use your metaphor, Mr. Chairman, we don't know if the plumbing has been reconnected or not; but I do strongly suspect that it will be reconnected before we know it has. And I'm wondering if these could be flashing danger signals. But, on the other side of that, the employment [outlook] from the National Association of Purchasing Managers report was extremely strong. We went back and telephoned the contacts that we usually talk to when we produce the Beige Book to see if we could find any evidence that there were changes in expectations or sales. We looked at 25 retailers, for example, and 18 said that recently their sales definitely had been running well above what they were last year; only three said they were down.

MS. SEGER. What is well above?

MR. BLACK. Well, Martha, I was going to get to this in a minute, and say you were spending more than Si Keehn, because the

in Washington, Baltimore and Philadelphia, said that sales were exceptionally strong. In Washington, they were running 16 percent ahead; in Baltimore 13 percent ahead; and in Philadelphia 18 percent ahead.

MR. HELLER. Is that dollars or volume?

MR. BLACK. Dollars.

MR. PARRY. Probably volume as well.

MR. BLACK. There's a lot of discounting, so I don't know if it's more or less. If there's more, then that means that you have

more volume, really, than these figures would imply. We also looked at our industrial--

MS. SEGER. Is that for one month?

MR. BLACK. It's since Thanksgiving, which is really the beginning of the Christmas season. She was very optimistic, much more so than

But it was really amazing to us that we couldn't find more evidence; nobody had scaled down estimates of what would happen next year. In looking at the industrial contacts it's pretty much the same sort of thing. So I guess you can just summarize their responses by saying that going into the details just didn't show any real signs of weakening at this point. So, for what that's worth-- It makes me feel better than I thought I would feel at this time following the crash on October 19.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, looking ahead to 1988, I too definitely think the October events [unintelligible]. I agree with Bob on that. While obviously those events were hardly positive, they have not had a fundamental effect on the economy as I had thought they might, at least as yet. Therefore, our outlook is not at all inconsistent with the staff forecast. We may be a touch on the more positive side. I have just a couple of specific comments. On retail sales, I certainly agree with Bob Black. I talked to somebody Monday who has important operations in the Midwest and, for the Christmas selling season so far through Sunday, their sales have been 5 percent over last year; and he thinks that for the balance of this Christmas season their sales will improve over that. The outlook for retail sales appears really quite positive at this point. Capital spending programs have not been cut and I've talked to an awful lot of people about that over the last two or three weeks. Most companies have contingency plans in place and they are taking a very careful look. They have a cautious attitude but, so far, nobody is reducing their plans and they are really carrying on with them in a pretty good way.

There are two dichotomies here that I have a hard time understanding: first, on inflation, I keep hearing these anecdotal reports about very significant price increases for a variety of raw materials, steel in particular. I have heard some huge numbers on steel from some people--30 percent increases on an annual basis; and I have heard of paper products and chemical products also moving up pretty rapidly. But these are offset by comments of other people. I have met with major companies, and one very, very large manufacturing company that I talk with pulled out their material prices for me. For 1987, excluding steel, their material prices have only gone up .7 percent; and for next year they are forecasting an increase of .5 percent. For steel for this year, they in fact had a price decrease of 1.8 percent; for next year they are expecting an increase of only 0.4 percent. So, there is this tremendous difference between large companies that have big power and the smaller companies that really don't. Certainly, the increases are not showing up in the inflation numbers. On the labor side, the news continues to be very good. Three-year contracts, at least in our District, are very standard. In some cases, annual increases in all costs are under 2 percent and certainly, 2 to 3 percent is quite standard. The productivity work

rule changes have been very important. Therefore, the productivity increases for some companies have been very impressive, so that unit labor costs indeed are coming down. So, with regard to the inflation problem, at least as I talk to people, certainly the pressures at this point are not nearly as great as I would have expected last summer. In fact, at least some of the heat has come out of this problem.

The other dichotomy, which we have talked about a little, is this trade balance issue. A lot of people I have talked to are really getting much better results on their exports; they are operating at high levels in some specialized industries but, at the current level of the dollar, they can easily compete in Europe and the Far East. But again, this is not universal. There are other people who are not having a similar kind of experience. I am reminded by people that when the dollar was so very high, dealer and distribution networks really came down very significantly; and those who were dependent on such networks are having a bit of a problem re-establishing them. But for the long run, I do agree with Ted Truman and Mike Prell that the fundamentals have to be very, very good and that, at some point, we're going to begin to see these improvements on the export side. On net, given the reduction of the dollar, and if the foreign markets hold up and indeed begin to improve, I think that we are going to see this increase in exports. If the consumption numbers hold up--and certainly I have this early look that they are moving along better than I might have expected--I think the staff outlook is a little soft on the consumption side. I do think the outlook for 1988 continues to be positive and not inconsistent with the results that we've had this year.

MR. BLACK. It's the sort of scenario that would worry Jerry Corrigan.

MR. KEEHN. Yes, that's right.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. As far as the overall Greenbook forecast, I think it's reasonable. In our own District, we continue to see strong employment gains. And in those areas where we've seen some slowing in the growth--Delaware, for example--I think it is more because of supply constraints than demand constraints. We've been seeing the same thing that Si Keehn has: the manufacturing sector is picking up handsomely and I think that's largely attributable to improved exports. Growth in construction, while slowing, still is at a fairly healthy level, particularly in the nonresidential area. On retail sales, we've been picking up; as I've heard around the table, they are doing really rather well. Our retailers say that they are holding up to pre-stock market crash expectations and it is very hard to see the effect of the stock market on retail sales. So, in a nutshell, the regional economy continues to do well.

I would like to piggyback very briefly on this adjustment process issue that Jerry brought up because it seems to me that we have to view the economy and the outlook a good bit differently with this overhang of the adjustment process than we ordinarily would. In the past, we've gone through periods where inflation was a problem and we've had to make some adjustments. We've gone through periods where aggregate demand was too weak. We've had recessions and we've had to

make adjustments. I think this is the first time that any of us has gone through an international adjustment process of this magnitude with the U.S. because I don't think we've been in this kind of a situation. We'd have to go back to before the World War I period. We may get this shift from consuming more than we produce to producing more than we consume; we may be lucky and get that magnitude just right. We may get the changes in exports and imports so that we can keep aggregate demand going along at what most of us would consider an acceptable growth rate. But we may not be so lucky; we probably won't be. There are a lot of scenarios here, but my sense is that we are going to have to be prepared to accept slower growth than we would otherwise think of as being desirable in the interests of this international adjustment process. Some of this slower growth may be forced on us by market discipline of the kind we were talking about earlier. We may have to begin to settle our foreign liabilities in other currencies rather than the dollar. But, I think there will come a time--probably sooner rather than later--when monetary policy decisions are going to have to be increasingly influenced by this adjustment process. We can lean toward helping the adjustment process or we can lean against it; but I think we are going to have to think more in terms of what we can do to lean in the direction of helping it. It just may mean that we will have to accept growth rate increases that are less than we ordinarily would in order to do that. But I think it is better for us to get ourselves in that kind of thought process rather than have the market disciplines coming down on us very hard, which they will if we don't.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. With regard to the regional economy, as some people have already suggested, it remains quite difficult out our way to find any pronounced negative effects as a consequence of the stock market decline in October. Most sectors in our District continue to do reasonably well. Anecdotal evidence is generally positive, particularly with regard to manufacturers and what they are seeing in terms of trade and international competitiveness. It leaves me, at this point, with very little doubt as to where we are going in that direction. I'm not sure that this continuing strength in domestic demand is all to the good at this point, as Bob Black already commented. As for my view of the national outlook, I'm going to echo Ed Boehne here to some degree. The Greenbook may be certainly a satisfactory outlook, and it may be about as good as we can expect. I happen to think that we are probably in the midst of this transition to an economy in which growth will be driven by growth in trade and, for a time at least, in inventory building and that domestic final demand will be subdued. I'm not sure that we can go through this kind of adjustment process, this transition, and avoid a recession. It seems to me that that's a risk that we have to run and that we may not have much choice about it. I have been struck that--at least until what's been happening with OPEC the last several days--the bond market, as far as I can read it, has been reacting to declines in the dollar kind of the way it was back in April and May and again in August and September. That's one form of the market discipline that would be foisted upon us if we don't take steps to promote the transition ourselves, or at least to allow it to occur.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Well, Mr. Chairman, after looking at the surprisingly strong October-November employment gains, it would seem that when the stock market decline hit us we had an economy with a very strong head of steam, particularly in the manufacturing sector. Perhaps the stock market drop will turn out to be a blessing in disguise in that it has taken at least a little of the speculative euphoria out of the system. The only impact we see in New England from the stock market decline is changed expectations as to the growth rate of the financial services industry, which had been growing very rapidly in New England, particularly the mutual fund business. Looking at the forecast, it seems to me that the risk is that the economy will grow more rapidly than we are forecasting, particularly in the business fixed investment sector. I know that the current quite modest projection is in line with the forecast, as Mike Prell said. But if we keep moving in the direction of greater utilization in manufacturing capacity, which I think is in the cards, I wonder whether the rate of growth of business fixed investment in 1988 may turn out to be substantially higher. Then we could have a situation in which the economy is growing faster than we can afford to see it grow. Maybe we could grow at a 2-1/2 percent rate without generating acceleration of wage increases. But if growth is much beyond 2-1/2 percent, I think we run the risk of making a fundamental change in this benign wage environment that we've had. So, I don't see that we have a lot of room to maneuver here. And I think the risk in the forecast is that we forecast too low a rate of growth in business fixed investment.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. In our District, the real strong point is employment. Non-ag employment has kept pace with national growth rates. And we've seen particular strength in manufacturing employment; in the three months before October, that was up over 4 percent. Construction has been notably weaker in both sectors but for a long time it was stronger than the rest of the economy. I would say that the retail sales situation is a little more moderate than described in other areas. I talked to a major national retailer about two weeks ago and they were disappointed with their November results. December started off better, but their profit plan for February through August has been nudged down significantly; and they're taking about 10 percent, or \$75 million, out of their capital spending plan for next year which, in a sense, doesn't surprise me. This individual also mentioned that apparel manufacturers are talking about double digit price increases for the spring line and he does not see that that's in the cards at all, based on his outlook of demand. Adding to what Jerry Corrigan and Gary Stern said about the adjustment process that Jerry was describing: it seems to me that the big risk--and I'm talking in the broad sense, not about monetary policy specifically, though it certainly fits into the picture--is that if we are perceived as not pursuing underlying policies that are consistent with that adjustment process, then it will trigger prices in exactly the way Sam Cross was describing before. As I said at the last meeting, I don't believe in defending the value of the currency; but the fact of the matter is that I perceive that we are in a financial situation where we just don't have a lot of room to ignore it. I wouldn't put my view in the context of specifically defending the currency but I do think that we have to run policies that are consistent with that adjustment process. That gets back to Ed Boehne's point that we have to be

looking at lower demand growth than we might otherwise be willing to accept.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, the generally healthy Twelfth District economy has experienced few significant changes since the stock market decline. The firms we surveyed indicated that they were going ahead with planned capital spending projects for next year. Moreover, retail sales appear to be holding up well, according to representatives of several major department store chains.

from September to date, which of course, is the most important part of the Christmas period up to this point, his sales were up 13 percent. He has had no price increases so that is basically a volume increase. Evidence from the mortgage market in our area is mixed but, on balance, activity in the residential area appears to have weakened slightly in the wake of the stock market decline. One little vignette in terms of exports comes from a large lumber company. He said that, unless there is a significant decline in the demand for lumber domestically, there is no room for further exports of lumber; capacity in the industry is not going to be added to significantly for the next two years, and you just can't count on lumber exports at a higher level unless there is a significant decline in domestic demands. Our economic forecast has a little more strength in activity next year and the same rate of inflation as the Board staff's forecast. The slowdown that we have in the first half, of course, is a result of the negative effects of the stock market decline. It is important to point out that both our staff's forecast and that of the Board staff--and I think a lot of the forecasts that have been mentioned around here--have included a fairly significant decline in interest rates in conjunction with the slowdown. It would also appear that those forecasts imply an easing in policy in the near term. Now, I want to emphasize the point that the forecasts all assume the negative effects of the stock market. And it seems clear to me, at least at this point, that as yet there haven't been any signs of such slowing. The second-half pickup, which is a little stronger in our forecast, results from the dissipation of the adverse wealth effects. In addition, the decline in interest rates in the first half has a role in causing the economy to grow more rapidly in the second half and, finally, the recent sharp drop in the dollar also adds strength to the second-half growth rate. Finally, although short-term prospects for inflation appear comforting, I don't think I could describe the expectation of 4 percent inflation next year, following a similar increase this year, as comforting at all.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. I have just a couple of comments. A few weeks ago I met with the chief financial officers of about 125 Fortune 500 companies. One of the things that I asked them about was their reaction to October 19, both individually and corporate-wise. Basically, they were sort of frozen in place. They hadn't dealt with that kind of situation before so they hadn't recommended dramatic changes in plans to their CEOs nor had they changed their profit plans. Most of them were right in the middle of the profit-planning season for 1988. Because most of them hadn't been through this

experience before--and, unlike us, they didn't have models that would predict the impact when there hadn't been a similar event--they were playing it by ear, I would say, and trying to get readings on what the sales of their companies were doing, and so forth. They were going to continue to look at them and there might be changes forthcoming; but, at that point, they were simply not sure. They said the biggest impact was on the bonuses and the value of the stock options. As one fellow said, one of the biggest shocks was having to get his CEO out of a board meeting and tell him that their stock had stopped trading on the New York Stock Exchange. That shook things up quite dramatically. The one company that really has reacted to this, though--and I think I mentioned this before--is

They have done such things as: cut back on a major plant modernization job; pushed the completion date into the future for an addition that was going on at a similar plant and delayed a new tech center they were going to be building out in

Also, they continue to fiddle with their pension plans, building more liquidity, raising cash, and cutting back on holdings of stock and also of long bonds. In addition, they continue to fiddle with their production schedules. As you know, Ward's announced that the auto industry as a whole was planning for production for the first quarter of about 14 percent below the first quarter of this year; but is making plans that are more pessimistic than that. Also, I was told by them that some of the other auto companies probably would be cutting their first-quarter plans more deeply and that, therefore, the Ward's number would probably turn out to be a little overly optimistic. Also, the inventory situation in autos is really, really severe. As of November 30th, the days' supply was 86 days as compared with 73 days a year ago. At the end of December, they think it will be 98 days. That certainly is consistent with the idea of cutting production because these incentives that they have tried to use for the last year and a half have less and less "oomph" every time they drag them out. And so, they just have to do something else. The final point is that there is great concern about the deterioration in consumer confidence, looking both at the University of Michigan survey and also the Conference Board's. One of the points made to me was that averaging the results of these two surveys, the latest number showed the lowest reading in this recovery after registering the highest level for this recovery in September. So, they are concerned about what that will do to future consumer purchases of their products. If you want a group that isn't rolling in the aisles with optimism, I would recommend that you talk to some of these people.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. The manufacturing side of the Fourth District is strong and it is strong based on the dollar. From what we can tell, it is strong in steel, chemicals, and capital goods. The emphasis on the customer side has been more on delivery times as opposed to price, which implies some increase in price of very [unintelligible] commercial side. It is very consistent with respect to not bringing on [line] a lot of old plant; they want to wait a while longer to see if the demand lasts. On the retail side, it's very much the same as everyone else has reported. Higbee's, May's, and Federated all have reported strong sales gains since Thanksgiving. None of the weakness that we've all been anticipating has shown up, to date. In terms of the longer-term forecast, we have no really major differences with the Greenbook forecast. In terms of the adjustment

process we were talking about, I suspect surprises in the future rather than disappointments will be on the side of a quicker adjustment rather than a slower adjustment than we have seen lately. And the reason for that has to do with what is going on, at least in some companies, with respect to their profit margins. The profit margins of foreign companies are being squeezed; they are holding market share, as everybody has discussed. But they are doing the same thing that the Americans did six or seven years ago: they are putting plants in place in domestic markets or buying plants in domestic markets to retain their market share. So, they are going to suffer a profit squeeze for a while, and then they will be up and running with domestic plant production which would then imply less imports from abroad. So, I have some view that the adjustment process, at least as forced by the marketplace, is going to go a little faster than perhaps we are expecting at the moment. It doesn't mean that we shouldn't worry about the things that Jerry Corrigan and everyone else are worrying about. But my emphasis would be that, obviously, we don't have a lot of control over all of those variables. One we do at least have some influence on is price stability. And I would find a consensus around the table for moving more towards zero over the next four or five years more comforting than 4-1/2 percent.

CHAIRMAN GREENSPAN. Vice President Gynn.

MR. GYNN. This is my first time here, and this process is fascinating. Economic development in the Southeast appears to be very similar to what I've heard others comment on in the national picture. Manufacturing and trade-related activity--and in our case that includes textiles and chemicals--clearly are doing better. In Texas and Oklahoma the oil and gas industry is finally showing some signs of life. Yet, I think there's a little concern that some of the projects that are still on the shelf and that haven't been restarted could be discouraged, or at least put off further, if the price of oil does fall back or stay at lower levels. So, that's a minor concern in that oil patch of ours. in the paperboard packaging business, reports backlogs have grown and he can't even shut his plants for normal maintenance. So somebody, somewhere, thinks that business is going to be good. Very much like I've heard others say around the table, our retailers also report that their sales have come in close to expectations. But we've had a number of people point out that they had scaled back their expectations for the last half of this year even before mid-October, so I don't think we would use words like strong. We've even had a few retailers, as Tom Melzer indicated, point out that they have a little concern about the early part of next year, after we get past the Christmas season. Finally, with regard to the region, at our last board meeting a bit of uneasiness about the early part of next year was expressed from Tennessee, which has become kind of a mini-Detroit with a lot of automobile and consumer durables-related businesses. But Tennessee has done well and they are looking through that and see that it is only a temporary problem with a little disappointment perhaps in their minds for the early part of next year.

Nationally, we, too, are comfortable with the Greenbook forecast; our differences are marginal. We might see modestly less improvement in the trade deficit but we see the prospects for manufacturing investment perhaps being even a little stronger than indicated, as Frank Morris suggested; so, those tend to balance out.

Overall, we are reasonably comfortable that we will get moderate growth in 1988. I am a little concerned that perhaps the downside risk in the early part of next year might be a little stronger than the upside risk.

MR. JOHNSON. I agree with a lot of the comments. I'm picking up the same thing: that the export side of things is very strong. You don't hear anyone complaining about orders coming in and their ability to compete at these exchange rates and the activity of their businesses at this stage, so I think that on the production side things do look very solid at the moment. What's starting to trouble me a little though--and maybe I'm smoking something because I seem to be a bit out of sync with some of the other views--is certainly not on the production side right now but on the sales end of things. We got revisions on October and September retail sales, which were down considerably and down relative to the Greenbook, if I remember right. We have revised down the retail sales figures even [for the period] before the stock market crash; our view of domestic demand is weaker going into the stock market crash than in fact we thought before, relative to the forecast. Now, I agree with everyone else: I haven't seen the impacts of the stock market decline on consumption at this point. Retail sales were actually up modestly in November; automobile sales seem to be holding up, although that's mainly an incentive issue. But we haven't seen a really severe hit to domestic consumption since the stock market crash. What I'm worried about a little is that we may not quite be seeing it yet but, given the fact that sales are running below what we anticipated them to be before the stock market crash, there's a little more downside risk, in my mind. I think some circumstantial evidence is that we have seen weak credit demands in November. How you translate that, I don't know; but it's the first time in a while that we actually have had a decline in overall credit demands for the month of November.

I don't place a lot of emphasis on the aggregates but the fact that we are now projecting an actual decline in M1 growth in December, when we were hoping for an increase, is a little bothersome. I can't really explain it and I don't want to have just a knee-jerk reaction, but it bothers me that I can't rationalize it either. So I think there is some near-term risk, but I agree overall with the longer-run view that we have to see consumption run lower than we have in the past to get the adjustment we need. I think the external adjustment is taking place; exports look very strong, and even adjusting out oil imports, non-oil imports don't look bad at all. But my concern is that things don't sneak up on us on the domestic demand side--that while we are expecting slow domestic demand and we are sort of looking the other way, the numbers go down sharply. I don't want to get caught in that side of things. We do have to resist a strong expansion in domestic demand or we have to have a very conservative expansion in that area or maybe even almost flat; but that's different from a sharp decline. But, once again, I don't see the sales numbers sharply weaker since the stock market crash. I'm worried more that we went into that on the weaker side than we thought. That's sort of where I am on the adjustment process. What I'm worried about, though, is that if we end up with a sharp downward reduction in consumption as the adjustment mechanism, we're just simply going to replace private sector demands for financing with public sector demands for financing, because we are going to see a huge swelling in the budget deficit. I'm not sure that our needs for foreign capital flows are going to

improve under that adjustment process at all, substituting government financing needs for private financing needs. And the interest rate implications of dependence on foreign sources of capital flows are pretty scary.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. My outlook and the staff's are very, very similar. There is only one modification and that is that I see as strong an economy as the staff sees only without the 1 percentage point decline in interest rates. I guess that would mean that I see an underlying strength of capital spending that would be able to accomplish the contribution that the staff has laid out even without getting the interest rate decline. That adjustment, I think, can still give us strength. There are three uncertainties that we are all faced with: consumer spending; the impact from net real exports and the dollar; and the foreign exchange rate/capital market adjustment problems. Let me mention, first of all, consumer spending. It seems to me that the consumer spending effect of the episode of October 19 and the days following is less than the impact of the exchange rate and interest rate changes that have occurred since then. That is, consumer spending is not apt to be affected in a worrisome way, given what has already happened. If we do not have another event, it seems to me that, of course, we will have employment effects in some of the financial service industries and that would be consistent with some slowdown. But I would note that personal consumption expenditures for the third quarter 1987 over the third quarter 1986 contributed about 1.5 percent out of a 3.1 percent economy. So, Jerry, I think this adjustment you're talking about is really already under way. My view, Jerry, is that it's helpful to lay out before us, as you did, the kind of adjustment scenarios. But it seems to me that there's just no question that these adjustments are going to take place. We are not going to be able to operate with the kind of imports of capital and the kind of balance of trade deficits that we've had; the market is going to bring some adjustments. The question is whether the adjustments come in the way we would like them to come or in a way that would be very unfavorable and maybe close to disaster. I was very pleased to hear Tom Melzer, Bob Parry, and Lee Hoskins all mention the fact that inflation of 4 percent is not satisfactory. Of course, if we have low wage rates and high inflation rates, that's one way we could get an adjustment. I would join them in saying that's not a satisfactory way of getting an adjustment.

Our real net exports, as you know, have been increasing in a rather dramatic way. I guess, Martha, I'd be on the side of calling the November numbers a fluke or a one-time occurrence. I'm not willing to rely on that as compared to twelve months of movement in the other direction. When we look at third-quarter rates of 18 - 19 percent on real exports, it seems to me that one of the problems we are faced with is that real exports are growing at such a dramatic rate. We pick a high [unintelligible] exchange value of the dollar and we say we don't want to tie monetary policy to that. I understand why, but we may have overlooked the fact that that foreign exchange value of the dollar is producing a real export role and a crowding out of manufactured imports at a rate that's going to be difficult to maintain, even given the heavier capital spending taking place there. So, it seems to me important for us not to make any gesture in the direction that would tend to exacerbate that problem. I tend to

think, as Jerry Corrigan and Sam Cross and some others do, that that's the real factor that could give us the recession that everyone is worried about. I don't think it is going to come because of slow money growth. The money growth path that we've had, it seems to me, is not a Federal Reserve starvation growth pattern. It isn't because we shut off reserves. If that were the case, I think we would see some other factors occurring: I'm sure that the foreign exchange markets would show more evidence if we really were being that stringent on reserves; that the Treasury yield curve would show it; and that we would be getting some declining commodity prices. But I do believe that the real risk that we face is a foreign exchange rate upset that could, in a sense, give us another financial market episode in equities. I understand why the monetarists argue for floating exchange rates, but you just don't get something for nothing. If we have floating exchange rates, then we'd have to accept floating interest rates also. And it would scare me as to what a precipitous move in exchange rates might do to U.S. interest rates. Frankly, I think that the stock market episode and the recent oil price move have simply given our bond markets some opportunity not to face the real consequences that a continuation of the dollar on this course would mean. It's in that context that I've been, I suppose, oversensitive to any tendency on our part to peg the fed funds rate. I'm just afraid to peg the fed funds rate in an environment in which we would not have interest rates responding to those real forces. I share the view that letting the dollar go is a recipe for disaster. We're not getting the kind of help we ought to be getting on Capitol Hill, but it seems to me we either have to take some steps in that direction, or we're going to get an experience that none of us wants.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I was quite surprised to hear the high degree of optimism from all parts of the country expressed around the table here. I was surprised because an awful lot of people talked about their agreement with the Greenbook. And if you look at the Greenbook, the next quarter's GNP is down 1.1 percent: consumption is negative; durables and nondurables are negative; industrial production is down to a 1.0 percent increase; housing starts and auto sales are at the lowest levels since 1983. Yet everybody is extremely optimistic.

MS. SEGER. [Unintelligible].

MR. HELLER. Martha hasn't spoken yet? Well--

MR. KELLEY. I haven't spoken yet.

MR. HELLER. The optimism is also in contrast to what I would almost call a barrage of visits and letters that have been coming in here during the last couple of weeks and days. Curiously, many of the remarks by those representing the national associations--often of the industries that some of you were talking about--were very much on the pessimistic side. Obviously, we have some problem here of looking at the trees versus the forest. And, having lived off Coricidin for the last three or four days, I really don't know how to sort it out. I come down with Mike Prell, who says I see a lot of good things and I see a lot of bad things, and I really don't know which way the evidence is pointing. But there is a marked contrast between the optimism that seems to be being picked up in the anecdotal evidence

and the outlook that I would argue is not at all optimistic, according to the Greenbook. Also, if you look at some of the monetary statistics, we have a real money supply that has been falling now since May, and reserves are flat. So, if all that optimism is out there, I'm still curious why people don't hold that money. Those are also some of the remarks I seem to be hearing, at least from our Desk people. They say, well, the demand for money just isn't there. So, I'm puzzled. Obviously, I hope it will turn out the way the vast majority here describe it to be, but I think that there are a lot of reasons for unease in that optimistic outlook, because I think some of the more macro forces may not be all that sanguine.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Well, I'm glad to follow your speech, Bob, because I think I'm coming from very much the same place. I have some concern, too, because I'm getting somewhat different reports than I'm hearing around the table this morning. In fact, the reports I'm hearing around the table this morning encourage me greatly from where I was when I came in here. My suspicion is that we are getting this adjustment, as Governor Angell suggests; and I also suspect that it may be this very slow aggregate growth and reserve growth that Bob Heller was talking about that's doing it. I'm not confident that retailers are doing that well. The sales I hear about across the country--when they started and the extent of them--make me wonder how strong things are. Indeed, there are a lot of reports coming in from associations that are not as strong as we are hearing here this morning. Martha, you were quoting from I had a visit from an economic consultant who works with and this fellow is telling that the economy is going to fall off the cliff in the first quarter on account of the growth in the aggregates. That may be part of what's going into their planning. In short, Mr. Chairman, to go back to your analogy about plumbing and Bob Black's comment on it, I wonder if the plumbing may not be beginning to work again. In any event, I suspect it will work a while before we realize it is working. Given that the retail economy is as important as it is to the overall picture, I think that we should be very alert to the state of the plumbing--what the aggregates are doing and what effects that may be having. I would be very happy with the staff forecast for 1988, and I basically agree with it. But that's where my concern about it would lie.

CHAIRMAN GREENSPAN. President Guffey, do you want to say anything?

MR. GUFFEY. Well, it's getting late, Mr. Chairman. I would just add to the optimism in a sense, particularly from the District perspective, although we are lagging the national recovery both in terms of employment gains as well as personal income gains. Nonetheless, looking back from where we started, in energy, agriculture, aircraft, and so forth, things are looking much better. That's particularly true in the agricultural area, where things such as agricultural real estate values actually have increased in the second quarter--very modestly to be sure, but nonetheless there is an increase. Energy rig exploration is something in the neighborhood of 35 percent greater than a year ago. However, given what's happening now with the potential fall in the oil prices, I'm not sure that will continue. With regard to retail sales, the report that we have is

that they are modestly higher, some 5 percent higher, than the same time last year, with a lot of sales and discounting, which means volume should be moving through those retail elements. As a result, I guess I would say we feel better than we did a year ago, and better than we did six months ago. The clouds on the horizon might be a drop in energy prices as the result of OPEC's problems and/or a change in the agricultural subsidy provisions from the federal government, both of which would impact the Tenth District. However, looking at 1988, the latter would suggest that it will be a fairly good year, given current commodity prices--if they hold up. Agricultural exports are very encouraging to the people in our area. Those are mostly government-subsidized exports, I might say, but the inventories that built up in the last couple of years are being worked off.

CHAIRMAN GREENSPAN. Why don't we take our break at this time and continue with Don Kohn's report.

[Coffee break]

CHAIRMAN GREENSPAN. Don, why don't you get started?

MR. KOHN. Thank you, Mr. Chairman. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Thank you, Mr. Kohn. What I would appreciate everyone doing in the process of expounding your views on policy is to first address the issue of whether or not we should be shifting to some other basis, in the context of our discussion yesterday. What I'd like to do is merely reiterate the four different options that were outlined yesterday and ask that as part of your exposition you stipulate where you would like to be in those various options. As you may remember, option (1) was to retain the current emphasis at least until markets calm further and borrowing behavior returns more to normal; (2) was to place even more emphasis on achieving a predetermined federal funds rate or a narrow range; (3) was to shift back toward more emphasis on achieving the borrowing objectives, but with greater flexibility and attention to the federal funds rate than before October 19th; and finally, (4) was for the Committee to return to the previous emphasis on borrowing and reserve pressure objectives. In the context of that, it also would be useful to indicate your general view on where you think the funds rate should be as well as the borrowing objective. Also, in expressing the borrowing objective, differentiate between the current borrowing levels, which are subnormal relative to the funds rate, and the normal borrowing levels so that, in the event the relationships started to return to normal, the Desk could make the appropriate adjustments in the context of the wishes of this Committee. At the moment, I would gather that the abnormal spread is approximately \$100 million to \$150 million.

MR. KOHN. Yes, I think it is. I think it'd be fair to say that the normal borrowing for a funds rate of about 6-3/4 percent would be in the \$400 million area. As we said in the Bluebook, we expect about \$300 million after year-end, allowing for some downward shift, but not as much as we've been getting recently.

CHAIRMAN GREENSPAN. So you'd say it's a \$100 million shift?

MR. KOHN. After year-end. Right now I'd say it's probably closer to \$200 million, but I'm guessing that some of that is saved up for year-end.

MR. ANGELL. Mr. Chairman, I have a question. If we specify what we want the level of the fed funds rate to be will that then go into the minutes? I'm assuming that if we come up with a fed funds level that it would be appropriate for that to be in the minutes.

CHAIRMAN GREENSPAN. Well, it will depend, I think, on the answer to the first question. If it is the consensus of the Committee to target the funds rate--if we go with, say, either option (1) or (2)--then I think probably that's appropriate.

MR. ANGELL. Okay.

CHAIRMAN GREENSPAN. If we go with option (3) or (4), I would suspect not.

MR. ANGELL. I agree with you.

MR. JOHNSON. How was it done last time? We went to a funds target last time.

MR. KOHN. Well, we did it sort of by analogy with the borrowing. We never mentioned the borrowing specifically in the policy record.

VICE CHAIRMAN CORRIGAN. It sounds like we didn't go quite as far as we apparently went, either.

MR. JOHNSON. Yes, I agree. I didn't think we--

MR. KOHN. We didn't mention a specific funds rate.

MR. PARRY. I think it would be a real mistake to indicate that we're following a funds target for the short term because I think it will really confuse the market, particularly if we intend to switch when things become more normal in a couple of weeks. I think handling it the way we did before is a better --

CHAIRMAN GREENSPAN. Well, I misspoke. I really meant if we did (2).

MR. PARRY. Yes.

CHAIRMAN GREENSPAN. We actually did option (1) and we didn't put the funds rate [in the policy record]. So it's only if the Committee chooses option (2) that I think it will require that.

MR. ANGELL. I wouldn't agree with that. If we do (1), it seems to me that we would have to report that in the minutes.

CHAIRMAN GREENSPAN. Why don't we do this. Let's actually see what evolves, and then we'll deal with it.

MR. ANGELL. Okay. And then we'll look at that question.

CHAIRMAN GREENSPAN. Let me just open up by commenting that in listening to this discussion I was surprised, in a way, about the spread that exists between the Board members on the one hand and the presidents on the other. I suspect that's a short-term phenomenon because the real world is going to impinge on us very shortly and push us together. The trick is to figure out where. I must admit I'm somewhat surprised at the strength of the economy. You can see it in the orders and you can see it in the burgeoning capital goods markets, which in many respects have been getting less emphasis here than the retail sales figures because in one respect, it's pretty easy to forecast retail sales. They're going to be dull and the reason they're going to be dull is that the saving rate is very low and it's very difficult to come up with an optimistic scenario on retail sales no matter how you play the game. Fine tuning the Christmas selling season I find is a wonderful experience fraught with failure. The reason is that customers go to the best deal. Unlike the numbers for capital goods orders which, if you get a sample of five or six major capital goods producers in a particular industry no matter where they are in the country, would all look the same because they're arbitrated; retail sales don't arbitrage. You don't get the same retail sales pattern in Boise as you do in Atlanta and as a consequence, you need a very large sample. What all of the data suggest to me is that none of us has been able at any time in the pre-Christmas season to get enough of a sample to give us a really good judgment. I suspect no matter how Christmas comes out, it's going to surprise us, either plus or minus. And we really won't know what Christmas sales were until February, probably. In any event, I think we have to assume that the retail markets are dull and that basically nothing is going to happen there.

The crucial issue is going to continue to be the basic plant and equipment numbers. It's becoming fairly obvious why the stock market has not had the effect that a lot of us were concerned it might. I guess the best way [to describe it] is to draw the analogy of the market going up 500 points in one day then going down 500 points the next day; it's unlikely to affect anybody's behavior. I think we're all aware of the fact that if we had had a 500 point drop back to levels of 5 years earlier, we would have had some really significant effect. But the issue is that we have wiped out a substantial amount of unrealized gains; what we were not aware of was that nothing was heavily committed; the extent of leveraging against the stock market gains was apparently really not all that large. I think that's the answer, but I must say at the moment that I feel uncomfortable with it. I still do not believe we are out of the woods on the market; I don't think all of the yield spreads have gotten back to where they were. All objective measures of stock market levels suggest that, if anything, we are still above normal and that we are vulnerable to a significant decline. Consequently, even though under normal circumstances I would say that in this type of environment we probably should be in something of a tightening mode, if rates go up under these conditions I suspect the stock market would go down, and I'm fearful of the extent of that particular decline. On the other side of this, I feel uncomfortable about the money supply figures mainly because, as Governor Kelley said, we don't know when the plumbing will be hooked back in and something could give at some point before we know it. More importantly, despite the 4-1/2 percent inflation rate, the debt levels, the aggregate levels, are all performing reasonably well now even though the Ms are all over the

place. If we take the oil price decline realistically, I think inflation is in the process of easing. So, on the other side of this, one could argue--and I'm sure a number of you will--that we should be easing from here. But, if we ease from here in the context of still soft exchange rates, I'm fearful that the system will crack, with the huge holdings of dollar-denominated assets in the world. Despite the heavy central bank accumulation, those holdings actually have never been other than a net plus for the private sector of the world. If we ever had private holders starting to try to liquidate, I think the effect would be a real free fall that could bring the stock market down and that would crash us. So, between Scylla and Charybdis, I sort of come out for alternative "B".

MS. SEGER. May I just ask one question about what Don said these new numbers were for the aggregates in December? I didn't hear what--

CHAIRMAN GREENSPAN. They were revised down.

MS. SEGER. I heard him say revised down, but I didn't hear--

MR. KOHN. The December aggregates--is that what you're asking?

MS. SEGER. Yes.

MR. KOHN. We're now looking at about a -4 percent on M1. That is composed of a further drop of about 16 percent in demand deposits and a small rise in other checkable deposits. And we have about a 2-1/2 to 3 percent increase in M2. Some of the revision to M2 is not only this demand deposit drop showing through, but the overnight RPs and Eurodollars also came in quite weak. That's a highly volatile series, so I'm not sure how much emphasis I'd put on that. The household parts of M2--the bank and thrift savings and time deposits and money market funds--don't look much different than they did last week.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. I also would favor "B". I would define that as a \$400 million borrowings target. In my mind, that's where we were and what we've done since then was really to accommodate the special conditions.

CHAIRMAN GREENSPAN. This is on the normal part.

MR. MELZER. On the normal relationship. I would expect that to be associated with a 7 percent funds rate and I would be symmetrical in terms of the language. As to the other--I guess I should have done that first--I would favor alternative (4). I wouldn't go back to it abruptly; I think I'd use the year-end as a cover, but I would get back to that relatively promptly. I really don't know what (3) means.

CHAIRMAN GREENSPAN. Three means to give discretion to Peter.

MR. MELZER. I like Peter, but I think I like number (4) better.

MR. BLACK. How about Peter in consultation with the Chairman?

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I would favor alternative (3) and probably would move in that direction after year-end. With regard to the alternatives, if I were to follow the analysis of my staff and that in the Greenbook, I think it would lead to a recommendation that monetary policy soon be eased in response to a significant expected slowing of the economy in the first half of next year and the accompanying declines in interest rates. However, to date, I haven't seen the signs of the negative effects of the stock market decline. Consequently, I would support alternative "B" with asymmetrical language providing us with the flexibility to ease before the next FOMC meeting should that become necessary. With regard to the specifics of the funds rate and the borrowing, I'm completely satisfied with the work that the staff has done in the Bluebook. It seems to me that the 6-3/4 to 6-7/8 percent funds rate is reasonable. In light of what we've seen with regard to the demand for borrowings, I also would accept their \$300 million borrowing number, expecting that it probably would be below that between now and year-end. Conceivably, we could get to the \$400 million level after that, but I don't know how fast.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I'm essentially for "B" but a bit split as far as the timing is concerned, maybe along the lines that Bob Parry was just talking about. Through the year-end, and as long as the dollar is under pressure, I would stick to the fed funds rate at 6-3/4 percent. If the pressure on the dollar eases, and once we get through the choppy weather of the year-end, I would switch more towards a (3) type policy with emphasis on the borrowing again. I would be asymmetrical in the easing direction, too, so that might allow the fed funds rate to drop a bit. Probably a normal borrowing target of \$300 million would be appropriate for that.

CHAIRMAN GREENSPAN. Actually, that is three that would be consistent.

MR. HELLER. That's right.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I'm for alternative "B" with normal borrowing of around \$300 million, which would give us a federal funds rate presumably of 6-3/4 to 6-7/8 percent. I would prefer a symmetrical directive and --

CHAIRMAN GREENSPAN. Sorry, that was symmetrical?

MR. BOEHNE. Yes, symmetrical. And I like option (3) in terms of implementation. As to whether one begins the process before year-end or starts after that, I think that's a judgment call. One

can't make that call at this point and I think we're going to have to let Peter and the Chairman decide that.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. I'd take "B" and I would want the normal borrowing, which I guess would be \$400 million after the first of the year. I will not mention any fed funds rate. I want no tilt and I want (4) just like Tom Melzer. But I do think if we're going to do (4) that we might consider an announcement. Someone mentioned yesterday that we might make a very simple statement indicating that we were reemphasizing adjustment plus seasonal borrowing so that the markets would not assume that we had made a policy move.

MR. JOHNSON. Symmetric or asymmetric language with that did you say?

MR. ANGELL. I want no tilt.

MR. JOHNSON. No tilt, I'm sorry.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I, too, would favor the specifications of alternative "B", although I'm a little uncertain about exactly what normal borrowings means in this context. Let me come to that. In terms of implementation, I would prefer alternative (3). My guess would be that we might as well start around the turn of the year and use that as a cover because I don't think we're going to have much choice. There's a chance that the markets are going to do something unusual. There will either be pressure or maybe a lot of excess reserves around, depending on how people position themselves. I don't think we want to sit there and work real hard to try to offset all that. But it seems to me to be a logical time, maybe an unavoidable time, to start. As I said, whether the borrowing that would be associated with that is \$300 million or \$400 million, I'm really not quite sure. I would start with the intention of keeping the federal funds rate roughly where it has been; but as the period develops, obviously, I wouldn't expect that it was going to stay there precisely. And I would prefer a symmetric directive.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. I guess I'd go with alternative "B", with some reluctance, over the concern about the aggregates and the continual downward revisions. That causes me some concern about going forward. Obviously, the optimism we see right now is related to some events that have already happened, if we believe in lags. So, I'm concerned about going forward. If we're going to look at an aggregate, I would try to pay a lot of attention to M2 and whether we're going to get the growth there or not. If we get continued shortfalls in that, then I'd be concerned more than I would be otherwise. I'd want to go with option (4) if we're going to use the announcement. I don't see any reason not to announce to the markets that we're making a change. We're sitting here looking for year-end cover and all that kind of thing; it seems to me we can get where we want to be very quickly with less misinformation or miscues by making an announcement. If we're

not going to do that, then I'd worry a little more about markets and go with option (3).

CHAIRMAN GREENSPAN. Symmetrical?

MR. HOSKINS. Symmetrical, and \$400 million borrowing.

CHAIRMAN GREENSPAN. \$400 million?

MR. HOSKINS. That's as good a guess as I can come up with.

CHAIRMAN GREENSPAN. No funds rate?

MR. HOSKINS. 7 percent.

CHAIRMAN GREENSPAN. President Boykin.

MR. BOYKIN. I would go with option (3) and begin the movement when it seems appropriate. I'd go with alternative "B" and probably a \$300 million borrowing assumption. I would assume that it could be adjusted up the same way it was adjusted down in the interim between our meetings. And I would have symmetric language.

CHAIRMAN GREENSPAN. Do you want to say anything about the funds rate?

MR. BOYKIN. About where it is now.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I would maintain our basic policy stance that's indicated by a federal funds rate centered on 6-3/4 percent. I think we ought to continue the present operating procedures for the period immediately ahead but I'd like to take advantage of some of these year-end pressures to allow the funds rate to begin to move around a bit more than it has. Then as we move into the new year, I'd like to go to alternative (3) whether or not there's an announcement effect, as indicated in Don's and Peter's memo. I guess that would call at that time for about \$400 million in borrowing. I would keep the asymmetrical language unless we remove the sentence that says, "still sensitive conditions in the financial markets."

CHAIRMAN GREENSPAN. So, you're saying you would stay with symmetrical or what?

MR. BLACK. No, I'm saying I would keep it asymmetric, as it now is, unless we remove the reference to still sensitive conditions.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, I'd also be in favor of alternative "B". With regard to the other four alternatives, I kind of like all of them in proper order other than alternative (2) which I do not like. Certainly between now and the end of the year, I think it would be appropriate to keep current procedures in place until we are satisfied that we've come out of that particular adjustment period; then I would shift to alternative (3) but lean toward alternative (4).

Specifically, a fed funds between now and the end of the year at 6-3/4 to 6-7/8 percent would be appropriate, with a borrowing level not unlike what we have now. But I think as we come out of that year-end period, we would want to get back toward alternative (3) and then move from alternative (3) to alternative (4) with a borrowing level of about \$400 million. I wouldn't necessarily want to judge a federal funds rate that would be appropriate for that borrowing level; I'd rather let the market determine what would be appropriate. In terms of the language, I would be in favor of symmetric language. But I'd also pick up on the same directive language that Bob Black mentioned with regard to sensitive market conditions. I think that phrase ought to be dropped and I would use symmetric language.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Mr. Chairman, I like Si Keehn's concept of moving in the right order from (1) to (3) to (4). I would go to (3) after the first of the year, moving toward (4) later on. And I would encourage some sort of an announcement at a proper time. I favor alternative "B" with probably a \$300 million borrowing target and asymmetric language on the easing side. I'd keep the funds rate about where it has been, calling that 6-3/4 percent, tending on the downside rather than the upside from there.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. Thinking back to the market reactions early in December when the fed funds rate passed 7 percent going north, I'm convinced that market participants are very sensitive to what happens to the fed funds rate on particular days. So, I would prefer, short-term anyway, to stick with option (1) which really watches the funds rate very carefully. If there's a decision to tighten that's one thing; but if there isn't, then I think the message that comes from a fed funds rate hitting 7 percent or higher is one of tightness and I'd be now very cautious about that. Eventually, I certainly would be willing to go (3) or even (4), but I don't think that now is the time to do it. And it may not even be the time to do it until we get to the February meeting. In terms of the choices facing us here, I guess I'm going to be a nonconformist and go with "A", which gives us a slight easing. I certainly hope that the exports stay very strong but I just feel that there is some risk there. Also, I remember how difficult it has been in the past to read consumption events and consumer behavior. It seems to me it was back in 1980, when I wasn't here but some of you may have been, when the credit controls were put on in March of 1980 because consumer demand was so terribly strong. Of course, later on we learned that we were already in a recession. And I think back in 1974 a similar thing happened when we handed out "WIN" buttons and that encouraged people to slice up their credit cards and so forth only to find again that we were already in the recession. So, I am really concerned about misreading the retail sales reports. We're all hearing different stories--some of strength, others of weakness. And consumption is a big chunk of GNP, as we all know; so I think there is some risk here. I also feel that maybe there's more of an inventory problem out there than we have yet identified. And I'm impressed with the fact that the inflation numbers look far better than any of us thought they would if we go back to our discussions in the spring or even in the summer. I think inflation psychology has simmered down. The Dick Hoey survey, which I

didn't believe then and probably shouldn't now, nevertheless, for those who follow it, does show some cut in the inflationary expectations going forward. So, I think that's good. I'm not a monetarist but I am paying close attention to what's happening to the reserves and the monetary aggregates; and I think that is something to be slightly concerned about. Having said all that, I would like to go with the modest easing identified as alternative "A".

CHAIRMAN GREENSPAN. What's the borrowing with that?

MS. SEGER. Well, because of the sloppiness of the relationships, I'm not sure what that would be. I guess I would just concentrate on a fed funds rate of somewhere between 6-1/2 and 6-3/4 percent.

CHAIRMAN GREENSPAN. President Morris.

MR. MORRIS. Mr. Chairman, I think you're right that, at least temporarily, we're really locked into a no-change policy, which I would interpret as alternative "B". I would make the directive symmetric. With regard to operating procedures, I would stay with our current stance of trying to stabilize the funds rate over the next few weeks in the 6-3/4 - 6-7/8 percent area. But once the Desk has concluded that the year-end adjustment is over and the relationships appear to be moving back toward normality, I would move to option (4), our pre-October 19 operating procedure, with a borrowing level of \$300 million.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I would choose alternative "A", I think, if I weren't somewhat concerned about the potential effect on the exchange rate and the fragility of the financial markets right now. I still lean that way, but I guess I would be happy with something like alternative "B", with asymmetric language toward ease if events unfold in support of that. Like Frank Morris, I would prefer current operating procedures in terms of emphasizing the funds rate. So, I'd support alternative (1) until we see a stable relationship develop. Once we see that, I'm for going back to our old procedures. In other words, I'd stay with (1) and, when we are sure that we are back to a traditional relationship, go to (4). So, I'm at alternative "B", with the 6-3/4 - 6-7/8 percent range on the funds rate, and asymmetric language. I have no real borrowing number because I don't see how we can decide on that.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. I have a multitude of problems. My first problem is that, going back to the last meeting, I frankly did not realize, or did not fully appreciate at the time of the meeting, how far we seem to have gone in terms of an operating strategy that so narrowly pegs the federal funds rate, as indeed emerged over the period. It may be that I missed the nuances of the discussion, but I certainly didn't view policy quite in that strict light of literally resisting even one-eighth of a percentage point wiggles in the federal funds rate. As I said yesterday, that approach to policy, even on a very short-term basis, is one that I find very, very troubling. So, on the strategy question, I would favor going back to (4) as fast as

possible. I don't think I would condition that on a stable relationship because there has never been one and never will be one. The whole idea is that part of what we're providing is room for the market itself to play a role in the process. So, moving back to (4) promptly is something that I put some importance on. I don't want to beat a dead horse here, but it seems to me that doing so at year-end is the perfect way to do it. The Chairman could say in testimony or in the question and answer [session] at the end of this week that we expect, as always, some volatility or churning in the markets at year-end, so don't read any policy significance into it, because there's none there. In my judgment, that provides the easiest way to get back to (4), but I think that is your call, Mr. Chairman. If you prefer to do it otherwise, I could live with (3) over the next couple of weeks. But getting stuck on something like what current policy has turned out to be would be a very big mistake, I think.

As far as the basic thrust of policy is concerned, were it not for the proximity to October 19th, I would actually favor tightening policy right now on the grounds that I regard the current exchange market situation as perilous. I recognize that there are risks on both sides. The exchange market could trigger a blowout in the stock market; or, the other way around, a blowout in the stock market could trigger a blowout in the exchange market. But what lies beneath both of those concerns, at least in my judgment, is a great deal of agnosticism or skepticism or cynicism about the thrust of U.S. economic policy in general. And I don't think that is going to go away very easily. However, I can't ignore October 19th, and I don't want to throw out the baby with the bath water, so I could live with an alternative "B" that would have borrowings, depending upon what we want to do with the strategy question, at \$400 million, at least after the year-end. I would associate that with a federal funds rate roughly in the range of recent experience, but I would define recent experience in somewhat broader terms than an eighth-of-a-point spread. On the language of the directive, I have no trouble with a directive that is asymmetric toward easing in a context in which the pattern of economic statistics is distinctly weak. On the other hand, I would strongly favor a directive that is at least potentially asymmetric to tighten if we run into another rout in the exchange market.

CHAIRMAN GREENSPAN. That's basically symmetric.

VICE CHAIRMAN CORRIGAN. Well, it's not because if the circumstances are not significant--

MR. ANGELL. But, you could say it symmetrically both ways. You could say that if your weakness--

CHAIRMAN GREENSPAN. Well, I know [unintelligible]. In other words, it's not the list of items that we have to determine how we are going to behave; and we have both of those in the instructions.

VICE CHAIRMAN CORRIGAN. The difference is that the only condition under which I would be willing to ease would be because of the economy itself. The ideal order [in the directive language is a problem]. In other words, I wouldn't be persuaded by--

CHAIRMAN GREENSPAN. I understand what you are saying. The only argument seems to be, I would assume, that everyone who was talking about symmetry would not have the same problem.

MR. ANGELL. Do you want a tilt to tightness?

CHAIRMAN GREENSPAN. No, he doesn't.

VICE CHAIRMAN CORRIGAN. No. The condition under which I would tilt to ease is only one and that is decisive weakness and evident weakness--

CHAIRMAN GREENSPAN. Evident weakness.

MR. ANGELL. But all of us who favor symmetry would have that.

VICE CHAIRMAN CORRIGAN. No, that's not what this says.

MR. ANGELL. Well, we can get the directive.

CHAIRMAN GREENSPAN. The directive says: depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchanges as well as the behavior of the monetary aggregates.

VICE CHAIRMAN CORRIGAN. I've always interpreted that to mean you'd ease depending upon any one of those.

MR. ANGELL. No.

CHAIRMAN GREENSPAN. Well, I've always interpreted it to mean that each individual who talked about asymmetry would be willing to tighten or ease depending on how any of those four behaved.

MR. ANGELL. Correct.

CHAIRMAN GREENSPAN. I can't seriously believe that we'd all put the same weight on all those variables; it's inconceivable.

VICE CHAIRMAN CORRIGAN. That's my point.

CHAIRMAN GREENSPAN. Yes, I've always assumed that--unless I'm naive as a newcomer.

VICE CHAIRMAN CORRIGAN. I get hung up on the language, so let me stress the point that I'm trying to make. Under what conditions would I be willing to tighten? There are several conditions under which I would be willing to tighten: the exchange market or strong economic numbers or a buildup in inflation or--

CHAIRMAN GREENSPAN. But only one in which you would ease: the economy.

VICE CHAIRMAN CORRIGAN. But only one where I would be willing to ease. That's the distinction I'm trying to make. That's a long-winded "B".

CHAIRMAN GREENSPAN. I'm going to put you down as symmetric because that's the way I interpret it.

VICE CHAIRMAN CORRIGAN. Well, we'll see what the language says.

CHAIRMAN GREENSPAN. Vice President Guynn.

MR. GUYNN. Basically, I favor no change in policy at this time, although I must confess that I have a nagging gut feeling that we could be in for a little disappointment in growth in 1988. Because of that, I have a very mild preference to tilt the directive very gently to suggest that we would ease more quickly than we would tighten. I don't profess, after one meeting, to know whether maintaining policy is \$300 million to \$400 million borrowing in normal times. I, too, would favor shifting back at the first opportune time to targeting borrowings rather than fed funds. If that can be accomplished around year-end, I would be in favor of that. I assume that would imply some tolerance of more fluctuations in the fed funds rate, but I would not want to let the fed funds rate gyrate to a great extent over year-end. We have a great deal invested in trying to keep things calm and stable; if that means stretching out the adjustment back to borrowings into next year, I'd be in favor of that.

CHAIRMAN GREENSPAN. I think that we're missing President Guffey. Do you want to give us a summary?

MR. GUFFEY. Well, the summary would be very short. I would favor alternative "B", with a symmetric directive. With respect to the operating procedures, like several others, I would like to move to alternative (4) as quickly as possible. I'd do it under the cover of the year-end uncertainty. Alternative (3) has some attractiveness to me, but it seems to me that this Committee ought to be making the decisions rather than putting that burden upon you, Mr. Chairman, and Peter on a day-to-day basis. As a result, I think alternative (4) ultimately is where we should be. And with regard to alternative "B", I'd associate that with a federal funds rate in the range of 6-3/4 to 7 percent, with whatever borrowing is commensurate with that, which I assume would be around \$350 million to \$400 million.

CHAIRMAN GREENSPAN. As I add these numbers up, there's a majority for (3), and alternative "B" with \$300 million borrowing seems to be prevalent. There's one alternative "A" and, in this type of analysis, I'd put that as asymmetric to ease, which makes four. So we come out with symmetric language on "B". We didn't specify the directive range on the funds rate but I would read that, to the extent that it's relevant, as 4 to 8 percent. Is that what we had? Do you read that pretty much the same?

MR. ANGELL. Right.

CHAIRMAN GREENSPAN. The language for the operational paragraph then reads: In the implementation of policy for the immediate future, the Committee seeks to maintain the degree of pressure on reserve positions.

MR. KOHN. It should say the existing degree.

MR. BERNARD. The existing--

CHAIRMAN GREENSPAN. Okay. Several individuals, but not all, raised the question about that "still sensitive" portion. In view of the fact that most did not, I infer that that was acceptable. Those of you that did not mention it and would prefer that that be deleted, I would appreciate your speaking up. If not, I will assume that the sentence remains as is.

MR. ANGELL. We could take the "still sensitive" out and leave the "uncertainties" in. It seems to me you might leave in the reference that uncertainties may call for a special degree of flexibility; that would be consistent with (3) rather than (4).

CHAIRMAN GREENSPAN. In what sense do you mean? The words still sensitive imply a bit more emphasis on certain fragilities. There are always uncertainties in the economic outlook. I don't think the word uncertainties captures it. It is saying something different. I inferred from what I was hearing that there was no objection to that remaining in, although a couple people did raise the question. I want to make certain that it wasn't inadvertence that--

MR. ANGELL. Well, I didn't mention it and I would like it out.

CHAIRMAN GREENSPAN. Okay. Let's quickly run down the members of the Committee and poll on this. Just say in or out.

MR. BERNARD. Vice Chairman Corrigan.

VICE CHAIRMAN CORRIGAN. It's hard to answer that question without knowing what else is going to be in. I guess I'd say out.

MR. BERNARD.

President Boehne	In
President Boykin	In
Governor Heller	In
Governor Johnson	In
President Keehn	Out
Governor Kelley	In
Governor Seger	In
President Stern	In

CHAIRMAN GREENSPAN. Well, the "Ins" clearly have it.

MR. ANGELL. You were correct, Mr. Chairman.

CHAIRMAN GREENSPAN. One never knows. [The language would read]: "The Committee recognizes that still sensitive conditions in financial markets and uncertainties in the economic outlook may continue to call for a special degree of flexibility in open market operations. Taking account of conditions in financial markets"--I would tentatively read that as "somewhat lesser reserve restraint would or somewhat greater reserve restraint would be acceptable depending on the strength of the business expansion, indications of inflationary pressures, developments in foreign exchange markets, as well as the behavior of the monetary aggregates. The contemplated reserve conditions are expected to be consistent with growth in M2 and

M3 over the period from November through March at annual rates of about--" What are we using for these?

MR. KOHN. About 5 and 6 percent.

CHAIRMAN GREENSPAN. "5 and 6 percent, respectively. Over the same period, growth in M1 is expected to remain relatively limited. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 4 to 8 percent."

MS. SEGER. But is that really what's going on? We put this broad range in there and it sounds--

CHAIRMAN GREENSPAN. We have that question at virtually every meeting.

MS. SEGER. Oh, I know that. For 3-1/2 years I've--

CHAIRMAN GREENSPAN. If we were targeting federal funds, I would say that would be irrelevant. The trouble is that in this context everyone is used to that language and I'm not sure they take it very seriously any more. If we were to change it, it might be a slippery thing.

MS. SEGER. I was just wondering whether there couldn't be some way to suggest that there might be situations where consultations would be helpful even if the fed funds rate were in the range.

CHAIRMAN GREENSPAN. I think that's generally implicit, Governor. If such a situation arises, I think the Chairman would call--

MR. ANGELL. Mr. Chairman, if we're going to (3), and that does involve a transition, it seems to me that we do not know at this point how the \$300 million on borrowing that we've specified will turn out. Would it be appropriate for a telephone conference call to take place at the first of the year to get a better feel of that so that we would not have eased inadvertently in going to that number.

CHAIRMAN GREENSPAN. Well, (3) itself has language in it that provides for increasing flexibility on the borrowing level, as I read it. Is that correct?

MR. KOHN. Well, increasing flexibility around the funds rate.

CHAIRMAN GREENSPAN. Using a borrowing objective?

MR. KOHN. Right. It does still suggest that the Desk would be attempting to hit the borrowing number but would be willing to adjust if it looked like the relationship were way out of whack.

MR. ANGELL. In other words, if the fed funds rate were moving down decidedly, you might not pursue the borrowing objective as precisely as you did before October 19?

MR. KOHN. Well, as the Manager saw that that was consistent with market conditions--

MR. ANGELL. But you would be pursuing the borrowing as your primary operating strategy?

MR. KOHN. I see (3) as moving in that direction.

MR. ANGELL. Yes. Now, my question relates to the transition from where we are to that. If the transition entails an acceptance of \$300 million of borrowing and that turns out to be easier than we thought, would it be appropriate for us to have a conference call?

CHAIRMAN GREENSPAN. I think it probably would. Even though we have what seems to be relatively firm language here, we are in an environment in which the potential volatility that exists is far greater than normal. And I think it is incumbent upon us to seek guidance from the Committee if something rather different than what is currently in the economic environment or the financial environment begins to emerge. It's quite possible that when we get into the beginning of the year things will look different. If so, I would say that some sort of consultation would be desirable and advisable.

MR. MELZER. Could I ask a question? I had a similar question last time. How will the policy record reflect what happened here? I think some people interpret the \$300 million as kind of where we were and as no change in policy; others interpret it as a change in policy in that we're moving the borrowing target down from \$400 million to \$300 million, albeit under that flexibility arrangement. If somebody reads the policy record next time and the directive talks about the existing degree of reserve restraint, where does it get memorialized that the degree of reserve restraint was changed, if in fact it was? How will that be read?

CHAIRMAN GREENSPAN. Well, it really wasn't changed.

MR. ANGELL. No, it hasn't been changed.

CHAIRMAN GREENSPAN. It wasn't changed, but the particular borrowing objective number came about largely because as the Desk read the directive in conjunction with our appraisal, which was pretty much the same--although I guess it's different from Jerry's--the emphasis was on the funds rate and secondarily on the borrowing target. Thus, when the divergence occurred, we stayed with the funds rate as distinct from the borrowing target. But in no way was the Desk trying to [unintelligible] what was inferred and was the directive of this Committee as the extent of pressure in the markets.

VICE CHAIRMAN CORRIGAN. Leaving that aside for a minute, I interpret the combination of a consensus for number (3) and the consensus to leave in that second sentence on still sensitive conditions in the context of your remarks still to be consistent with an operating strategy (3) and a prompt move to (4). That, in turn, means that before we get to \$400 million on borrowing we are not, even in the next couple of days or weeks, slavishly seeking a federal funds rate of 6-3/4 or 6-7/8 percent.

CHAIRMAN GREENSPAN. Well done.

VICE CHAIRMAN CORRIGAN. Pardon me?

CHAIRMAN GREENSPAN. What you're saying [unintelligible]. That's correct.

VICE CHAIRMAN CORRIGAN. Okay.

MR. MELZER. What would be the equilibrium borrowing assumption?

CHAIRMAN GREENSPAN. Let me put it this way: If the relationship between the funds rate and borrowing objectives goes back to where it was, I would interpret this to mean \$400 million, not \$300 million.

MR. ANGELL. Okay.

MR. MELZER. Fine.

MR. HELLER. Then borrowing at \$400 million could be associated with fed funds trading above 6-3/4 percent.

VICE CHAIRMAN CORRIGAN. If it worked the way we thought it would work, that would not be the result.

MR. HELLER. It would not be the case. Okay.

MS. SEGER. What if it does come to that?

MR. ANGELL. Well, it does; and if it goes below it, it goes below.

MR. HELLER. Well, there was quite a consensus, though not a total consensus, for symmetry; there was a very substantial minority that was asymmetrical toward easing. Implicit in that view was [an understanding] that the fed funds rate would come down from the 6-3/4 percent level rather than go up as we move to a borrowing target. That was implicit, at least in my mind.

MR. ANGELL. That wasn't a majority though, was it?

MR. HELLER. No, but which way are you moving? As you get up to the 6-3/4 percent and you move to a borrowing target we all figure that the 6-3/4 percent is associated roughly with \$300 million, right?

CHAIRMAN GREENSPAN. Currently.

MR. HELLER. Currently. And, as you move toward the \$300 million--

MR. ANGELL. Let me ask a question. I thought we had assumed it to be \$300 million before the end of the year, but would assume it to be maybe \$400 million after the end of the year. Is that right, Don?

MR. KOHN. No, I don't think so, Governor Angell. Peter and I had extensive conversations on this, I would add, and we were equally uncertain about it. But our presumption was that some, but

not all, of the reluctance to borrow would go away because we still would have a sensitive economic environment. We would have the Bank of Boston situation and a lot of things going on which might make banks a little reluctant to be seen at the discount window. So, our presumption was that \$200 million was more appropriate now and that would rise to \$300 million after the end of the year; but there would still be a margin below the \$400 million.

MR. ANGELL. Well, I think Tom Melzer has a very good point: that the FOMC has not voted at any time to take an easing step and we ought not to get a translation of this into an easing step without a vote to ease.

CHAIRMAN GREENSPAN. Let me put it this way. I think you're correct in raising the issue. If the issue becomes ambiguous and if, in fact, Peter and Don are wrong about the judgment as to where the relationship between borrowings and funds would be at the end of the year, in order to make a judgment with respect to how it is played then I think it would be advisable to come back to the Committee for a judgment at that point.

VICE CHAIRMAN CORRIGAN. Good.

MR. STERNLIGHT. Just a footnote on Don's comment: If it turns out that a number of banks borrow on December 31, on that long weekend, that could throw the borrowing number for that particular period into--

CHAIRMAN GREENSPAN. Let me put it this way: I will stipulate further that the judgment as to whether that is happening is yours.

MR. MELZER. He likes you too, Peter.

CHAIRMAN GREENSPAN. Today--oh, yes, a good point. In this context, how do you read the issue you raised about--

MR. ANGELL. I feel satisfied that with the \$300 million to \$400 million that we not go through the process of mentioning it in the minutes. I would not have felt satisfied before because there are people in the market who do read these minutes on a belated basis very carefully, and I would feel a responsibility that if we ever make such a move that we should let the markets know. I believe the markets work best when people have accurate information.

MR. JOHNSON. If we make it into what?

MR. GUFFEY. Well, this number doesn't appear in the policy record or the directive; it's not in either one.

MR. MELZER. No, but the language on reserve restraint--

MR. GUFFEY. Yes, but it only talks about the level of the borrowing target.

MR. ANGELL. No, I feel satisfied that it's not the end under this specification.

CHAIRMAN GREENSPAN. Peter is [unintelligible] this. Can we get a vote on the directive?

VICE CHAIRMAN CORRIGAN. Can I just ask one other question?

CHAIRMAN GREENSPAN. Go ahead.

VICE CHAIRMAN CORRIGAN. I want to come back to this dollar business--not that it's necessarily directly relevant to the vote, but let me raise the question anyway. In the circumstances that we face right now we literally have risks all over the table. And everybody is talking about this. There are very few things that we can influence directly, but I continue to be deeply concerned about our ability to have any constructive influence on any of this so long as it is perceived to be the policy of the Federal Reserve on the one hand and the United States Government on the other hand to be indifferent, to the point of embarrassment almost, about the exchange rate in the circumstances that we face right now. If there is anything that can be done--through G-7, G-5, G-10, or any other mechanism available--to try to stabilize that situation, that is something I want to be strongly associated with.

CHAIRMAN GREENSPAN. What specifically do you have in mind?

VICE CHAIRMAN CORRIGAN. Do you mean if I had my druthers?

CHAIRMAN GREENSPAN. No. What I'm trying to ask is: Do you mean some joint venture by the G-7 in which the basic purpose is in that direction?

VICE CHAIRMAN CORRIGAN. That's correct.

MR. ANGELL. Do you mean specifically the use of monetary policy to add to exchange rate stability?

VICE CHAIRMAN CORRIGAN. That was the point I was making before. That's implicit here under certain circumstances, but I don't think that's enough. I think what is needed is going to have to go beyond that.

MS. SEGER. Are you talking about a discount rate hike? I'm a little confused.

VICE CHAIRMAN CORRIGAN. No.

MR. JOHNSON. No, Jerry's talking about fiscal policy.

MS. SEGER. I thought you meant monetary policy.

VICE CHAIRMAN CORRIGAN. I'm also saying that I do think there are things that can be done in the G-7 context that would be compatible with that objective. And unless, or until, there is some movement in that direction, the risks that we are running in terms of these massive unfunded liabilities constitute, in my view, the largest single risk of the many risks that are in front of us right now. And if push comes to shove, whether it's monetary policy or not, the answer is going to come in the form of higher interest rates with or

without monetary policy. What I'm trying to avoid is getting there the hard way. There's no choice here.

MR. JOHNSON. You say unfunded liabilities. I agree that they are unfunded to the extent that they're financing the deficit for consumption purposes. They're not unfunded if they're private sector investments; they are funded.

VICE CHAIRMAN CORRIGAN. Prospectively, they're unfunded.

MR. JOHNSON. If there's a rate of return included in the interest rate it's not unfunded.

CHAIRMAN GREENSPAN. Let me ask you this: Is this relevant to the vote that we're--

VICE CHAIRMAN CORRIGAN. It's relevant to my reservations about the vote, yes. Even though I have to vote--

MR. ANGELL. You're just talking about what the minutes say then?

VICE CHAIRMAN CORRIGAN. No, I'm--

MR. ANGELL. You're not talking about the minutes?

VICE CHAIRMAN CORRIGAN. I don't care about the minutes.

MR. ANGELL. Okay.

CHAIRMAN GREENSPAN. The reason I asked is that we can have a formal discussion on this if you want.

VICE CHAIRMAN CORRIGAN. Fine.

CHAIRMAN GREENSPAN. Let's vote.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Corrigan	Yes
Governor Angell	Yes
President Boehne	Yes
President Boykin	Yes
Governor Heller	Yes
Governor Johnson	No
President Keehn	Yes
Governor Kelley	Yes
Governor Seger	No
President Stern	Yes

CHAIRMAN GREENSPAN. Do you want to reopen this?

VICE CHAIRMAN CORRIGAN. Well, as I see it, we're on a tightrope and I'm at the point where I think that a real effort should be made to try to stabilize the exchange market. By that I mean that the dollar has gone down enough. What policy tools are available to do that? The problem is damn few. We're not going to get anything more on the fiscal side or elsewhere. We could tighten monetary

policy, including raising the discount rate, but that entails all these risks in terms of both the real and the financial sides of the economy. Or we could try to paste together some kind of a Louvre II agreement backed up perhaps by using swaps or some foreign currency borrowings. But I'm dubious that that by itself, without some kind of policy initiative, would be convincing. On the other side of the coin, if the skepticism about policy continues and if we have a renewed run on the dollar, it seems to me that that's going to produce precisely the kinds of things that we're all so afraid of, including a further break in the stock market. And that's the dilemma. But in order to solve that dilemma, there has to be some movement someplace. And I ask where? And this is the thrust of my argument: that at this point some of that movement has to come from the United States. As I said, there are several ways to do it; but with the vulnerabilities that I see right now, it is a very high-risk approach and I don't like it. I think it's very dangerous.

MR. ANGELL. I would like to associate myself, as you probably understand, with the remarks that Vice Chairman Corrigan just made. I believe it's a high-risk approach. And I also believe that a very clear-cut policy on the part of the U.S. Government and the Federal Reserve would not require as much interest rate cost as we otherwise will have to bear. It would be more consistent with lower interest rates and faster money growth than our ignoring the exchange value of the dollar.

CHAIRMAN GREENSPAN. Does anyone else want to address this issue?

MR. JOHNSON. There's not enough time.

CHAIRMAN GREENSPAN. If not, I just want to confirm that the next meeting date is February 9 and 10. I will entertain a motion to adjourn.

MR. JOHNSON. I so move.

MS. SEGER. I second it.

CHAIRMAN GREENSPAN. No objection.

END OF MEETING