

Meeting of the Federal Open Market Committee

August 24, 1999

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, August 24, 1999, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Boehne
Mr. Ferguson
Mr. Gramlich
Mr. Kelley
Mr. McTeer
Mr. Meyer
Mr. Moskow
Mr. Stern.

Messrs. Broaddus, Guynn, Jordan, and Parry, Alternate Members of the Federal Open market Committee

Mr. Hoenig, Ms. Minehan, and Mr. Poole, Presidents of the Federal Reserve Banks of Kansas City, Boston, and St. Louis respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Ms. Fox, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Baxter, Deputy General Counsel
Mr. Prell, Economist
Ms. Johnson, Economist

Messrs. Howard, Hunter, Lang, Lindsey, Slifman, and Stockton, Associate Economists

Mr. Fisher, Manager, System Open Market Account

Mr. Ettin, Deputy Director, Division of Research and Statistics, Board of Governors

Messrs. Madigan and Simpson, Associate Directors, Divisions of Monetary Affairs and Research and Statistics respectively, Board of Governors

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

Ms. Edwards,¹/ Senior Economist, Division of Monetary Affairs, Board of Governors

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

Mr. Stewart and Ms. Strand, First Vice Presidents, Federal Reserve Banks of New York and Minneapolis respectively

Mr. Beebe, Ms. Browne, Messrs. Eisenbeis, Hakkio, Ms. Krieger, Messrs. Lacker, Rasche, and Steindel, Senior Vice Presidents, Federal Reserve Banks of San Francisco, Boston, Atlanta, Kansas City, New York, Richmond, St. Louis, and New York respectively

Mr. Weber, Senior Research Officer, Federal Reserve Bank of Minneapolis

Mr. Bryan, Assistant Vice President, Federal Reserve Bank of Cleveland

¹ / Attended portion of meeting relating to issues pertaining to year-end operations.

Transcript of Federal Open Market Committee Meeting of
August 24, 1999

CHAIRMAN GREENSPAN. Good morning, everyone. Would somebody like to move approval of the minutes for the June 29-30, 1999 meeting?

VICE CHAIRMAN MCDONOUGH. So move.

CHAIRMAN GREENSPAN. Without objection. We need to elect Ms. Cumming and Mr. Howard as Associate Economists to serve until the election of their successors at the first meeting of the Committee after December 31, 1999. President McDonough, would you nominate your colleague?

VICE CHAIRMAN MCDONOUGH. Yes, I would like to nominate Christine Cumming for that position. She has a Ph.D. in economics from the University of Minnesota and is a very highly regarded career professional at the Federal Reserve Bank of New York. Most recently, before we put her in charge of our research group, she was the brain trust for the bank supervision function of the Bank. She's a very good economist and I'm very happy to nominate her.

CHAIRMAN GREENSPAN. First of all, would somebody second the motion?

SEVERAL. Second.

CHAIRMAN GREENSPAN. Any discussion? All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. The "ayes" have it. Karen Johnson, would you do the honors for David Howard? You do know him, I hope!

MS. JOHNSON. Yes. Dave Howard has been a member of the Board's Division of International Finance for almost 25 years and has worked in several of the areas of the division. Recently, owing to the passage of time and the departure of some people, he was promoted to Deputy Director of the division. He has a Ph.D. from the University of Virginia, is very well rounded in open economy international macro issues, and is a very thoughtful economist. I think he would be an asset to the Committee and I recommend him to you.

VICE CHAIRMAN MCDONOUGH. Move approval.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. I assume no discussion is required, at least I trust not. If so, the presumption is that David Howard is elected unanimously.

I'd also like to recognize First Vice President Jamie Stewart who is attending his first meeting. We welcome you.

Peter Fisher, would you review developments in foreign currency and domestic financial markets and domestic open market operations?

MR. FISHER. Thank you, Mr. Chairman. In front of the members of the Committee is a package of charts, similar to the one I usually show.^{1/} I will begin by addressing agenda item 3, my report on markets and the Desk's activities.

The first page, covering the period from June 1 through August 20, presents a slightly different configuration of charts than I usually show you. The top panel depicts U.S. deposit rates, current and forward; the middle panel shows yields on U.S. Treasury securities; and the bottom panel shows the percent change in various equity market indices.

In the top panel, you can see that from the time of the Committee's last meeting on June 30 until the Chairman's Humphrey-Hawkins testimony on July 22, current and forward 3-month deposit rates moved more or less sideways. They began rising fairly consistently after the Chairman's testimony through the time of the release of ECI and GDP data and the nonfarm payroll employment numbers, and then came off noticeably following the publication of the PPI on August 13 and, two days later, the CPI. Even more interesting than that movement in rates is the changed structure of the forward rates from the beginning of June to the beginning of August. On June 1, shown at the far left-hand side of the chart, the 6-month forward 3-month rate and the 9-month forward 3-month rate were trading rather closely together at around 5.8 percent and the 3-month forward rate was around 5.4 percent. Now, I would suggest that the proximity of the 6-month forward and the 9-month forward rates had to do with the market's expectations that the Committee was likely to tighten a bit in the future. They didn't quite know when, and they didn't know what would happen after that. There might be just one move. So, some of the term premium between those two maturities was squeezed out.

By August 1, you see that the 6-month forward rate had shifted and was then trading in line with the 3-month forward rate. Several things happened in the month of July, I think. Obviously, the market's attention

^{1/} A copy of the material used by Mr. Fisher is appended to the transcript.

was focused on the Chairman's Humphrey-Hawkins testimony, particularly his comment that the Committee would act promptly and forcefully. There was increasing attention during the month on the funding pressures anticipated in the fourth quarter and in early January as a result of the century date change. Also, there was the rolling forward of the maturity of these contracts, which changed each day.

To make the point very specifically, on August 1 the 3-month forward 3-month rate involved a deposit whose term covers precisely the period when the greatest pressures are expected--November, December, and January. If you look at the early August period on the chart, you see that the 3-month forward rate actually traded below, even if just a few basis points, the 6-month forward rate. Now, I'm not sure the market's expectations are correct. But the forward rates are showing us that the market is pricing up considerably the deposit rates for this 3-month window, erasing whatever term premium one might expect to exist between the 3-month forward and the 6-month forward because of the anticipated pressures around the year-end.

Turning to the middle panel on Treasury yields, you can see that those yields more or less followed the same pattern relative to the data releases. However, just before the release of the nonfarm payroll data on August 6, there was a two-day rally across the yield curve after the Treasury's refunding announcement in which Treasury officials discussed the introduction of buy backs and the elimination of the 30-year auction in November. That rally was short lived, unwinding after the release of the nonfarm payroll data. I'd note that the 30-year bond from Friday, August 20 through today traded at a rate identical to the rate at which it closed on June 30, the day of your last meeting, whereas both the 10-year and the 2-year rates are roughly 10 basis points higher.

In the bottom panel you can see that equity markets here in the United States more or less tracked inversely the movements in yields. If we include yesterday's change in the DOW on that panel, the increase in the DOW would be 6.6 percent.

Turning to the second page and to European markets, the top panel shows the forward rates and current rates for 3-month deposits on euros. As is evident in the middle of the top panel, the 9-month forward 3-month euro deposit rate jumped appreciably following the European Central Bank's press conference on July 15, during which President Duisenberg suggested that there was bias creeping into the ECB's deliberations. Several days later, on the release of German IFO survey data on business confidence, which was somewhat stronger than expected, there was a very abrupt jump in the 3-month forward deposit rate; but that was completely unwound subsequently. What I think is

noticeable both in the top panel and in the middle panel depicting European bond yields is the extent to which these rates moved in response to U.S. data releases and moved more or less in a pattern similar to that in U.S. markets.

The bottom panel shows the euro-dollar exchange rate. One can see that the euro has moved up a bit off its lows against the dollar, particularly in the week of July 19 to July 23. There are two stories circulating in foreign exchange markets about movements in exchange rates. One is that a revival of global growth, especially in Europe and Japan, will be narrowing growth differentials with the United States. The second is that the Fed is about to tighten and that that will be bad for U.S. assets and bad for leverage and, therefore, for the dollar. Now, both of these stories could be true. I don't mean to discount that possibility. But I would note that many observers, particularly in the foreign exchange markets, have tended to focus in their conversations on the first story--the narrowing of global growth differentials. But it seems to me that the asset market movements reflect more of the latter story--that is, the fear that a Fed tightening will be bad for assets and bad for leverage.

In the bottom panel, one can see that in the week beginning July 19, following Duisenberg's comments about creeping bias, the dollar came off quite abruptly. That Monday morning several large asset managers thought it was an opportune time to buy euros. They did not expect the kind of exchange market reaction that occurred. They found a very, very thin market and the dollar moving downward quite briskly. It appears to me and to others, in hindsight, that the market was very thin partly in anticipation of the Chairman's Humphrey-Hawkins testimony. That dollar trend accelerated some on the release of the German IFO survey data even though, as you can see in the other panels on the page, the IFO survey had very little impact on forward rates or on the yield curve.

I would underscore that the dollar is still quite strong against the euro. If my chart depicted it through this morning, it would be trading at 1.05. Translating this morning's rate into a rate more familiar to us all, the dollar-mark, that rate would be 1.86. So, I just want to emphasize that, regardless of its movements against the euro, the dollar in historic terms is quite strong.

Turning to the third page, which depicts Japanese markets, you can see on the left side of the top panel that Japanese forward rates rose a bit following the release on July 29 of stronger-than-expected Japanese industrial production data for June. Japan's IP was plus 3 percent on a month-over-month basis as opposed to minus 1 percent in May. But it is hard not to notice that, again, Japanese forward rates more or less in their

own muted way also are tracking the pattern of U.S. forward rates and U.S. interest rate expectations.

There has been much attention paid to the Japanese equity market of late, and its movements are shown in the middle panel. But all that chatter is now overshadowed by the extraordinary performance of bank shares in the Japanese market following the merger announcement of last week. On this scale, if the bank index included Monday's trading, the Topix Bank Index would show a 26.8 percent increase over its June 1st level.

The bottom panel shows the value of the yen expressed against the dollar and the euro. Since your last meeting, the Japanese authorities intervened on three occasions--on July 5 in conjunction with the release of the Tankan Survey and again on July 20 and 21--for a total of

We acted as their agent on one occasion. I think there are two distinct periods to focus on here in terms of the dollar's movements. During the week of July 19, the dollar weakened against both the euro and the yen. But as you can see in the blue line on this panel, the euro-yen rate was mostly unaffected. That was the week during which the markets were most intensely interested in the global growth differential story, and bond yields started backing up. I would note that the anxiety about a Fed tightening being bad for assets was particularly acute in Tokyo. Market participants and also Japanese officials, I'm afraid, have coalesced around the view that a Fed tightening in 1999 is likely to have the same impact on the dollar as the 1994-95 Fed tightening episode. I don't share that view. I think that's a bit of a stretch. But that view has become rather widely held in the Tokyo market and also by the Ministry of Finance.

In the more recent episode last week, the yen appreciated against both the dollar and the euro. At the start of last week Governor Hiyami suggested to Japanese corporate leaders, I think wisely, that they should take more responsibility for hedging their own foreign exchange positions. That had quite an impact on the mood in Tokyo. Later in the week, former Vice Minister Sakakibara somewhat less wisely let slip that further intervention by the Japanese authorities was not likely until the yen/dollar rate reached 110, and the market promptly obliged him and traded down toward that level.

Turning to the next page, the chart depicted there for the period from May 1, 1998 to August 20, 1999 is similar to a chart I've shown before on various spread relationships between private instruments and comparable U.S. Treasuries. Several of these spreads have widened to levels above those of last October. In particular, note that the 10-year Fannie Mae benchmark and the 10-year U.S. swap rates, shown at the

bottom of the chart, have backed up above their prior peaks of last October 12 and 7, respectively. The index of 10-year A2 investment grade corporate securities, the green line, and the mortgaged backed securities, the red line, haven't quite backed up to their prior peaks, but they also have been rising. Corporations and federal agencies have been eager to lock in what they perceive as rather low rates. They used the swap market initially to try to lock in those rates, and the aversion of swap market intermediaries to holding on to fixed rate risk has led to the sharp backup.

Now, I want to be very clear that I think this is quite different from what was happening last October. There is no sense of panic in these markets. That said, however, we have to recognize that these markets are quite thin and that the intermediaries are quite reluctant to hang on to risks. We have triple checked the data for the period of marked volatility in the swap rate last week, when it oscillated 10 and 15 basis points from one day to the next, and those are valid data points.

The other thing I would point out is that the lower grade credits, the more risky credits if you will, such as mortgage backed securities which are shown on the chart and junk rated issues not depicted here, have not backed up to their peaks of last fall. I would not want to suggest, however, that that is an indication that everything is warm and fuzzy in those markets--on the contrary. But there is very little being issued in those markets as opposed to the rather strong issuance of higher grade credits. So part of the reason why those rates haven't backed up further is because of a reluctance to issue in those markets.

Finally, turning to domestic operations, on the next page you can see that there was very little of note in the fed funds market during the intermeeting period. Deviations of the funds rate from target and the intraday standard deviation in the volume were quite moderate. The only point of note was that the demand for excess reserves appeared to run a little below the allowance of \$1.2 billion that we had in the path.

Mr. Chairman, during the intermeeting period we had no foreign exchange operations on behalf of the System or the Treasury. I will need the Committee's ratification of the domestic operations in the period.

Also, I sent to the Committee a memorandum on August 9, explaining my intention to raise the per-issue limit in our securities lending program from 25 percent to 45 percent. I would be happy to answer any questions about that at this time or on any other aspect of my report, before your vote to ratify the domestic operations.

CHAIRMAN GREENSPAN. Questions for Peter? President Minehan.

MS. MINEHAN. Peter, I don't have a problem with the proposed change in the limits under the SOMA securities lending program, but I do have a question. Apparently you have identified more than one dealer misusing the program, trying to gain some kind of dominance in a particular issue at a particular time. I know that in such cases you disallow their participation in the program until they give some evidence of having changed their strategy, but I just wonder whether that's a significant enough punishment. There are aspects of this that go to the Salomon situation. I wonder whether their primary dealer relationship should be at stake.

MR. FISHER. Let me distinguish a couple of things. First, if I thought the management of any dealer firm was not taking seriously the intent of our program, we would escalate the issue rather quickly. I believe the problem we've had in the first three months of the program is that some traders looked to take what advantage they could of it and did not understand the last resort nature of our program. So, in each case where this has happened--where a dealer appeared to have a large position and was also bidding in our auction--we suspended their bidding for that issue until such time as we were persuaded that their position was more in line with the intended usage of our program.

We have discussed already, Cathy, that if there were multiple infractions from a single dealer and the management didn't amend its ways, the first step would be to suspend them from use of the program for a year or some period like that. We are still discussing what constitutes a "strike" and whether our rule should be two strikes or three strikes and you're out. I would be inclined to pursue it that way--by prohibiting them from using the program. I think the analogy to the Salomon case is a little extreme. I don't want to overplay it, but raising the limits per issue--

MS. MINEHAN. That will help.

MR. FISHER. But not changing the per-dealer bid I am hopeful will reduce the potential for dealers thinking they can make something of this. So that is one incentive for us to raise the limits at this time.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Peter, I have another question along those lines. When you brought this before the Committee the concept, as you've just suggested, was more or less as a lender of last resort. But the frequency of use over the period strikes me as being far more

than last resort; it seems to me to be part of an everyday facility. Why the frequency of use if it is a last resort facility?

MR. FISHER. There are quite a few different U.S. Treasury securities outstanding. For any one of them, I don't think the frequency of use is continuous other than for on-the-run issues. But one of our major incentives in this program was to try to reduce the risk of fails to deliver in the on-the-run issues. So we always anticipated that the use would likely be frequent with respect to those issues. It is not the same dealer borrowing every time. That gives me some comfort, and I hope would give the Committee comfort, that the program is being used by the vast majority of dealers appropriately as a last resort. I want to underscore the overnight borrowing constraint we put in the program. We only lend securities overnight now, whereas previously we lent them for a one-week term. The dealers themselves view that as a fairly onerous condition. They would much rather finance a short position for a one-week or a one-month term. To have to come back every day means that in an operational sense borrowing from us truly is much more like a last resort for them. So in that sense I think it really is consistent with how we set up the program, although in a period when Treasury supply is contracting as rapidly as it is, I believe one can understand why the facility is being used as much as it is.

MR. HOENIG. We probably should expect at least as much usage going forward?

MR. FISHER. Yes.

CHAIRMAN GREENSPAN. Further questions for Peter?

VICE CHAIRMAN MCDONOUGH. Shall I move approval of the domestic operations?

CHAIRMAN GREENSPAN. I would suggest that somebody had better do so.

[Laughter] Without objection, they are approved.

Item 4 on the agenda is a very important issue being brought before this Committee. It is one that probably is ripe for discussion and certainly it was not at an earlier stage. But by now I believe we are all beginning to get a sense that, while we cannot pin down the whole array of Y2K effects, the broadened range of things that could potentially go wrong has grabbed our concerns. I don't know how the rest of you feel about what is going on, but I'm feeling an increasing uneasiness about a low probability--and perhaps very low probability--development. And that is the potential for a very significant adverse event in the financial

markets as a consequence of liquidity concerns, currency withdrawals, and uncertainties of a general nature. I think we can all probably assume, as the Greenbook assumes, that things will essentially work their way out. I don't deny that that is a very, very high probability. But we are the central bank, and what I'm concerned about is that we have a fiat money system. This means in effect that with some limitations--both legal and from our own rules--we can expand money as much as we choose. What I hope does not happen--and this is the reason why it is quite relevant for Peter to address these issues at this time--is that we will find that very low probability event occurring and our ability to address it somehow hobbled solely by our own rules of operation. The issues that Peter will raise and the authorizations that he will request, with the exception of the authority to do 90-day RPs, are solely for the purpose of handling potential Y2K problems and, therefore, should be sunset. What we will want to do, of course, is to review how all of this worked out after the year-end period. We can make judgments at that point on whether those authorizations should be allowed to expire, as I think we all hope at the moment, or whether some should be retained or even expanded. But the essential issue here is one of insurance, with a relatively modest premium, against a potentially catastrophic, very low probability event. With that, Peter, would you outline your proposals to us?

MR. FISHER. Thank you, Mr. Chairman. Included in my package of charts are two pages of outline notes that you can follow as I speak. You also have a one-page document containing a revised list of the votes that I will be requesting. They provide a guide to my specific requests. In that regard, there is some revision from those in the memo I sent you on August 17.

To begin, as I explained in my memo of August 17, my first proposal is to remove the constraint of the guidelines that restrict our operations in federal agency securities. These "Guidelines for the Conduct of System Operations in Federal Agency Securities" have been in effect since 1977. The formal proposal I would like to make is to ask the Committee to suspend the guidelines until April 30, 2000. At the FOMC meeting in March of next year I would expect to review thoroughly our experience with temporary operations in agency securities and, as I'll explain in a minute, our use of tri-party arrangements in our operations in agency securities in general. So, that is the first item I would plan to request.

As my memo spells out, Board staff and New York staff see reasonable potential for reserve needs to grow during the fourth quarter by around \$100 billion. I want to be clear that that is not a forecast; it is a scenario. I'd also like to be clear that my own seat-of-the-pants judgment is that our range of potential error is about the same size; that is, reserve needs might be \$50 billion or they might be \$150 billion. I don't know how I could tell you with any confidence where reserve needs are going to fall within that band. If they come in at \$50 billion, that will be just terrific and we won't have the kind of strain that I'm concerned about. If they come in at \$150 billion, triple the amount we've ever injected into the banking system at a time of peak demand for reserves, we will face some considerable challenges.

As I outlined in the memo, but perhaps I should have given some more emphasis to this, the supply of Treasury securities and straight agency debt in which we conduct our temporary operations is going to be subject to some considerable demand. The entire private sector is going to be engaged in a flight to quality and will be looking for liquidity. There was an article in yesterday's Wall Street Journal about the many corporate issuers who were so proud of themselves for borrowing all the money they need through year-end in the third quarter instead of the fourth quarter. Nowhere in the article did it mention what they were going to do with that money now that they've borrowed it. They aren't going to put it under their mattresses! They are going to try to put it in Treasury bills or in short-term deposits and make the banks put it in Treasury bills. I'd also like to underscore the fact that foreign central banks are busy changing their operating procedures in order to accept U.S. Treasury securities as collateral for their open market and discount window lending operations. So the whole world is thinking that around the year-end the place to be is in U.S. Treasuries and, as a close substitute for that, straight agency debt--precisely the markets we have relied upon for our collateral.

Therefore, I'd like to expand the pool of collateral that we can accept in our temporary operations around the year-end. In framing this proposal we focused on the language of the Authorization for Domestic Open Market Operations itself. That authorization allows the Desk to operate in all U.S. Government securities, "securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States." Significantly, that would include mortgage-backed securities that are agency pass-throughs

because they are “guaranteed as to principal and interest” and thus would fall within the scope of the Authorization. There are two constraints on our ability to do this. One constraint is the Desk’s own custody systems and our competence in valuing mortgage-backed securities. I’m not trying to disparage my colleagues and our staff, but we simply have never developed the skills to value mortgage-backed security collateral. We do not have the custody systems. And I blush to think what kind of supplemental budget authority I’d have to request for the second half of the year to try to build those systems, which probably would be impossible, or to acquire the necessary staff, which would be nearly impossible.

The other constraint relates to the 1977 “Guidelines,” which in practical effect constrain us in two ways. First, because of the structure of the Authorization for Domestic Open Market Operations, we presume that we can conduct temporary operations only to the extent that we can conduct outright operations. Since the Authorization limits the types of securities that can be used as collateral in our repo operations to those securities that are eligible for purchase--and since the Guidelines set rather low thresholds for outright operations in federal agency securities--that restriction would carry over and constrain our temporary operations. In today’s market, however, when we accept collateral we simply aren’t in a position to pick and choose the collateral dealers offer us or to set very precise limits on that collateral. That is not how the repo market works today. The other principal effect of the Guidelines is that they effectively preclude us from operating in GNMA securities, which is particularly counter-intuitive given the structure of the three major agencies.

Therefore, in order to expand the pool of collateral during the fourth quarter and early in the first quarter, we need to set up tri-party custodian arrangements with the two major clearing banks, Chase and Bank of New York. The entire dealer community uses these two banks; half of them are with one and half are with the other. And we would simply try to piggyback in this very short time horizon on their existing tri-party custody arrangements. As noted in my memo, this would be more or less identical to the arrangements we currently have with Deutsche Bank in Frankfurt for the management of our euro-denominated German government securities posted as collateral on the repos through which we invest System and Treasury foreign currency reserves.

I should add, as mentioned in my memo, that the tri-party custody arrangement would also permit us to take Treasury STRIPS, which our current systems are not configured to do, also expanding somewhat the pool of collateral. I guess that about summarizes the major points. So, focusing on this first request, my view is that suspending the 1977 Guidelines until April 30, 2000, as I mentioned at the outset, would give us a window of opportunity to expand the collateral pool so we can hope to meet the year-end upside risks. Then, as I say, we would review at the time of the March meeting the tri-party arrangements and all our operations in agency securities before the temporary authority lapses. I'd be happy to answer questions on the reserve needs or on this proposal.

CHAIRMAN GREENSPAN. Let's do that now.

MR. BROADDUS. Peter, I don't have a big problem with what you are proposing, but I think some of the principles in the 1977 Guidelines are quite valuable. I'm thinking especially of the first two. I'm wondering if we really need to suspend those to get what you want. Might it not be possible to suspend some of the guidelines but not all of them?

MR. FISHER. As you may recall, in my August 17 memo I proposed that the Committee act upon my request with the understanding that we would still adhere to the principles incorporated in those first two paragraphs. I suggested that a statement to that effect could be included in the minutes of this meeting. I'm agnostic about the precise wording on which the Committee votes. The Secretary of the Committee may have a view. I'd be happy to suspend only paragraphs three through six of the document.

MR. BROADDUS. It's mainly the fourth one that gives you the difficulty, right?

MR. KOHN. It is paragraphs four and five that are giving him difficulty. I think keeping the first two paragraphs and suspending the rest would be fine. That would accomplish the objective.

MS. MINEHAN. That is basically what was suggested in the memo.

MR. KOHN. This would be a more formal way of doing that.

MR. FISHER. It is identical in spirit to what I was suggesting in my August 17 memo. I'd be happy not to suspend those first two guidelines.

MR. KOHN. Right.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I have a question about the reserve needs. The Treasury balance is expected to be twice as high as usual at year-end. What are the major reasons for that?

MR. FISHER. The Treasury is forecasting its total cash balance at roughly double what it was last year. I'm not expert in this; Don Kohn or someone on his staff may be better qualified to respond, but \$20 billion of that has to do with the rules Congress passed for--

MR. KOHN. Credit unions.

MR. FISHER. So that bumps the level up considerably. Then the rest is a safety buffer for the Treasury.

MR. KOHN. That's so they can meet their obligations very early in the year if people have trouble getting cash to them. They want to be certain they will have plenty of cash to meet their needs.

MR. FISHER. Let me underscore that our problem in this area is that the Treasury's starting point, when they told us about this, was that they were going to put all this cash comfortably in Treasury Tax & Loan (TT&L) accounts. I just don't believe it is going to sit there. I think the banks are going to push that back to us. I might even be more comfortable if the Treasury were to leave some rather large share of that cash on our balance sheet. That would put us in a better position to reduce the volatility of day-to-day fluctuations stemming from what comes out of the TT&L accounts and what comes back to us.

CHAIRMAN GREENSPAN. I assume, incidentally, that that will increase the supply of Treasury securities available as collateral by a comparable amount.

MR. FISHER. Yes, but the TT&L banks will have to have additional--

CHAIRMAN GREENSPAN. No, I wasn't referring to the TT&L accounts. I'm saying that if Treasury uses the cash to build up its TT&L accounts or its balances at the Federal Reserve, it would not be paying off Treasury securities.

MR. FISHER. That's right. If the cash is in the TT&L system, the banks have to have collateral against that; and if it is on our balance sheet, we'll have to get collateral somewhere. It won't be one-for-one in Treasury bills. There will be a little more supply out there, but the asset side of the balance sheet--

CHAIRMAN GREENSPAN. I'm trying to say that they are supplying a goodly part of the net new demands as a consequence of that.

MR. FISHER. Yes.

CHAIRMAN GREENSPAN. So it's largely a zero-sum game in this particular discussion.

MR. FISHER. Yes.

MR. PARRY. I have another question on needs with regard to currency. There is no indication at this point, is there, that the estimates on currency needs are anything different from what we've been assuming?

CHAIRMAN GREENSPAN. Well, currency in circulation is still running ahead of normal, obviously, so there is some early store of value accumulation going on.

MR. PARRY. But I mean the amount that we've accumulated is also running far ahead of normal.

CHAIRMAN GREENSPAN. Yes, by some \$300 billion.

MR. KOHN. We don't see any reason to think that the Federal Reserve won't have many times the amount of currency that will be demanded in the fourth quarter. That's not an issue. I think the issue is how much will be outstanding in the hands of the public and, therefore, how many assets the Federal Reserve will need to hold to offset that.

MR. PARRY. Exactly. But I was wondering if anything has led us to revise our estimates on that?

MR. KOHN. No. We've done some analysis of the surveys that have been done of households. Interestingly, they tend to cluster around the \$500 per household level--if we make some assumptions and drop out the extremes--that we used for our planning purposes. Now, even that may be high. But, as best we can ascertain, the intentions of households and of banks to get currency are all roughly consistent with the estimates we used in the planning that we were doing some time ago.

MR. PARRY. Okay.

MR. FISHER. We have been doing some thinking about this in New York. One issue that is novel, at least in my thinking in the last month, is that if currency is going to flow more quickly through the banking system--that is, when banks draw on us and the cash goes out--there will be less of a benefit in holding vault cash. That's because, having moved to lagged reserve accounting, they actually take a debit. They ask for cash from the Fed and they have to pay us, so that's a debit to reserves. They get the cash in their vault and it

counts four weeks later. If it's moving faster through the system, that vault cash is never there to be counted as reserves for them. If it's still on hand it can be counted, but if it is flowing more quickly--. I don't fully understand the implications of that yet, but we think there may be a little difference in how we view that.

CHAIRMAN GREENSPAN. When the "howl" level goes up, you'll understand it very much more quickly!

MR. FISHER. Yes, I think you're right. There are a lot of uncertainties here.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I just want to speak to that issue and partly to the issue you raised at the outset, Mr. Chairman. My own view is that there is a very big gap at present between reality and perception, particularly in the markets. The reality is that at least with regard to U.S. domestic markets, things are in really good shape, as you've pointed out. There's a very low probability of a big problem--though we're likely to see glitches here and there--at least in my view. The perception, however, is focused a little more heavily on that probability and there is also this self-reinforcing logic in the market that is making everybody really nervous about having no liquidity in the fourth quarter of the year.

I hear this from a lot of different sources--from State Street and other investment people in the First District. I was at a conference last week in Aspen and among the market people there I heard this sort of chatter. It gets worse every time it is discussed in the sense of feeding into people's fears. So I think this proposal, as well as the others, is a very good way of closing that gap between reality and perception. These actions should make market participants comfortable that even if there are little glitches, we are going to go out of our way to make sure that we can either inject or sop up excess liquidity so that funding will be available in the fourth quarter if they need it. In particular, I feel strongly that the use of tri-party arrangements is a great idea, particularly since it allows us to operate after the close of the book entry wire. If reserves need to be absorbed, the Desk can handle it. Bringing this issue before the Committee was a really good idea. The writing of the memo in its entirety was extremely well done. It was very interesting and provided a lot of information for us to evaluate, and it contained some pretty original and useful suggestions on how to deal with this problem. The sooner we can announce something to the dealer community along these lines the better off we are going to be because the gap I mentioned would start to close.

CHAIRMAN GREENSPAN. Further questions for Peter? Would somebody like to move the authority?

VICE CHAIRMAN MCDONOUGH. So move, Mr. Chairman.

CHAIRMAN GREENSPAN. All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. Opposed? The "ayes" have it.

MR. FISHER. Turning to Item B, I would like to ask the Committee to amend the Authorization permanently to give the Desk authority to operate for periods of up to 90 days in our repurchase agreement operations. To be candid, as my memo says, with the benefit of hindsight I wish I had asked for that authority last year when the Committee raised the maximum maturity on repos to 60 days. I think the normal difficulties we face over almost every year-end period would be well met by 90-day repos. The 90-day term is also the standard in the marketplace and I see no reason why we should intentionally be different from the standard market practice. If we had a good reason, I'd be happy for our practices to be different, but I think there is some benefit in trying to operate in a way that is consistent with market practice. And particularly this year, we would like to start to address the buildup of pressures as we approach the year-end through term operations that would roll off in early October and then extend them through the end of February. As I said, I wish I had asked for 90 days when we discussed this last year. I think it is the right place for us to be permanently in any event. So I'd like to ask for 90-day authority.

CHAIRMAN GREENSPAN. Questions for Peter on this issue?

VICE CHAIRMAN MCDONOUGH. Move approval, Mr. Chairman.

CHAIRMAN GREENSPAN. Is there a second?

MR. KELLEY. Second.

CHARMAN GREENSPAN. All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. The "ayes" have it.

MR. FISHER. Item C, to amend temporarily the Authorization for Domestic Open Market Operations to authorize reverse repurchase agreements, I would like to try to explain in some detail.

Matched sale purchases and reverse repurchase agreements are functionally equivalent transactions. But the prior view in the System had been that we were only authorized to do matched sale purchases and not reverse repurchase transactions. In recent years, as I think the various memos in your package explained, the evolving view was that reverse repos are within our authority. The dealers have for many years been strongly urging us to move from the matched sale paradigm to the reverse repo paradigm. Our outside auditors have been pressing us to do this. They are much more comfortable with the accepted market practice of reverse repos and would like us to get away from the involved accounting methodology used for matched sale transactions. The legal memos in the package suggest that the switch would be acceptable to our lawyers, though recognizing that it would be a change from a prior view.

Let me be clear that I have been planning for some time to ask the Committee for the authority to do reverse repurchase transactions--as you can see from the dates of the memos --in conjunction with the Desk's acquisition and development of a new trading and processing system. We are currently finishing up a proposal that we will be bringing to the Board to seek approval to spend the monies on a new system. As part of putting in place a new system, I had been intending to ask for this authority. However, we won't be able to do reverse repos as part of our regular operations until we build a new system, which will be at least 18 months or 2 years from whenever we begin and maybe longer. We plan to have a phased introduction of the new system in all our operations.

Now, in considering the use of tri-party arrangements, we realized rather early on in our thinking that tri-party operations offer us the opportunity to operate later in the day, as Cathy Minehan has already alluded to, on both the add and the drain sides. The add side presents us with no particular problem; we can pursue that as we talk to the clearing banks. But on the draining side, if we are trying to get this done for year-end and just want to piggyback on their existing systems, there is no possibility of getting the dealers and the clearing banks to rebuild their systems. They might not want to do it anyway, but there is certainly no prospect of accomplishing it ahead of the Y2K date change to accommodate our current matched sale accounting system.

So if we want to pursue the development of a contingency plan--and I want to be very clear that I'm not certain we can make this work, though I'm hopeful that it could be a

useful tool for us--it will depend on some systems we haven't yet built. And it will depend on the willingness of the dealers to accommodate us late in the day, to change their balance sheets in response to our needs. If there's too much liquidity in the banking system, they ought to be willing to do that, but I don't want to pretend to you that I can go out and make this happen all by myself. However, to do that we would need to adopt the reverse repurchase authority so that we could do those transactions through tri-parties. Given that we're not going to be able to put this in our new system for at least a couple of years, temporary authority to do reverse repos is certainly what we need just to get us through the fourth and the first quarters. But you are on notice that I'm interested in this for the long run, too. We can see how it goes over the turn-of-the-year period.

So, I'd like to ask the Committee to amend temporarily the Authorization for Domestic Open Market Operations to authorize reverse repurchase transactions by adding the language shown as paragraph 1(c) in Attachment VIII of my August 17 memo.

CHAIRMAN GREENSPAN. I would suggest, since your coughing suggests that you're dying, that we have Norm Bernard read the paragraph!

MR. BERNARD. This would involve an additional paragraph to the Authorization under section 1, as Mr. Fisher was just mentioning. The new paragraph 1(c) would read: "To sell U.S. Government securities and securities that are direct obligations of, or fully guaranteed as to principal and interest by, any agency of the United States to dealers for System Open Market Account under agreements for resale by dealers of such securities or obligations in 90 calendar days or less, at rates that, unless otherwise expressly authorized by the Committee, shall be determined by competitive bidding, after applying reasonable limitations on the volume of agreements with individual dealers."

CHAIRMAN GREENSPAN. Questions for Peter on that?

VICE CHAIRMAN MCDONOUGH. Move approval, Mr. Chairman.

CHAIRMAN GREENSPAN. Is there a second?

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. The "ayes" have it. Let's move to Item D.

MR. FISHER. Mr. Chairman, turning to Item D, I'd like to ask for temporary authority to sell options on repurchase agreements, reverse repurchase transactions, and matched sale purchase transactions through the end of January 2000. The language, which we will come to, was in Don Kohn's memo to you of yesterday, which was included in your packages last night. Let me give my views on this and explain why we're seeking this authority.

As the Chairman said at the outset, there is a small risk of some extreme events at the end of the year that I think it prudent for us to lean against. From my perspective, I'd just like to offer the view that to a certain extent we are seeing some expectations among market participants that are already a problem. There is a problem now. Cathy Minehan referred to it and the Chairman was alluding to it.

CHAIRMAN GREENSPAN. The point I was making was not solely the technical problem. I was referring even more to the psychological problem.

MR. FISHER. Yes, I understand. I just want to focus on the problem that we already see today of growing levels of anxiety and uncertainty on the part of financial intermediaries, both banks and securities firms, which they are communicating to their customers in ways that are very unhelpful. Let me elaborate on that. The banks are telling their customers: "We may apply quotas. We may not take your deposits. We may give you a zero or negative interest rate." And securities firms are telling their customers: "Don't count on us; we may not be able to finance you in the last week of December. Go look elsewhere." And that is creating uncertainties about the functioning of financing markets, particularly repo markets, in the weeks around the year-end which go beyond the problem just of how much collateral we can get.

One of my motives for this request is to try to put some limit on the upside risk of that potential development. It is not just a quantity issue. That is, if the markets are not functioning--if the dealers are not willing to be on both sides of the market for us in some depth--regardless of the amount of collateral we're prepared to extend, we may find it quite difficult to carry out our objectives. So I see appreciable risks that market conditions may frustrate the Desk's ability both to add and drain reserves in the period around the year-end and to keep the funds rate trading around the Committee's target. I feel it would be

imprudent of me not to seek your approval for the tools that I believe are necessary for the Desk to carry out the directive.

As I outlined in my memo and as I mentioned, I think, at the May meeting, our having the ability to write options on repos, reverse repos, and matched sale transactions could be quite effective. In my view it has not just a reasonable prospect but the greatest prospect of enabling the Desk to carry out its mission in what could be extraordinarily illiquid markets. Whether or not something goes wrong in the markets, we are reasonably certain that these markets will be very illiquid. Now, whether some triggering event or some extreme circumstance will occur is the risk we're uncertain about, but I'm reasonably confident that these markets will not be tame. The idea, as my memo explained, is to auction options on repos and matched sale purchases for exercise during the days or weeks immediately surrounding New Year's Day at rates that would be in some band around the Committee's fed funds target. Now, I want to be candid about a dilemma we face. I believe the greatest impact this device could have is the announcement effect. Its secondary impact would be in actually providing low-cost assurance to the intermediaries that the money markets would not become dysfunctional and that funds would be available in some band around the Committee's target rate. However, it would be a measure of success of the program if very few of these options were exercised. If they are purchased, that will give the market some comfort. So if they are exercised, that would be fine; but it would be even better if market players came to the conclusion that they didn't need to exercise them.

The dilemma is that, while I believe the greatest impact would be in the announcement effect--at least I hope it would be--I'm not quite sure that we can develop the precise details of the program I would like to ask you to approve without talking to the dealers. I think we need a candid back and forth flow of discussions with the dealer community on how to structure this program. We have some ideas. I outlined them in my August 17 memo. But a practical issue is that we have to put a good face forward and show that we have some confidence in announcing this and also work out the details with the dealers to make sure this approach is really practical and will have the intended effect. And thus Don's memo to you of last night indicates that we seek this rather broad authority--I'll be candid about that--fully understanding that we'll have to work out quite a few details to make it actually fly. I'd be happy to answer any questions I can about this request.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I have more of a comment than a question. I think our approval of what Peter is recommending here is extremely important and in fact vital. The first three resolutions we've already agreed to really had to do with being able to carry out our normal responsibilities at the end of the year plus having some damage control capability. Damage control is something I've lived with for a long time because in my first job in the U.S. Navy I was a damage control officer. One thing that you figure out on a ship that is very capable of sinking is that the best way to control damage is not to have any. So you're always better off to be in the risk-avoidance business. And this essentially is the situation we have here.

Probably until about a month ago, I was of the view that the damage control capabilities that we have already agreed to would be adequate--that we could get financial intermediaries to respond essentially in the way that we got them to respond last fall. And that is that they pulled up their socks and decided to make markets, which is part of their job. But as President Minehan has suggested, it is also very clear to me that regardless of how much we lean on the financial intermediaries to make markets at the end of the year--and I probably would do the leaning--it is likely that those efforts will not be successful. It is sufficiently likely that we are well advised to use this additional tool. The conversations I've been having with very responsible heads of major institutions are much like those Cathy has had. They feel their responsibility to their shareholders and their customers is such that they have to protect themselves. And if we were in their jobs, that's essentially what we would do. They are not paid for being patriots; we are.

Therefore, I'm absolutely convinced that we need this capability largely to avoid risk or at least to reduce risk. And as Peter has suggested, if we're completely successful in the message we give, we may never have a single one of these options exercised. That would be victory.

CHAIRMAN GREENSPAN. Not exercised and not even purchased.

VICE CHAIRMAN MCDONOUGH. That would be even better! I think the likelihood is that the dealers will purchase them. And Peter is absolutely right in that we need to have the agreement of the Committee in order to go out and have meaningful discussions with the dealers. We can't go out and say, "Well, we're thinking of doing this;

maybe we will and maybe we won't." If there is anything that will make us look ludicrous as an institution and a Committee that would be it--even though, as you could see from Peter's memo, that's where he started or where he started with my support. But as time has gone on, I've come to the view that we absolutely have to have the capability to say that the Committee has approved our doing this and now we are figuring out the details.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I don't have any question about the need for these types of tools. But I do have a question--if we can put on our BS&R hat for just a moment--that relates to us as a central bank. If a bank or other financial institution were to engage in these types of activities, we would be interested in whether or not they had conducted simulations to ascertain what the impact of these activities was likely to be on that institution. Then we'd expect that to be shared with management and their board of directors, and so forth. Is that a step we should take? And if so, should that step be taken before we approve this? In my experience that is something we think is very important for private institutions. It seems to me that we could have simulations showing extreme events that could have rather important impacts on the Federal Reserve System and the financial system, and I think it is something we ought to look at.

MR. FISHER. If I could respond, President Parry, I think a major difference between this institution and the private institution you're referring to metaphorically is that our cost of covering this option is quite different. If a private firm were to write options on financing, their cost of cover would be market-based. They would have to find financing out in the marketplace. That is the risk of options to private participants. In this case, we would only be writing options on our own balance sheet. While there are upside risks in terms of the growth of our balance sheet, and that's obviously what I'm trying to constrain, our cost of cover is not a real constraint. I think the challenge for us is how to price the premium sufficiently low, because in market-based terms we face no real risk here. We have some transactional risks. There are risks, I want to be clear, but we don't face the kind of risk a private institution would face in providing this service. And that is really why it works at all. If we were a private institution, this would be a very risky undertaking. Early on in my thinking about this--this was a month or so ago--one dealer told me that a customer approached them and asked them to provide an option on over-the-weekend financing for

December 31. The dealer thought about it and said "no." He said there was no premium they could charge that customer that they would be prepared to have known publicly because of how they saw the risks. In their view, the risk to their reputation was too great. They would have to charge such a high premium that they didn't want the charge for that risk known in their customer base. For our balance sheet, just the reverse is true. It's hard to figure out how low to price this because we do not face a market-based risk of covering the option. I do think that makes a considerable difference in a comparison to a private institution.

MR. PARRY. I'm sure there are differences. Does that lead you to conclude that looking at such simulations is not appropriate?

MR. FISHER. I'm sure it would be appropriate if I thought we could do it. You've seen the confidence interval I have on my estimate of reserve needs for the fourth quarter. It's around \$100 billion. I ask you to think for a moment how much better I could do in trying to anticipate what the use of this program would be, especially where the ultimate goal is not to have it used. Our hope is to minimize the exercising of the options.

MR. KOHN. President Parry, I think Peter's goal is to achieve the FOMC's objectives for keeping the federal funds rate in a range around its target. The very high likelihood is that if people wanted to exercise the options because rates were high, that would be a day on which Peter would be doing lots and lots of RPs. So, in effect, I don't think this presents a risk to us. It may actually help to limit the risk that he wouldn't be able to meet his objective of calming markets down. So, if anything, it reduces the risks relative to his objective. Secondly, there are issues having to do with where the RP rate is relative to the federal funds rate. But the very high likelihood is that if the RP rate is very high--so that people want to do these RPs with us--the federal funds rate would be very high. And that would be a day on which the Desk would be adding a lot of reserves, and the exercise of these options would be only the first step in what would likely be a long list of reserve-supplying operations that day. On the other side, in the case of a reserve-absorbing operation--if the rates are so low that they're in effect doing the matched sales with us--we'd probably be doing matched sales that day also. So, if anything, these market instruments reduce the risk that Peter won't be able to hit his objective, which is obviously very different from the profit and loss risk that a commercial bank would face.

VICE CHAIRMAN MCDONOUGH. Bob, I think you can see from Peter's and Don's comments that we've done an awful lot of thinking about the "what ifs" and "maybes" and what could go wrong. Even though it has been done at a level of Board staff and the Chairman and the New York Reserve Bank staff and me, we haven't been remiss in putting this through every stretch exercise we could imagine.

CHAIRMAN GREENSPAN. President Broadus.

MR. BROADDUS. I think the case for this is pretty persuasive. But in the spirit of Bob Parry's question, on the issue of the Fed operating in options and the Fed doing derivatives I have a sense that the public perception of that might be of some concern to us. I think we should be aware of that. I know this is a vote on a temporary authority, but temporary things sometimes become permanent. And certainly before we decide to do anything like this on a permanent basis, we ought to consider the broader implications relating to public perceptions.

CHAIRMAN GREENSPAN. That's the reason why it's essential that most of this new authority gets sunset. President Jordan.

MR. JORDAN. Thank you. I have a question along the same lines. In view of all the other things that are in place--the special liquidity facility and all the things we are going to be doing to make sure that everybody knows we will be making markets and operating to the full extent--I can still see some concerns among individual market players. I'm not sure whether you're worried more about bank dealers or nonbank dealers; my guess is nonbank dealers. And I think they still would be concerned about the distribution of liquidity. It's not that the aggregate is a problem, but rather the distribution, with everyone trying to get through the door at one time. You've used a few words that get near but don't quite answer what I've been puzzling about. You've said "auction;" you've said "insurance;" you've talked about the pricing. But auction implies supply as well as demand, so you have to decide on an amount you're going to auction. Then there has to be a demand. So describe for me, and for everybody else I guess, how somebody in a dealer operation would explain, to whomever they have to get approval from, that they want to bid at the Fed's auction to buy an option. What is it that they're gaining and how much should they be willing to pay for it?

MR. FISHER. Obviously, and I think my memo was candid about this, the problem of setting a reservation price and what we would ask the dealers to bid for in the auction is a major challenge and one of the primary reasons I want to talk to the dealer community. I think an auction sale is the right approach to take; the problem is how much to auction. We want to have it open; we want to have competitive bidding and a reservation price set quite low. I don't have an absolute answer on what the right quantity is to auction each day or how to conduct the auction. Again, that is why I want to talk to the dealers. So I want to give you a scenario that's in my mind but I don't want you to think that I'm invested in any one of the details.

I would imagine that there would be a two-week period on either side of the year-end in which the dealers could exercise overnight options either on matched sales, reverse repos, or repos. I'd say that sometime in October we would begin auctioning each day a set quantity of overnight options for any one of those 20 business days. One way of thinking of the arithmetic would be that we might be prepared to put up to \$200 billion on either side of our balance sheet. If we had 40 days' worth of auctions, we'd be auctioning \$5 billion a day for each of the one-day overnight windows the dealers could bid on. I think I will have to put out some proposal like that as a straw man in talking to the dealers in order to get their creative juices flowing on how to think about the reservation price. We want to set it very low, but we don't want the option to be a free good. They will want it because it's cheap, but not because it's free. In earlier discussions about this I said I didn't want them to think it was as cheap as water, but under the drought circumstance I've learned that everything has a price!

So it would be something like that. I'd be tempted to begin discussions by talking about setting a rather low limit. It's easier to raise the auction limits than lower them in that environment. I'm just trying to think about ways of creating an auction process the dealers would participate in. The idea of having a small amount auctioned each and every day would be a way to get the dealers to anticipate their demands and not wait until the end--to try to smooth out their demand and buy a little each day. For this to be successful and involve the right kind of pricing, it is not that I want to see the price start high, but I'd like to see it trend lower as the market relaxes about the availability of year-end financing. Nevertheless, I want to be clear that I don't know today what the right limits are. I think

there are limits. There are some very tricky issues we would have to think about, such as what assets we would be putting out for doing the matched sales and whether we'd be doing them through tri-parties or through our DVP system, which is why both are mentioned in Don's proposed paragraph.

MR. JORDAN. May I ask a follow-up question? You mentioned already that, in their scenario, when the currency is going out banks are also going to be thinking about that currency coming back in. What are they going to do with it? Are they going to get to count it toward meeting their reserve requirements? I can see those in the banking industry doing their own exercises--seeing times when they are concerned about adequate liquidity and they want some insurance and then seeing periods of excess liquidity and wondering how to get rid of it. I can imagine both. It seems to me that it would be important in your conversations with the dealers to ask them their ideas about quantities and prices and so on. I'd also want to find out if we offer this and if they buy this insurance--these rights to get liquidity or put liquidity to us--what is it that they otherwise would have done that they will not be doing as a consequence of our making this available. I say that because we are going to alter their behavior from their own contingency planning that assumed this program didn't exist.

MR. FISHER. I mean to offer these as examples, because I believe the reactions are likely to be quite diverse. The anxieties of the major money center banks, and therefore of the major bank dealers, tend to be focused on what to do with the surplus cash they're going to have. They are afraid of being excessively liquid. So I think they would likely buy in on the cash-put collateralized option drawn on us. My hope is that that would permit them to be less obnoxious in talking to their customers about the risks of zero or negative overnight interest rates on corporate deposit accounts because the banks would be more confident that they can pay some kind of market-based rate. So that's a behavior we do want to see changed. On the dealer side, the premier dealers in the world have been telling customers not to count on them for financing around year-end and it's making their corporate customers very anxious. I think the behavior change we'd like to see among the major dealers is that they would be less obnoxious in telling their customers to go away and not count on them to finance their inventory of securities during the last two weeks of December and the first two weeks of January. So those are the two behaviors I know I want

to change. I agree with you that there are bound to be other behaviors that would change that I haven't anticipated. But those are the two I'm aiming at; I'm trying to get the intermediaries to behave more like intermediaries and less like risk avoiders. My hope would be that the markets would behave more as we would like them to.

MR. KOHN. Along that line, one good outcome might be that the dealers would simply pass these options through to their customers. That is, if they took the options and in turn entered into the same contract with their customers--customers who don't have access to the Federal Reserve either through the primary dealer network or because they're not commercial banks or other depository institutions--that would afford those customers some degree of confidence. They would know that they could put the securities back to the dealer, who would in turn put them back to the Fed or they could borrow from the dealer on a collateralized basis, and the dealer in turn could borrow from the Desk collateralized. So, having these pass through the primary dealer system to the other market participants I think would potentially be a very positive development.

MR. FISHER. Forgive me for interrupting, but I would like to underscore what Don just said. I think the only reason to do this is to have the dealers pass the benefits through directly or indirectly. There are accounting issues that I'm not going to be able to think through here as to how this would all work, but we will strongly impress on the dealers that they are to make the benefits of this available to their customers. That's the purpose of the exercise. It is not to have the dealers sleep better at night while their customers don't.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I understand the importance of Y2K concerns, but I want to follow up a bit on what Jerry Jordan was saying. I know that Peter Fisher and others have scrubbed this proposal pretty carefully, but in terms of the analysis I'm not as clear as I'd like to be. And I am a true believer in the law of unintended consequences. When you want to do things and get them done for the right reasons, you think of all the positives. But without some fairly rigorous analysis, you tend not to think of the other side. I worry, given the speed with which we're taking this forward, that we may not have thought of all the negative consequences, and that leaves me uneasy.

One other comment I would make is that necessarily--and I understand the reasons--there is a great deal of vagueness in this proposal; one uncertainty is even the strike price. I

hope in structuring this that we keep in mind many of the conditions we have in the special liquidity facility as we go to these individual dealers, because we are treading on new ground as far as how we conduct monetary policy. And even though the authorization is temporary, it does have implications going forward that I haven't had the opportunity to think through. I hope that as the details are worked out we will be briefed again on what is being decided with regard to the strike price and the reservation price. I know you have to talk with the dealers, but it leaves me uneasy to think that they might be structuring this program. So, those are my concerns. I know Y2K is important and I don't diminish that, but I do have these reservations that I wanted to raise.

CHAIRMAN GREENSPAN. Let me just comment. I think there is no question that there will be adverse consequences. We're going to change certain types of behavior in ways that are very difficult to anticipate, and presumably some of those changes are going to be adverse. One of the advantages of having this as a temporary program--one would presume--is that we will see a number of the adverse outcomes and we will not be locked in to maintaining the program. I think the argument that we perceive of this as a temporary reaction to an idiosyncratic event tends to limit the types of institutional changes that might occur as a consequence of it.

MR. HOENIG. That does give me some solace.

CHAIRMAN GREENSPAN. If you think about it, the potential downside risks of not doing some of these things are just awesome.

MR. HOENIG. I understand.

MR. FISHER. Could I add a comment? In your package of charts, page 10 is a background chart that I did not discuss but would like to point out to you, President Hoenig. I have given some considerable thought to adverse consequences, and the one I'm most concerned about is whether we would discourage market intermediation in some way when, in fact, we're trying to encourage it. I've at least thought through what the worst perverse consequences would be if we discouraged market intermediation and arbitrage opportunities.

MR. HOENIG. Very good.

MR. FISHER. What the chart shows, starting from October 15 of last year across the top panel and March 23 of this year across the bottom, are the rates on repos on Treasury

collateral in blue, the rates on mortgage-backed securities collateral in red, and the morning federal funds rate. The latter is based on an informal survey we take in the morning that tells us where funds are trading. There is an extraordinary correlation here, which is wonderful to see; it shows that markets work and arbitrage takes place. Most of the spikes on the chart are at month-end or on Treasury refunding dates or tax payment dates. It's all rather predictable behavior. I'm drawing it to your attention to show that even in the chaos of last fall, shown at the upper left, the range in which these repo rates moved during the morning, the most active time of the day, was contained at 4.25 to 5.75 percent. And that even includes the period through the year-end last year, and I'm sorry that precise date isn't shown. So, in my memo I discussed a 150 basis point corridor on either side of the then-existing funds rate target. That's something we will want to talk about. I think it is going to be hard for it to be any tighter, with the precedent of the special lending facility on the one hand and the coincidence of the negative 150 basis points, which is our minimum bid when we lend out securities and put out collateral. So if we were to do matched sales and put collateral out at a tighter spread, I think we would be creating some perversions. Now, I want to be able to talk to the dealers about this and think about it. As you can see, the corridor in which rates actually vary is very narrow. So a range of 150 basis points is considerably wider than the range in which normal arbitrage takes place. Therefore, with respect to the issue of the most perverse unintended consequence, I think anything like the spreads we're going to talk about is really going to be the disaster insurance. We're trying to offer the market disaster insurance to get them more comfortable intermediating within that range. I just wanted to be clear that we've done some of the work here.

VICE CHAIRMAN MCDONOUGH. Let me make a comment that I hope will be helpful to President Hoenig and others. The way we envision introducing this to the primary dealer community is at a meeting at which the heads of the firms would be invited to the Reserve Bank and I would be their host, with Peter Fisher joining me. We will make it very clear to them that this is not the "Primary Dealer Benevolence Society Act," but rather that we expect them to behave in a responsible way, as we are, in carrying out their function as a financial intermediary. If they try picking us off, they might succeed. But we want them to know--and we will let them know--that the price of that will be very high and will last very long. So, I think we can make sure that they don't get confused about that.

They shouldn't think that because this involves matters they are more experienced with and more clever about than we are, which is true, that therefore they can lead the holy innocents off to slaughter, so to speak. We will make sure they understand that if they try to do that, they'll get caught and the price will be extremely high. I personally would not be willing to support this if we were not prepared to make that very clear to them. Thank you.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. While I recognize that there is some risk on the opposite side, let me relay an anecdote from a recent conversation with a very senior person at one of the major investment banks who is responsible for a lot of their funding operations. He said, after an anguished discussion about all of the fourth-quarter concerns those in the investment bank community have, and I quote, "We will not be heroes." His comment was quite passionate and heartfelt. By showing that we are willing to be more innovative and a little fleeter of foot than usual and that we are willing to work with them on the details, I think we could be a bit of a hero. And we should be as the central bank. As a side point I would reiterate what Tom Hoenig said in that I'd love to hear what the details are after you've had your discussions with the dealers. Not to be doing this would really risk a lot of potential damage in the period around the turnover to the new millennium. I'm very much in favor of this, as I've said before.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I think this is a very good idea and I'd do it on a temporary basis. I agree with Cathy Minehan that it is an innovative approach and would show that we are trying to address a very important problem. Three or four years ago I went to a conference of central bankers and this idea of central banks engaging in options activities was discussed. This was not related to Y2K but was just a discussion of the general concept, and I actually commented on a paper on it at that time. I am just curious as to whether any other central banks are doing this or even considering it at this time.

MR. FISHER. I'm not aware of any that are using this in their management of domestic interest rates. I know the ECB has made a point of saying that they have the authority to use all instruments; if they want to use options and other derivatives they can. They have often stated that they have the full arsenal of weapons if they need it. A number of central banks use options in their investment activities in foreign currencies, in managing

their foreign currency reserves and limiting the risks. The Bank of Mexico uses a nonsymmetric option in its intervention strategy. That is, when they're accumulating reserves they do it through an option that avoids having their operations exert an impact on the day's price. In other words, it is always backward looking. When the exchange rate strengthens, they accumulate a few reserves. The bank's exercise of options is one-sided. I may be mistaken, but I'm simply not aware of any central banks that use options for domestic interest rate management.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Actually, Mike Moskow already asked the first half of my question. The second half is--and given your answer to Mike, I'm not saying it's necessarily a bad thing--whether there is any risk that we're going to be the insurance provider of last resort for the whole world if other central banks don't do something like this?

MR. FISHER. I think there is that risk today in our money market, which is why we're proposing these extraordinary measures. As I alluded to earlier, the Bank of Japan wants to find ways to be sure it can take U.S. Treasuries as collateral when they lend yen to their banks. European banks and others are doing the same thing. The world is focusing on our money markets and financing markets as their adjustment mechanism. I think that's where some of the pressures are coming from that we're seeing. So, yes, if we're trying to address our money market problems, I think there is a risk that the benefits and the demands will spread beyond our nation's markets. But that's the reality we confront to begin with, so I don't think we can do anything about it.

MR. GRAMLICH. What would be the implications of that?

MR. FISHER. I didn't mean to say it should be viewed as a risk. It may be good that somebody in this whole world is going to do this. But these are the implications.

CHAIRMAN GREENSPAN. Well, an obvious question arises here. Is there a limit to the number and volume of options you'll be willing to sell?

MR. FISHER. That is even more challenging than the reservation price. My guess is that we will go out with a proposal of \$200 billion, as I suggested, telling the market that with the Committee's review and approval we might raise that limit if we saw a demand. I would try to go out with a program involving a limited number of contracts per day and tell

them they should price accordingly, but give them notice that there's a risk that the quantity could be raised if we saw the demand.

CHAIRMAN GREENSPAN. If you price appropriately, you'll get as large a volume as you want.

MR. FISHER. There's an interaction of limits and pricing.

CHAIRMAN GREENSPAN. The desire to create a very low price may not be the wisest of all operations.

MR. FISHER. As I say, it should be low enough so that we are making insurance available to the market to calm it down but high enough to provide some constraint on demand.

CHAIRMAN GREENSPAN. It's called subsidized insurance. That's what it is.

The fact is that they can get it from the private sector but the price they would pay would embarrass the seller of the insurance. The difference is the subsidy.

MR. FISHER. Exactly.

CHAIRMAN GREENSPAN. It's the sovereign credit of the United States. It is like the FDIC; it is precisely the same issue.

MR. PARRY. We seem to be learning a lot.

MR. STERN. The question is what they are going to charge their customers for this.

CHAIRMAN GREENSPAN. It would beat the subsidy.

MR. STERN. The subsidy is going to get smaller the further out the chain one goes.

CHAIRMAN GREENSPAN. Gary, that may well be the type of thing that Tom Hoenig is concerned about.

MR. FISHER. It's my recollection that the publication of the primary dealer list is a consequence of the New York Fed asking the dealers to report to us their inter-dealer transactions. The dealers said, in effect, "We'd love to report our inter-dealer transactions; you just have to tell us who the other dealers are." And that is how we got backed into having a list. It has already occurred to me that we will want to ask the dealers--"ask" politely--to report to us secondary market transactions on similar contracts so we can keep track of the pricing.

VICE CHAIRMAN MCDONOUGH. My guess is that as we have these discussions the notion of how high the price should be will continue to go up. We don't want the subsidy to be too low or too high. Whatever it is, what we want is--

CHAIRMAN GREENSPAN. Once the money is available, it's impossible to trace it to individual contracts or relationships. So, in effect, it will be hard to see how the subsidy gets passed on. I guess every economist would say that the subsidy stays with the dealer.

MR. FISHER. It is with that in mind, though my plans are a little inchoate, that I have thought of auctioning set amounts each day. That way there will be a price today, but more will be coming online tomorrow and more will be coming online the next day.

CHAIRMAN GREENSPAN. If you have an auction, basically you have not solved the problem but you've limited it.

MR. FISHER. Yes, precisely.

MR. KOHN. With a limit they will bid up the price, depending on how they think they can turn this onto their customers. That will tend to reduce the subsidy.

CHAIRMAN GREENSPAN. In fact, the price will tell us something about how the program is going in the market.

MR. FISHER. Absolutely. That is another reason daily auctioning somehow seems preferable to me.

CHAIRMAN GREENSPAN. I had the impression that you were thinking of setting the price.

MR. FISHER. No, I mean to set a minimum price. We don't want people to put in a bid of zero or \$1 at the auction. We'd have a minimum or reservation price and they would bid upward from there.

CHAIRMAN GREENSPAN. Is there a reservation price on Treasury bill auctions?

MR. FISHER. I don't think so.

CHAIRMAN GREENSPAN. No? The question is: Why would you want one on this?

MR. FISHER. Because we are uncertain about the supply--whether we are going to provide an unlimited supply. That is, we haven't yet figured out--

CHAIRMAN GREENSPAN. But that reservation price doesn't help you for that. It is the wrong side of the question; that's all I'm saying.

MR. FISHER. I just mean that we are talking about a reservation price because we are uncertain about whether we are going to set an upside limit on the supply and, if so, where. Those are two ways of talking about the same thing. I am agreeing with you, I think, Mr. Chairman.

CHAIRMAN GREENSPAN. If it turns out that indeed the demand is very low or they set a very low price, you'd be required to give it to them at a negligible price, and that may not be desirable. Okay. Governor Kelley.

MR. KELLEY. Peter, if we are ready for a more nuts and bolts type question here, I'm wondering about the timing of this. It seems to me highly desirable, if we are going to do this, to do it as rapidly as possible. But there is a lot of work to do. How is this going to flow as far as the timing is concerned for these inquiries, preparations, announcements, putting it in place, and so forth?

MR. FISHER. I alluded to the timing--probably too briefly--in my memo of August 17. I believe it is very important for us to work with the custody banks, BONY and Chase, before we go public, so we can set a reasonable date certain on when we could begin tri-party operations. We would propose to begin immediately, tomorrow morning, working with the two clearing banks in the hope that over the next business week and a half we could resolve the various issues. Then we would be in a position shortly after Labor Day to announce at least a date certain. My hope is that by the first full week of October--for the reserve management needs I mentioned earlier--we will be laying in the 90-day RPs so that we could begin tri-party operations in the broader collateral pool then. Now, that's my hope. We want to work out some of the nuts and bolts details with the clearing banks so we can announce with certainty that we will be doing tri-party operations, using the collateral pool, and doing 90-day repos.

So, a day or two after Labor Day, we certainly will be announcing that we have the authority. We would begin working with the senior leaders among the dealers about the same time we would be making public that we have this authority and plan to offer these options. We would be developing the details with the dealers, and I would hope to be able to conduct the auctions on the models I'm roughly thinking of, if not by the first full week of October, by the middle of October. That would give us roughly two months of

auctioning until we get to the period when these options are likely to be exercised by the dealers in the last two weeks of December.

MR. KELLEY. If you can meet that timetable, that would be excellent. I think it is pretty ambitious, but we need to try to do it that way.

VICE CHAIRMAN MCDONOUGH. We envision having the meeting with the heads of the firms on the Wednesday after Labor Day. The reason we don't want to do it before then is that we won't be finished arranging for the tri-party agreements with the agent banks and also because this is the time of year when too many people are away.

CHAIRMAN GREENSPAN. Further questions for Peter? Why don't you read the Authorization as it is being amended?

MR. BERNARD. This would involve an addition to the Domestic Authorization, paragraph 4, as described in Don Kohn's memo, which was circulated overnight. The new paragraph is: "In order to help ensure the effective conduct of open market operations during the transition period surrounding the century date change, the Committee authorizes the Federal Reserve Bank of New York to sell options on repurchase agreements, reverse repurchase agreements and matched sale purchase transactions for exercise no later than January 2000."

VICE CHAIRMAN MCDONOUGH. Move approval, Mr. Chairman.

CHAIRMAN GREENSPAN. Is there a second?

MR. KELLY. Second.

CHAIRMAN GREENSPAN. All in favor say "aye."

SEVERAL. Aye.

CHAIRMAN GREENSPAN. The "ayes" have it. Thank you very much, Peter.

MR. BOEHNE. Mr. Chairman, before we leave this subject, I think we owe Peter, the New York Bank, and the staff here our gratitude and an enormous "thank you" for their efforts on all of this. Life is going to get messy; these likely will be extraordinary times. But this kind of extraordinary thinking and extraordinary planning really shows that the Federal Reserve can operate not just in ordinary times but in extraordinary times. My confidence level in our ability to deal with all of these potential problems has gone up as a result of this conversation, in large part due to you, Peter, and your associates.

MS. MINEHAN. Hear, hear!

MR. FISHER. Thank you.

CHAIRMAN GREENSPAN. Mike Prell

MR. PRELL. Thank you, Mr. Chairman.

At first blush, it might seem odd that in this edition of the Greenbook we'd be talking about heightened inflation risks and raising the assumed fed funds path in our baseline forecast. After all, real GDP growth was surprisingly weak in the second quarter, and the core CPI increased only a tenth-and-a-half per month on average in June and July.

Given that you've all perused the text, I'm sure that you appreciate the compelling logic that lay behind our forecast revisions! [Laughter] But, just for the record, Karen and I shall highlight for you some of the key considerations. Because a significant part of the explanation comes from the international side--and because some interesting developments have occurred in that sphere in the post-Greenbook publication period--Karen will lead off.

MS. JOHNSON. There are two elements of the external picture that I believe need to be highlighted this morning. One is the shift in our thinking toward the view that recovery among many of the crisis countries has taken hold; our outlook for output growth abroad for the rest of this year and next year is now stronger than we previously thought. This more optimistic tone is present in the Greenbook, but I think it merits some comment, including some cautions. Second, since the Greenbook forecast was finalized, we have received the trade data for June. Those data showed more imports than we were expecting, and we would shade our forecast of the external sector just a bit from that in the Greenbook as a consequence.

Additional data showing very strong real output growth in several developing countries have convinced us that activity in some of these countries is rebounding sharply from the depressed levels reached last year. For several important Asian economies, including Korea and Malaysia, we have raised our estimates of the level of output reached in the second quarter and have extrapolated firmer growth over the forecast period. There have been positive surprises with respect to some Latin American countries as well, in particular Mexico and Brazil, and we have revised upward the average growth we expect for that region but less markedly than we did for Asia. Taken together, these upward adjustments imply output growth for developing countries that is 3/4 percentage point stronger at an annual rate during the second half of this year and a percentage point stronger next year than we had in June.

Although we now read the signs of recovery in many emerging economies as more persuasive, downside risks remain that should not be

underestimated. In Asia, the economic and political situation in China is clouded. With output growth slowing and deflation continuing, market talk of an imminent devaluation of the currency has resumed. We are anticipating a gradual decline in the nominal value of the renminbi during next year. If, instead, there is an abrupt adjustment, financial stresses for other economies in the region could result. Given China's substantial holdings of international reserves and capital controls, we believe that officials are in a position to manage this decision, but we cannot rule out that circumstances could force their hand.

Downward pressure on the Brazilian real over the past four weeks appears to be a sign of heightened market concern. Despite very strong real GDP performance in the first half of the year, progress on permanent fiscal reform is questionable, with both court challenges and political commitment continuing to pose problems. The government of Brazil has struggled to normalize access to global financial markets: The agreement of Brazil with its major bank creditors to maintain their lending positions is about to expire, and Brazilian authorities have announced that they have no plans to draw on the third tranche of their IMF or bilateral support funds. However, with the external accounts still in deficit, Brazil is dependent on attracting foreign capital; a further loss of market confidence could trigger a swift resumption of contractionary forces. Financial markets in Latin America are generally somewhat skittish. The recent announcement by Ecuador that it may miss a payment due shortly on its outstanding Brady bonds had a moderate effect on spreads elsewhere in Latin America and could lead to further volatility if talks with the IMF make no progress.

Although we see the situation in some parts of the global economy as still fragile, the overall picture is nonetheless considerably brighter than in June. With the significant positive revision to the forecast for output in the developing countries and a small upward adjustment to that in the foreign industrial countries, we have output abroad growing at 3 percent over the forecast period, about the same as forecast for the United States. Stronger growth abroad should boost exports some, and we have raised their projected growth accordingly.

The nominal trade deficit in June, which was released after the Greenbook forecast was final, revealed slightly more exports and significantly more imports than we had incorporated into the second-quarter estimate. All categories of imports were buoyant, and no special factors or statistical anomalies seem present. We are inclined to adjust the level of imports--and exports--in the second quarter, but to retain our path for quarterly growth rates over the forecast period. The higher level of imports in June implies that the negative contribution of net exports remained substantial in the second quarter. Going forward, with foreign

output growth solid, and the path for the real exchange value of the dollar trending down slightly, as we have in our forecast, the negative contribution of real net exports should diminish.

The positive surprise to imports of capital goods in June suggests that the level of PDE in the advance second-quarter release should be revised up somewhat. Taken together, these data revisions imply an annual growth rate of 1.5 percent for second-quarter GDP, compared with 1.9 percent in the advance release.

MR. PRELL. Even with the revision to net exports, the biggest surprise in the second-quarter GDP picture, relative to our last projection, still is the very low rate of inventory accumulation. A forecaster's fairly typical response to such a surprise, especially when it occurs against a backdrop of solid final demand, would be to assume that the shortfall will translate into additional impetus to subsequent output growth, as firms seek to bring their stocks back into normal alignment with expected sales. Unfortunately, however, one must judge just what the normal alignment is; and that is something that can shift over time in response, among other things, to changes in price expectations or interest rates, or structural improvements in "supply-chain management."

In the present case, the persistent--and now sizable--decline in the aggregate inventory/sales ratio in recent quarters and the lack of evidence that this is causing any discomfort have caused us to reassess our judgment about firms' objectives for stocks. In essence, we're putting considerable weight on the structural improvement story and, consequently, we're not looking for any meaningful rebound in the stock-sales ratio. But, on the assumption that firms will not seek still lower ratios in the near future, we still get a step-up in inventory investment that makes a positive contribution to GDP growth similar to what we had in our previous forecast.

So, in addressing the question of where our heightened inflation risk came from, inventories are not the answer. Nor, of course, is it from recent domestic financial market developments. Indeed, though we'd been expecting that the markets would be afflicted with Y2K anxieties, we didn't anticipate that the fears would exert the force they apparently have so far before the end of the year. To be sure, the recent backup in interest rates didn't arise solely because of anticipated Y2K pressures; concerns about monetary policy tightening contributed as well. But it seems quite clear, as has already been noted this morning, that the concern that market liquidity would dry up later this year gave rise to pressures on an array of rate spreads for which there were not the arbitrage resources available to offset fully.

The further rise in longer-term interest rates--especially those on home mortgages--should exert some additional restraining force on domestic demand in the coming months. But we anticipate that the spread widening, which already has reversed some this month, will reverse more fully once we've negotiated the century date change.

This is one reason we've assumed another 50 basis points of tightening by next spring. All else equal, if the System failed to validate the market's expectation of at least that much firming in short rates, the tendency probably would be for corporate bond yields and mortgage rates to drop back even more than we've anticipated. Moreover, the absence of tightening could well provide the all-clear signal that would help the stock market to extend its uptrend. The rally of the past few days, as the markets became a little more sanguine about Fed policy, I think underscores that risk.

The final point I'd make on the domestic demand side is that the outlook for the federal budget has turned a tad more stimulative for the coming quarters, with the addition of about \$20 billion of outlays for the coming fiscal year that was not anticipated in our previous projection. Obviously, this amount isn't a big deal in a \$9 trillion economy, but it comes on top of the additional impetus expected from export demand.

So, on balance, aggregate demand growth prospects--even with a notch more nominal monetary tightening--look to us to be at least as strong for the coming year or so as they did at the time of the last meeting. But our inflation concerns stem also from the supply side, where there are indications that cost pressures are mounting to a greater degree than we'd perceived before. All the recent wage readings have surpassed our expectations, some by quite substantial margins. Admittedly, all the measures have their limitations as representations of the cost elements that might be influencing short-run pricing behavior, but it would seem wrong to discount them entirely as factors that could contribute to larger increases in the prices of goods and services.

In addition, recent news on crude and intermediate materials prices has been disappointing, with the increases in the core PPI measures as well as in oil prices pointing to more pipeline inflation. We don't expect that either of these will provide a major jolt to core inflation, but the picture is less favorable at this point than we thought it would be. The prospect that the recent weakness of the dollar will foster an earlier upturn in non-oil import prices reinforces that concern.

All told, then, we felt that a modest elevation of our wage and price inflation forecasts was appropriate, and the 25 basis points of additional fed funds increase that we tacked on did little more than keep the real

short-term interest rate path as high as it was last time. Clearly, if the recent sinking spell of the dollar continues, the alternative 10 percent depreciation simulation in the Greenbook potentially comes into play, and the inflation problem could be significantly intensified.

We didn't see that as the most likely outcome, but as a quite clear risk that is worthy of your attention. To put it in terms of an overused fairy tale analogy, it could well be that Goldilocks, the international investor, has pretty much gotten her fill of U.S. dollar porridge--be it hot, cold, or just right--and has begun to develop an appetite for some Kobe beef or Euro truffles.

That concludes our prepared remarks, Mr. Chairman.

CHAIRMAN GREENSPAN. Questions for Mike or Karen?

MR. JORDAN. I have a couple of questions, Mike, on different topics. First, on inventories, your remarks this morning as well as what I read in the Greenbook surprised me a bit by suggesting that there is a lack of anecdotal reports on inventory problems. We've all been reporting on certain shortages, for example that there are no 2x4s around and so on.

MR. PRELL. Drywall and some other construction supplies certainly would be the exception.

MR. JORDAN. We had noted in our Beigebook report that in the auto sector certain models simply aren't available. So my staff looked at the Beigebook reports of other Reserve Banks, and a couple of them also cited drains from retail inventories. One of my directors reports to us regularly about the retail sector, and he has been saying for a few months that major retailers are increasingly worried that their efforts to build stock are being aborted by those darn consumers who keep clearing out their shelves! He believes retailers are going into the year-end period with significantly less inventory than they wanted. I always think that means they are inevitably going to overshoot, as they find themselves trying to catch up to some level and miss it. So I was just wondering how confident you are that you've got the picture right on inventory. It seems to me a significant risk to the forecast.

MR. PRELL. I don't think one can ever have confidence in an inventory forecast, and I certainly don't at this moment. We are conscious of some areas in which it is likely that firms would want to build stocks. I'm not sure that's the case in retailing on a broad front, but it certainly would be true in many areas of building supplies. There are still industries,

by all reports, with more inventories than firms would like to have--construction equipment, farm equipment, chemicals still to some degree, and so on. Our sense is that if there are cases where inventories are leaner than desired, it is not a pervasive phenomenon. If one looks at survey evidence--for example, the purchasing managers' reports on perceptions of customer inventories--nothing has happened recently to suggest that firms in general have been greatly surprised by the strength of sales and that their inventories have been depleted beyond levels they would be happy to live with. Going forward, we are expecting a substantial step-up in inventory accumulation, augmented over the remainder of this year by some Y2K hoarding. So we do have a substantial contribution to GDP growth from inventory investment over the next several months. We are hopeful that with the cooperation of the Reserve Bank research staffs we will be able to come up with a little more concrete notion of just how big the Y2K inventory hoarding effort will be, and we will report on that before the next meeting. That's certainly a wild card in the picture.

MR. JORDAN. The other question relates to inflation, anticipating that at our October meeting you are going to give us a first look at your forecast for 2001. As I look at this Greenbook forecast, which goes out to the fourth quarter of 2000, your forecast for the CPI excluding energy seems to be on a track that will produce a number over 3 percent in 2001. Am I right about that?

MR. PRELL. I think we'd edge above the 3 percent mark in core inflation on the assumption that the unemployment rate will be drifting up ever so slightly as we move through 2001.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mike, given the surprisingly strong growth of income, profits, and also tax receipts in recent years, can we draw any inferences about what we might see with the October benchmark revision--in particular, what it might imply for real GDP and, of course, productivity?

MR. PRELL. We have some bits and pieces of information from various censuses and some notion about what the reports from the unemployment insurance system are suggesting about revisions to wage and salary income. On both sides of the ledger, the information points to upward revisions in the level of GDP this year. I should caution though that this is fragmentary. There will also be some changes in the scope of GDP, in a sense, as they

Thus, there may be reasons for less concern that the lack of availability of labor will be a deterrent to regional growth.

Contacts continue to report average wage increases in the range of 3 to 5 percent notwithstanding tight labor markets. As I've noted before, there is a wider use of flexible or performance-based pay increases, as well as non-monetary incentives such as increased training for staff. Recently, we've also noticed that some firms are using pay strategies that seem particularly unsustainable for the longer run. For example, one firm noted that it was attracting new hires with a combination of signing bonuses, performance sharing, stock options, and relocation packages, while existing employees were getting small or no wage increases. This would not work at a Reserve Bank for very long and I doubt it is going to work there either!

Regional price growth has recently been moderate. The July data now show prices in the Boston area, as measured by the CPI, growing at a pace somewhat faster than the nation in almost all categories. In particular, medical costs are growing at better than a 4 percent pace. Despite these CPI data, regional contacts still report very little pricing power, given the competitive nature of the economy. There continues to be a real effort to improve productivity and to control the cost of inputs by managing suppliers' prices-- "à la Wal-Mart," as one contact put it. Residential real estate sales slowed a bit, largely because of a lack of supply and a shortage of construction workers and building supplies. Not surprisingly, the prices of new and existing homes for sale rose at a rate above that for the nation as a whole. Reportedly, some of this increase also reflects high demand for expensive second homes in the region.

Looking forward, measures of state business confidence and consumer confidence are very high. New England consumers apparently continue to view current conditions as either as good as it gets or perhaps too good to last, since the future expectations component of the confidence index is lower than the measure of current conditions. Finally, business confidence is close to an all-time high and has not been near current levels since early 1998. Manufacturing as well as nonmanufacturing industries report strong confidence on both the current and the future basis. One very interesting side comment in our contacts with manufacturers this month was their perspective on inventory building for Y2K. Several mentioned that they saw few problems with domestic suppliers but were concerned about

foreign sources. Thus, they expected to build inventories largely in the form of imports. Perhaps if this tendency is widespread, it could begin to account for some of the unexpected worsening in the trade deficit in recent months.

On the national scene, we are largely in agreement with the Greenbook forecast. We view the second-quarter slowdown as an aberration, not the beginning of a trend, and see the rest of the year and 2000 much along the same lines as the Greenbook. As I've noted before, we see a bit more inflation risk, largely driven by wage costs, which do seem to be turning up a bit--whether in the latest ECI data, average hourly earnings, or the purchasing managers' data. Moreover, I am not as sanguine as is the Greenbook about the recent increase in oil prices backing off in 2000.

Last week I attended a conference that involved public and private sector participants from a variety of areas around the world. One CEO of a major foreign oil company and a senior investment banker specializing in trading commodities spoke about their expectations for oil prices. Both believe that neither Brent nor West Texas Intermediate prices are likely to back off much from current levels in 2000 and could overshoot a bit before falling back as the year-end approaches. They regard current levels as not ideal for producers, but as reflective of a balance between providing sufficient income for the major current suppliers while not enough to attract new high-cost providers. The main concern they cited was managing production to adapt to expected further increases in world demand while keeping prices relatively stable.

Thus, I think we are seeing the gradual unwinding of many of the temporary factors that have contributed to the economy's extended period of success. World growth is accelerating, commodity prices are increasing, the dollar is more likely to weaken, and wage costs are growing. To be sure, continued productivity growth helps, and overall measures of inflation have not yet accelerated. But the need to be proactive and forward thinking remains. It is true, as we discussed earlier, that financial markets have been fragile and volatile of late. Nevertheless, some widening of spreads is not unhealthy nor is a moderation in the continuing upward trend in stock market indices and PE ratios--though, given yesterday's market behavior, one wonders if that actually has happened. One antidote to this volatility, however, may well be a greater certainty about the stance of Fed policy in

the short run, both our stance with respect to interest rates and our stance with regard to Y2K.

Finally, one keeps hearing comments about even the small amount of tightening in monetary policy we've implemented already or may be contemplating as being anti-growth. Certainly, I've heard it from my own directors. However, there is good reason to believe that proactive monetary policy--monetary policy that anticipates rather than waits for inflation to occur--is more supportive of stable growth than the alternative of potentially letting inflation get out of hand. Thank you.

CHAIRMAN GREENSPAN. Let's go to President Moskow and then we'll break for coffee. I see some heads nodding. [Laughter]

MR. MOSKOW. Thank you, Mr. Chairman. The Seventh District economy continues to expand at a moderate pace, with tight labor markets increasingly being cited as a factor constraining growth. Activity in the motor vehicle industry remains a key source of strength in the District. Industry contacts continue to expect 1999 to be a record high year for sales of both light vehicles and heavy-duty trucks. The CEO of a major automaker told me that one reason is that the affordability of light vehicles is at a 35-year high. Elsewhere, manufacturing conditions are still mixed. But based on purchasing managers' surveys from across the District, overall activity is expanding. For example, the Chicago Purchasing Managers' Report for August, which I'll caution will not be released to the public until a week from today, will show continued expansion but at a somewhat slower pace than in July. The composite index was 56.1 in August, down from 60.5 in July. The Chicago survey for August also showed the prices paid component at above 50 percent for the sixth consecutive month and at the highest level in more than four years.

In terms of specific industries, some gypsum wallboard producers are delaying normal maintenance in order to keep running overall at 100 percent of capacity. The steel industry continues to show improvement as the import-related inventory overhang is worked down. On the other hand, construction equipment shows a few signs of slowing, and farm equipment makers have trimmed production plans again. For one major farm equipment producer in our District output this year is expected to be down 30 to 40 percent from last year, and that seems to be representative of the industry. There is no doubt that some farmers have been adversely impacted by low commodity prices. Ironically, it is possible

that net cash farm income could be at a record high level this year if the additional farm subsidy package being considered in Congress is enacted and if funds are disbursed this year.

As all of us have been reporting for a long time, labor markets are very tight. The rate of unemployment for our five-state area fell back to 3.5 percent in July, after having moved up to 3.7 percent in May and June. Actually, though, four of our five states were below 3.5 percent in July. The exception was Illinois where we've seen a rather sharp increase in the unemployment rate recently from 3.9 percent in April to 4.6 percent in June and July. An economist at the state employment agency did not view the increase as a sign of weakness but rather attributed it to a surge in the labor force, particularly reentrants who had been out of the work force for over a year. There has been a pickup in demand for temporary industrial workers, according to my contacts at Manpower. In addition, Manpower's latest survey results, which won't be released publicly until next Monday, show hiring plans for the fourth quarter to be very strong again. What is not clear, though, is whether all these jobs will be filled. Increasingly, contacts are reporting that labor shortages are constraining business activity, either in the form of scaled-back expansion plans or business lost because of the inability to fully staff current activities. This is a widespread phenomenon in our District, with such reports coming from home builders and other construction firms, retailers, dining establishments, temporary help firms, and trucking firms just to name a few.

Turning to the national economy, our outlook is reasonably similar to that contained in the Greenbook though we, like Cathy Minehan, remain slightly more pessimistic about inflation next year. Data received since our last meeting continue to suggest that the economy will gradually return to trend growth rates. However, this moderation in growth is not likely to be enough to alleviate increasing inflationary pressures. Indeed, the recent data on wages, the further increase in oil prices, the rise in other commodity prices, and the weakness of the dollar all suggest less optimism about cost pressures in the months ahead. Meanwhile, the factors that have been driving the recent rapid expansion of demand--high levels of wealth, confidence, and income growth--remain with us. It appears unlikely that the policy adjustment we made last time will be enough to significantly lessen the risk of increasing inflation. Without some further adjustments, we risk the kinds of imbalances that would endanger the economic expansion. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Let's recess for coffee.

[Coffee break]

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, the Twelfth District economy has expanded at a solid pace so far this year, although the disparity across states has increased. District payrolls expanded at a 2.4 percent rate during the first seven months of the year, down from the 3.1 percent pace of 1998. Employment growth rates in the fastest growing states--Arizona, California, Nevada and Utah--averaged between 2.5 and 4.2 percent. In five other District states--Alaska, Idaho, Hawaii, Oregon, and Washington--employment expanded at or below the national pace. Despite slower overall growth, District labor markets remain tight. Construction and services as well as transportation, communication, and public utilities have continued to be the strongest sectors of the District's economy.

In contrast, District manufacturing payrolls have declined at a 1.6 percent pace this year. Employment reductions have occurred in both the durable and nondurable sectors. In the durable sector reductions have been broad-based, although employment has declined most rapidly in the aircraft and resources-related industries. In the state of Washington, Boeing and its suppliers have cut 11,000 jobs since last December. In the nondurable sector weak demand for agricultural commodities has continued to damp employment growth in the food-processing industry.

During the past few years, prices and profits of agricultural producers in the Twelfth District have been held down by weak export demand caused by the appreciation of the U.S. dollar and the economic crisis in Asia. District exports of agricultural products fell by nearly 20 percent between 1997 and 1998, and data for California suggest that agricultural exports have continued to decline in 1999. As a result, gross sales and net farm income in the District have fallen. However, relative to other areas of the United States, District agricultural producers are in reasonably good shape since only a small percentage of the District's production is in the bulk commodities experiencing the largest price declines.

Turning to the national economy, from 1995 to 1998 core price inflation measures, even on consistently measured bases, generally were trending downward. This decline probably reflected favorable supply shocks that more than outweighed strong demand. However, several special factors helped out as well. Since mid-1998 this disinflation has

stalled. Price inflation and survey expectations of future inflation appear to have flattened out. This halt in the progress toward our goal of price stability sounds a cautionary note in assessing the current stance of policy. This is particularly true given the context of tight labor markets and our forecast, which predicts strong output growth through the rest of this year and steady to slightly rising core inflation through next year. Such a path does not continue the gains that we have made toward price stability during the past few years and may even give up some of those gains.

We have examined a variety of risks to this outlook, some of which are similar to the alternative scenarios in the Greenbook. In one alternative not covered in the Greenbook, the favorable supply conditions of the recent past are assumed to dissipate by lowering underlying trend productivity growth for the forecast period from 2¼ to 1¼ percent. In 2000, real growth slows by ½ percentage point and inflation begins to accelerate. I believe this scenario demonstrates that an unwinding of the positive productivity shock poses a risk to our recent progress toward price stability. Thank you.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, we have not had a lot of change in our District since the last meeting. To jump to the bottom line, with one exception I'll mention in just a minute, we see relatively few signs of any deceleration in activity in our region. At the last meeting, I reported that consumer spending had been especially robust in May and June, and all reports suggest that that is continuing. Car sales remain at an exceptionally high level. One of our bank directors recently told us that new car loans at his bank, were at an all-time high. This strong auto demand may soon be stimulating some additional manufacturing activity in our District, which generally is already fairly strong. As you may know, BMW has a big new plant in Greenville, South Carolina. As I'm sure Jack Gynn is aware, people down there like to say that in South Carolina BMW stands for Bubba Makes Wheels! [Laughter] Anyway, that is a big plant and they've announced plans for a \$650 million expansion in part to make sports utility vehicles at that plant to meet the strong demand for those vehicles.

Elsewhere, construction is the sector in our region where imbalances and bottlenecks are most apparent. Skilled construction workers are still in very short supply. We hear lots of anecdotal reports about pay increases and special bonuses for that particular category of

labor, which seems consistent with what Mike Moskow was saying about wages generally. Materials are also in short supply. I heard a report from one of our directors that somebody had hijacked a truckload of drywall somewhere in Maryland! [Laughter] So we really do have some of those kinds of conditions. And I think that situation reflects continued very strong demand for housing in our District, despite the recent increases in mortgage rates--or maybe because of them, if people fear further increases. As a result of that demand, I've seen a number of reports recently of a quicker pace of price increases for both new and existing homes.

The two weak spots in our District are still textiles and agriculture. As I am sure most of you are aware, our farmers are suffering from what may be the worst drought in the last half century in this part of the country. The problems for farmers, of course, have been exacerbated by the low prices worldwide for agricultural commodities.

Also, I might just note that I got a call yesterday from _____ who runs a rather big furniture company in North Carolina. He said that his business had fallen off fairly noticeably over the last 90 days or so, so I thought I should report that. But that is really an outlier. With that exception, we don't see many signs of a slowing in overall activity at the regional level.

We don't see many signs at the national level either. The Greenbook points out that the widening U.S. current account deficit could produce a sizable depreciation of the dollar, with potentially inflationary implications. I think it's also possible that some of our major trading partners could ease their monetary policies going forward to prevent their currencies from appreciating, which could stimulate foreign growth perhaps even beyond what is now anticipated. Either of those developments could increase U.S. net exports or at least moderate the rate of decline, with potentially inflationary consequences given the already tight labor market conditions in the United States.

So it seems to me that the weight of the risk in the national outlook is still skewed to the upside. At the same time, I would certainly acknowledge that there are downside risks, specifically the possibility that a sharp decline in the stock market might scare consumers and precipitate a sudden collapse of confidence and spending. Obviously, we cannot rule out a sharp market correction. But even if one occurs, there are a few reasons for thinking that in the current situation the negative impact of such an event on demand and

employment could be contained. I'll just mention a couple of points. First, back in 1987 I think we saw and learned that if we react quickly and appropriately we can contain the downside impact of a market break. Also, we are talking here about wealth effects and it is worth keeping in mind that physical capital constitutes about 30 percent of aggregate wealth in the United States while human capital constitutes about 70 percent. So if monetary policy keeps the job market on track, I think workers can still have reasonable confidence about their longer-term income prospects, which would moderate the negative effects on spending that might otherwise come from a market break.

Finally, the situation is a bit less precarious precisely because the Fed now has credibility and is expected, I think quite generally in the markets, to take the actions that are needed to contain inflation. Because of that, over the course of this year at least, bond rates have been rising well ahead of actual policy actions, preparing the market for additional restraint and in a sense creating a continuity--maybe smoothness would be a better word--of monetary policy. I think that can reduce the likelihood of a really sharp market break, though it doesn't eliminate it.

The bottom line, Mr. Chairman, is that while there are downside risks in the outlook, at this point they seem to me still pretty clearly outweighed by the upside risks and the potentially costly inflationary implications of those upside risks.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Growth in the Sixth District remains healthy. Our regional economy seems to be expanding at approximately the same rate as the nation at the current time, although I continue to expect some slowing in housing. Residential construction is relatively stronger than the national numbers suggest, perhaps because the inventory of available housing units remains low. Permits are up even more strongly than in the nation. Reports of materials shortages and scarcities have pushed up housing prices and may act to damp both demand and supply growth somewhat. But the strong permits data suggest that this may be a temporary development. Regional industrial production was up, according to the latest Southeastern manufacturing survey, hinting of the strength in the national statistics. And while shipments and new orders were off slightly, respondents indicated that production is expected to increase over the coming months. Regional consumer confidence, as measured by the Florida Consumer Confidence survey, is

high; the index is only 2 points below its all-time high of last February. This is reflected in robust District retail sales. Prospects for the Christmas season look especially bright, gauging from the extremely strong buying reported at the Atlanta Gift Mart Christmas Show, where both regional and national retailers come to do their looking and buying for the upcoming Christmas season.

I have been expecting some pickup in the Gulf Coast oil and gas industry. Based on a substantial run-up in crude prices and the lower extraction breakeven point now prevailing, one would have expected drilling to rebound. It still has not and we interpret that as saying that the drillers are less confident than most economic forecasters that the cartel's production quotas and, consequently, pricing will hold. Long-term prospects for that industry in our region just had a big boost from BP-Amoco's announcement last month of the largest deep water find ever in the Gulf, an estimated 1 billion barrels of oil a mile down and some 124 miles southeast of New Orleans.

To retell an old familiar story, District labor markets remain quite tight. Our regional year-over-year payroll growth of 2.6 percent is outpacing that of the nation. The District unemployment rate has now declined by another 0.2 percentage point to 3.9 percent, and that rate is the lowest in some 20 years. However, despite that tightness, we still see little evidence of general broad-based wage acceleration. Similarly, prices for raw materials and finished goods also remain stable, with the exception of prescription drugs and selected building materials, whose prices have increased, as others have already mentioned.

Turning to the national picture, my interpretation of the most recent incoming data, combined with anecdotal information, is that the economy is maintaining substantial forward momentum. Fundamentals of job growth, income growth, and confidence remain quite favorable. The improving economic outlook for the economies around the world that Karen Johnson talked about should begin to spur exports. And the propensity of government to increase spending may provide marginal stimulus in the period ahead. Although one can point to some signs of slowing or potential slowing--including the effects of higher mortgage rates on housing and related industries--I share the view that the sharp downturn in GDP growth in the second quarter will be reversed in the current quarter and over the forecast period.

Of course, for us the crucial question is whether the expected pace of growth can be sustained without increasing inflationary pressures. Our Bank's own judgmental forecast and our VAR modeling work, like most other forecasts, suggest an upward drift in expected inflation of nearly 50 basis points next year and somewhat more beyond that. With some humility, which others have already expressed in previous meetings, I acknowledge that we have had such forecasts for some time now, and measured inflation has continued to defy those forecasts.

So the difficult question for me is what underpins those forecasts of higher inflation and how much confidence we should put in them this time around. After sorting through what seems to be happening and pressuring my own staff for evidence, I conclude that the probability of inflation trending upward is high enough, and higher than it has been, that we should continue to lean against it. For me no one factor or development makes that case. Rather, the cumulative probability of pressures from various sources, including the reversal of favorable commodity prices, the more positive outlook for Latin American and Asian economies, the expected boost to U.S. exports, and rising import prices from a decline in the value of the dollar, all point in that direction. I do not consider myself a Philips curve devotee, but I think very tight labor markets and a low unemployment rate are at least signaling that policy remains somewhat accommodative.

Finally, I do not think we should always feel compelled to validate financial market developments. But should we decide not to provide the modest policy firming that is now widely expected and apparently priced into the market, we may lose some of the market discipline and caution that is in play and instead get a dose of added stimulus that we don't want and don't need. I see this as a unique opportunity to take out some additional inflation insurance at little or no cost. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. The economy in the Kansas City District remains quite healthy. It has slowed from the rather strong pace of last year but remains overall a very strong economy. Employment has improved modestly, although the growth rates have slowed, but we suspect that is as much a supply issue as a demand issue. Construction activity remains brisk; it's down a bit from the torrid pace of last year but is still very strong, and we are continuing to see price pressures on resources in that industry.

Manufacturing activity remains subdued compared with past very high levels, but through our surveys we have picked up an obvious increase in demand for exports coming from some of the improvements in Asia and South America. Others have spoken of activity in the energy sector. In our District the rig count is up about 25 percent from last April, but it is still about 25 percent below a year ago. Nevertheless, there is some pickup in activity in that sector.

As for wages, there are wage pressures. They are not accelerating sharply, but we are now well aware of steady pressure on wages. Our labor markets are extremely tight and our unemployment levels are very low. Our participation rate is very high and that is affecting our labor markets. I'll share a bit of anecdotal information on both sides of this issue. In Colorado, _____ contracted with 600 software engineers in India because the firm could not find anyone in their own area to do the job. In Kansas City, our major construction companies have imported skilled workers generally and in particular have hired bricklayers and others in the higher skilled professions from both Canada and Mexico to fill a crying need. In fact, we have found in talking with school districts throughout the region that they are having a problem replacing math and science teachers who are being recruited and hired away by private industry. On the other side, we had an interesting discussion with one of the major accounting firms, which has changed its accounting and operations systems to bring automation into its work papers and analysis. The firm is counting on productivity improvements to the extent that it is actually budgeting for the improvements by budgeting down the number of people it will bring on board. That's a fairly risky position on their part but they really are looking for some productivity improvements because they are paying very high premiums for professional help.

I will talk just briefly about our farm economy. I know that the Northeast and East more generally are in a drought. That is not the case in our area. We are expecting a very large harvest; for both corn and soybeans we think it will be a record. The wheat crop, with even less planting, was very strong. I talked with one of the major co-ops last week and they are actually bringing back on line elevators that they had abandoned earlier in order to store the surplus they have. Livestock producers are doing better; cattlemen are actually making money and, of course, the hog industry is now making money. On the financial front, the farmers did come in with much stronger balance sheets this season. Frankly, the

benefits from government payments and prospective increases in those payments are really going to buoy their net income flows. So, while we are seeing a deterioration in some farm operations--and as a result of that, in some Main Street operations--we are not seeing major problems surfacing in loan portfolios. The nonperforming loans are increasing, but nowhere near as sharply as they did the last time we went through this kind of situation.

Turning to the national side, I will only add a bit to what others have said. I would say first of all that we are projecting continued economic growth, though not as strong as the Greenbook projection. Certainly, some of the favorable factors seem to be reversing, but we do see strong domestic demand. And if the global economy picks up as we believe it might, we may have some strong pressures on the demand side in the economy that we have to be mindful of as we go forward. With that I'll stop.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Thank you, Mr. Chairman. The regional economy in the Philadelphia District continues to move up. Manufacturing has advanced modestly. Retail sales and tourist activity have been strong. Construction has increased. Employment is on an upward trend. Conditions in the financial sector are so-so, with loan demand reported flat. Agriculture, because of the drought, is hurting, and some of the smaller banks that service mostly farm communities almost surely will suffer as well later in the year and going into next year. Anecdotally, I am beginning to pick up a subtle shift in tone about pricing power. I have the sense that more business people feel a stronger need to raise prices to protect financial performance, and they feel they may be able to make price increases stick. In part, this feeling reflects a view, whether accurate or not, that both consumers and businesses are less inclined to shop for the lowest price or the best deal than they have been. I don't want to make more out of this point than warranted; it's just a subtle change. I don't think it is a major shift nor is it a view held by a majority of business people, but I just have not sensed it up until fairly recently.

The national economy is clearly stretched. The outlook both for growth and inflation, however, remains unclear. There is a reasonable case for a decelerating trend in demand growth going forward, largely based on less of a kick from equity gains. But we could be fooled again. On the inflation side, productivity gains may continue to hold down inflationary pressures--and I suspect they will--but that may not happen either.

On balance, the risk to the economy of raising the funds rate a notch is less than not raising it. A more important issue today is how we position ourselves going forward and how we manage our rhetoric during the coming days and weeks, topics for later in the meeting.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, the Second District's economy has shown renewed signs of strength in recent weeks, after some slowing in the second quarter. Despite increasing price pressures, there is no evidence of any broad-based pickup in inflation. Private sector job growth accelerated to a 3.1 percent annual rate in July from 1.7 percent in the second quarter. Retailers report that sales retreated in July and were close to plan, following unusual strength in May and June. Most attribute this downshift to lean inventories, but it was so oppressively hot that a lot of people might just have decided to stay home. Prices paid by retailers remain steady, but selling prices have firmed up just a little. The housing market has gained momentum since the last report. Residential building permits rebounded sharply in June, led by a surge in the multifamily sector. We've had double-digit price appreciation in most of the downstate New York housing markets. Office markets in and around New York City remain tight, with vacancy rates hovering near record lows and rents rising moderately. Purchasing managers indicate that manufacturing activity expanded moderately in both June and July, while price pressures increased. Banks report a seasonal dip in loan demand, tightening credit standards, and stable delinquency rates.

Our view on the domestic economy is that we will continue to see positive real growth, about 3½ percent in the second half of 1999 and about 2½ percent in 2000. My colleagues in the research group are anticipating a growth recession in 2001, which is very conveniently timed to help keep inflation under control. But, unlike most of what we've been hearing around the table, our view is that the inflation pressures, which we too have been forecasting for the last few years, are in fact much better contained. It may be that if you leave your research staff alone--just as if you leave your kids alone they grow up okay--eventually they will decide that inflation really isn't going to happen after all. I rather share that view. I think what we have now should be called price stability; that is, it is not something toward which we are working to achieve. And, therefore, our view of the

inflation forecast is that we will continue to enjoy price stability, which is our statutory assignment.

The global situation is certainly better, as Karen Johnson described. It is much better than it was last fall when this Committee correctly exercised both responsibility and leadership by easing monetary policy three times to respond to a world financial crisis. But the global situation is still highly problematic even though Karen's forecast is, I think, a very reasonable bet. I believe that Japan is still having tremendous difficulty trying to figure out what to do to solve its very basic economic problems. Until and if it figures that out, it will continue to be a source of systemic risk both to the rest of the world and certainly to its own people. In addition, I find the situation in China getting worse, in the direction of pressure going forward, as a result of the developments on the political side. And on the economic side, there is little positive effect coming from a great deal of pump priming of a Keynesian variety that is also blowing air into the domestic stock markets. South Korea took a highly positive and very courageous step in the dismantling of Daewoo, but that is a very, very tough workout situation in a country with absolutely no experience in workouts.

The situation in our hemisphere, I think, is getting more troubling. Two of the countries, Brazil and Argentina, are potentially serious problems. Karen described very well what's going on there, but in my view the biggest problem is

I believe the dangers to that country's economy are very real. Argentina's success of recent years has been, in my view, mainly the result of excellent leadership from President Menem. He is about to leave office. The candidate from his own party certainly doesn't sound like him. And the candidate from the other party, who is ahead in the polls, represents a coalition that has agreed only that they would like to win the election. They have no agreement on policy matters and, therefore, the policy they would follow is a matter of very considerable uncertainty. So it is not surprising that market pressure is being felt there. Mexico, at least according to Moody's, is improving. And yet next year is the sixth year of a presidential term, always a problem period, and one in which the political result is so uncertain that a weakness of public confidence and a weakness in investor confidence both within Mexico and outside are very real possibilities. Ecuador is highly likely to default on its Brady bonds; and even though it is a very small country, that would be the

first default on Brady bonds. And it makes rather dramatic the point that there are now four countries--Pakistan, Ukraine, Romania, and Ecuador--in which the International Monetary Fund, correctly in my view, has not found enough private sector support to justify the use of public funds. Russia is not only a mess in and of itself, but is bringing very severe pressure and criticism on the IMF, which will likely have the effect of making the Fund less capable of carrying out its responsibilities. Growth in the Euro area is slow and spotty, and in some of the countries, particularly Germany, the government is having trouble keeping a coalition together to follow the policies that they think--and I agree--are necessary.

Well, that is not a very pretty picture! It certainly is a much less pretty picture than the one we all thought we were looking at in the spring of 1997. And even though it is a lot better, or less bad, than the one that we were looking at last fall, it seems to me one that we have to keep in mind. Although we are not the central banker of the world, given the fact that we are the unique world super power and the main economy with the main currency, we have to do two things in this Committee. The first is that we have to do the right thing on monetary policy. But, as Ed Boehne suggested, in our rhetoric we have to try to get out the message and then stick to it in terms of what it is we are doing and what we intend to do. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. On cars, trucks, and steel, which are all very important in our District, I can just say "ditto" to what Mike Moskow said: All are very strong in every dimension. Construction in the District also is very strong. is involved with the construction unions said that the best sign of the prosperity in construction labor markets is that the local breweries all seem to be expanding! He regularly reports to us now about warnings being given by the AFL-CIO that wages of workers are not being kept up. He's starting to stress what he considers to be the need for a catch-up in compensation. So, at least from that one source, there's a suggestion that a bit more labor militancy might be forthcoming.

On the steel side, the strikes settled with increases in the range of 8 to 10 percent over the full three-year period and that sounds pretty good. But they doubled the pensions. So they avoided the bigger problem of disruption by promises about the future rather than the

present. Our directors are telling us that there will not be a strike in the auto industry--that Ford, which is the target, will settle. They believe Ford will settle and then Chrysler and GM and the others will just fall in line.

Let me skip some of the other points in my prepared notes because it would just be repeating what a number of other people have mentioned. In labor markets we are hearing about a couple of new wrinkles. One is a "show-up" bonus: If the workers come to work five consecutive days they get a bonus! [Laughter] And one firm pays a daily bonus for workers who show up in the morning on time and finish a full shift. That is probably not showing up in wage and ECI data. One banker asserted that we are experiencing a lot of wage inflation, but it does not show up in the figures because businesses that he's familiar with are paying the same or somewhat more for considerably less qualified people than previously. Somebody earlier mentioned that schools were losing people to the private sector, but the bankers in our area claim that they are losing people to the schools, that the school districts and local governments are flush with funds from tax receipts and are bidding aggressively for people. Nevertheless, the schools opened for the fall term with shortages in teaching positions and in some staff positions and a reported "severe" shortage of substitute teachers.

We took an in-depth look at what is going on in labor markets in the health care sector. Health care is a huge industry in the District, with the Cleveland Clinic, University Hospitals, and others in Cleveland and Pittsburgh as well. You may have seen the Wall Street Journal story yesterday about the health quality program in our city that the Cleveland Clinic managed to kill off. That sort of thing is not the real problem. The problem is that they do not have enough people. We have been told of shortages throughout the District of nurses and other staff to support the hospitals. One contact claimed that it is an ongoing crisis. One hospital said it had gone to a work schedule of three 12-hour days with four days off for the nurses, and that getting floor coverage in hospitals on a 24-hour basis is becoming increasingly problematic. The hiring coordinator at the Cleveland Clinic said the shortage is the worst she has seen in 20 years. Others, including Meridian Health Systems, described the situation similarly. They say it is not just a shortage of nurses but of support staff as well.

When one talks to people in the health care industry it is not uncommon for them to use words like acute and critical, but they are usually talking about their patients. In this case they are talking about their staff levels. Ohio State University reported that its critical care unit and operating rooms are not adequately staffed with competent people. So they are using retention bonuses, referral bonuses, and premium pay for those working overtime, special hours, or weekends. The VA hospital said that the shortage of staff is so severe that they've decided to close some inpatient units, such as their long-term care unit, simply because they could not staff it. If that's not bad enough--probably other areas of the country are experiencing this, too--a race is going on between Rite-Aid and CVS to see who can overbuild the most and the fastest and they are bidding away the pharmacists on hospital staffs. Our VA contact said that pharmacists are getting \$8,000 to \$10,000 more in salary to move to the retail side.

On the national economy, if I were focusing on the domestic side alone, I'd say that the risk is on the upside on inflation and that policy is not balanced for that risk. Yet the international dimension--and Bill McDonough described in some detail the political risks--is where I think all of the risks are in the other direction. I agree with Karen Johnson's description about the near-term economic outlook in Japan, Europe, and elsewhere. But with that shaky coalition in Japan, it is very hard to have confidence about what is going to happen there. I think Chancellor Schroeder faces extraordinary challenges over the next couple of months in Europe, and what happens is going to be extremely important for the outlook for the rest of Europe. The Italians are certainly not going to attack pension reform if the Germans do not come through with solid reform. The good news about the ongoing saga in Russia is

So,

that's the silver lining.

We will have to be prepared at all times for an easing action that could be necessary because of some development on the external side. I would rather go into that situation feeling that monetary policy is positioned where it ought to be in terms of our domestic risk, so we can respond to unforecastable international developments when they happen.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. The Eleventh District is apparently doing better than the Fourth District, where schoolteachers are moving into industry and bankers are beginning to teach

school! Growth is still very strong in the District, but it has slowed just a little.

Construction has been flat, net, due to concerns about overbuilding, rising interest rates, and shortages of personnel and materials. Energy producers are responding to higher prices, but very cautiously. The rig count is up only a bit; it's still below the level of last December when oil was \$11 a barrel. The outlook for Mexico is cautiously improved. All of Mexico's leading indicators were positive in the second quarter, suggesting a strong second half. But the peso and the stock market have given back some gains this quarter, tempering the outlook for early 2000. And, of course, as Bill McDonough mentioned, an election is coming up.

Labor markets are extremely tight in Texas. At the last San Antonio board meeting I attended, the director from Brownsville mentioned that a milestone had been reached in Brownsville: The unemployment rate had fallen into single-digits for the first time anyone there could remember. We looked it up and the last time it was below 10 percent was in 1981. While unemployment is still high in the border areas, only the town of McAllen had an unemployment rate well above 10 percent; it is around 13 percent or so. In El Paso it is right at 10 percent, but the other border towns now report rates of slightly below 10 percent. Most of the larger non-border cities in Texas and in the Eleventh District more generally have unemployment rates below 4 percent. And labor participation rates in our major cities are far above the national average. I am told that in Austin and Dallas there are almost 9 jobs for every 10 residents between the ages of 16 and 65. However, to paraphrase Professor Tobin, higher labor costs are everywhere but in the data. District employers tell us that they are paying more for everyone from programmers and engineers to temporary workers, truckers, and legal staff. We have not seen these increases in our wage statistics, but the statistics have limited industry coverage and they don't count stock options and other fringe benefits.

The anecdotal evidence relating to the price picture is mixed. Our Beigebook contacts reported more increases in prices than reductions. However, house prices rose more slowly than in the past. Energy prices were up and there was a slight price increase in the retail sector, but prices were down for timber, concrete, and memory chips. And, of course, the Chairman has pushed down farm prices all by himself!

On the national front, I believe that inflation remains under control, even while the economy remains very strong. If one were worried about inflation, the most important statistics to look at would be the various measures of inflation. These statistics offer little reason for concern. Core inflation is about as low as it was last year--significantly lower by some measures, a little higher by some. The core CPI increased at a 1.7 percent annual rate during the first seven months of 1999, compared to a 2.4 percent increase in all of 1998. The core PCE deflator increased at a 1.4 percent annual rate during the first two quarters, compared to a 1.2 percent rise in all of 1998. Is higher inflation in the pipeline? The core PPI is down 0.2 percent for the first seven months of the year. The ECI signals little threat, either, if one considers the low first-quarter increase along with the larger second-quarter rise. The index rose at a 2.9 percent annual rate during the first two quarters, compared to an increase of 3.3 percent in all of 1998.

Looking beyond the inflation numbers, we will get shortly a revised second-quarter GDP number, which will probably be below 2 percent. If it is below 1.8 percent, it will be the lowest quarterly increase in real GDP in at least a couple of years. Employment growth remains vigorous. Even manufacturing employment has increased. The decline in unemployment has not only reached into the border areas of Texas, but it has reduced minority unemployment nationwide. With inflation low and with the economy strong, I am concerned that any tightening today would be interpreted as a vote against prosperity.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Most of the major economic trends in our District remain in place or have intensified recently. Consumer spending is healthy. Housing and nonresidential construction activity are strong. The manufacturing sector is doing well; the agricultural sector is not. Labor markets remain tight and I think it is fair to say, at least based on the anecdotal evidence, that wage increases have notched up a bit. I would not say the same thing about inflation, although I do have the impression that discounting has diminished, and that is the other side of the price coin I suppose.

As far as the national economy is concerned, the outlook is good. My principal concern in the current circumstances has to do with aggregate supply and productivity. I think aggregate demand is growing at a satisfactory pace at least and is likely to continue to do so. We all know that we have very tight labor markets and it's clear that the rate of

increase in compensation has been accelerating. I believe there is a chance that it will continue to do so. This may all play out fine as long as aggregate supply and, in particular, productivity grow rapidly enough to offset that acceleration and keep demand and supply in balance. The risk is that that won't happen. And if it doesn't, the inflationary consequences concern me.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Mr. Chairman, conditions in the Eighth District are as they have been. The environment is good, and I do not have any particular news to report. I want to spend a couple of minutes on the information I have gotten from FedEx and UPS, which is rather interesting because it is a bit mixed in terms of the domestic economy.

But first, both of my contacts report that their international business is doing fine, better than anticipated. FedEx says that it sees increasing growth abroad; volume from the United States to foreign markets and from markets abroad into the United States is growing, especially for Asia. In fact, FedEx reports that the international business is 3 to 5 percent stronger than had been anticipated in the months of June and July.

On the domestic side, my FedEx contact thought that there was a clear sign of some slowing in volume--not dramatic, but clearly perceptible. FedEx reported that its own business was slower year over year for the first time in a long time.

That was not, however, the view of my UPS contact. He said that the economy was booming and that UPS volume was exceeding projections, domestically and internationally. Through July, year-to-date volume was up 4.6 percent over the comparable months of last year, versus an expected increase of 3.9 percent, so that is significantly above what they had planned. Growth was especially strong in domestic ground business. My UPS contact had just returned from meetings at

As I said, both UPS

and FedEx agreed that business with Asia was really picking up.

My FedEx contact reported that there is no question that fuel prices are hurting. He said that FedEx has put a surcharge on West Coast less-than-truck-load traffic, and he expects more surcharges to be put into effect if fuel prices remain high. FedEx is not concerned about wage pressures; my source said the company is making up wage increases

with productivity gains. My UPS contact said that his company has continuing severe problems in the labor market. UPS has a lot of part-time employees who are college students. In trying to reduce employee turnover, which has become a significant problem--and this of course should remain confidential until UPS decides to announce it--UPS expects to reopen its labor union contract.

I

would also note that UPS has had to divert traffic out of Chicago--Mike Moskow talked about the pressures in the Chicago labor market--since the company cannot handle the volume in Chicago because of the labor shortage there. So, those are a few anecdotes from those two sources.

One of our research department people put together some data on employment growth that I thought was interesting. In the last year employment growth among both males and females in the 25 to 54 age bracket was 0.8 percent. That is pretty much in line with the demographics. The employment growth has been coming entirely from what labor economists call secondary workers, including a lot of older people. Growth in employment of workers 65 and over, male and female, was 4½ percent; among those aged 55 to 64, people who should be working anyway but had opted for early retirement, it was 4.3 percent. So it is clear that the employment expansion has been coming in these demographic breakdowns that have relatively low participation rates. In principle, there is a lot of room for expansion. On the other hand, most people over 65 have retired for good reasons, so presumably there has to be some limit to how many of those can be brought back into the labor force.

In the course of our budget work at the St. Louis Fed, we were quite taken aback by the increase in health care costs that we are facing. I asked our HR people to do a survey of all the other Federal Reserve Banks. I thought that would be easy information to get. Of course, these are tentative guesses and some of the final contracts may be different, but let me just read you those numbers. In terms of health care costs, the Reserve Banks are looking at the following increases: Boston, 14 to 20 percent; New York, 6 to 11 percent;

Philadelphia, 9 percent; Cleveland, 10 percent; Richmond 7½ to 15 percent; Atlanta, 10 to 20 percent; Chicago 13 to 15 percent; at our own Bank in St. Louis, 14 to 15 percent; Minneapolis, 15 percent; Kansas City, 7 to 8 percent; and Dallas, 8 to 10 percent. San Francisco had a very accurate forecast of somewhere between 2.4 and 23.8 percent! [Laughter] I don't know what the average there is going to be.* I found this rather interesting because I wondered to what extent our experience in the St. Louis area was peculiar. But, in fact, this is a very, very general phenomenon and these costs are clearly up quite a bit from what we've seen in recent years. I think we can regard that part of labor costs as pretty much baked in the cake. So we can anticipate that those costs will be showing up in the ECI as those contracts are actually signed and take effect next year.

In terms of the prospects ahead of us, the Greenbook forecast, of course, is for somewhat lower real growth and somewhat higher inflation. I think we have to be ready to deal with the prospect that growth will turn out to be a little lower and inflation a little higher than forecast; in my view that outcome has a much higher probability than the reverse. And that will be an uncomfortable situation. It means that the financial markets are going to be whipsawed. One day they are going to get data showing lower growth and they will say, "Oh, the Fed is going to ease." The next day they are going to get data that suggest the inflation problem is worse than anticipated and they will expect the Fed to tighten. We are going to have a tricky problem of setting a steady course. That is all I am going to say at this point. Thank you.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. My bottom line today is that I think the FOMC ought to do what it has to do at this meeting and then leave financial markets alone for a while, at least until the end of the year. What do we have to do? I would argue that rates are a bit low from three standpoints. Even if labor markets and inflation were in balance, for the longer run the funds rate might be a bit too low. The real interest rate based on the TIP bonds is now 4 percent; adding a reasonable amount for target inflation puts the equilibrium funds rate in the mid-5 percent area. Even if we assume that there is some

* Secretary's note: Subsequent to the meeting Mr. Parry indicated that the 2.4 percent is the increase in medical plan premiums and the 23.8 percent refers to the increase in the dental plan premium. The weighted average increase for the San Francisco District is 5.8 percent.

liquidity premium in the TIP rate, we still get an equilibrium funds rate that is a bit above the actual funds rate.

But labor markets may not be in balance. The Greenbook gives scattered, early evidence of accelerating wage gains. The evidence is not only scattered and early but each particular piece of evidence is debatable. Nevertheless, wages do seem to be rising more rapidly than earlier. We can look at labor markets in any number of ways: We can compare NAIRU with actual unemployment rates; we can add in discouraged workers; we can take all the Beigebook anecdotes. I even heard several anecdotes on National Public Radio the other day. They all seem to suggest that labor markets are very, very tight and that wage gains may finally be accelerating.

Even if labor markets were in balance now, they might not stay that way. In the constant funds rate forecast of the Greenbook, which is my favorite, the rate of growth in aggregate demand after the Y2K quarter averages about 4 percent. I think that would be greater than anybody's estimate of aggregate supply growth, however enhanced by the productivity changes. And if the forecast is accurate, there would be a further tightening of labor markets. To me, therefore, a number of indicators suggest that the funds rate is a bit low.

Let me make a quick digression on a point that I raised last time about leading indicators of inflation. The ever-responsive staff has looked into this and written a nice memo--nice, but I must say from my point of view disappointing. Indices of leading indicators had more or less worked up until 1990 but did not predict well at all in the 1990s. Moreover, many of the actual component series are already labor market indicators. And when controlling for these structural model variables, leading indicators are not even close to being significant predictors of inflation. At times a particular series may have predicted a phenomenon, but as a general rule I must reluctantly admit that that approach doesn't seem to help us any.

So, to get back to my earlier point, I think we ought to make some adjustment today. But after that--Peter Fisher's memo thoroughly scared me as I think it probably scared others--we probably want to have as few moving financial parts as possible as we go toward the end of the year.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Thank you, Mr. Chairman. I read the recent data as consistent with a continued momentum in aggregate demand that is likely to support growth at or above trend in the period immediately ahead and maintain very tight labor markets. I see core inflation stabilizing amid signs of a dissipation or reversal of many of the favorable supply shocks that have contributed to low and declining inflation over the last couple of years and stirrings, perhaps, of higher wage gains. This sets the stage for a test of the role of tight labor markets on inflation going forward. I expect we all look forward to learning a little more about just how new the new economy really is. The story in the Greenbook--and one that I can definitely relate to--is that the dissipation or reversal of favorable supply shocks, including the stabilization in trend productivity growth, will allow the effects of prevailing tightness in the labor market to show through. We will maintain growth at near trend over the forecast horizon with gradual upward pressure on inflation. The result is a core inflation rate that in the Greenbook forecast moves from about 2 percent recently to 2¾ percent by the end of next year, with the momentum pointing to a further increase in 2001, even allowing for two ¼ point tightening moves. An interesting feature of the forecast is that the initial step-up to a 2½ percent rate is already in train and is reflected in the quarterly data in the forecast for the fourth quarter. In addition, the 2¾ percent rate at the end of 2000 would be higher on a methodologically consistent basis than the core CPI inflation rate over the year 1995, before the coincidence of powerful disinflationary forces took hold.

One of the issues that we face and will continue to face in our policy deliberations is how much to take into account a forecast of rising inflation as opposed to the realization of utilization and inflation rates going forward. That is, how proactive and forward-looking are we prepared to be in light of uncertainties about the structure of inflation dynamics and the poor forecasting record of recent years?

Let me point out, relative to the Greenbook baseline forecast, a couple of contingencies that I think are particularly important and deserve mention--that is, a correction in equity prices and a sharper-than-projected decline in the dollar. The combination in the Greenbook forecast of a tightening monetary policy, slowing growth, rising inflation, and a declining dollar appears to raise the potential for an equity market correction. However, I certainly would not want to temper a tightening of monetary policy by relying on an expected equity market correction to slow growth. Rather, we have to be

prepared to adjust monetary policy in light of how overall financial conditions evolve in response to our policy actions.

I read the Greenbook as suggesting that the staff has an asymmetric probability distribution with respect to the exchange rate, with a much greater chance of a lower than a higher exchange rate evolving over the forecast horizon. Given the difficulty in forecasting exchange rates and particularly timing the effect on exchange rates of a large and widening current account deficit, the best way to handle the situation may be, as the staff has done, by providing an alternative simulation with a sharper decline of the dollar. But the recent upside surprises to foreign growth and the high and rising U.S. current account deficit should weigh heavily on the dollar going forward. This may temper any slowdown in 2000 and reinforce upward pressure on inflation. Thank you.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. It seems to me that the questions before us today are both factual and tactical. At a factual level, I believe the issue is whether or not we really are facing an end to the good news on inflation. There are certainly some reasons, based on the data, to believe that that may be the case. Over the past 12 months the core CPI has gone up about 2.1 percent, which is certainly moderate by anyone's measurement. But the annual rate of change in the core CPI has moved up from a little under 1 percent in Q1 of 1999 to about 2.3 or 2.4 percent in Q2 of 1999. More significantly, there may be some potential signs of early inflation, so-called pipeline inflation, in the most recent PPI. But without putting too much weight on that, in the context of strengthening growth overseas, a commensurate weakening of the U.S. dollar, expected strength in exports, and a likely rise in both oil and nonoil import prices, I think we can well expect a further firming tendency in U.S. prices. Obviously, this is against the backdrop of labor markets that are tight by anyone's estimation. Whether or not they are below one's estimate of NAIRU is less relevant than the fact that we have seen already some uptick in hourly compensation figures.

As Karen Johnson has already indicated, we are in a period of unusual asynchronous global growth patterns that have arguably allowed us to enjoy a very benign growth and pricing picture. At the end of this asynchronous period I think we will also see an end to some of the factors that have allowed us to enjoy benefits of excess capacity and slack

demand from overseas. That will put a further spotlight on the question of growing productivity here in the United States. Unfortunately, just when the importance of that factor has become a little clearer to us, the data have become a lot less clear--particularly the issue of measuring the economy from the product side versus the income side, which I suspect we'll come back to during the course of the year.

Against the background of this factual uncertainty, I think we're faced with a very important tactical question. From my perspective there are some risks to the forecast. One, for sure, is that it depends at least in part on a waning of wealth effects. And we know from experience that calling for a slowing of the equity markets has proven to be a triumph of hope over experience. Secondly, we also see in this forecast some expectation that the desired level of inventories in the private sector, or expectations regarding the relationship between inventories and projected sales, may have changed a bit. I think that may be true because of some structural changes. But we also have to be mindful that in the year 2000 we may see some other forces that cause inventories to be higher than perhaps businesses would otherwise like to have.

Finally, from a tactical standpoint we have to be mindful of the fact that we are in an unusual period. Year 2000 fears do make markets skittish. And if the general inclination of the Committee is that we want to firm a bit as an insurance policy if you will, I suggest we do so sooner rather than later. Whenever we are in the process of raising rates, even by a small amount, we are about as popular as a skunk at an outdoor wedding reception. But if that is the case, I think we should do a little defensive spraying--at least for the bride and her mother.

CHAIRMAN GREENSPAN. That is an improvement. I thought it was an indoor wedding.

MR. FERGUSON. We are at least outdoors!

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. I believe I am the final hitter in the lineup today and the day is getting on, but let me offer a brief summary of the situation as I see it, although this is admittedly rather repetitious. The economy continues to exhibit a great deal of fundamental strength though we may be getting a bit of the long-expected slowdown. However, the consensus expectation for the second half is for growth of 3½ percent or likely

more than that, which would mark a return to a pace above a sustainable level. Left unconstrained, this could go on into and perhaps through next year, which would introduce substantial additional upside risks. So far, the overheating this threatens has been more than damped by strong productivity gains, with important assistance from special world cyclical factors. While this could well continue for a time, it seems to me increasingly dangerous to depend too heavily upon productivity alone to hold inflationary pressures in check, as the reinforcement provided by a weak world economy seems likely to be dissipating. If overheating were allowed to occur and ignite a cost-driven rise in inflation, it could be quite difficult to deal with. Serious downside risks to economic activity exist, as always, with the most readily identifiable potential culprits liable to be the sky-high stock market and the still fragile world economy and exchange rate structure as well as the ever-present possibility of exogenous shocks. But at this juncture the downside risks would seem to be of both lower magnitude and probability than the upside risks.

The federal funds rate is still 50 basis points below the level that existed prior to the financial crisis of a year ago. While one cannot by any means say that all vestiges of that episode have disappeared, conditions have improved markedly. I can see little motivation in recent experience or likely short-term prospects for continuing all or perhaps any of the remaining degree of stimulus put in place at that time. Thank you.

CHAIRMAN GREENSPAN. Let's move on to Don Kohn.

MR. KOHN. Thank you, Mr. Chairman.

Judging from the remarks of policymakers, a further small increase in the federal funds rate would seem to be in the works at this meeting. Private domestic demand is expected to remain strong, at a time when the restraining effects of fiscal policy and of developments overseas will be diminishing. Deepening problems abroad and their spillover to the U.S. economy and financial markets have played an important role in justifying holding policy steady from late 1997 through last summer and then easing last fall. In effect, the Committee has allowed relatively accommodative financial conditions to boost domestic demand in order to offset the depressing effect on domestic production of lower exports and higher imports--and the FOMC has had additional scope to do so while keeping inflation contained as foreign developments damped import prices. The easings last fall in particular were designed to protect not only against the anticipated effects of global financial market turmoil, but to take account of heightened downside risks as well. In large measure because of these policies, the United States not only remained an "oasis

of prosperity” but--to stretch the metaphor to the breaking point-- provided water to the rest of the world in the form of strong demand for its goods and services.

But now domestic demand abroad is strengthening and import price declines are coming to an end. As Karen noted, recovery seems to have taken hold in a number of emerging market economies, and, while the vigor of the European and Japanese economies may be in question, at least the downside risks in those economies appear to have greatly diminished. Under these circumstances it becomes increasingly important to trim the strength of domestic demand here if we are to avoid putting additional pressures on U.S. resources. The turnaround abroad is occurring when the level of labor resource utilization here at home is extraordinarily high. The unemployment rate is as low as it has been on a sustained basis since the late 1960s, and some recent data on labor costs at least hint at the possibility that it might be too low to be consistent with containing inflation. Even if the Committee is not yet ready to judge these recent data as the beginning of an uptrend in unit labor cost increases, as in the staff forecast, it may still see the current unemployment rate as low enough to justify tilting policy on the side of forestalling any further declines in the unemployment rate.

The slowing of domestic demand needed to keep the unemployment rate from falling is likely to depend, as Mike noted, on retaining the greater degree of restraint in financial markets that evolved over recent months as private long-term interest rates rose 75 basis points and stock prices leveled off. That restraint, in turn, owed importantly to growing expectations that the Federal Reserve would tighten policy. A firming at this meeting, together with the action taken in June, would validate those expectations and should tend to keep interest rates and equity prices near current levels.

If the Committee decides to raise its target for the federal funds rate by $\frac{1}{4}$ percentage point, as in alternative C in the Bluebook, you will also need to decide what your view is of the balance of risks going forward and how to convey that view to the public.

An inflation outlook similar to that in the staff forecast would offer a rationale for adopting and announcing an asymmetric directive. In that forecast, the unemployment rate is judged currently to be appreciably below its sustainable level and financial conditions not yet restrictive enough to damp demand sufficiently to raise that rate. Consequently, inflation is on an upward trend in 2000 and beyond, even with the assumption of a near-term firming of policy and another tightening next spring. An alternative model simulation in the Greenbook indicates that something like 150 basis points of tightening would be needed by mid-

2000 to cap inflation at a little over recent rates. With actual or anticipated century date change disruptions in markets possibly constraining policy increasingly over the fourth quarter, if the Committee thought it might want to raise rates by a substantial amount by next spring, it might want to give serious consideration to tightening again in October. In this case, an asymmetric directive would give due warning that the Committee saw the inflation risks as remaining serious and was determined to take action in the near term to forestall a prolonged acceleration in prices. Tightening in October ought to be far enough in advance of year-end to avoid aggravating market dislocations stemming from last-minute century date change preparations.

An asymmetrical directive after a 25 basis point rate increase would come as a surprise to market participants, and their responses would help to impose added restraint the Committee would find helpful if it were still quite concerned about inflation risks. Interest rates would rise somewhat and markets would remain volatile, pressuring spreads, which have retreated in recent days when benign price data seemed to reduce the odds on a policy tightening in the fourth quarter. Judging from the response to the May tilt announcement and the July testimony, with a tilt toward tightening markets would be likely to react more strongly to incoming data that tended to confirm intensifying price pressures than to information that did not point in that direction, and there is a high probability that they would build in a further rate increase in October unless the data were consistently to the weak side.

If, on the other hand, the Committee saw the inflation risks as having been reduced enough by its two tightenings to allow it to observe incoming data for a while without the presumption of a near-term tightening, it might want to adopt and announce a symmetrical directive. After 50 basis points of federal funds rate increases this year and little apparent change in inflation expectations, the Committee will already have raised real interest rates appreciably in the last few months. Those increases, as they came to be expected, were largely responsible for pushing many private long-term rates up to their highest levels since the end of the 1994-95 series of tightenings, and they have contributed to sustaining a slower growth trend for money and credit. Recent data on several components of final sales already suggest a moderating trend, with these readings taken even before most of the effects of the rise in interest rates and flattening of equity prices have been felt. As a consequence, the Committee may see the risks around the forecast of slowing growth as much better balanced than they have been for some time.

Uncertainties about the growth in productivity, the level of the NAIRU, and the supply side of the economy more generally also may

support the case for a spell of watchful waiting. Such uncertainties make preemptive policy more difficult, and may argue, as noted in the papers sent to the Committee before its last meeting, for tempering the response to estimated output gaps relative to that on incoming inflation data. In these circumstances, with core inflation still quite subdued, if the economy looked like it was slowing to the growth rate of its potential, the Committee might want somewhat more evidence that labor costs were on a sustained upward trend relative to the growth of productivity--and that therefore the unemployment rate was too low--before deciding that it needed to tighten further.

Finally, financial markets remain unusually skittish and sensitive. After the crisis of last summer, participants are less willing and less able to arbitrage spreads back down once they have begun to widen. Moreover, widening spreads on Brady bonds and weakening equity markets in a number of emerging market economies in recent weeks suggest that confidence is fragile and that downside risks persist in these economies and are perceived to be heightened by increases in interest rates in the United States. Even at home, reduced liquidity has made markets more vulnerable to shocks, such as positioning in advance of the century date change and shifting perceptions of monetary policy intentions. A symmetrical directive would reduce one source of uncertainty and volatility, perhaps leaving markets better able to cope with other problems, such as century date change preparations.

A symmetrical directive would not rule out a near-term policy action should developments take a significant unexpected turn. But such a directive could convey the Committee's feeling that in the near term, absent such an eventuality, it would be content to evaluate the data and the effects of actions already taken. If this were the Committee's intention, care would be needed to ensure that this came through in the announcement, so that market participants did not interpret the symmetry as merely a repeat of the symmetry in June, which they have been told was more fundamentally asymmetric than they first perceived.

CHAIRMAN GREENSPAN. Questions for Don? If not, let me proceed. Following up on a number of the issues that Peter Fisher raised at the beginning of our meeting, I have become increasingly concerned, somewhat surprisingly in a sense to myself, about what is looming out there in the Y2K area. My concern centers mainly on the increasing evidence of potential illiquidity problems, as people in the business community and financial community keep talking to one another about possible year-end developments. Everybody seems to be focusing on what they should do to protect themselves at year-end in a situation where the cost of appropriate precautions is not perceived to be all that large relative to the

cost of the potential outcomes. I think we are addressing the year-end issue, and I don't believe there is likely to be a significant problem in the financial area.

However, even though I agree with Mike Prell that the declining inventory/sales ratios do not at this stage seem to have caused a sense of a shortfall, it is just not credible that the tightness of just-in-time inventory management that businesses have created in this country can continue, as we move ever closer to the end of the year, without generating some precautionary buildup of various supplies along various pipelines. We've seen several surveys that suggest many people are inclined to take such precautionary measures. The crucial consideration is that we don't need very much stocking up to create a quite large increase in seasonally adjusted inventory investment. Indeed, my recollection is that a one percent increase in real business inventories is about \$50 billion at an annual rate. And an increase of that order of magnitude from one quarter to the next adds more than 2 percentage points to the GDP growth rate. An additional one percent change in inventories investment is not a big number. So even though my perception is that the Greenbook forecast is probably right, the risk to the forecast is on the upside and very substantially so.

The question that arises is how that inventory is going to be financed. When I look at the nature of markets and how the flow of funds may emerge in the year-end period, I can envision some potentially very worrisome developments. I do not perceive that as a necessary or most likely outcome. Indeed, I don't believe it will happen. But I think the risk is sufficiently large that I would very strongly be in the group that wants to tighten up on monetary policy today if for no other reason than that we want to go into a period like that with a somewhat tighter than looser policy stance.

As Don Kohn pointed out, we've not only had the June funds rate increase but we've also had a very significant increase in the real long-term investment grade yield in recent months. Indeed, as I recall from the charts I looked at yesterday, the BAA real rate is up just about a full percentage point since the beginning of the year. That's a fairly substantial amount of tightening that has taken place. My own perception is that it is likely to be adequate for our purposes. The reason I think so at this stage is that the outlook for rising inflation is still a forecast. If we look at the detailed data, as a number of you have pointed out, there is nothing there. In fact, the twelve-month change for the core CPI excluding tobacco--which had that artificial, very sharp rise last December--is well under 2 percent. I

think it is 1.7 percent. That is a more relevant statistic, if we are going to use the CPI, than any of the other numbers we're looking at. But as I've argued before, I think the CPI is a flawed measure of inflation. The personal consumption expenditure deflators are far more important and not only because of the weight differences, which are quite important. Indeed, a number of the "component" or "detailed" price indices are far more accurate than those in the CPI.

I think there is a question of which of the various broad-based inflation indexes to use, but I agree with the Vice Chair in that I believe we have arrived at price stability by any measure we can employ. And the argument that the rate of inflation has stabilized I think is probably accurate, although it's difficult to tell in certain respects for reasons I will get to in a minute. The point is that we are at the level we need to be; it is not as though we have stalled out at some higher level of inflation and, therefore, will require additional effort to bring inflation down.

The concerns that a lot of people around the table have raised with respect to this issue I think are quite valid. The oil price increase has been more than we would have expected, certainly more than I would have expected. And you cannot just subtract energy out of your price indexes as though there is some core aberration in the way that you can with agriculture. In a certain sense when food was a crucial issue in the CPI and affected wages, taking food out of the CPI was questionable. But taking food out of the CPI now is not questionable because it clearly is fairly exogenous. However, oil is not. Oil eventually works its way into the core price indexes, through transportation costs, petrochemical feedstocks, heating costs, and a variety of other areas. So it is not as though the oil price is extractable from the overall price index; its impact is just delayed. To be sure, oil--and energy more generally--doesn't have the weight that it had 20 years ago in the GDP, but it is still a prominent force and, therefore, I would not diminish its inflationary implications.

The intermediate materials of the PPI are largely construction materials, which are being pressured by a very, very tight housing market. The nonresidential markets, as you all know, are weakening. Indeed, some company reports show orders for construction equipment falling off; and even in the data on residential markets that we get from the National Association of Homebuilders, a sample of large homebuilders shows a significant weakening in home sales in July. I would be a little careful translating that into starts

because, as several here have mentioned, there is a very serious inventory problem of new homes. Demand has to fall a lot before it begins to affect the starts figure significantly.

One element that nobody has discussed--I'm not sure how important it is but it could become so--is owner-equivalent rent. As you know, it has been in the CPI at one-tenth of a percent per month for quite some time. Some statistical techniques that we've employed, which endeavor to extract near-term signals from that BLS procedure of using a six-month moving average, suggest that that figure may move up from 0.1 to something like 0.3 in the August CPI. That wouldn't be very important except that it is one-fifth of the total CPI. But it is a much smaller fraction of the PCE. So, while it may have an impact on the CPI if indeed our statistical procedures are accurate, it will have a very much more subdued effect on the PCE price index.

The bottom line on all of this, however, is really the question of wages and wage costs and unit labor costs generally. We've all commented on the ECI and average hourly earnings. I think the ECI may be stronger than is shown in the Greenbook, but it certainly is still below the rate of change of a year ago. The average hourly earnings figure, which in July was 0.5 on the basis of data supplied to us by the BLS, suggests that some of that increase reflected changes in the mix and that the fixed weight structure of wages probably rose less than that. But, fundamentally, the crucial issue is not what is happening to average hourly compensation. I suspect that neither the average hourly earnings measure nor the ECI is as useful as the aggregative data on employment costs per hour. Even though the latter measure is a dubious statistical calculation, it probably is more representative of reality because it takes into account all of the secondary sources of labor costs. So the annual rate of increase of a little over 4 percent that we've seen in that statistic is probably the best estimate, in today's context, of the real rate of wage increase. That gets us down to the question of what is happening to productivity.

From the data I look at, I find no evidence yet that the increase in the rate of growth of productivity has slowed at all. To be sure, the official published data for the second quarter, which showed productivity growth of 1.3 percent and will be revised to below 1 percent, would suggest a very significant slowing. The problem is that about 2 percentage points of that number reflects the change in the statistical discrepancy. And that published second-quarter number is not in any way consistent with what we know is going on out in the real

world--namely, that while there may be some evidence of firming in prices, there is little evidence of corporate pricing power. I must say that the anecdotal reports I hear from people to whom I talk--even though they do bring up the point of the lesser discounts--suggest no really significant change in pricing power on the part of companies. If that is indeed the case and if operating domestic profit margins rose in the second quarter--we don't have official data on that as yet but the evidence points to an increase, judging from all the individual company reports we see--certain algebraic conclusions follow. Algebraically a stable price level and rising operating profit margins necessitate a decline in the rate of change in unit costs. Since labor costs are 70 percent of unit costs and the indications in the nonlabor cost area suggest only modest declines, it necessarily follows that the rate of increase in unit labor costs declined in the second quarter. And indeed that is precisely what shows up on the income side in an evaluation of costs and prices. As I've indicated previously, when we look at the nonfarm business sector from the income side, we estimate that over the last four quarters unit costs rose less than $\frac{1}{2}$ percent. Unit labor costs were up about $\frac{3}{4}$ percent. The growth rate of income, of course, was also significantly stronger than the growth rate of product-based GDP.

I will grant that there are lots of arguments about what that statistical discrepancy is showing, but leaving that aside, I would say that we don't even need to look at any of these data on the product or income side. We can infer a decline in unit labor costs wholly independently of those data. And no matter what data we use on average hourly compensation, whether it's average hourly earnings, the ECI, or the compensation data, we still get rising increases in output per hour. The figures in the data that we are looking at from the income side show productivity growth over the four quarters ending in the second quarter of around $3\frac{1}{2}$ percent. I might add that the difference between the $3\frac{1}{2}$ percent and the 4.3 percent in compensation per hour is indeed a unit labor cost increase of $\frac{3}{4}$ percent.

The point that I'm trying to make here is that we don't have any real evidence that inflation has risen. Indeed, we are still looking at declining rates of increase in unit costs. And if profit margins are rising, that basically says that some of the increase in prices or the lack of decline in prices has to be reflected in widening profit margins. So there is still a gap there. In other words, the inflationary pressure is not there. Now, I don't deny that if we proceed with the product-based GDP numbers and project a stable productivity growth

rate, that will produce an acceleration in the CPI growth rate. There is no algebraically conceivable alternative to that. But that is begging the question, because unless and until we see some slowdown in productivity growth, then the argument that inflation is about to bite us is not credible.

I do not deny, as I've said previously, that the growth of output per hour is going to slow down, but I don't know when. There is no evidence of that yet, and there is no reasonable upper limit in the near term. The crucial point here is that we became so used to a 1 percent increase in productivity growth over a very long period of time--from the '80s into the '90s--that we have looked at the gap between potential and actual as entirely a demand-side phenomenon. Certainly the demographics haven't changed that much. And if we have stable demographics--say, a little more than 1 percent growth in the working-age population including immigration--and a 1 percent trend productivity growth rate, then potential is a little over 2 percent. And if that does not change, our evaluation of inflation can ignore the supply side and look at the demand side, which is what we typically do and why we argue in terms of an overheating economy. But now we have the supply side moving, and the question of whether the economy is overheating and inflationary pressures are mounting cannot be strictly an issue of what is happening on the demand side. That's because if productivity is accelerating, of necessity it has to be balanced in some manner, as I said last time, by very high expenditures for motor vehicles, housing, construction--big everything--unless we get a big statistical discrepancy--bigger than the one we're looking at now.

The truth of the matter is that we have a very strong economy with very marginal indications of any slowing. But the question that is still up in the air is whether, in fact, it is an overheating economy. An important element of that, obviously, is what is going on in the supply and demand for labor. There is no question that the pool of people seeking jobs is continuing to erode. We continue to see shrinkage in the number of those who are working part-time, so we are seeing ever increasing hours. But the rate of decline in the pool of job-seeking people who haven't gotten a job has itself been slowing. We know the gap between potential and real output is in the area of less than 1/2 percent without claiming any knowledge of what the actual potential is because we don't need to know that. All we need to know is the difference.

What I'm suggesting is that we still should be looking for the answer to the question of "Where is the inflation?" It is not showing up anywhere in the basic price data, at least that I can tell. And the people out in the business world with whom I talk, and it's a fairly extensive group, keep complaining about their inability to raise prices. I do think that wages will continue to increase if productivity growth continues to rise. But since this would mean that unit labor costs would be little changed, that won't be a source of price pressures.

In any event, having said all of that, so far as the domestic side is concerned I think the availability of resources is very tight. Inflation is clearly prone to acceleration should the increase in the growth of productivity slow or even stabilize. That hasn't happened yet as far as I can tell.

Finally, let me say something about the international side, which is an issue a number of you have raised. I think something ominous is going on. It's not the economics; it is the politics. The Vice Chair mentioned that, as did President Jordan. The situation in _____ is deteriorating. I don't mean the economics. On the contrary, the economics look fairly good, especially in _____. But the economics are a lagging indicator. Mr. _____ political strength has deteriorated very dramatically. As I recall, his approval ratings went down _____ and he is being largely abandoned by a number of his strong supporters. It is very difficult to know what is going on in _____. The _____ situation is technically better, but the politics there are just as bad. The long-lasting _____ is obviously coming to an end at the close of this particular session, because none of the candidates shows any signs of becoming that type of president. So there is a possibility that we could be confronted with a crisis that ironically could create another period of strength in the dollar as fears of the international political situation and other concerns emerge. The flight to the dollar would resume. I think one of the things we have learned, to our chagrin, is that the hardest thing to forecast is the American exchange rate. I know how much effort Karen Johnson and her people have put into it, and theirs is the most sophisticated analytical process you will ever see. And I can't say that the result is all that impressive. [Laughter] So if she can't do it, I don't think any of us ought to consider ourselves to be in a position to do it.

My bottom line is that I think we have to tighten by 25 basis points. I would argue that we should make that move and stay with symmetry, as I think Don Kohn mentioned. If

it turns out that we have to move again in October, symmetry does not preclude us from doing so. But we ought to be careful in the wording of our press statement, if we go in that direction, not to construct an “asymmetric” symmetric directive, which we consciously and purposefully did the last time and for good reason. I would argue that that is probably not the desirable thing to do at this point. I have gone on far longer than I anticipated. Who would like to speak next? Vice Chairman.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I fully support your recommendation. Let me just express a couple of thoughts. Since I believe that we are enjoying price stability and since I believe very firmly in the rather brilliant analysis that you have just presented, one might ask: Why are we tightening at all? In my view, the reason is that the domestic economy can certainly bear it. The worst case scenario is that we will have moved the funds rate up by 25 basis points that we didn't absolutely need. But the strength of the domestic economy and the tightness of the labor market are such that a move of 25 basis points is certainly a bit of insurance that is in the interest of the American people.

Another reason--which you just alluded to, as I did in my earlier remarks--is that the international situation is tenuous enough that it is best for us to be in the position of having domestic policy just where we want it or maybe a tiny bit on the snug side. It will give us much greater flexibility to respond to any unanticipated weakness in the domestic economy, which is always possible, or to the more likely event of some shock coming from outside the United States. So I believe very firmly that “C” symmetric is the right solution.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I, too, very much agree with your recommendation, Mr. Chairman. Although I might be a bit more inclined than others to view the prospects for increases in interest rates as more probable rather than less probable, at this point in time I think it is important to make a move and give some indication of then standing pat for a while. I believe that would be very helpful in terms of overall market conditions. I think President McDonough is right on target in saying that it would be to our advantage to have monetary policy close to where we want it as we go into the last part of the year, which is going to be a tricky period.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Mr. Chairman, I support the recommendation for a 25 basis point increase. The market expects it and not to move at this point would confuse the market. As for Y2K issues, I think our position ought to be that as we approach the close of the year we won't hesitate to change our policy if necessary. After all, we have said again and again that we are ready for Y2K and the banking system is ready. So there is something peculiar about saying that the Y2K issue has to be an absolutely controlling consideration. In my view if we have good reason to move, we should move. Y2K should be one of the considerations involved in any decision, and it might tilt us in the direction of not moving. But I do not think we should foreclose moving if there is a compelling case to move. Obviously, we might see strains in the market that are greater than those that we now think are likely, in which case that would elevate the importance of Y2K considerations.

My view is that over the last two years, until the beginning of this year, financial conditions were quite accommodative and perhaps even expansionary. But that situation has changed. Rates are up. Money growth is slower this year. I think we will be not very far from where we ought to be with the increase in the fed funds rate today. If we are starting out after today pretty close to where we ought to be, I think we have to make clear to the markets that our future policy moves are going to be driven by what we see happening. And if we end up with more inflation than we currently anticipate, we have to be ready to respond to that. That seems very important to me; we shouldn't try to preordain or give any very firm view about our policy direction in coming months.

My preference is very strongly for a symmetrical directive. I firmly believe that the market is quite unclear about what the symmetry/asymmetry clause means; we need to defuse the speculation about that and try to get the market to pay less attention to it. I think we ourselves around this table are unclear about what that clause means. It is awkward for us as we talk to people around our Districts and to the press to have to stumble and mumble about what this clause that we voted on means. In my view, the best way to defuse this is for us to adopt a symmetrical directive for the foreseeable future until we ourselves are clear about what we mean by that clause. Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Mr. Chairman, like Governor Meyer, I look forward to the debate on the new economy and to seeing how the actual new economy will play out. But the test of

the new economy will be marred if we burden it with interest rate increases based only on demand side considerations without equal consideration given to supply side factors. We had a productivity growth rate of only 1.3 percent, or even lower, in the second quarter--a period of rapid growth in hours worked--after it averaged almost 4 percent in the previous two quarters. I expect to see the higher productivity growth trend show through as labor supply growth slows. My guess is that the true productivity growth trend will turn out to be much closer to 3 percent than to 1 percent. Wages may in fact rise even faster than that and unit labor costs may rise, but after years of a profit boom and after years of an investment boom that has raised capacity faster than output, it seems to me that higher wages are appropriate. I was taught that wage-push inflation does not occur through higher wages alone without validation from monetary expansion. While we never know what the appropriate rate of monetary expansion is, it is heartening that money growth has decelerated in recent months. So I would prefer no rate increase at this meeting.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. I agree with your recommendation to raise the funds rate 25 basis points and I strongly agree that we need a symmetric directive and that we ought to stay with that.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. I support "C" symmetric, truly symmetric. I've never studied the statistical discrepancy and I don't want to get into the question of whether we ought to be looking at the income side or the product side; I take no position on that. But I do like it when you talk about this because it makes me less worried about inflation, and I hope you're right. [Laughter]

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. I have to endorse what Governor Gramlich said on all counts.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I favor both aspects of your recommendation, Mr. Chairman--that is, the increase in the federal funds rate objective and the symmetric directive. I would add that I will be mildly surprised if we don't wind up deciding that we need to move the funds rate up a bit further before too long. But I think a symmetric directive permits us to do that, and I'm comfortable with what you are proposing.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I support your proposal for a 25 basis point increase and a symmetric directive. However, on the directive I just want to associate myself with what President Poole said about symmetry and asymmetry. In my view we should not be using that tool for the foreseeable future even though I agree with President Stern in that I personally think the odds are that we are going to be increasing rates again in the not too distant future. In my view we should just make announcements regarding symmetry or asymmetry if we think they are appropriate. The language on the tilt is no longer useful. I think we misunderstood the impact it would have in the financial markets when we used that tool in May. But the fact that we now announce it right after the meeting just confuses the markets even more. So my personal preference is to drop its use completely in the future.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I'm increasingly concerned that aggregate supply may not keep up with aggregate demand, particularly in light of a probable pickup in foreign demand. If that turns out to be the case, we risk an acceleration in inflation at a time when I'd personally like to see further progress toward price stability. I, too, would prefer to raise the funds rate $\frac{1}{4}$ point at this meeting. Although we might have to move again this year, I would prefer a symmetric directive in part because we don't know how fast aggregate supply will continue to grow and also because I agree with much of what President Poole said about the symmetry issue.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I agree with your recommendation on the rate increase, and I strongly support the symmetric directive. I say that because if we do in fact make the $\frac{1}{4}$ percentage point move, we can sit back and analyze its effects, analyze the data, and then move again when a change is called for. I don't think we need to have an asymmetric directive of any kind.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Thank you, Mr. Chairman. I support your recommendation for a $\frac{1}{4}$ point increase in the funds rate and the continuation of the symmetric directive. I want to focus a bit, though, on the issue of whether we need not just a symmetric directive, but a "truly symmetric" directive. And I'm going to give a contrary perspective. The bond

markets today still have the expectation built in that if we move today, it won't be our final move--that there are still further, though modest, increases coming down the road. I don't think it would be particularly useful to use the directive and our announcement to remove that expectation from the bond market. Indeed, I think it is a very reasonable expectation. It involves the same kinds of considerations that we have talked about around this table. There is a lot of momentum in the economy. Labor markets are very tight. The supply shocks are beginning to dissipate. So, I think the task we have before us is a rather difficult one. We need to combine the rate move, the tilt, and the announcement so as not to put into place expectations of an immediate move--keep our options open to be sure--but not to squeeze out of the markets what I think is a very sensible and rational expectation right now. I think we should try to be market neutral.

Now, one reason that I support the symmetric directive is the reason that Presidents Poole and Moskow and others have noted. Right now we have the problem that symmetry and asymmetry seem to mean different things to different members of this Committee. Until we solve our internal problem, it is very difficult to communicate our intentions to the public effectively. So, first things first. During the interim while we clean this up, I think we have to be more reluctant to use changes in the tilt and, if possible, stick with a symmetric directive. But again, the challenge is how to balance that approach with the announcement so as not to convey an incorrect set of expectations about our policy intentions going forward.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I think a ¼ point tightening is the right move today, and for all the reasons that have been articulated I think a symmetric directive is the right place to rest until we can sort this issue out.

I also want to comment, although it is not to be decided by this group, that I hope the Board will consider a catch-up increase in the discount rate. It is part and parcel of our total policy posture. A catch-up in the discount rate would help to underscore and anchor, at least to some extent, the policy adjustment that we made at the last meeting and the one it appears as if we are about to make this morning. Thank you.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. I concur with your recommendation, Mr. Chairman, for all the reasons that have been expressed around the table.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I agree with your recommendation to increase the rate. As far as the tilt is concerned, my position is still what it was before. I recognize all the issues that have been raised here. But looking at all of the information we have and giving full weight to your comment that we are probably going to have to move at least one more time, given the way we have been operating, my sense is that an asymmetrical tilt toward tightening is better.

If I may, I'd like to make one other comment about the tilt. I certainly agree with what Bill Poole and others have said about the need to get our act together and make sure we all are on the same page. Nevertheless, there has been a sentiment expressed by Jerry Jordan and others about not using a tilt in our directive, and I certainly understand those arguments. But I have a slightly different perspective on this. As I see it, under our current operating procedures monetary policy works to a very large extent by influencing the yield curve. One of the most important determinants or channels of that influence is market expectations regarding our future policy actions. The key point is that those expectations are always out there. In a sense one could say that there is always a market perception of a tilt in one direction or another or of no tilt, whether we use tilt language in the directive or not--and if we do, whether we announce it or not. That is a key issue that we need to keep in mind. And given that, the issue as I see it is how that inevitable market perception of a tilt or the absence of a tilt gets determined. If we don't use symmetric or asymmetric language in the directive at all--or if we do and don't announce it--then those expectations would be formed largely, and I think obviously appropriately, by the Chairman's public statements. They might also be influenced from time to time by what some of the rest of us say and more generally by how markets guess we are going to react to incoming information about the economy. By telling the markets what our consensus view is, it seems to me that we cut out a lot of that guesswork, or at least some of it. That should make it easier for markets to move ahead of our actions and create the kind of continuity and smoothness in monetary policy and its implementation that I referred to awhile ago in my statement on the economy. So, I just offer that perspective.

One quick final point: To my mind, an asymmetric directive is a statement about a propensity. It has never really been, as I see it at least, an unconditional promise of future FOMC action, and it never should be interpreted as such a promise. So, if we are going to use anything like that in the future, we need to make that clear.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. A large and rapidly growing trade deficit or current account deficit says to me that demand for products in the United States has been growing at an ever faster rate relative to the pace at which we can produce them. So far, we've been blessed by the savings of the rest of the world, as poor as the rest of the world is, coming to our benefit. That is unsustainable. That will turn around. They will want to take their savings home and we will need to start making our savings available to them. That means U.S. domestic demand must slow. Current policy is not positioned to accomplish that.

If the move today were designed to signal that we're on hold for the balance of the year, my preference would probably be to go ahead and do 50 basis points and say this is a "we're done" type action. That is really not my first choice, though. My first choice is what Jack Guynn has suggested, a move on the discount rate. I think that is more important. I've thought about an increase of 25 basis points on both rates but I like his idea of a catch-up, so I'd favor 25 basis points on the funds rate and 50 basis points on the discount rate.

CHAIRMAN GREENSPAN. We have a consensus on "C" symmetric, 25 basis points. Would you read the appropriate language?

MR. BERNARD. I'm reading from page 15 of the Bluebook: "To promote the Committee's long-run objectives of price stability and sustainable economic growth, the Committee in the immediate future seeks conditions in reserve markets consistent with increasing the federal funds rate to an average of around 5¼ percent. In view of the evidence currently available, the Committee believes that prospective developments are equally likely to warrant an increase or a decrease in the federal funds rate operating objective during the intermeeting period."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
President Boehne	Yes

Governor Ferguson	Yes
Governor Gramlich	Yes
Governor Kelley	Yes
President McTeer	No
Governor Meyer	Yes
President Moskow	Yes
President Stern	Yes

CHAIRMAN GREENSPAN. At the termination of this meeting I'm going to ask that the Board of Governors meet separately to consider the requests of a very large number of the Reserve Banks to move the discount rate up 25 basis points. In the event that the Board goes along, I would propose to release the following statement with respect to our decisions:

The Federal Open Market Committee today voted to raise its target for the federal funds rate by 25 basis points to 5¼ percent. In a related action, the Board of Governors approved a 25 basis point increase in the discount rate to 4¾ percent.

With financial markets functioning more normally, and with persistent strength in domestic demand, foreign economies firming, and labor markets remaining very tight, the degree of monetary ease required to address the global financial market turmoil of last fall is no longer consistent with sustained, noninflationary, economic expansion.

Today's increase in the federal funds rate, together with the policy action in June and the firming of conditions more generally in U.S. financial markets over recent months, should markedly diminish the risk of rising inflation going forward. As a consequence, the directive the Federal Open Market Committee adopted is symmetrical with regard to the outlook for policy over the near term.

In taking the discount rate action, the Federal Reserve Board approved requests submitted by the Boards of Directors of the Federal Reserve Banks of Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Kansas City, and San Francisco. The discount rate is the interest rate that is charged depository institutions when they borrow from their District Federal Reserve Banks.

There is one additional item on the agenda, which addresses the question of the tilt. Bill Poole and a number of other Committee members have raised the question as to whether the Committee shouldn't come to an agreement on what the tilt language in the

directive really means. This has always been an awkward question, but obviously it has taken on added importance with our announcements. Most of us are also at least slightly uncomfortable with how the new announcement policy has been working out in practice and wonder if it might not benefit from at least some tinkering. I don't think we can resolve any of these interrelated issues at this meeting. In fact, I would prefer to have considerably more experience under our collective belts before making any new decisions on these matters. But I do think it is important to get a process under way to review the language of the directive, its meaning, and what we announce. That's the reason I asked Don Kohn to add this topic to the agenda at the last minute.

What I propose is that Roger Ferguson head a small subcommittee of the FOMC to examine these issues and come back with some recommendations or at least choices for us to consider. Roger will consult the Presidents and Board members to come up with the other members of this subcommittee. Theirs will be no easy task and it will benefit from added experience, as I already noted. My inclination is to ask Roger and his colleagues to get back to us in early spring.

Is that satisfactory to everybody? You have all raised the issue in one form or another, and we have to come to some form of agreement on what to do about it. Having said that, may I request that the Board members adjourn to my office?

END OF MEETING