Meeting of the Federal Open Market Committee
August 19, 1997

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 19, 1997, at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. McDonough, Vice Chairman
Mr. Broaddus
Mr. Guynn
Mr. Kelley
Mr. Moskow
Mr. Meyer
Mr. Parry
Ms. Phillips
Ms. Rivlin

Messrs. Hoenig, Jordan, Melzer, and Ms. Minehan, Alternate Members of the Federal Open Market Committee

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

Mr. Kohn, Secretary and Economist
Mr. Bernard, Deputy Secretary
Mr. Coyne, Assistant Secretary
Mr. Gillum, Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Prell, Economist
Mr. Truman, Economist

Messrs. Beebe, Cecchetti, Goodfriend, Eisenbeis, Lindsey, Promisel, Siegman, 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

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

Ms. Strand, First Vice President, Federal Reserve Bank of Minneapolis

Messrs. Lang, Rolnick, Rosenblum, and Sniderman, Senior Vice Presidents, Federal Reserve Banks of Philadelphia, Minneapolis, Dallas, and Cleveland respectively

Messrs. Gavin, Kahn, and Ms. Perelmuter, Vice Presidents, Federal Reserve Banks of St. Louis, Kansas City, and New York respectively

Ms. Little and Mr. Sullivan, Assistant Vice Presidents, Federal Reserve Banks of Boston and Chicago respectively

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CHAIRMAN GREENSPAN. I would like to welcome three newcomers to these proceedings--Jane Little from Boston, George Kahn from Kansas City, and Steve Cecchetti from New York. This is their first meeting and as I have indicated previously to individuals who have come and gone, they will not learn very much economics but large amounts of chaos theory! I think that was a welcome, but I'm not quite sure. [Laughter]

We need the approval of the minutes for the July 1-2 meeting.

VICE CHAIRMAN MCDONOUGH. Move approval.

SPEAKER(?). Second.

CHAIRMAN GREENSPAN. Without objection. I turn the next item over to the Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, I would like to move the election of Steve Cechetti as Associate Economist for the Federal Reserve Bank of New York to serve until the election of his successor at the first meeting of the Committee after December 31, 1997. I very much hope that his successor will be himself.

CHAIRMAN GREENSPAN. Would someone like to second that nomination?

SPEAKER(?). Second.

CHAIRMAN GREENSPAN. Without objection. Let us move on to Mr. Fisher. Peter.

MR. FISHER. Thank you, Mr. Chairman. I will be referring to the several pages of colored charts distributed this morning.[1]

In reviewing recent market developments, I will try to describe what I see as the causes of the recent, abrupt repricing and volatility of equity, bond, and currency values.

[1]Copies of the charts used by Mr. Fisher are appended to this transcript (Appendix 1).

First, since your last meeting, there have been noteworthy shifts in the interest rate outlook for the United States, Germany, and Japan. While each of these movements may appear small, in perspective and in conjunction they can be understood as causing a significant increase in risk to which market participants responded.

Second, to my way of thinking, it is not helpful to view the dollar's movement--or exchange rate movements generally--as "causing" the sell-off in bond and equity markets. The dollar's recent movements appear to reflect the same reassessment of the outlook that has affected other markets.

Third, I think the recent volatility in markets can, in part, be attributed to the difficulty all market participants are having in coming to grips with the extraordinary performance of the U.S. economy. In this sense, the recent volatility reflects the contest between "old" and "new" paradigms.

Looking at the first page of charts, which depicts forward rate agreements and Euro-deposit rates from August 1996 for the dollar, the mark, and the yen, you can see the backing up of the 9-by-12 dollar FRA--indicating three-month deposit rates, nine months forward--which occurred following the August 1st release of the nonfarm payroll data and the NAPM survey. In the blue lines, you can see the consistent rise in German forward rates from mid-July. At the bottom, you can see the recent, continued decline in Japanese forward rates.

The rally in U.S. interest rate markets, which started in the spring, continued in the last two weeks of July. That rally was propelled by the combination of reduced expectations for any near-term Committee action following the Chairman's Humphrey-Hawkins testimony and expectations for reduced Treasury issuance as a consequence of the improved fiscal outlook.

The August 1st release of the nonfarm payroll and NAPM reports caused a modest increase in expectations for a tightening by the Committee before year-end, with the December Fed funds futures backing up by 14 basis points in six days. As you can see in the FRA chart, late last week the backup in interest rates reversed at the time of the rapid decline in equity markets. But through last Wednesday's close, the 9-by-12 backed up by 32 basis points in the nine trading days from July 31st.

Looking back across the past year, this move is comparable to the increases in the 9-by-12 that occurred in December and February. In December, beginning a few days before the Chairman's speech at the American Enterprise Institute, the 9-by-12 backed up by 30 basis points in thirteen trading days; in response to the Chairman's Humphrey-Hawkins

testimony in February, the 9-by-12 backed up by 28 basis points in just six trading days.

Trend reversals such as these, reflecting only a modest increase in the probability of a tightening of monetary policy, also tend to cause market participants to reassess the likely consequences of still seemingly remote events. Most market participants still think that an increase in rates by the Committee is not likely to occur at this meeting or the next. But given the lofty levels to which bond and equity markets had traded, even a small increase in the likelihood of an event which could have such extreme, negative consequences for asset values causes traders to reduce their exposures.

To put the same thought differently: for those still working in the "old paradigm," uncertainty premia were squeezed awfully tight by the end of July, when the two-year Treasury yield traded within 25 basis points of the Fed funds target rate; some backup in interest rates and a collateral selloff in equities were accidents waiting to happen. In conjunction with the reversal of the U.S. rate outlook, after the mark began to weaken sharply in mid-July market participants also have had to respond to the escalating rhetoric from Bundesbank officials threatening an increase in rates.

On July 24th, the Bundesbank Council met and announced that their repo operations would continue at the fixed rate of 3 percent but only for the first two weeks of their four-week holiday until the next Council meeting. This suggested that the Bundesbank Directorium would have the opportunity to change the repo rate by either moving to a variable rate tender or raising the fixed rate last week. However, they announced one more operation at the fixed 3 percent rate last week, and this morning they announced one more operation at 3 percent.

From the Bundesbank's perspective, this saber rattling has had two beneficial effects: It has created a much greater sense of two-way risk in the Deutsche mark and
itself in the pre-monetary union environment.

Now, the Bundesbank faces something of a dilemma--or a couple of dilemmas. First, the German economy is providing mixed signals: some measures of activity are picking up and, as a consequence of the decline in the mark this year, officials expect import price inflation to begin to show up in the data. On the other hand, high unemployment continues; ongoing problems in implementing tax reform suggest that consumption demand will remain weak, and M3 growth continues to slow. Thus, on strictly domestic grounds, a decision to increase rates would be finely balanced.

Second, it is not clear how markets would respond to a rate increase in the context of European monetary union. To the extent that an increase in rates by the Bundesbank were to be perceived as hostile to the EMU process, causing delay or postponement or a narrowing of the field of likely member countries, it might then be expected to cause the mark to strengthen.

However, much of the Bundesbank's rhetoric of the last few weeks has been in service to the idea that an increase in rates would be consistent with and supportive of EMU, suggesting that European monetary policy should not be frozen in place until the ECB is created and that the convergence process could be completed by German rates rising to meet Italian rates. To the extent that market participants believe this, in the event that the Bundesbank were to raise rates, it is not clear that German long-term rates would move very much, or that the mark would appreciate much more than it did last week.

Japanese forward rates reflect the continued unwinding of expectations for any near-term firming by the Bank of Japan, particularly following the July 24th release of the Bank of Japan's Quarterly Report and the July 30th release of weaker-than-expected June industrial production data. As you can see at the bottom of the page, the rise in rates that occurred in May--in response to official pronouncements that things were not as bad as they seemed--has now been completely reversed as market participants have come to see the Japanese economy to be as weak as they originally feared.

The 9-by-12 forward rate is now returning to the levels where it was trading in March, at the end of the last Japanese fiscal year when gloom was widespread. On August 15th and again today, the yield on the benchmark No. 182 Japanese government bond hit a new, historic low of 2.065 percent.

Turning to the next page, a further jolt to the global outlook has come in the rush of currency devaluations in Southeast Asia. Over the course of the spring and summer, media attention has shifted back and forth between describing these events as "speculative attacks" on the one hand and "competitive devaluations" on the other. Increasingly, emphasis is now placed on the latter. While much of the focus has been on the devaluation of these currencies against the dollar, shown in the top panel, their declines against the yen since May 1st have been even more impressive, which is not likely to do much to improve the outlook for the Japanese export sector.

Turning to the third page of charts--

VICE CHAIRMAN MCDONOUGH. Peter, may I interrupt you for a moment? Would you remind everybody what a 3-by-6, a 6-by-9, and a 9-by-12 are?

CHAIRMAN GREENSPAN. It is not a question of "reminding!" What are they? [Laughter] Let me put it this way: I have never heard that term except as used by you in this room.

MR. FISHER. All right. As I mentioned at the outset, [laughter] a 9-by-12 is the 3-month rate traded 9 months forward. So, 9 plus 3 is 12--

CHAIRMAN GREENSPAN. Now, stop! [Laughter] The arithmetic is easy, but why don't you use English? This is market jargon whose use is restricted to a very few acres surrounding your office in New York.

MR. FISHER. I think the new technology is spreading it out all the way to New Jersey and Westchester! The 3-by-6 is the 3-month rate as it trades 3 months forward.

CHAIRMAN GREENSPAN. Why didn't you say so?

MR. FISHER. Where were we? [Laughter] As I mentioned at the outset, I do not think it is helpful to see exchange rate movements generally, or the dollar's movements in particular, as an exogenous "cause" of bond and equity market volatility. Rather, I think that exchange markets have been responding to the same shift in outlook that has influenced other markets.

In the first panel you can see the dollar's movements against the mark, in blue, and against the yen, in red, since May 1st. In July, the dollar rallied sharply against the mark as the idea of a broad and timely EMU process became generally accepted. The dollar came off against the mark in early August when the Bundesbank worked hard to suggest the risk of upward movement in German rates; as these risks declined, the dollar has jumped back up a bit against the mark in the last few days. The dollar appreciated modestly against the yen in July as the Japanese outlook deteriorated and recently has been more stable against the yen than against the mark. Looking at the movements in bond and equity markets, depicted in the second and third panels, I see a case of correlation in their responses to common impulses, not causation.

Finally, just as members of the Committee have been surprised by the performance of the United States economy in sustaining low inflation and

relatively strong activity, so too have market participants. Surprises--even pleasant ones, like the combination of last Wednesday's PPI and retail sales releases--tend to create uncertainty, and uncertainty needs to be priced into markets.

Another way to view this, depicted on the fourth page, is as a contest between the old and new paradigms and, specifically, among the diverse views now being expressed in market behavior. "Old paradigm pessimists" think that inflation is about to break out; it has just been hiding in the lags. They think the Fed is "behind the curve," providing too much liquidity. In response to last Wednesday's data, old paradigm pessimists would be inclined to sell stocks and bonds short.

"Old paradigm optimists" think inflation is probably coming soon, but it's hard to tell. They think the Fed is doing a good job and that maybe this benign inflation behavior can be kept going for a few more quarters. Many old paradigm optimists are reformed old paradigm pessimists, whose pessimism became too expensive a few thousand Dow points ago. Thus, they remain cautious: buying stocks and bonds on dips and selling them on rallies.

"New paradigm optimists"--who have done rather well over the past year or so--think that we have entered a new era in which productivity growth, hidden in the macro data, is taming inflation. They think the Fed is doing a great job and are great admirers of the Chairman. In response to low inflation and strong activity, they do what they always do: buy loads of stocks and some bonds whenever they can.

"New paradigm pessimists" are only recently getting the attention they think they deserve. The lack of corporate pricing power, the industrialization of China, the chronic weakness of Japan and Europe, the competitive devaluations of the United Kingdom and Italy a few years ago and, now, of all of Southeast Asia, are signs of the coming global capacity glut. They think the Fed is much too tight. They look at the PPI and retail sales data and see deflation staring them in the face and the last gasp of the U.S. consumer before the deflationary reality sinks in; they, therefore, sell stocks and buy Treasuries--not corporate bonds, just Treasuries.

While some of the recent volatility can perhaps be attributed to thin, August markets, as I see it the volatility is also a consequence of the interaction of these four archetypes' diverse responses to the same data and of the movement of market participants among these four types. Much of the rally of this year can be thought of as having been propelled by the migration of old paradigm pessimists to old paradigm optimists and of old paradigm optimists to new paradigm optimists. Much of the recent

retrenchment can be thought of as old paradigm optimists hedging against the risks of either old paradigm pessimism or new paradigm pessimism.

Turning to domestic operations, reserve needs were somewhat more moderate than in preceding intermeeting periods and we tended to use shorter-term operations to meet those needs. The next page of charts contrasts the volatility of Fed funds trading and operating balances in comparable periods from last summer and this summer. The daily range of Fed funds trading is shown in blue; the one-standard deviation of funds trading around the daily effective rate and the effective rate are depicted in red; below each is a bar chart showing daily operating balances. At discernibly lower levels of operating balances this year as compared to last, we have actually had modestly less volatility in the funds rate, as measured both by the range and by the standard deviation.

Mr. Chairman, we had no foreign exchange intervention operations during the period. Committee members have received materials describing how we intend to manage the diversification of a small portion of the System's Deutsche mark holdings into a sub-portfolio of longer-dated German government securities, which the Committee approved in principle last September.

I would be happy to answer any questions about this material, or about any aspect of my report this morning. I will need the Committee's ratification of the Desk's domestic operations during the period.

CHAIRMAN GREENSPAN. How serious is the most recent pressure on the Hong Kong dollar?

MR. FISHER. It is certainly worthy of note. I do not have an exact read this morning, but the forward exchange rates have backed up quite a bit in the last 10 days. I am told anecdotally that the pressure is from prudent asset managers who are hedging risks, not speculators poised for an attack. I don't know how much value I can place on that information.

MR. TRUMAN. I talked with Hong Kong Monetary Authority officials last night, and they did not seem particularly concerned. Their mode of operation is one that in some sense tends to draw attention, because in essence they meet a demand for Hong Kong dollars when it arises, but they automatically tighten their money markets. That's why we've seen a rise in their short-term

rates, which they hope will be enough to adjust financial market balance. There does seem to me to be a question as to how long the peg of the Hong Kong dollar against the U.S. dollar is going to last. The current mechanism is somewhat artificial, and now that the artificiality of the other pegs in Southeast Asia has been revealed, there is some sense that the Hong Kong authorities are nearer the time when they will have to make a decision on this issue.

CHAIRMAN GREENSPAN. Is that true of the other Southeast Asian currencies as well? Are they going to let their currencies float?

MR. TRUMAN. I don't think they know what they are going to do, quite frankly. In fairness, they face a difficult problem. President Minehan and I were at a conference last week, and a very bright woman from Indonesia asked what advice we had for them now that they had floated their currency. Mike Mussa of the International Monetary Fund replied that at a minimum they should not freely float but should have some sort of managed float and should re-orient the basket of foreign currencies in terms of which they had sought to maintain their own currency's value so that the basket is less heavily weighted toward the dollar. He added that that was the end of his advice. My comment to her was that it was very good advice, although it was only about 25 percent operational in terms of what they really needed to do. They have a relatively small open economy, so the notion that they can ride the roller coaster of international financial disturbances is very difficult for them to accept. Their financial markets do not have the depth or resiliency that is necessary to allow them to go, for example, to a Canadian style of monetary conditions index and expect to have the sort of gyroscopic stability that the Canadian dollar has displayed. It is a real problem for them, and we should not underestimate it. Perhaps monetary union with the Japanese--

[Laughter]

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I have a follow-up question based on some of the conversations at the conference. It was rather striking to a few people there, as it probably is to a lot of people in this room, that as compared with our involvement with Mexico and in IMF packages in general, there was no specific U.S. involvement in the Thai baht situation. I am sure that some people in this room view that as highly positive and other people may not. I wonder whether there is any perspective on this. Is this a new paradigm going forward that we do not get involved in these things, or is it solely related to how much the Thai baht is going to impact the United States? What is the thinking?

CHAIRMAN GREENSPAN. With respect to the baht?

MS. MINEHAN. Yes.

CHAIRMAN GREENSPAN. Ted, why don't you take a minute and review that.

MR. TRUMAN. I think there are two points to be made. One--about which it would seem appropriate to inform the Committee in any event--is that the United States government was very concerned about this from the beginning. In fact, this issue came up last March and I think it is fair to say, as Governor Meyer can attest based on meetings he attended, that this is an accident that did not particularly surprise us. Once the pressure built in March, we were in the awkward position, partly because of U.S. political opinion, of not wanting to be perceived as pushing the Thai authorities into an action that I believe most observers thought was inevitable. The Thais

and they have a very serious problem in terms of restoring confidence and the stability of the baht. The Treasury's position basically was to encourage the Thais to engage with the International Monetary Fund, which has a traditional view on these types of things, and to urge the Japanese to restrain from pouring money into Thailand until the Thais had fully arranged their loan from the International Monetary Fund. When it came

time for the Fund to put forward its package with the augmentation of bilateral assistance--a quite unusual feature and one that the Fund tried to put together in connection with Mexico but could not find countries that were willing to take on the direct Mexican risk in the way the Asians are prepared to take on the direct Thai risk--the Treasury had to contemplate, in consultation with the Chairman, whether to participate in this arrangement. Post Mexico, as you may remember from our discussion of the renewal of the swap lines, the Treasury is under much tighter constraints about what it does with the Exchange Stabilization Fund than it was in the past. So, the Treasury would have had to jump a lot more hurdles to participate, and they have a number of other proposals before Congress that require political support. The latter include the approval of the New Arrangements to Borrow, which is on the legislative agenda, and the potential approval of an IMF quota increase. So, on balance, they said that they would like to participate for purely geopolitical reasons, but for internal political reasons it would be risky for them to do so. They have said they can anticipate some step-up in EX-IM Bank financing, but that financing is tied aid as opposed to the untied aid contained in the rest of this Fund package.

The one thing that we and the Treasury have done is to put forward a proposal, which has now been accepted, to provide some backstopping in the form of short-term liquidity bridge financing. This was in the works from the beginning. We were sufficiently skeptical about the ability of the Fund to raise this medium-term money in Asia that we tried, and were largely successful, not to put this forward as an alternative but rather as a supplement to the basic package. Agreement on that package has now been reached by the G-10 countries and a few non G-10 countries. It is expected to be announced tomorrow or Thursday after the IMF approves the Thai program. That program provides a degree of political, if you want to put it that way, or international monetary support for the operation, but obviously not on the scale to which the

Japanese and the Southeast Asian and other Asian countries have participated. Some people in Asia think that the Japanese they put up $4 billion and everybody else put up $6 billion, which is a higher fraction than we got with Mexico. On the other hand, as President Minehan knows, the Japanese were represented at our conference by Mr. Sakakibara, who observed that

So, I don't think we've heard the end of this. For your information, this arrangement probably will be announced Thursday morning or late tomorrow afternoon and will include a conventional bridge loan--the amount will not be announced--that is intended to bridge to some World Bank and ADB disbursements that are part of the package. The BIS will be putting up the bridge loan money and will be backstopped as an agent by the Federal Reserve Bank of New York and ultimately the Exchange Stabilization Fund.

MR. PARRY. Ted, have you had any discussions either with the Peoples Bank of China or the Hong Kong Monetary Authority about the political commitment to peg the Hong Kong dollar? It would seem to me that there would be a lot of vulnerability associated with making any change very soon.

MR. TRUMAN. I think everybody in the room has heard in one form or another that they have a very strong political commitment. I was referring to the future. At this point, it seems to me that it would be very difficult for them to abandon the current policy. The Hong Kong dollar may be under considerable tension right now, but the right time to rearrange things would not be only two months after the hand-over, no matter what one thinks about the long-term viability of the current exchange rate regime. One also could say that they ought to pick some point of relative calm in the next five years and adjust their exchange rate regime. They will face some of the same

kinds of issues as they do now concerning which way they should adjust, and if some of their economists were to say that they have the right answer, I would not believe them.

Let me just add the fact that Hong Kong and China have participated in the Thai financing arrangement and they also are going to participate in the bridge financing; there's not much risk associated with the latter. It is essentially an operational risk--symbolic in my view of their perceiving themselves as having a big stake in stabilizing this situation for exactly the reason that they do not want to confront these difficult questions concerning the Hong Kong dollar right away.

MR. MCTEER. Ted, in the Mexican bailout, we gave them money to refinance their tesobonos, their dollar-guaranteed debt. What is the money being loaned to Thailand to be used for?

MR. TRUMAN. You can use the word "bailout," but I am not allowed to. The financial situation in Thailand is in some respects much more problematical than was the case in Mexico. They have something on the order of $38 billion in short-term obligations. Most are bank obligations, of which more than half are to Japanese banks. They also have a very large forward position that is approximately equal to their gross reserves. The amount of money being put up, about $16 billion, is relatively small. If we net out the forward position against the foreign exchange reserves, their reserves position is no better than Mexico's was. In a sense they are getting some $16 billion in this package against $40 billion of short-term obligations, which are mostly private-sector debts. In that sense the whole program is predicated on the assumption of credibility rather than a bailout because the money is not sufficient to allow all these short-term lines to run off. In the Mexican case, we had a package of close to $40 billion against essentially $40 billion of short-term bank obligations and tesobonos. We tend to forget that there were a lot of

bank obligations in the Mexican case, but they were as vulnerable as the tesobono problem. In fact, in the short run Mexico did lose some dollars through the banking system, but they recovered quite quickly. So, in that sense that financing package was less problematic.

Two elements of moral hazard are involved in this case. One has to do with the people on Peter's acreage who conduct their business, but do not book their positions, on that acreage. They are on the other side of many, but not all, of the forward liabilities of the Bank of Thailand. You could say that the system is financing the Thai central bank's ability to meet its commitments. It would be a tricky business if the Thais were to start to default on their foreign exchange contracts. It would change the nature of the business. The second element is a little more conventional. It has to do with what should be done with the obligations of banks in Thailand. The Thai central bank already has expended 16 billion--that's in baht, not dollars--to bail out domestic institutions whose operations have now been suspended. They have been quite successful in sterilizing it, but it has become in effect an obligation of the Thai government as a whole. It would be one thing to stiff bondholders and still another to stiff commercial banks that might be expected to come in and help support the Thai financial system as a whole. The goal is to keep the central bank's gross and net reserve positions from going to zero as they run down these forward obligations. I think that is the simple answer to your question.

CHAIRMAN GREENSPAN. Any further questions? President Melzer.

MR. MELZER. Alan, I just want to make an observation on another issue for Peter. We are a fairly substantial holder of inflation-indexed Treasury securities in our portfolio, 5 percent of the outstandings or something like that. Looking down the road, as those securities become more useful as guides to monetary policy in terms of giving us insight into inflation expectations and real rates, I wonder whether we ought to be investing in that market. In other words, if the perception is

that we are a significant enough player to affect how those markets trade, it may undermine the usefulness of the information. I don't expect an answer right now. I assume that our purchases have been on the same basis as they are for any other Treasury securities, but we may want to think about continuing to acquire those obligations as we go forward, perhaps as they become more useful to us from an information point of view.

MR. FISHER. That's a very good thought. Let me make a few observations for the benefit of the whole Committee. First, we are treated as an "add-on" in the Treasury's issuance at the long end, so our purchases do not reduce what the Treasury issues to the public. Whether to buy such obligations at all was a bit of a dilemma for us. If the Treasury launches a new program and we do not buy any of the securities, there is a risk of a negative inference for the new instrument that the Treasury is marketing. There is also a risk that if the new type of security becomes a major vehicle for Treasury funding and we have not bought any such securities, we will need to buy them in order to keep the SOMA portfolio invested in the deepest area of the Treasury's issuance. On the other side of the dilemma, obviously, the notion of central bank purchases of inflation-indexed securities has a certain odd ring to it.

MR. MELZER. That occurred to me.

MR. FISHER. But as I noted, we are not a net subtractor of market supply because the Treasury treats us as an "add-on." An additional reason for holding some of these securities was to have them available for our securities lending program. You inspired me to comment on that program at an earlier meeting, and I have told the Committee that we are trying to come up with a new program. I hope to come back to the Committee during the fall with some new ideas for that. It might well help the inflation-indexed market if we were in an improved position to lend securities to that market.

CHAIRMAN GREENSPAN. Is there going to be a forward market in those securities?

MR. FISHER. Not that I'm aware of.

CHAIRMAN GREENSPAN. I recently heard discussions concerning possible futures contracts.

MS. PHILLIPS. The Board of Trade is reviewing the feasibility of such contracts.

MR. FISHER. Yes, the Board of Trade is considering those, but when you said "forward" I thought about the over-the-counter forward market.

CHAIRMAN GREENSPAN. "Forward" is a more generic term.

MR. FISHER. The futures market is what the Board of Trade is working on.

CHAIRMAN GREENSPAN. We could always hedge our position. [Laughter]

MR. KOHN. As long as we publish our forward position, Mr. Chairman!

CHAIRMAN GREENSPAN. As a footnote? [Laughter]

MR. KOHN. There are futures markets in both the 5-year and the 10-year issues. Those issues are eligible to trade in those markets, but as of a week ago there had been essentially no trades--a few trades in the 10-year bond--and no positions. I believe the markets also obtained permission to trade options on the futures contracts, but there had not been any such trading as of a week or two ago. So, the markets are there but they are not being used.

MR. MELZER. It's a complicated issue, but one that I believe is worth continuing to think about.

CHAIRMAN GREENSPAN. There is an anomaly in the central bank buying inflation-indexed bonds for its portfolio. Any further questions for Peter? I'm going to need a motion to ratify the actions of the Domestic Desk.

VICE CHAIRMAN MCDONOUGH. Move approval.

SPEAKER(?). Second.

CHAIRMAN GREENSPAN. Without objection. Thank you very much. Mike Prell, you are on.

MR. PRELL. Thank you, Mr. Chairman. In the opening sentence of the Greenbook, we characterized the economy as continuing "to hum along in recent months." As of last Thursday, we were able to report that hiring remained strong and that high-spirited consumers were once again spending heavily at auto dealers and other retail outlets. Now we can report that homebuilders are busy, too. According to this morning's release, which is summarized in the table you received, total housing starts were unchanged in July, as we expected. Single-family starts rose 3 percent, just a hair above our guess, but permits for such units were off 2 percent. On the whole, these data, along with the upbeat report from the homebuilders survey for early August, would seem to support our view that the housing sector is doing quite well at this juncture.

Indeed, the basic point is that the indicators now in hand provide few direct hints that economic expansion will be limited to the relatively moderate path that we think is ahead. We are predicting that real GDP growth will average just 2-1/4 percent over the next few quarters--well below the 3-1/4 percent rate of the past year. And as you know, a slowing of at least this degree likely is necessary, given our assessment of the trend of potential, if we are to avoid a further intensification of pressures in an already taut labor market.

Unfortunately, our near-term growth forecast hinges crucially on a judgment about the outlook for inventories--a very tricky element to predict. In a nutshell, we find it difficult to believe that the pace of accumulation in the second quarter was as high as the available statistics indicate. But, after discounting the data as much as we feel comfortable doing at this point, we are still left with a rate of inventory growth that is clearly unsustainable--around a 6 percent annual rate. We don't think there were major overhangs of undesired stocks at midyear, but there will be if the accumulation doesn't slow soon. Our guess is that it will, exerting an appreciable damping influence on GDP growth in the second half of this year.

What could go wrong with this forecast? The possibilities are numerous. One is that the rate of accumulation could have been even lower than we have assumed, so that the near-term drag on output might therefore be less than we are anticipating. It's my intuition that this should be viewed as the more likely alternative to our Greenbook forecast than that inventory investment has been greater than we have assumed.

But what if we have the rate of inventory investment in the second quarter just right? The possibility would still exist that businesses will want to maintain that brisk pace of accumulation a little longer because they are highly optimistic about sales prospects. However, I don't sense such a degree of optimism now; nor am I as concerned as I was earlier that final demand might seriously overshoot our forecast, in turn generating additional inventory requirements.

In particular, we have been noting for some time the risk that consumer demand might yet surge in response to the enormous run-up in stock market wealth. Now that the national income accounts show the personal saving rate declining considerably over the past couple of years, the likelihood of such a spending surge would seem to have diminished. Moreover, for what it is worth as we look ahead, the flip side of this argument is that we can perhaps also be somewhat more confident that there will indeed be some demand-damping effect if the stock market drops, as we are still predicting it will. The wavering of the market recently might suggest we are on the right track in that regard, but we have been wrong before.

There are uncertainties regarding other components of final demand as well, but I think our forecast is reasonably balanced overall. I won't take the time to run through all the sectors of demand, but Ted and I will be happy to answer any questions you might have.

Before concluding, however, I would like to say a few words about the price outlook. We continue to believe that a pickup in inflation is brewing out there in a very tight labor market, but it clearly has not surfaced yet. As you undoubtedly noticed, we have lowered our forecast of price inflation again--this time by a couple of tenths of a percent through next year.

The incoming wage and price indexes provided only a bit of the motivation for this adjustment: The ECI for June and the CPIs for June and July were no more than a rounding difference below our expectations. But we saw other grounds as well for some greater optimism about the price outlook.

Notably, while we think the recent run-up in the dollar is unlikely to hold up permanently, it seems prudent to anticipate only a gradual erosion in its value over the forecast period. Consequently, we have anticipated a tad more restraint on inflation coming through the trade sector in coming quarters. Certainly, the auto market is demonstrating the efficacy of import competition as an inflation fighter, as the Big Three have cut prices to save market share.

In addition, however, the prospects of competitive pressures damping inflation seem greater now because the inventory adjustment is likely to

contribute to some slippage in the level of factory capacity utilization. Moreover, the revised NIPA data suggest that profits have been much stronger and that corporations have more cushion to absorb some increase in labor costs. Finally, there has been increasing evidence of a gradual downdrift in inflation expectations among individuals, for example in the Michigan SRC survey, which bodes well for the nominal wage outlook.

Speaking of wages, in refining our inflation forecast, we obviously did not give much weight to a concern that surfaced occasionally last week when commentators were looking for excuses for the stock market decline--namely, that the UPS strike might signal a major shift in the balance of power in the labor market, with workers now being able to dictate the terms and conditions of employment. In particular, there was a fear that the outcome would be an erosion of firms' ability to use part-time and contingent workers at lower cost. What we have heard of the settlement does suggest that the Teamsters won some significant pay gains for part-timers and 10,000 promised conversions of part-time jobs to full-time over the next five years. But, pending receipt of more information about the agreement, it is far from obvious that what has happened would warrant a change in our forecast of only a gradual acceleration of labor costs.

CHAIRMAN GREENSPAN. The information that I heard on the radio this morning on the UPS agreement may or may not be correct, but it suggested wage increases of 5 or 6 percent. Since the firms that compete with UPS are, to my understanding, all non-union, is there a possibility that the wage cost change could result in a competitive situation for UPS that would significantly erode its very large market share of this industry and in a sense undercut what appears to be, at least on the immediate surface, a victory for the union? Is there any evidence that supports or refutes that proposition?

MR. PRELL. I don't think we know enough to answer that question at this point. It does appear that the gains for full-time UPS workers may not be spectacular in terms of hourly wages. I don't have a very good fix on what the part-time workers received.

CHAIRMAN GREENSPAN. I heard $4 an hour over 5 years on an $11 base.

MR. PRELL. I saw those figures and I'm not sure to whom they apply or whether the reference is to the minimum wage or some other measure.

CHAIRMAN GREENSPAN. I think it applies to the average wage.

MR. PRELL. In that case, it would seem that there have been some significant gains.

CHAIRMAN GREENSPAN. It is interesting that the head of the Teamsters Union was acknowledging that there would be job losses. The implication was that UPS will convert 20,000 part-time jobs into 10,000 full-time jobs.

MR. PRELL. The company has been saying that they probably would lose some market share, at least for a time, because many firms would no longer want to rely solely on UPS. This strike is going to be a fundamental problem for them, at least until they can rebuild confidence among their customers. I have not heard the assertion that they would be priced out of the market by the wage agreement, but it was not known what the wage agreement would be when people were making these pronouncements. The company evidently has indicated, and as you said the union has confirmed, that there probably will be some layoffs. So, the situation is ambiguous. I don't know how much erosion of market share one might expect simply on the basis of the cost factor.

CHAIRMAN GREENSPAN. This is a labor intensive activity is it not?

SPEAKER(?). At least at the distribution centers.

MR. PRELL. To a considerable extent, yes, but there is also a lot of capital investment involved, particularly in the rapidly growing area of second-day service that UPS has developed. That is part of the story behind the changing employment mix. In order to implement this rapid delivery service, they needed to have a lot of people in concentrated periods to shuffle all the boxes and get them loaded onto airplanes. That is where the disproportionate rise in part-time employment apparently occurred. So, UPS evidently had some real problems in accommodating the labor union's desires; many of their employees were working two four-hour shifts with a three-

hour break. The unions did not want to call that an eight-hour day. I do not know how these working-condition aspects of the negotiations were resolved.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, a directly related development, at least in the New York area, has been the reaction of UPS competitors. When some shippers asked those competitors to provide a delivery capability, rather than increasing prices the competing firms asked for a two- or three-year agreement to assure the continuation of the new business. So, they were going for market share rather than short-term price increases.

CHAIRMAN GREENSPAN. This could turn out to be a quite counterproductive labor contract for the Teamsters if a lot of events go in the wrong direction. They could end up with a significant loss of total jobs not only as the result of the conversion from part-time to full-time work, but also through a significant loss of market share because of the continuity agreements secured by UPS competitors and because of the effects of higher wages on UPS pricing. So, after the significant glow that the union is putting on the settlement, things could turn in the other direction and be most unhelpful for the union as far as I can see.

MS. RIVLIN. Unless their negotiating success leads to greater organizing success in some of the non-union companies.

CHAIRMAN GREENSPAN. One would assume that to be the result unless there emerges a perception that works against the union organizers and reduces their ability to unionize more companies. It is in part a question of timing as far I am able to tell. President Parry.

MR. PARRY. Mike, I wanted to ask you a question about inflation forecasts that in the view of some have become particularly unreliable recently. We did an exercise--an out-of-sample forecast--that looked at the inflation forecast in our model. As one would have expected, it turned out that we were overestimating inflation, but the overestimate did not exceed the 90 percent

confidence level. If we look back to, say, 1994-95 the errors actually were greater then and in the other direction. There were times, one in particular, when the 90 percent confidence level was exceeded in the sense that inflation was so much understated. My question is whether you conclude in terms of your model that that relationship has broken down, or do you find in a statistical sense that you cannot state that conclusion? We feel we cannot.

MR. PRELL. I do not think, given the standard errors across most models, that one would say that the price equations have uniformly broken down. And I emphasize "equations." We tend to look at an array of models in our forecast work. Some perform better than others. Not surprisingly, the inclusion of import prices as one of the variables in the Phillips curve model would have produced much better results in the last year or so in terms of anticipating the deceleration that occurred in the core CPI. So, we would not throw these models out at this point. We would use them cautiously, though, as we always have, knowing that they are not very precise predictors in any given period. As a practical matter, we have not found an alternative to these models that we can turn to in our effort to come to grips with the problems involved in constructing quantitative forecasts.

MR. PARRY. It strikes me as interesting that if we wanted to make a point that we are in some new era, we would not use these equations to support that conclusion.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Mike, I understand that you are assuming a significant decline in equity values next year. How important is that to your view of how things are going to transpire?

MR. PRELL. As we emphasized, applying the normal lags that we found in estimating consumption functions with wealth terms, the time profile and dimension of the stock market movement that we have assumed suggest that we would not get much of a retardation in consumer

spending from that drop in stock prices before the end of 1998. If we contrast this outcome to a counterfactual one where the market continued to climb at anything like the rate we've seen on average over the past couple of years, I suspect that we would have a considerably different consumption forecast for the latter part of 1998. Unless there is a significantly quicker effect transmitted through consumer sentiment in some way, which at the fringes is allowed for in our thinking, I think the story mainly is how robustly the economy will be moving in 1999.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mike, I want to ask you about spending for durable equipment, particularly for technologically oriented durable equipment. The Greenbook says that this sector has become less cyclical, and I have two questions about this. One, I assume you mean it has become less cyclical since the last recession. And, second, I was wondering what the implications are for overall durable equipment spending. Does the growth of this category mean that durable equipment spending is becoming less cyclical more generally?

MR. PRELL. I don't want to convey the notion--and I hope we didn't state it quite that way--that we believe the durable equipment sector is systematically less cyclical than it might have been in the past. Our assessment at this juncture is that there seem to be in train some changes in technology of a dimension such that the demand for those products will outweigh whatever drag there will be from the general flattening of profits and cash flow and the deceleration in output. We would not see the same kind of impetus in some other areas of capital spending such as basic industrial equipment. So, we have a continuation of quite rapid growth in real computer outlays and fairly substantial growth in telecommunications equipment expenditures as measured by the national income accounts. The effects of this, as I think we noted in a footnote in the Greenbook, on the growth in spending for overall producers' durable equipment are invisible in this forecast

relative to the previous forecast because of the chain weighting. This means that the weights diminish as the prices of these goods fall rapidly and this balances out the higher real growth that we anticipate for this component. But at this point we see very substantial reductions over the near term in the cost of various components of computers and very strong continuing demands for equipment in the networking area. There seems to be enough innovation going on here that people are going to find that their equipment is becoming obsolescent, and they are going to be replacing it at a relatively fast rate for a while longer.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. You noted the dependence of your forecast on the assumption about inventories. Is there any way of knowing how much of this inventory accumulation is domestically produced versus imports?

MR. PRELL. We saw considerable strength in imports in the second quarter in a number of categories in the consumer goods and machinery areas, and that suggests that imports may have contributed to the very substantial increase in inventories in that period. As we look to the third quarter, we anticipate that some of the fallout in inventory accumulation will be mirrored in a more modest increase in imports in the merchandise category.

CHAIRMAN GREENSPAN. We do estimate a synthetic split in inventories between domestic and imports. My recollection, and I may be wrong on this, is that the inventory accumulation that occurred in the second quarter was predominantly in domestically produced goods.

MR. PRELL. I don’t recall whether there was any significant change in trends in those estimates.

CHAIRMAN GREENSPAN. I don't think it was a trend; I think it was a second-quarter development. I will check on this and report on it when I get the information.

MR. TRUMAN. We do not yet have the June trade data. Taking the inventory data to give us a hint about what is going to happen to the trade data, one would expect imports to tail off. That would occur especially in the consumer area because we saw such a big rise in imports of consumer goods in April and May. Understanding all of this is a bit puzzling. Our forecast tended to level off such imports in June and into the third quarter, but there is a tension in the forecast as a whole on exactly this point and how this should be put together.

CHAIRMAN GREENSPAN. There is, of course, a lot of noise in the data when we move from the trade account to inventories.

MR. TRUMAN. There has been some shift in the seasonal factors over the years and to some extent earlier this year, especially in the consumer goods area. One would not expect Christmas to come in April, if I may put it that way. It is not clear to what extent the seasonal adjustments may have become unreliable, but it would not be a surprise if the seasonal adjustment of imports were another source of the noise in these estimates.

CHAIRMAN GREENSPAN. Further questions for Mike? If not, who would like to start the Committee discussion?

MR. MCTEER. Mr. Chairman, the Eleventh District economy, like the national economy, has been exceptional. I guess most of you saw the notice from the Shadow Open Market Committee. For the first time since 1974, they are going to skip a meeting, and the reason they gave was that policy and the results of policy have been so good that there was nothing for them to talk about.

In our District, there is not much new to report. We continue to have faster employment growth than the nation. Since the beginning of 1995, if we use January 1995 as the base, Eleventh District growth is second only to that of the Twelfth District. The fall in energy prices that we have had in our neck of the woods has not been a problem; it was anticipated. Drilling is being constrained by an 18-month backlog in deliveries of drilling pipe; energy firms cannot get enough pipe to do the amount of drilling that they would like. Our labor markets remain tight, and the job churning seems to have picked up. It may seem tighter to me because our Bank has been experiencing some of the turnover. We have lost several key professional people recently to expanding firms in the Dallas area. But surveys indicate that workers are being found somewhere, and there is no inordinate upward pressure on wages, at least in the statistics, even though anecdotally we hear a lot of stories. I would not be surprised under these conditions of prolonged labor market tightness to see our labor force participation rates hit new highs soon.

Prices appear to be constrained. House price inflation in our area is about a third of what it is in the nation. Computer chip prices have fallen more than the high-tech firms had expected, and recent attempts to raise petrochemical prices have failed. An exception to this price picture in our area is commercial real estate. Office rents in Dallas rose 9 percent in the first half of the year, and prices for Dallas office buildings are up about 50 percent from a year ago. Warehouse prices are up about 40 percent, but there is a lot of building going on to provide new supply. So, we do not expect those kinds of numbers to last all that long.

Turning to the national economy, as everybody knows, the string of consecutive PPI declines is now up to 7 months. I understand that the 0.7 percent increase in the deflator for gross domestic purchases in the second quarter is the smallest since 1961. The core CPI increase at a rate of 2.4 percent in the first 7 months of this year is the lowest since 1965. The 4.8 percent

unemployment rate is a 24-year low, and some measures of consumer confidence are at about their highest level since 1952. Now that the UPS strike is apparently over, there is nothing obvious on the horizon to spoil the party, although I suspect we will find that the strike has done a good deal of damage in the past couple of weeks. The settlement may go a long way toward undermining the wage flexibility that we started to get in labor markets with the air traffic controllers' strike back in the early 1980s. Even before this strike, it appeared that the secular decline in real wages was over, although productivity gains appeared to be sufficient to keep unit labor costs under good control. To summarize my views, I would say that I consider myself a new paradigm optimist. [Laughter]

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Mr. Chairman, the New England economy--

CHAIRMAN GREENSPAN. You have to label yourself before you go on.

MS. MINEHAN. Oh, okay. I have to think about that.

CHAIRMAN GREENSPAN. Peter has set up a little box for each of us.

MS. MINEHAN. I hate to call myself old anything. [Laughter] I think I'll wait on that.

The New England economy continues to expand steadily. Employment growth is roughly the same as that for the nation, and it is above New England's long-term trend. Massachusetts is a star performer, while Rhode Island lags behind. The retail sector in New England is experiencing fierce competition in addition to somewhat slower growth overall than the nation. All our retail contacts think that the New England economy is quite strong. However, in a number of cases, their own results do not reflect this. In contrast, the manufacturing sector is doing quite well. Although increases in employment are minuscule, they are there. Employment in manufacturing increased over the past year for the first time in a long time. I assume that a lot of this is due to the Boeing merger with McDonnell Douglas and the demand for aircraft worldwide.

The demand for aircraft engines that are produced in the First District, at least in part, and for aircraft parts is quite strong. We also have a local auto-related manufacturing industry, and demand among the firms in that industry varies depending on which auto company is being supplied. Suppliers to Chrysler reflect a mixed picture, and reduced production of the Taurus model has affected suppliers to Ford. On the other hand, a fabricated metals company reports fantastic business because General Motors is using its product.

The regional unemployment rate was 4.2 percent in July, and that rate puts our region back, after several months, below the national average. A number of firms are responding to the tight labor markets with targeted compensation schemes. We see a lot of reports of individual workers' salaries going up by 20 to 25 percent, but these salary increases are being applied so selectively that the overall rise in compensation packages amounts to a small fraction of total payroll, somewhere between 2 and 3 percent. Some firms also are using signing bonuses to attract workers. In general, firms seem to be contending successfully with these tight labor markets, although one of the Bank's directors recently noted that turnover had increased so much that training costs had become an issue. While both the unemployment rate and the anecdotal evidence indicate that labor markets are tight, help-wanted advertising in the region remains very low, suggesting that employers may not be using traditional means to attract workers.

Firms continue to view increasing their prices as an impossibility. One person, who may have been talking to Peter, said in commenting on customers' resistance to higher prices that "the paradigm has changed." Despite their inability to raise prices, a number of firms indicated that margins are being maintained or even improved. There are exceptions to this benign price picture. One is the rates for Boston hotel rooms that have risen 12 percent in 1997 in response to a banner year for tourism. Another exception involves commercial real estate in a number of cities in the

region. The Boston real estate market has been described, as I have mentioned before, as being as hot as a firecracker and as one of the three or four best real estate markets in the country. The office market is especially strong, with rents up 10 percent in the past year and even industrial rents are rising. Other cities are seeing a less dramatic improvement. Hartford still lags behind but is starting to appeal to some investors because its space is so cheap.

The Conference Board's index of consumer confidence provides an interesting perspective on the regional economy. The index increased slightly in July from a fairly high June. However, the assessment of current conditions soared while future expectations plunged to levels not seen in two or three years. There may be a sense in New England that things really are too good to last.

On the national scene as well, trends have been almost unbelievably good. We, like the Greenbook, have begun to question our assessment of capacity measures, especially in labor markets. We have trimmed our perceptions of likely inflationary growth over the next year, though we believe there certainly is the potential for the economy to be stronger and for the rate of inflationary growth to exceed the rather mild uptick predicted in the Greenbook. In particular, I think conditions for residential investment seem a bit brighter than the Greenbook suggests, and we would not predict that net exports will have as benign an effect on prices due both to dollar depreciation and our somewhat stronger assessment of foreign inflation prospects. On the whole, however, we have no major differences with the Greenbook. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Our regional economy continues to expand at a modest rate, though growth in the District seems to be slower than that for the nation due in part to labor supply constraints. As I have been reporting for some time, our labor markets

are very tight, with lower unemployment rates and higher employment-to-population ratios than the nation's. In fact, last year the employment-to-population ratio for our five states averaged 3 percentage points above the nation's 63.2 percent, and over 70 percent of the working age population was employed in Iowa and Wisconsin. Nonetheless, the employment cost index for the Midwest has not risen appreciably faster than the nation's, although we have received numerous anecdotal reports of intensifying wage pressures for entry-level and certain skilled workers. Next Monday, August 25, Manpower will release its latest survey on hiring intentions, so this information should be treated as confidential until then. The survey indicates that the demand for workers continues to be very strong. In fact, the results show the highest fourth-quarter hiring intentions since 1978, both nationally and in the Midwest.

Manufacturing activity in the District continues to expand at a slower pace than in the nation. Strong activity continues to be reported in industries such as cement, gypsum board, medium- and heavy-duty trucks, agricultural and other heavy equipment, and steel. However, there are a few hints that business is slowing in some industries, though all of my contacts believe that the slowing is temporary. For example, noted that for the first time in several years there was some softening in demand at his firm's steel distribution subsidiary that caters to small manufacturers. Another contact reported slower growth in orders for a variety of products including food equipment for restaurants, hotels, and supermarkets as well as for decorative ceramic tiles in the construction industry. in the trucking industry described activity as slower than normal for this time of year, but he said his customers expect business to improve significantly in the fall.

Manufacturers and retailers in our District continue to report that competitive pressures inhibit their ability to raise prices. One report to the contrary relates to our discussion at the last

meeting when I indicated that a large paper company was reducing capacity by temporarily closing two plants. In July, that company pushed through its first price increase since 1995, which other firms in the industry followed in August. The firm referred to this increase as "price restoration," and it emphasized that the increase still left prices 30 percent below their peak in 1995.

In terms of consumer spending trends, retailers indicated that sales over the past month or so were generally at or slightly above expectations, helped in part by more seasonable weather and the use of promotions in some cases. Incentives apparently also contributed to the sizable pickup in auto and light truck sales last month. Reports suggest that light vehicle sales got off to a good start in August, although probably not as strong as in July. Part of the recent sales strength may be due to a change in end-of-model-year allowance policies at General Motors. Credits to dealers are now targeted to slow-selling models rather than across the board, and they were initiated in July of this year rather than October, which had been GM's traditional policy.

Turning to the national outlook, our forecasts of real growth and inflation have both come down a bit since our last meeting. However, the big question is still whether we will see the increase in inflation that most of us are forecasting for 1998. Labor market conditions suggest that we may. Of course, labor markets have been tight for some years now without a major pickup in labor costs or inflation, but they have become even tighter in the past few quarters. Moreover, the fundamentals appear to be in place for continuing real growth at trend rates at least. Consequently, the labor markets should remain tight for the foreseeable future. Fortunately, we have had a great deal of investment in recent years, and the resulting increase in productive capacity should at least lessen inflationary pressures. We may also be entering an era of significantly faster productivity growth; I guess that is part of the new paradigm. But the most recent official statistics do not provide much evidence of this. Moreover, even if the data become more favorable, it will take

quite some time before we know with any certainty whether the economy has changed in such a fundamental way. Thus, given our current understanding of the economy's growth potential, the most reasonable forecast is one of rising inflation. Of course, the upward tilt to the inflation forecast is relatively modest, but in my view the risks are still clearly on the upside.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, the Twelfth District's rapid economic expansion has actually gained momentum in recent months. Payroll employment grew by 3.2 percent at an annual rate in the second quarter. Growth in durable manufacturing employment accelerated between the first and second quarters as Boeing's expansion combined with the continued strength in high-tech industries and a recent resurgence in wood products industries. Construction employment growth also accelerated in the second quarter. Districtwide, this sector expanded nearly 9 percent on an annual basis during the first half of the year. I might note parenthetically that in the last year construction increased 9.2 percent in California, generating more than 46,000 jobs, and 14.9 percent in Nevada. Normally, I would say that a percentage increase that large is unsustainable, but when I discuss the Nevada economy, I do not use the word "unsustainable."

The second-quarter acceleration was evident in most District states. Payroll employment in each of the District's growth leaders--Nevada, Arizona, Utah, Washington, and Oregon--grew by 4 percent or more at an annual pace. Furthermore, the unemployment rate has fallen this year in all District states except Hawaii, and labor markets in virtually all major urban areas are extremely tight.

The impressive turnaround in California's economy has continued this year; payroll employment grew nearly 3 percent at an annual rate during the first seven months of the year. Although the pace slowed in recent months, the state's unemployment rate continued to fall. Other

California economic data also point to a continued rapid expansion. Unexpectedly strong growth in state income tax receipts recently led to a substantial upward revision in state government revenues. Also, the recovery in residential real estate markets has spread to most areas of the state, and housing prices statewide are back on the rise.

Turning to the national economy, recent data suggest that over the next year or so, real GDP is likely to grow at a rate close to the 2-1/4 percent pace now reported for the second quarter. Like the Greenbook, I think underlying demand may be somewhat stronger than this in the near term, but firms are likely to satisfy part of the demand out of inventories. While the economy is not likely to grow much faster than its trend rate over this period, conventional measures, as we all know, suggest that it is already operating at relatively high levels of resource utilization. Thus, there is still a risk that inflation may trend upward in the future. Of course, recent data on wages and prices have been highly favorable and now actually show a modest downward trend. While part of this can be explained by factors such as the higher dollar, part remains unexplained by conventional relationships. Is inflation being held down by temporary factors such as unusually small increases in benefit costs or higher worker insecurity or is the change of a more permanent nature because it reflects developments such as an increase in trend productivity? Taking these factors into account, my best judgment is that, while remaining low, underlying inflation is likely to pick up a little over the next six quarters. For instance, our forecast shows measures of core inflation going up between ¼ to ½ percentage point between this year and next. Finally, I would classify myself as an old paradigm, newly found optimist. [Laughter]

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. As far as our District goes, not a great deal has changed since our last meeting, so I will summarize developments and highlight a couple of

them for you. Generally, we have a robust economy that is growing modestly; we have strong production and increased sales overseas. Our manufacturing sector is operating at high levels of capacity, including the airline industry with Boeing and the auto industry with GM and Ford. The energy companies are continuing to expand in the District and are experiencing some production backups because of supply constraints. Bank lending picked up in July, with banking contacts reporting a fair amount of activity. With regard to the agricultural sector, you may have read about our excellent wheat crop. Kansas will have a record harvest of just under 500 million bushels, and that comes after a spring forecast of a decline in production. There is some pressure on the corn crop and current estimates are coming in a little lower than earlier forecasts. How that will turn out remains to be seen.

One of the topics about which we have talked a lot at these meetings is the cost of worker benefits. We had interesting conversations with an executive of They are estimating that premiums probably will increase by 3 to 8 percent in 1998, partly because capacity is being wrung out of the system and demand continues to increase.

We are seeing some indications of moderating growth in our District. Our employment growth has fallen over the last two months for which we have data, the last one being June. We do not know if that slowing is partly due to the fact that we have such low unemployment rates to begin with. The rate is 2 percent in Nebraska and around 4 percent in some areas that are experiencing our worst unemployment. Also, manufacturers are saying that while their production is still expanding, the growth is moderating. Some of them are rethinking their projections and are forecasting more modest growth going forward. In construction, we have seen some moderation in our region, especially in housing. The latter is concentrated in the mountain areas around Denver and Albuquerque, and it may be in part the result of a slowdown in in-migration. However, the

moderation in those areas is being offset to some extent by pickups in the eastern parts of the District. Overall, District business activity is good, but there are some mixed signals and slowing in some areas.

On the national front, our projections of GDP and inflation are similar to the projections presented here by the staff. We do not have any real disagreements. We currently see the economy expanding at a pace a bit over potential, with only slight increases in inflation. I will end with that, Mr. Chairman.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. The economic picture and outlook for the Southeast also have not changed very much over the last seven weeks. We still have a very favorable and balanced picture, mirroring and reinforcing what we see at the national level. The Southeast is still "humming along," Mike.

Picking up on Cathy Minehan's comments on tourism, our region's hospitality and tourist industry, which offers some insight into discretionary spending, is operating at or near capacity in most of our major tourist cities. Future bookings are well ahead of a year ago. Even with the new capacity that has come on line--and more is coming--hotels are offering fewer off-season discounts, and there is no noticeable impact on occupancy rates. Cruise ships and airline flights in South Florida are essentially fully booked, so if anyone is planning a speech in South Florida, make your reservations early!

We, too, see continuing evidence of some slowing in residential construction activity, but one must look beyond very high levels of activity in cities like Atlanta. Expansion of construction activity in the commercial sector, mostly office buildings and hotels, is taking up some of the slack.

But even with speculative prices still holding up, leasing activity has slowed somewhat in those sectors and we expect announcements of new projects to moderate in the period ahead.

Manufacturing activity is more difficult to read, but it appears to have recovered a little since the last meeting. While our latest regional manufacturing survey showed that current production had eased slightly, shipments, new orders, back orders, employment, and the workweek all rose in the last report. Also, picking up on Bob McTeer's comments, oil and gas activity continues to be strong in Louisiana and along the Gulf Coast, with the number of working rigs remaining high. Orders for new ship construction are booked several years out.

Labor markets in our region also remain tight, an old and familiar story by now. Pockets of special tightness include information technology and skilled crafts in areas like marine and oil-related work. At the same time, we still cannot find any evidence of a systematic run-up in wages, and wage increases reportedly are continuing to hold below the 4 percent level. In fact,

in the paper industry told me last week that his company is continuing to get concessions from its unions to protect jobs at lower productivity plants. Employers are telling us that they are not spending significantly more to pay workers but are spending considerably more to recruit, screen, and train new employees.

Our surveys have turned up no new evidence of unusual developments in prices. While our latest manufacturing survey indicated that prices received increased moderately, 75 percent of the respondents in that survey expected no change in the period ahead. Prices paid eased slightly, with 70 percent reporting no change. Consistent with Tom Hoenig's comments, we too hear with greater frequency reports of sharper increases in health care costs.

One area of special concern in our region is the Florida citrus industry where growers are battling the medfly for the first time in many years. While current estimates of damage are only in

the $20 to $26 million range, those estimates are doubling every couple of weeks, and we are mindful of the last experience in California where losses hit some $200 million. So, we could see some run-up in fruit prices late in the year.

Our view on the national picture is very similar to that laid out in the Greenbook and discussed by Mike Prell this morning. We, too, expect a slower second half of 1997, with GDP growth at perhaps 2-1/4 percent and a similar pace in 1998. We also think it likely that we will lose some ground on inflation over the coming period. My feeling is that we need to remain vigilant, and with the risks still skewed somewhat to the high side an anticipatory anti-inflationary policy move in the future is still quite likely. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. The central question on the economy that we face this morning is much the same as the question we faced at the last meeting and at earlier meetings: Is demand reviving as we move into the third quarter or not? At our Bank, we tried to analyze the recent information and data that we have received as closely as we could in the context of that question. Our sense is that activity did pick up fairly markedly in our region in June and July, especially in the retail and services sectors. As some of you may know, we conduct a couple of monthly surveys, one on the manufacturing sector and one on services and retail. In July, our indexes for service-sector employment and wages both posted their strongest gains since we started putting these indexes together about four years ago. The results of the latest manufacturing survey were less robust overall, but there are some indications in that survey of firmer wages at plants and factories. Prices for finished goods and manufacturing inputs are up about a percentage point from the almost negligible increases that had been registered consistently for about 18 months or so before this. Overall, we do not see any signs of significant weakness in our regional

economy; even West Virginia is doing well. On the contrary, we are impressed by the basically across-the-board indications of stronger activity and at least some modest upward pressure on both wages and prices.

On the national picture, the Greenbook projection is certainly reasonable. Like a number of others around the table, we still think that the risk of error in the projection is moderately tilted to the upside. The major reports that we have received since early July--the jobs report, the Purchasing Managers' Survey, the reports on retail sales and automobile sales--all suggest, at least to me, that the economy is poised to put some additional upward pressure on our labor resources.

I was especially interested and happy to see that this month's Greenbook and Bluebook both included for the first time charts comparing the regular 10-year Treasury rate with the rate on the new inflation-indexed note. The first page of the Bluebook interprets the gap between the two yields as a reflection of longer-term inflation expectations. I hope the staff will continue to provide that information. As we gain more experience with it, I think it will be useful in both our economic analysis and our policy analysis. As many of you know, it has been used by the Bank of England and included in their inflation report for some time with good results.

A couple of quick observations on the behavior of this indicator in recent weeks: I think there is both good news and bad news, or at least not-so-good news. The good news is that the current gap indicates an expected trend CPI inflation rate of about 2-3/4 percent. If we subtract the 1 percent Boskin Commission bias from that, the true expected trend rate of inflation is somewhere below 2 percent. That is very nice, and I will eat a little crow and say that a year or so ago I would not have expected this result. That kind of inflation expectation is close to what I think we need to have to be able to say that inflation expectations are no longer a major factor in business and household economic decisions, which has been our working definition of price stability for some

time now. I do not want to understate this outcome; it is good news even for inflation hawks like me.

The bad news, or the not-so-good news, is that this indicator has been very volatile recently. It was at about 3 percent in early June and fell to about 2-3/8 percent in late July, but it recently has risen again to about 2-3/4 percent in the wake of stronger-than-anticipated economic reports. To me that kind of sharp, short-run reaction of inflation expectations to just a couple of monthly economic reports indicates that, although we certainly have had an encouraging increase in our credibility in recent months, we still do not have a level of credibility that I would regard as fully consistent with price stability as we have defined it. Moreover, apart from the volatility, the recent increase in inflation expectations in that indicator is a signal that bears watching. Last month Bob McTeer suggested, quite reasonably I thought at the time, that we are winning the war against inflation but having trouble accepting our success. I thought about that afterwards, Bob. It made a lot of sense to me and it is obviously a very attractive idea. Around July 28th I was about to relax, declare victory, take the day off, go to a ball game, and maybe even drink a cold beer, but then we got these numbers and the reaction to them. So, I don't think we want to get too comfortable yet.

As far as the paradigms are concerned, I would characterize myself, Mr. Chairman, as an old paradigm optimist because I know that eventually we will do the right thing, whatever that might be. [Laughter]

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Conditions in our District have not changed much in years in the sense that the moderate and steady expansion that has been under way continues. Employment has continued to grow and there are some anecdotal indications that

employers are going to new extremes to find workers. Construction activity is healthy, both residential and commercial, and certainly the major contractors in our District, of whom there are a decent number, are quite optimistic about the outlook. Perhaps the only prominent soft spot in the District is tourism, which is experiencing a disappointing season. I don't have an explanation for that. It may be partially weather related, but that is the one sector that jumps out as a departure from a generally healthy economy. Wage and price pressures are generally absent. People have been commenting particularly favorably about nonlabor costs because they are not seeing increases in input prices. The one exception is in the health care area where we have had a very competitive market for some time and have enjoyed small increases or even declines in costs. People in the health care industry have been suggesting with more force than usual that the favorable trend may be over.

As far as the national economy is concerned, my impression of the Greenbook forecast is that it is very finely balanced. It projects modest growth and what I would describe as relatively low inflation. In my view, it would not take much to tip the economy off that generally positive course one way or another. Abstracting from fluctuations in inventory investment over the next quarter or two, my view is that we will see somewhat more growth in the real economy than the Greenbook envisions and somewhat more inflation as well. But whoever is right about that, it seems to me that the risks in the outlook have not changed significantly in recent months; they continue to lie on the side of greater inflation, given where we are cyclically. Thank you.

CHAIRMAN GREENSPAN. President Boehne.

MR. BOEHNE. Thank you, Mr. Chairman. The pace of economic activity in the Philadelphia District is picking up somewhat in the third quarter after moderating in the second. Labor markets are tight, with some upward pressure on wages. Businesses, however, are still

finding ways to offset higher wage costs. Inflationary pressures therefore remain muted. Manufacturers, retailers, and contractors are all showing moderate increases in business activity. Loan volumes are up slightly. Firms generally are doing very well in maintaining their cost structure. All in all, my impression is that the District economy is growing steadily without noticeable excesses. This steady growth environment is particularly helpful in alleviating some of the long-standing social problems that one finds in a large northeastern city like Philadelphia.

Turning to the national economy, there does appear to be some pickup in final sales during the current quarter. The amount of inventory accumulation is uncertain and quarter-to-quarter growth rates are therefore uncertain as well. More basically, the economy appears to be growing moderately, with tight resource usage. Conventional economic models point to upward price pressures, as they have for some time. They may be right or they may be wrong, but in the meantime actual signs of an inflationary buildup are shadowy at best. There still is a strong case for us to wait and watch.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. Thanks, Alan. The Eighth District economy is still growing at a moderate pace. District firms report continued growth in sales and employment, although tight labor markets throughout the District are a limiting factor. Average unemployment, at 4.4 percent, remains below the national rate. District payroll employment, which earlier had increased much faster than nationally, grew only 1.4 percent in the year ending in June compared with 2.1 percent for the nation. Estimates of District automotive production are down about 4-1/2 percent for the third quarter and .2 percent for the fourth quarter from high levels a year ago. Residential construction activity also remains below last year's high levels, though some bankers have noted a pickup in mortgage demand recently. Commercial and consumer loan demands are described as

steady. In agriculture, crops are in reasonably good condition despite the hot, dry weather that has prevailed in most of the region, and an above-average harvest is expected in most of the District.

Regarding the UPS strike, concerns have been expressed by District contacts about the long-term ramifications of the strike for future labor market bargaining, including the ongoing UPS dispute with its pilots and the Teamsters contract with less-than-truck-load carriers, which expires April 1 next year.

The nation seems poised for another year of above-trend economic growth despite the strike and some slowing in the second quarter. Rising real wages, high consumer confidence, and a recent surge in consumer expenditures, especially for housing and big ticket items, all suggest that real GDP will continue to grow above trend in the second half of 1997. Although labor markets have become extremely tight, there is some puzzlement as to why the employment cost index has been on a downward trend. An alternative measure, compensation per hour, has displayed a more distinct cyclical behavior, slowing to 1.4 percent for the year ended in the second quarter of 1994 and rebounding to 3-1/2 percent over the last four quarters. The compensation per hour measure picks up changes in labor costs when the composition of the labor force changes as well as cost increases due to promotions and bonuses that can be missed by the ECI. We are hearing an increasing number of reports from our District contacts about the need for hiring bonuses and other special compensation arrangements to attract the talent that they require.

The broad monetary aggregates continue to grow at or above the upper limits of their ranges. M2 growth, at an annual rate of about 5 percent and given its recent velocity pattern, is roughly consistent with projected nominal GDP growth. The good news on lower inflation in 1997 is welcome, but as we all know it is partly an illusion. The low CPI inflation in 1997 reflects the moderation of energy prices after a surge in 1996. Also, people seem largely unaware of the

technical BLS adjustments that will shave ¼ percentage point from the 1997 average. If this ¼ point is added to the last 12 months of CPI inflation, the rate is back around 2-3/4 percent, which is about the average for CPI inflation over the last several years. The continued emphasis on the CPI less food and energy can be misleading in identifying underlying inflation trends. Recent research suggests that the CPI itself is actually a better predictor of future inflation than the ex-food-and-energy measure. If we want to eliminate the month-to-month noise in the data, rather than focusing on the ex-food-and-energy measures we can simply average CPI inflation over a longer period or we can look at a measure such as the median CPI. The median CPI averaged over three months has remained around 3 percent at an annual rate over the first seven months of 1997, essentially the same pattern as in recent years. I guess the question is whether that is good enough. Until we can agree on a common yardstick, I don't know how we as a group can ever reach agreement as to whether we are achieving our objective of price stability. That's why I think it is so important that we continue the discussion on inflation measures that we began at the last meeting.

Finally, although we tend to assume that there is not much of a constituency for price stability, we should not underestimate the cost to our credibility and the potential public backlash if we permit trend inflation to rise. In fact, we might be surprised at how much support there would be for locking in the lower inflation we have seen this year, in view of how well the economy has performed under conditions of relatively low and stable inflation. Thank you.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN MCDONOUGH. Mr. Chairman, the Second District economy continues to underperform the nation's to some extent, but it has been doing somewhat better. The region's labor markets remained steady in the second quarter. New Jersey's unemployment rate edged down to 5.4 percent in July, reversing its little uptick in June, but it is down 0.7 point from a

year ago. New York State's unemployment rate remained fixed at 6.3 percent for the first six months of this year. New York City's rate climbed to 10 percent in June, up from 9.6 percent in May. That is the highest level since early 1994. It does appear, however, to be the result of an upward trend in labor force participation.

Most major retailers in the region report that sales were above plan in July. Compared to a year ago, same store sales gains for July ranged from 2 to 6 percent. Virtually all the retailers surveyed report satisfactory inventory levels, helped in part by successful summer clearance sales. Our retail contacts report little or no change in merchandise costs and some deflation in selling prices. Retail wage pressures generally remain subdued.

Residential construction activity retreated modestly in the second quarter, but the regional variations persisted, with upstate New York weak and the New York metropolitan area relatively strong. The commercial real estate markets in and around New York City continued to tighten in the second quarter, as reflected in brisk leasing activity and declining office availability rates. The reports from our regional purchasing managers indicate some slowing in manufacturing activity in July, especially in the upstate area of New York, again the problem part of our District. Consumer price inflation in the New York metropolitan area averaged 2-1/2 percent during the 12 months ending in July, up a little from the year ending in June and just a tad above the national rate. New York State legislators finally approved the fiscal year 1998 budget. The approval came four months later than the deadline under New York State law, a new and not particularly enviable record.

On the national level, we see the economy rebounding in the third quarter and we draw some confidence in that forecast from the strength in retail sales and in the sales of light vehicles in July. We see the economy subsequently slowing to its potential growth of about 2 percent. We see

reasonably balanced risks to our forecast of real economic activity, but there is some downside risk in the next few months if the ratio of sales to inventories, especially in manufactured goods, should encourage manufacturers to cut production back somewhat. That ratio is low by historical standards, but it's a bit higher than it has been in the recent past.

We share the disappointment of many that the recent NIPA revisions did not demonstrate a greater growth potential for the economy. The revisions helped explain the good performance of inflation because of the downward revision to unit labor costs, but it leaves us with the large question of how long the low growth rates of wages and benefits will continue. There is also a question of how long the favorable effect of a strong dollar can continue to be helpful to our inflation performance because of both its direct effect on import prices and the discipline it provides to domestic manufacturers. So, as regards our inflation forecast, we believe that the rate of increase in the prices of core goods will remain subdued, but we are somewhat more concerned about increases in the prices of services where competition is less severe and more local. We think it is possible that such prices will creep up. The reason for that is above all because we think the economy is at present operating about 2 percentage points above what would appear to be potential GDP. Therefore, we have some concern about the possibility of rising inflation even though our forecast has the economy growing in line with the rate of increase in its capacity. So, we are forecasting a rise in inflation, but we are not terribly certain about the timing; the forecast has the rise taking place in the latter half of 1998 and as we go into 1999.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. In the seven weeks since we last met, I have been doing my best to search the data and read and listen as carefully as I could to see if I can come up with any convincing information that indicates things are beginning to change. Other than

various straws in the wind, I just cannot find any. There certainly are some straws in the wind. Al Broaddus mentioned some important ones that would indicate some strengthening in economic activity, and others have as well. But it should be mentioned that there also are some straws in the wind blowing in the other direction that would indicate a possible slowing or at least not very much acceleration in economic activity, and possibly some easing in inflationary pressures. The dollar has continued to strengthen on balance; long-term interest rates have eased on balance; the yield curve is flatter and lower; the PPI has fallen for seven straight months; inventory growth has been too strong; consumer sentiment is still quite high but is off its peak; gold prices--for anyone who is interested--are lower; capacity utilization is down a little; and non-oil import prices are expected to continue soft. There are straws in the wind that are swirling, I would guess, in all directions.

I have no intention whatsoever of climbing into any of Peter Fisher's boxes, [Laughter] but I must say that we should be careful about making too much fun of the so-called new paradigm pessimists because I don't think that deflation is completely impossible. All in all, the message to me is that the risks are probably still moderately to the upside, and we should, and will certainly, stay very alert. But basically, it is steady as she goes.

CHAIRMAN GREENSPAN. Governor Rivlin.

MS. RIVLIN. I have always been an optimist. I think I was born that way, but I find myself stuck between the old and the new paradigms at the moment and not helped very much by the flow of data. The good features of this economy have been emphasized by all of us for several meetings in a row. I believe we are now beyond the point where we are just getting short-run good news. We have had a solid economic performance for long enough to be quite reassured in a basic sense about the strength and competitiveness of the U.S. economy, and that is a good thing. The continuing tight labor markets, without accelerating inflation, are terrific. We certainly have lots of

evidence of the increasing competitiveness of U.S. industry at home and abroad, which is reassuring. The fact that exports have held up so well in the face of the high dollar is really a quite good thing. We have had continued and balanced growth across regions and industries. It's getting harder and harder to figure out with our eyes closed who is talking around this table because the reports are quite uniform. On top of that, we have generally good news in agriculture and commodities, and prospects for growth in all our markets abroad should keep the favorable export story going even if the dollar fails to reverse course.

There still seems to be a major mystery about what is going on, especially about productivity. That is not helping us to decide among paradigms, which actually, Peter, I find you have very usefully organized as a set of boxes. So, I think all of us have to conclude that the risks are more on the high side. I'm not so much worried about the possibility that the economy may overheat and that we will face the prospect of higher inflation because I think we know what to do about that. We have a tool; it is just a question of when to use it.

The bigger problem for the U.S. economy, which was reinforced in my mind by the Humphrey-Hawkins experience--both the Chairman's and the one I shared with Larry Meyer and Bill McDonough--is the problem of the distribution of the gains from this very good economy. It is hard to refute the evidence that the gains are very heavily concentrated in the top 25 percent of the income distribution, and I find that very worrisome. There is a real problem for social cohesion. There is a potential problem, at least, for economic stability if we get more strikes and labor unrest, perhaps even as a result of what may be perceived as the success of the UPS strike. It is a serious problem, it seems to me, for people who talk about the economy, including or perhaps especially representatives of the Federal Reserve. If we talk about all the good things that we see happening and crow about the excellence of the economy, we risk sounding insensitive and out of touch with

average people or even the majority of the population. On the other hand, if we recognize the problem of concentration of gains at the top of the income distribution, that would lead to the reasonable question regarding what we propose to do about it, since we do not command the tools that can help. We can talk in general terms about other kinds of policies, about education and training, but it seems to me that we have to be very careful when we talk about this economy, given the limited tools of monetary policy at our disposal.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. I definitely identify with the old paradigm, albeit with an updated estimate of NAIRU. [Laughter]

MS. RIVLIN. The first mention of NAIRU today!

MR. MEYER. But I am at least an old paradigm with a new NAIRU. I recently have become more optimistic about the near-term outlook in response to data indicating much larger than expected inventory building in the second quarter, continued favorable inflation news, and the further appreciation of the dollar. These developments suggest that it is now less likely that the economy will rebound to well-above-trend growth in the second half, and more likely that inflation will remain well contained in the near term. I guess that makes me, along with Bob Parry, an old paradigm newly found optimist.

This more benign outlook reflects crosscurrents on both output growth and inflation in the near term, crosscurrents that are very well captured in the Greenbook forecast and discussion. The first crosscurrent is between slowing inventory investment and rebounding demand. While this was a minor story in the forecast at the last meeting, the higher pace of second-quarter inventory investment, especially in light of expected revisions to the data, has made this a dominant theme of

the near-term outlook. As a result, the economy is more likely to grow closer to trend in the second half, and therefore there is less concern that utilization rates will rise further.

A second set of crosscurrents affects the inflation outlook. I continue to be concerned about the risks of higher inflation as a result of an economy that is operating beyond its sustainable capacity. The resulting upward trend in inflation should be reinforced for a while to the extent that the restraining effect of favorable transitory factors recently in play diminish over time. Developments so far this year, however, suggest crosscurrents that might slow this process.

First, the better than expected inflation outcome this year, both in terms of lower core and especially lower overall inflation, and the modest acceleration in compensation per hour will act in the near term to restrain wage and price increases going forward. In this case, it is inertia that is our friend, and the result is a virtuous wage/price spiral.

Second, some of the transitory factors that have been restraining inflation, particularly the effect of the dollar on import prices, appear to be less transitory than previously expected following the further appreciation of the dollar since the last meeting.

Third, the upward adjustment of profits in the NIPA revisions suggests more of a cushion that might delay passthroughs of any future increases in compensation. While the net effect is still likely to be higher inflation over the forecast horizon, any increase will begin from a slightly lower base, and at least over the forecast horizon may be even more modest than previously expected. The net effect is the prospect of a more benign environment going forward, though one certainly not without its challenges. Looking at the Greenbook forecast, it's hard not to be delighted with the projected outcome in 1998 unless we have become jaded by two years of stronger-than-expected growth and lower-than-expected inflation.

While the near-term outlook looks more benign, I still view the risks as asymmetric. Consensus forecasts for the second half, for example, still appear to be in the 2-1/2 to 3 percent range, compared to the 2-1/4 percent rate projected in the Greenbook. While the slowdown in inventories should be a drag in the period immediately ahead, I would interpret the inventory building in the second quarter as largely voluntary, and therefore a measure of the confidence that businesses have in the economy going forward. That confidence undoubtedly reflects the sound fundamentals supporting demand and is consistent with the initial indicators of the strength of demand in the third quarter. Growth over the second half is therefore more likely to be above than below trend in my view. As a result, it remains more likely that utilization rates will rise further rather than decline, at least for the second half of the year. In addition, even without a further rise, prevailing utilization rates continue to point toward higher inflation over time.

One of the more intriguing aspects of the Greenbook forecast is the projection of utilization rates. The Greenbook projects a nearly unchanged unemployment rate, but a declining capacity utilization rate even after taking account of a slowing in the growth of investment spending in the manufacturing sector and a resulting moderation in the rate of increase in industrial capacity. A decline in the capacity utilization rate with an unchanged unemployment rate would further widen the disparity between these two measures of resource utilization, already one of the interesting anomalies of the current episode. If this divergence is part of the explanation for the apparent decline in NAIRU and the surprisingly favorable inflation outcome, the further widening of this gap may further damp the responsiveness of inflation to the already low unemployment rate. Maybe. But I expect one of the more important stories still to be written about this expansion is how the economy will find its way back to NAIRU, assuming we are already below NAIRU. In the Blue Chip consensus forecast, the economy slows on its own over 1998 to a below-trend rate and,

as a result, the unemployment rate retreats slowly toward NAIRU, fortunately before inflation rises to any considerable degree. In this case perhaps we can sit back and watch.

In the Greenbook on the other hand, the economy grows at trend, preserving the prevailing utilization rates, and as a result, inflation rises gradually over time. This version of the story is waiting for us to write the conclusion. The change in the outlook since our last meeting suggests, however, that we may have more time to refine our forecast before we have to pen our conclusion.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. Thank you, Mr. Chairman. We did get our second-quarter slowdown, but the signs are now consistent with the continuation of the slower growth or the resumption of somewhat above-trend growth. So, it seems to me that the challenge for the Committee is to assess the strength of the economy's momentum and the related prospects for inflation. The press and other more professional forecasters phrase our current dilemma as a dichotomy between a lengthened or protracted business cycle and the so-called new age, new era, or new paradigm economy characterized by enhanced but unmeasured productivity improvement, deepened capital capacity, and less proclivity for inflation. The truth is probably somewhere in the middle. That is, while there probably are technology-driven productivity improvements at least in some sectors, it is hard to believe that business cycles have been exterminated.

At this point, there is considerable strength in the economy. The labor market not only looks strong but it may have more flexibility than is implied by the current low unemployment rate. That is, employed people seem to be quite willing to change jobs. Business is getting very creative in finding ways to attract and train new workers and to stretch already taut labor markets. Wage pressures are probably uneven across different types of jobs and skill levels. This may help to

explain the anecdotal stories we are getting about the lack of statistical evidence of widespread wage pressures. Whatever the outcome of this analysis, the low unemployment rate suggests a continuation of consumption growth. Housing and auto sales are holding up quite well for this stage of the expansion.

Another source of strength is business fixed investment, and I see no particular reason to believe that this sector will fade. Profits continue to be surprisingly strong. The capital market is supportive of further spending. As long as aggregate demand holds up, business investment and reinvestment are justified. It does seem to me, however, that there is a confluence of events or factors that have helped to hold inflation down in this favorable economic environment. First, of course, as has already been noted, is the strong dollar. Relative economic weakness in foreign competitor nations is alleviating supply pressures. Various supply factors in the oil market have kept world oil prices down, and this is a particular vulnerability for the United States economy. There has been good enough weather to prevent major problems in grain crops, thereby allowing some replenishment of reserves and avoiding run-ups in food prices. The recent pattern of consumers taking a breather after a spending spree has helped to temper spiraling demand. Progress on the deficit has been made somewhat easier by a strong economy and a favorable interest rate environment.

If any of these factors change, the balance could be tipped in the other direction and reverse the recent benign inflation situation. World demand could heat up, creating supply problems. OPEC could get itself together and push oil prices higher. The stock market could take a dive off its recent roller coaster ride. The El Nino and global warming could converge to wreak havoc on agriculture. Labor unions, or employees generally, could become more successful in pushing wages up to a level that could not be absorbed by productivity improvements or profit hits,

resulting in final price increases. Consumers could get so self-confident that they forget to take that quarterly pause that has refreshed our economy.

These are clearly upside risks for inflation, but none of them appears imminent. In the other direction, we could get a more ordinary inventory cycle, as Mike Prell has suggested, but none of this is certain. So, I believe that for now we are left to debate how long a sustainable economic growth trend is sustainable.

CHAIRMAN GREENSPAN. To round us out, President Jordan.

MR. JORDAN. Thank you, Mr. Chairman. I want to mention only a few things from the District that relate to the national outlook and to convey some of my concerns about where we are or may be in a few months. On the retail outlook question discussed earlier,

the head of a major retail company, said that the first half of this quarter had been excellent, with double-digit rates of increase. However, he is not yet confident that the strength can be sustained. He said it would be mid-September before he would be able to begin to assess the extent of the pickup in holiday season ordering and to reach a judgment on whether the recent bounceback in sales was anything more than a temporary aberration from the softness in the spring. On the question of inventories, his view was that in the case of autos, the buildup was in domestically produced vehicles, not imports. However, in the case of dry goods, the rise reflected imports, not domestic goods. He said that imported goods accounted for some 70 percent of his company's stocks.

Manufacturers of communications equipment reported to us in the spring that their sales had been disappointing. More recently, however, they indicated that there had been a significant pickup in new orders and that their backlogs were starting to build again. One of our directors said that the whole high-tech sector has ramped up sharply after being soft for several months.

One area that concerns me, as it does others around the table, is real estate. With regard to farmland, we are continuing to hear reports of sudden and sharp increases in prices that make no sense if we think in terms of the agricultural use of that land. The huge price increases are not limited to Kentucky horse farms, and that leads us to speculate that those increases may reflect the anticipated conversion of these lands to alternative uses at some point in the future. In any event, we are not sure what to make of these very dramatic reports.

We are told that construction in the region is being constrained only by labor shortages. Contractors simply are not able to get more construction workers. Projects are being delayed or they are being completed much later than anticipated, and new bids are coming in significantly higher than previously. There are still some concerns about sluggish sales of higher-priced homes, but reports from most of our metropolitan areas indicate that there has been a recent pickup in existing home sales after a very slow spring. That is happening through much of the region. One isolated report, from is that there has been absolutely no traffic in the four months that his house has been on the market in Columbus, Ohio.

Bankers tell us that vacancies are appearing in shopping malls throughout the region. The new malls may get the tenants, but they are leaving behind vacant stores throughout the District. This development is still in its early stages. One banker claimed that through next year, we are going to see sharply rising vacancies in commercial retail space. Another banker said with regard to developers that it is getting hard to hold them back and they are getting later and later in their payments. The community bankers claim that they are making fewer unsecured loans, but they say that the regionals and super regionals continue to lower their credit standards.

I have a couple of observations about the labor markets that provide a little different twist on productivity and about what we are hearing and reading concerning developments in labor

markets. who runs a small manufacturing company that is mostly related to the motor vehicle industry and does a fair amount of exporting, said that he cannot hire the same skilled worker at the same rate as he could one or two years ago. However, he is not willing to raise his workers' wages, and he also does not feel that he needs to because in a sense he is dumbing down his workforce. He still pays the same wage, but because his business makes use of computer-driven machinery, computerized inventory control, and computerized scheduling he is able to produce the same output and continue to pay the same wage. He simply has smarter equipment coupled with less skilled workers to get the same output. That will not show up in productivity.

who is associated with a company that employs several hundred workers, said that software is available to permit the flexible use of a workforce with unusual hours and that has greatly increased their ability to tap into labor pools that were unavailable to them previously. Examples cited include housewives and formerly retired people who do not want 40-hour workweeks but are willing to work odd schedules. The available software allows the preferences of these people to be accommodated. Another company that produces auto parts needs a flexible workforce to meet the just-in-time demands of its customers. A few years ago, they could not have handled such demands, but they are now able to do so because of the new software.

Finally, a very large company with 70,000 employees worldwide is now using very sophisticated, multimedia educational software to train their workers. They have been able to reduce their training costs after several years of dramatic increases in such costs. And at the same time, they claim to have increased the effectiveness of their training by 80 percent. Again, this is something that would not show up in productivity statistics. There is a question as to how much

training actually occurs in a three-hour training session or a three-week training session. When asked how many students were in their classes, the reply was three students; the others in the classes were just avoiding work.

Concerning paradigms and the outlook in the Greenbook, anytime I hear that something is new, whether it is an idea or a paradigm or whatever, I usually react by thinking that what is new probably is not true, and what is true is not new. It was said in this room well over 25 years ago that the old laws of economics had been repealed. It was not true then and it is not true now. The old laws of economics still work. Of course, 26 years ago last Friday the U.S. government tried to repeal the laws of economics, but I hope that that will never happen again. It may be that what is called a new paradigm simply involves allowing what we all accept as fundamental economic forces to operate in a less fettered way than previously. That does lead to some optimism about the sustainability of the expansion. With regard to the new paradigm of pessimism as it relates to deflation, we certainly are not hearing any of that when it comes to asset prices.

When I looked at the Greenbook and listened to a number of people report about a pickup in economic activity, the words "rebounding" and "somewhat stronger" were used to describe the near-term outlook. Yet, the Greenbook has 2.6 percent real GDP growth in the second quarter and 2.3 percent for the third quarter. On the surface, that would lead people to think that there is some weakening or softening going on. But what it says to me is that the growth reported for the second quarter, assuming that the Commerce Department numbers are correct, was unsustainable. The mix was unsustainable and, as one exceptionally smart economist once said, unsustainable things have a habit of ending. When we look at that second quarter with weakness on the consumer side, booming capital spending--which would suggest capacity is increasing--a dramatic surge in imports, and inventory accumulation that is extraordinary for a second quarter,

we have to conclude that something is fundamentally wrong. If those quarterly numbers are right, those conditions cannot be sustained. The Greenbook fixes things by having everything shift the other way. The consumer comes back, which I guess is what we mean by a pickup or rebound even though real GDP is projected to slow. There is a dramatic negative swing in inventory spending, and net exports also make a negative contribution in the forecast for the third quarter. I don't know whether that is a correct forecast or not. I certainly hope so because if it isn't, our problems will be much, much greater. We need an outcome something like the Greenbook's third quarter and also its fourth quarter or we will have missed something here in a very serious way.

The question in my mind, then, is how to monitor whether that is occurring or not. A part of it, getting into the monetary numbers, is the need to make sure that the behavior of those numbers stays rather tranquil, including slow growth in M2 which has been running at a rate just under 5 percent and some slowing in the growth of MZM from almost 7 percent in the second quarter to something under 5 percent. The recent jump in the growth of the monetary base is also worrisome even though it reflects only a few weeks' data; that growth needs to slow.

I am troubled, though, that as we get out to September 30th, we are not going to know a great deal more than we do today about the performance of the economy. It really is going to be November before we get a reading on how good a job the staff has done in forecasting an economy that corrects the problem second quarter. I would simply like to skip October because nearly all the corrections take place in October. We ought to repeal October, jump from the end of September into November, and then get it right. Thank you.

CHAIRMAN GREENSPAN. I think this is an opportune time to break for coffee.

[Coffee break]

CHAIRMAN GREENSPAN. Mr. Kohn.

MR. KOHN. Thank you, Mr. Chairman. As background for the Committee's decision today, I will begin by taking a few minutes to discuss real interest rates, concentrating on the real federal funds rate, given its occasional use as an index for the stance of monetary policy. In the course of my discussion, I will be referring to the set of charts that has been distributed; these update selected charts from the Financial Indicators package.[2]

As you can see from the panels on the right side of the first chart, the real federal funds rate has risen considerably this year when lagged CPI inflation is used to proxy for expected future inflation. The increase is a product of the Committee's decision to raise the nominal funds rate in March as well as a decline in inflation expectations, as estimated using these proxies. One might question whether inflation expectations actually have decreased as much as has measured inflation--especially total CPI inflation, which has been driven importantly by temporary swings in energy prices over the last two years. But qualitatively similar movements are also evident when real rates are constructed by subtracting the results of surveys of inflation expectations.

Moreover, as you can see by comparing the bottom to the top rows in the lower panel, the current level of the real federal funds rate is fairly high relative to history--in the neighborhood of a percentage point above its average over the entire sample, from 1965 to the present. This sample period was chosen because it has about the same inflation rate at the beginning and the end. This should indicate that over this interval the economy experienced about the same amount of excess demand pushing up inflation and excess supply pushing it down so that, on average, output was at its potential. Consequently, other things equal, the average real federal funds rate from 1965 to 1997 might be a reasonable approximation of the natural or equilibrium federal funds rate consistent with holding the economy at potential and keeping inflation steady.

But, of course, other things have not been equal. One set of developments that probably has been tending to shift up the equilibrium real rate over the last 30 years has been deregulation and innovation in financial markets. The dismantling of regulatory interest rate ceilings and the spread of loan securitizations and other means of diversifying sources of funds have removed or reduced important sources of nonprice rationing in credit markets. Greater reliance on the price of credit to allocate scarce saving implies that higher real interest rates are needed.

Aside from such structural changes, the equilibrium real funds rate will depend on cyclical or one-time influences on the economy and financial markets. Certainly, the required level of interest rates was lifted in the early-

[2] Copies of the charts used by Mr. Kohn are appended to this transcript (Appendix 2).

and mid-1980s by an expansive fiscal policy, and reduced in the early 1990s by the so-called credit crunch.

What can we infer about equilibrium rates in recent years? Note that, although the actual real rate has risen to a fairly high level of late, it is now only a little above the range of the last few years. Moreover, if the staff and Committee members are right about the slight pickup in the CPI next year, some of the very recent increases in the calculated real rate will be reversed. Real funds rates near these elevated levels over the last three years have not connoted a restrictive monetary policy. Instead, over this period, robust growth has propelled the economy to a level that exceeds many estimates of its long-run potential. An important reason for this, as Committee members have pointed out in past meetings, is the strong demand for capital goods. The profitability of this investment means that higher-than-normal real rates may be needed to avoid inflationary pressures on resources. And this profitability has been reflected in other financial markets, such as for equity, where high prices have reduced the cost of capital and boosted net worth, further damping any restraint from short-term real rates.

Moreover, a somewhat different picture of financial conditions is portrayed by longer-term real interest rates. Much of the run-up in the real federal funds rate over this spring and summer apparently has not been transmitted out along the yield curve. The rise in the real funds rate resulted importantly from the drop in measured inflation expectations against a fixed nominal funds rate. But nominal longer-term rates have been free to decrease with inflation expectations--and they have done so, leaving real yields on the Treasury's indexed debt fluctuating fairly narrowly. The top panel of the next chart shows other measures of real long-term Treasury yields. Despite a small upward trend since early 1996, these rates remain appreciably below their peaks of 1994-95. The uptrend is even more muted in private rates, the lower panel, which have been held down by low and narrowing risk premiums. The behavior of these premiums is indicative of the generally ready availability of financing for private borrowers, which itself would boost required real rates on federal funds or Treasury securities.

The effects of the flattening yield curve and declining risk premiums on the real private bond yield can be seen in chart 13, which plots this yield against the subsequent year's change in inflation. This technique, like the use of historical averages, is limited by the implicit assumption that history provides reliable guidance to future developments--that the equilibrium rate has not shifted significantly over the past 15 years. And, as you can see, the fit is not tight. Nonetheless, real long-term rates in 1996 and 1997--plotted in the diamonds marked 97 and 98 for the Greenbook projection of the change in inflation for those years--are not elevated by this standard; they are certainly not in the restrictive territory implied by recent readings of the real funds rate.

While not evident in domestic credit and equity markets, elevated real short-term rates may still have some restraining effect. For example, they may be one factor behind the strength of the dollar, though questions about foreign economies and policies likely have been important. Whatever the reason, the appreciation of the dollar should help to hold down U.S. production and prices. Moreover, further increases in real short rates--through policy tightening action or declining inflation expectations without compensating policy easing--would put upward pressure on real intermediate- and long-term rates.

In sum, short-term real rates are high, and they have risen recently. The current real level of the funds rate may provide some assurance that policy is not highly stimulative. But, in the absence of policy action, the real funds rate is likely to begin to edge lower as some of the special factors holding down inflation wear off and higher inflation rates begin to affect expectations. Moreover, even very high real federal funds rates may not necessarily indicate restraint or even neutrality in monetary policy when other important elements in overall financial conditions are considered, especially taking account of the strong demand for capital. Real short- and long-term rates close to current levels have apparently allowed output to overshoot sustainable levels, and in the staff forecast this situation is not corrected without a change in policy.

Still, considerable uncertainty persists about the level and growth of potential output and the implications for inflation of operating for a time with the current degree of tautness in labor markets, which may be seen as supporting a continuation of the wait-and-see posture of alternative B. The drop in inflation expectations provides an additional counterweight to the effects of resource pressures on prices, allowing the Committee to await firmer signs that inflation is likely to intensify without risking a substantial acceleration in prices. And with inventory investment likely to slow, the odds on a near-term strengthening of production that would increase resource utilization rates have diminished. Recently more volatile conditions in financial markets may also counsel caution. This development may be associated with some second thoughts about just how rosy the outlook for prices, profits, and interest rates may be. If markets become more cautious, equity prices and credit spreads would become a little less stimulative.

If the Committee were to choose to keep the stance of policy unchanged, it would need again to consider whether to retain the asymmetry in its directive. As compared to the situation in early July when the Committee last voted to have an asymmetric directive, the favorable behavior of prices and price expectations, along with a slightly less expansive staff forecast for growth going forward, may be read as reducing the urgency to take action should any signs of inflation pressures emerge over the near term. On the other hand, the basic situation has not changed since early July: The

labor market continues to operate at levels beyond most estimates of sustainable potential, and strength in consumption and investment spending seems to suggest that financial conditions, at least those prevailing a little while ago, have not been tight enough to prompt a closing of any output gap.

This brings me to the language of the directive. As you suggested, Mr. Chairman, I polled the members for their views on the wording of the two sentences, and as I suspected, there were almost as many suggestions as members. I tried to boil these down to a few alternatives, which were sent to the Committee and are repeated beginning on page 12 of the Bluebook. On the first sentence, most members preferred the alternative sentence in the June Bluebook, though some suggested relatively minor wording changes. President Boehne's alternative, labeled "New Alternative," seems to have the advantage of eliminating the somewhat/slightly distinction from the first sentence--employed in the past to differentiate 50 from 25 basis point actions, but perhaps not needed to describe actions taken at the meeting now that the Committee is explicit about the actual federal funds rate it expects. It also eliminates the tighten/maintain/ease choice on reserve conditions, which several other members also suggested.

Consensus was less clear on the second sentence. Although quite a few members preferred the June Bluebook alternative, there were a number of other suggestions. The wording given as "New Alternative 1" is also based on President Boehne's suggestion and would conform the June Bluebook alternative for the second sentence to his alternative for the first sentence. In keeping with a suggestion several of you made, it puts the possible change in terms of an increase or decrease in the federal funds rate, instead of reserve conditions. However, a few of you also thought that the asymmetry was about presumptions, or inclinations, or risks rather than weight given to incoming data. This approach may be more consistent with the notion that the directive tilt is a signal of the risks the Committee sees, and hence the more likely direction of its next action, without any necessary implication for the upcoming intermeeting period. In the circumstances, the tilt implies that you would move relatively promptly if the data seemed to confirm your concerns, and that you have a hard time imagining moving in the other direction, though such an action cannot be ruled out in very unexpected circumstances. I tried to capture some flavor of this in the second new alternative. However, on re-reading this alternative, I'm not sure better language couldn't have been found to express this view--for example, "In the context of ... , the Committee believes that developments are more likely over time to require a tightening than an easing of reserve conditions to attain its objectives."

The difficulty of framing a consensus on the second question may suggest that leaving the current wording in place for this sentence, or tinkering with it only very slightly, ought to be seriously considered. The current wording, however awkward, does not try to spell out what the Committee

means by asymmetry but merely states the kind of actions the Committee would, or might, find acceptable. If the Committee changes the first sentence but wants to leave the second essentially unchanged, it could conform the second sentence simply by substituting "higher" and "lower" "federal funds rate" for greater and lesser reserve restraint, though even this change might not be needed.

CHAIRMAN GREENSPAN. Let's see if we can make some progress on this. I have the general impression that there is a consensus around the Boehne alternative for the first sentence. I will assume that is the case unless somebody wishes to raise an objection here. [Pause] Not hearing one, I will assume that we will make that change, which really has carried us much further than anyone would have anticipated! [Laughter]

SPEAKER(?). Should we stop?

CHAIRMAN GREENSPAN. I think we have to focus on whether we should leave the second sentence alone, apart from the minor adjustment that Don Kohn has mentioned, or try to go further.

MR. KELLEY. Leave it alone.

CHAIRMAN GREENSPAN. The major problem I always have had with this directive has been in the first sentence. I find all the proposed variations of the second sentence to be circumlocutions in one way or another. The difficulty is that we are trying to reflect differing opinions as to how we should view the question of asymmetry. That is an issue we never have been able to resolve among ourselves. There are differences in this Committee and very legitimate differences. Yet, I think we all find a value in maintaining the notion of symmetry and asymmetry, though for somewhat different reasons. There has never been any consensus, as I read the views of this Committee, to eliminate that concept. So, my inclination at this stage, given my suspicion of what would happen if we tried to resolve something that we have failed to do in the past for good reasons--

MS. RIVLIN. No lunch would be the consequence! [Laughter]

CHAIRMAN GREENSPAN. That is a very thoughtful way of putting it. [Laughter]

VICE CHAIRMAN MCDONOUGH. Thoughtful and practical.

CHAIRMAN GREENSPAN. After going through a lot of the possible variations with Don Kohn, it strikes me that we are not going to succeed in resolving this issue at this stage, and it probably is not worth the effort of the Committee to try to force something that would make a number of us feel uncomfortable. I am inclined to put on the table as a potential resolution of this to make just the minor change that Don Kohn has suggested.

MR. MELZER. Could you repeat that, Don? I'm sorry, I didn't mean to interrupt.

CHAIRMAN GREENSPAN. I'm just opening the issue up for questions. Don, in that context would you read the operational paragraph of the directive with those changes?

MR. KOHN. Okay. I'm on page 13 of the Bluebook and I will start with the "New Alternative." If you chose Alternative B and translated the July directive into this, it would read: "In the implementation of policy for the immediate future the Committee seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5-1/2 percent. In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, a somewhat higher federal funds rate would or a slightly lower federal funds rate might be acceptable in the intermeeting period."

CHAIRMAN GREENSPAN. That wording is not satisfactory to everybody, but it is everybody's second choice, if I may put it that way. I would be inclined to go with that, but I would like to hear the Committee's views. Governor Phillips.

MS. PHILLIPS. What is the purpose of differentiating between "somewhat" and "slightly?"

CHAIRMAN GREENSPAN. It gives you the asymmetry in effect.

MS. PHILLIPS. We have not worked that out.

MR. KOHN. We have two methods of establishing that; the other is the use of "would" and "might."

CHAIRMAN GREENSPAN. The two methods together have been used when we wanted to express a strong degree of asymmetry.

MS. PHILLIPS. "Somewhat" is stronger than "slightly?"

CHAIRMAN GREENSPAN. Yes.

MS. PHILLIPS. Well, this has not been clear to me in the past! [Laughter]

CHAIRMAN GREENSPAN. It wasn't supposed to be! [Laughter]

MS. PHILLIPS. I am going to write that down so I won't forget it next time.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Well, Mr. Chairman, I would say that you are in error in one respect. It is not everybody's second choice. It is my first choice.

CHAIRMAN GREENSPAN. I am delighted to be corrected. In a hidden sense it is mine, too. President Broaddus.

MR. BROADDUS. Mr. Chairman, just a comment here: The only thing that bothers me about making these changes--and I think I made this comment at the meeting last time--is that what we are doing here is to be clearer about our operating instrument without making corresponding changes with respect to the language on our longer-term goals. That worries me because I think it is going to increase the already intense focus on the funds rate, and that, I think, is one of the

principal difficulties we face currently in conducting monetary policy in the short run. I don't know how far I'll get with this, but I would like to make this suggestion concerning the lead clause in the second sentence. There are no suggestions on the table now for changing it, but it currently reads: "In the context of the Committee's long-run objectives for price stability and sustainable economic growth…". Is it possible to consider changing that to: "In the context of the Committee's long-run objectives, which assign priority to price stability as a prerequisite for achieving sustainable economic growth…"?

CHAIRMAN GREENSPAN. That is a fundamental change. The words have been fudged in such a manner as to avoid stating that. I think you are quite right on the issue of giving prominence to the funds rate, and I think we all recognize that were we able to find financial aggregates that reflect the state of the money markets and that we could employ to gain leverage in the system, we would find that preferable to targeting the funds rate. The latter has all the problems that we have discussed over the years. Having gone in the direction of announcing changes in the federal funds rate after our meetings, all we are doing is moving that explicitly into the directive. If at some point we are able to shift away from the funds rate, then the directive will get changed and our public statement will get changed.

MR. BOEHNE. I was just going to say, Mr. Chairman, that you have made wonderful progress here this morning, and I do not think we ought to jeopardize it. We ought to support it as a group and consider it time well spent.

CHAIRMAN GREENSPAN. Why don't you make a motion?

MR. BOEHNE. If I could, I would.

MS. MINEHAN. He's not a voting member.

CHAIRMAN GREENSPAN. Can we make you an honorary one? [Laughter]

MR. BOEHNE. I will make an honorary motion.

MS. RIVLIN. I will second the honorary motion.

CHAIRMAN GREENSPAN. Technically, it is true if we are taking a vote of the Committee as presently constituted. But as a practical matter, the vote has to include everybody around the table because we are making changes that will involve all of us. So, the "votes" of those who are temporarily nonmembers should be taken into account.

MS. RIVLIN. Can I make it legal by moving the Boehne motion?

CHAIRMAN GREENSPAN. You could do so.

VICE CHAIRMAN MCDONOUGH. I second the Boehne motion.

CHAIRMAN GREENSPAN. Would you read the Boehne motion, just to make sure we know what it says?

MR. BERNARD. The first sentence, assuming alternative B, would be: "In the implementation of policy for the immediate future, the Committee seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5-1/2 percent."

CHAIRMAN GREENSPAN. And go on.

MR. BERNARD. The next sentence, if I have it down correctly and using the same tilt as in the July directive would read: "In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, a somewhat higher federal funds rate would or a slightly lower federal funds rate might be acceptable in the intermeeting period."

CHAIRMAN GREENSPAN. Okay. Let's recognize that this is not a vote on the directive; this is a vote on the structure of the directive.

MR. KOHN. You could ask for a show of hands maybe without doing a vote. That way everybody could be included.

CHAIRMAN GREENSPAN. Let's have a show of hands rather than an official vote. This is in favor of it. All opposed? It carries unanimously. I congratulate Donald Kohn for a Solomonesque--

MR. KOHN. And President Boehne.

MR. BOEHNE. And the Chairman.

CHAIRMAN GREENSPAN. Well, I merely followed you two gentlemen.

VICE CHAIRMAN MCDONOUGH. I would like to add Governor Rivlin for drawing attention to the practical consideration that got this discussion over with.

CHAIRMAN GREENSPAN. I thank everybody. [Laughter] Are there any questions on the first part of Don Kohn's presentation relating to monetary policy?

MR. MEYER. Don, before each FOMC meeting we are provided a memo on what various rules are indicating, the Taylor rule particularly. My recollection is that the equilibrium real interest rate constructed in that case is for a 2 percent real funds rate, using the chained GDP deflator.

MR. KOHN. Right.

MR. MEYER. Do you want to talk briefly about the table at the bottom of chart 10 in your handout and its implications? While I am a strong believer in some of the wisdom embedded in the Taylor rule, I have been concerned for a long time that we need to be more careful about how we set its level by coming up with a more reasonable estimate of the equilibrium real funds rate. The 2 percent comes from Taylor's heuristic rounding. Do you think this table provides a somewhat more thoughtful estimate?

MR. KOHN. I think that if we took it literally, and I would have to look at that, it actually would be a little higher if we used the GDP deflator over time, which is what Taylor's rule is based on. These days the GDP deflator tends to run a little below the CPI, but over time I think it runs a little above. So, if we use the deflator, the gap between the 2 percent and what we might think of as history over the 1965 to 1997 period would be a little larger. So, we need to think about that rule in the context of what price index we are using, what changes have been made to the price index over the years that might have distorted it going back in history, and whether it may be less distorted now. I think most researchers, as we have been told over the past few years, have not found a big change in the amount of bias in the indexes, but we need to be careful about that. I think all these factors are important. I know that partly at your behest, Governor Meyer, people on the staff are trying to take account of these various factors and make a more sophisticated, technically justifiable estimate of the real funds rate even for the very simple Taylor rule. The real funds rate in that rule is not allowed to move around. The other major issue, even if we know how to measure the real funds rate, is whether it moves around from time to time. So, we should take account of all these other aspects.

VICE CHAIRMAN MCDONOUGH. Don, I have a question for you that comes from page 1 of the Bluebook. In the fifth line down you state that "longer-term nominal yields were down 15 to 25 basis points, but yields on indexed debt were about unchanged, suggesting that a slight reduction" etc. Is part of the reason you use the term "suggesting" that you believe that these bonds are new enough and still not liquid enough that they will not tell us as much as they might "X" years from now when they are not so new and have become more liquid?

MR. KOHN. That is one of the factors, President McDonough, in the sense that relatively small trades can push these rates around because these markets are not liquid, and I think

we need to be careful about interpreting small ups and downs in the yields. On the other hand, I don't think the lack of liquidity in the market vitiates their usefulness entirely. There are a few folks out there, at least as one talks to people on the Street, who are keeping their eye on these things. They are doing a little trading. And if there were a sense, for example, that the economy was terribly strong and the Fed really needed to raise real interest rates a lot to keep inflation down and was going to do so, I think these yields would go up. Now, we would have to be careful about whether we should count every basis point and look at that spread for every basis point. I think it is useful to look at that yield and at the spread in a general kind of way, but we have to be careful not to slice it too thinly.

Another factor here is relative supply. The Treasury has cut back on its note auctions, and in particular it has eliminated a ten-year note auction or two and is concentrating more of its issuance in the indexed area. So there may be, particularly with a thin market, some relative supply effects that ordinarily we would think would wash out very quickly in a nominal bond market but that may have some effect in the indexed market. Nonetheless, I think the fact that the spread has come down by almost 50 basis points over four months suggests something.

VICE CHAIRMAN MCDONOUGH. I think you have it just right. I believe it tells us something, but we have to be very careful not to get overly caught up with it quite yet.

MR. KOHN. The other point I would make about the sentence that you pointed to is that we characterize it as inflation compensation. There is another part to inflation compensation. It is not only expectations; it is the inflation risk premium. One had a sense, particularly over the spring through the end of July, that not only were people perhaps a little more optimistic on inflation, but they were a little less uncertain about their optimism. So, one reason that nominal yields might have dropped relative to the real yield is not entirely a decline in inflation expectations but a

decline in the insurance premium that people buying nominal bonds required for the possibility that inflation would turn out to be a lot different than they expected it to be.

CHAIRMAN GREENSPAN. The term "inflation compensation" is really a word of art because what is being projected here is not true inflation expectations, including the risk premium, but a forecast of the CPI as published. And that may or may not be exactly equal to inflation expectations. But shouldn't the word "expectations" be in this sentence--"a slight reduction in "expected" long-term inflation compensation"?

MR. KOHN. It is a reduction in the actual compensation that investors are demanding for buying a nominal bond. Its size would depend on their expectations for inflation and on the standard error or standard deviation--

CHAIRMAN GREENSPAN. It is based on their forecast of the CPI.

MR. KOHN. Right.

VICE CHAIRMAN MCDONOUGH. It is a kind of economist's 9-by-12, I think. [Laughter]

CHAIRMAN GREENSPAN. Further questions for Don? If not, let me start. I will be a good deal briefer than I have been of late. To be sure, as Governor Kelley indicated, not all that much has changed in the period since the last meeting, but there are a few fundamentals that I think require a bit of evaluation.

The most recent period is interesting because it reinforces the notion that we still may be experiencing disinflation. That is, it is very clear in looking at the price indexes--whether we are using the CPI, the PPI, or the various NIPA data on prices--that the inflation rate over these last six months has been coming in lower than in 1996 or at the least has been unchanged. This is really quite relevant, especially since the data on domestic operating profit margins still seem to be edging

higher. Taken together, these two factors clearly imply that consolidated unit costs for the nonfinancial corporate sector are moving up only very modestly. Indeed, our latest estimate for the four quarters ended in the second quarter of 1997 is that consolidated unit costs have gone up just .4 percent. Since net interest payments per unit continue to fall, the increase in unit labor costs remains rather modest though obviously higher than the rise in total unit costs. Unit labor costs are up about 1.2 percent over the four quarters, but higher productivity growth is factored into that. Indeed, the productivity increase for the nonfinancial corporate sector looks something like 2-1/4 percent, with average hourly compensation moving up close to 3-1/2 percent.

The significance of all this is that we have continued to get this sort of data for quite a while. Indeed, I used almost the same set of numbers several months ago with the sole exception of productivity, which seems to be accelerating for nonfinancial corporations. The obverse of this is that the decline in noncorporate business productivity, as residually estimated, seems also to have accelerated in the most recent period. That explains why, when we bring the corporate and noncorporate sectors together, we get this modest increase in total nonfarm productivity. The problem with that number is that it cannot explain the rise in profit margins, whether we include only nonfinancial corporate margins or the broader margins where we add in the appropriate part of noncorporate earnings or noncorporate profitability. Of course, the problem in this context is our inability to price services appropriately; they have a substantial overlap with the noncorporate sector.

The question is, which data do we believe are the most accurate? The profit figures have to be reasonably accurate in the sense that they come out the same way no matter how we calculate them. The price data doubtless have biases in them, but there is no evidence that the bias is changing significantly. Clearly, if prices are going up very modestly and profit margins are

increasing, we are forced algebraically to conclude that consolidated unit costs are going nowhere. If that is in fact the case, it is inconsistent with the nonfarm productivity data, and we have to choose which data we believe are best describing the current state of the economy. I suspect that we ought to be able to find out, hopefully within a year or two, whether this issue is ultimately resolved by the closing of the statistical discrepancy or by some extraordinary discovery of new data that create a more reasonable set of real noncorporate gross product.

Despite the absence of indications that inflation may be accelerating, signs are beginning to emerge that suggest we may finally be running out the string. The major sign relates to compensation per hour whose relatively subdued behavior I have attributed largely to job insecurity, a view that is subject to some controversy. I recognize that the econometric analyses are of dubious value on this issue, and I am sometimes inclined to suggest that instead of trying to find out what people believe by using detailed and indirect econometric analysis, we might try something terribly novel. We might ask them. When people are asked whether they fear that they are going to lose their jobs, and the same question is asked of basically the same sample year after year, we find that the proportion of people responding in the affirmative doubles from the recession period of 1991 to the mid-1990s, leading one to conclude that people mean what they say. But survey respondents are now saying that they are not as nervous as they were earlier; that is, the survey results are beginning to tilt in the direction of less concern as tight labor markets have persisted for a now protracted period of time. Indeed, one statistical estimate that had been significantly subdued throughout this period--namely, the measure of the number of people who voluntarily leave their jobs to seek other employment--is finally showing some signs of moving up the way it did in past periods. So, the notion that the insecurity issue is beginning to wane is getting some statistical verification.

Leaving aside the NAIRU and other issues involved in evaluating unemployment and labor force participation, we still have the problem of determining how many people are left in the noninstitutional population who want to work. That number is diminishing at a very rapid pace. The number of people who say they want a job but are not currently seeking one, which by definition puts them out of the labor force, has gone down 1-1/2 million, as I recall, in the last three years. This implies a fairly dramatic squeeze on the potential labor supply in the sense that an annual increase of 2 percent on average in both payroll and household employment in recent years is matched against growth in the working-age population that is half that rate. We do not have to go through a Phillips curve analysis, nor any other analysis, to conclude that when we run out of a product--in this case labor--its price goes up. At some point something has to give. The process still appears to be at a very early stage, and it is moving slowly. It may well be that the real significance of the UPS strike is that we are beginning to see a reversal of what had been a dramatic development: The air traffic controllers' confrontation with President Reagan set in motion a fundamental change in policy for this country more than 15 years ago. It is conceivable that we will look back at the UPS strike and say that it too signaled a significant change. I don't know whether that is true or whether that impression may change when we look at the data after all the publicity spins stop in the next 48 to 72 hours and we begin to learn what actually happened. But it is clear that something is going on in that area.

The important question that we have to ask ourselves is whether the fairly significant pickup in effective demand in the last six weeks or so will moderate before the pressures on wages begin to work their way through to prices. As Mike Prell pointed out, the crucial element in the near-term outlook for economic activity is the inventory situation. Certain conclusions probably are not unreasonable. The first is that we do not need any liquidation of inventories for the

economic expansion to slow; all we need is slowing in the rate of increase. It is quite conceivable that we can have, as we have had over the last six months, a very dramatic increase in inventories that is wholly voluntary, wholly the result of inventory-sales ratios having gotten too low and bottoming out. Obviously, if we have an inventory-sales ratio that declines and then flattens out, inventory investment surges at that particular point. But there is also a concern that we can still have very low inventory-sales ratios even after the big surge. This, indeed, may result in a view that there is no inventory overhang in any meaningful sense. However, as I said, the rate of increase in inventories merely has to moderate to slow the economy, meaning that the rate of inventory investment falls.

I think the inventory investment forecast in the Greenbook has an important element of credibility because at this stage neither the new orders data nor any anecdotal reports suggest serious inventory level problems. But the numbers do seriously suggest that the inventory investment level is excessive. To get a sense of whether there is something illusory in the Greenbook forecast, I have converted the inventory investment numbers to factory value, as distinct from chain-weighted deflated book value. If the physical quantity of goods does not change but merely moves from the factory level to the retail level, the constant dollar value of the inventories rises. The reason is that as goods move from one sector of the distribution channel to the next, value is added and income is created. For national income accounting purposes, it is indeed the book value where held, properly deflated, that is relevant to the income and product account calculations. But to measure whether inventories are excessive or not, we don't care where the units are held in the distribution stream. Whether automobiles are in inventories at the dealer level, at the factory level, or somewhere in the pipeline is of no significance to the level of assemblies but it is to GDP.

In any event, stripping out the markups in the distribution process, the factory value data for inventory investment for the first half of 1997 are very significantly above the peak levels of 1994 and early 1995, whereas that is not true for the deflated NIPA total book value data. I don't know whether you can see this chart from where you are sitting, but the black bars are what the official NIPA data show, and they are at about the same level as they were in 1994. However, if you look only at factory value, it is up close to the NIPA data in the first half of 1997, but it was much lower in 1994 because a substantial part of those earlier data reflected markups and not increased numbers of units.

Secondly, Cathy Minehan raised the issue as to whether, in fact, the inventories were produced by domestic firms or were imported. With the caveat that the data themselves are very dubious, the staff here has tried to associate imports with various types of inventories in order to estimate separate domestic and foreign-originated inventories. Overall, the levels have tended to run about one-fourth imported, three-fourths domestically produced. Through April and May, the proportion of inventory investment that was imported was about one-fifth--or less than normal. In that sense, we are not getting any evidence, at least in these data, suggesting that all the inventory buildup is coming from imports, which, if it were the case, would mean that the impact of their adjustment would be on foreign producers and not on domestic production. The NIPA inventory investment data appear to derive disproportionately from domestic production. Hence, the impact of the slowdown in inventory growth on the GDP shown in the Greenbook is credible.

If we find instead that final demand is significantly higher and that we get further strong inventory accumulation from either a wealth effect or factors that are related to inventory investment, we will not get a slowdown in the growth of GDP. In that case, we will face some serious policy questions. My judgment is, as we have discussed before, that we will have no choice

but to tighten because if we do not, the risks will be too high, no matter whether one is in box A, B, C, or D of Peter Fisher's little structure. So, I think we need to recognize at this stage that there may be factors that could cause inflation to pick up.

Let me add something parenthetically that was hinted at but not put on the table. A very big part of the consumer price index is related to property values. You will recall that about 19 percent of the CPI is imputed owners' equivalent rent. Rents are tied to property values. Rent as a ratio to the market value of single-family homes has been falling for quite a long period of time. And the little pop that we saw in the last CPI may be an indication that this ratio is stabilizing or moving back to a somewhat higher path, which suggests that the services CPI may look a little stronger in the near future than we have seen of late. We are going to have to make a judgment as to whether we should look at property-value-related prices somewhat differently from prices that are related in effect to income flows. I have raised this issue before, but we never really have confronted it because the issue has never come up with respect to a question of monetary policy. I would not be surprised if what we encounter is a CPI that looks a lot stronger but one where the rise in inflation will be very narrowly concentrated in these property-value-priced areas. Commodity prices could be going down, other prices could be going down, and these prices could be going up. What should we be looking at? That may well prove to be an interesting question.

In summary, my general view has not basically changed. As I see it, the real federal funds rate, as Don Kohn pointed out, is sufficiently high that we need not be concerned that monetary policy is out of sync at this point or that it is far off from where we will want it to be in any event. And with disinflation probably still going on, there is very little reason to move today, as has been the case for a number of meetings. Nonetheless, as many of you have argued, and I think quite correctly, the risks are on the upside and there also is little reason to discard the

asymmetric directive toward tightening. Nothing out there of which I am aware suggests that the underlying pressures are very different from what they have been for quite a long period of time. President Boehne.

MR. BOEHNE. I agree with your "B" asymmetric proposal.

CHAIRMAN GREENSPAN. Governor Rivlin.

MS. RIVLIN. So do I.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. I agree as well.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. I accept your recommendation.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I accept your recommendation as well.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Me too.

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. I accept, Mr. Chairman.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I agree.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Agree.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Agree.

CHAIRMAN GREENSPAN. President Jordan.

MR. JORDAN. Agree.

CHAIRMAN GREENSPAN. Governor Meyer.

MR. MEYER. Agree.

CHAIRMAN GREENSPAN. Governor Phillips.

MS. PHILLIPS. Agree.

CHAIRMAN GREENSPAN. Has anybody been left out?

MR. MELZER. I can accept your recommendation, Alan. I will not say much more other than to express the wish that we had the groundwork in place to lock in these lower inflation rates. I do not think we have. It would be an excellent time to act opportunistically, as I have said before. I worry a little about whether there will be a defensible rationale that will permit us to act before inflation actually starts to rise. That is going to be a challenge.

CHAIRMAN GREENSPAN. I think it is going to be difficult. The reason is that the longer we are in a period where the economy remains exceptionally tight and price inflation continues to go down, the more difficult it will be for us to make a credible case for a policy tightening move, indeed around this table let alone how we explain it to everybody else.

MS. MINEHAN. Just one last question because you raised the issue in your commentary. We have noticed an uptick in housing-related components of the CPI. There also are increases in other asset prices that people are worried about, obviously the stock market, nonresidential real estate, and so forth.

CHAIRMAN GREENSPAN. Remember that the nonresidential real estate sector shows up in the CPI for hotels, lodging, and--

MS. MINEHAN. Yes, exactly. I probably am asking the same question that you were posing: What do we do with monetary policy when there is no inflation but asset prices are booming?

CHAIRMAN GREENSPAN. That is the question that I raised in a speech just before the sentence in which I expressed concern about how we will know when we encounter irrational exuberance.

MS. MINEHAN. Yes, in your AEI speech.

CHAIRMAN GREENSPAN. We have not been able to address that issue because I don't think we know how to handle a problem where we have one instrument and conflicting goals. What do we do? What should the Japanese have done when confronted with a very benign product price environment and rapidly escalating asset prices?

MS. MINEHAN. Hindsight tells us to prick the bubble sooner, but how does foresight tell us we have a bubble?

CHAIRMAN GREENSPAN. That was the context of that speech, and the state of my knowledge, at least, has not gone beyond that. I do not know what to do.

MS. RIVLIN. It had some success.

CHAIRMAN GREENSPAN. Temporarily. President Moskow.

MR. MOSKOW. Mr. Chairman, I accept your recommendation. I was very interested in your analysis of inventories, and I hope you will distribute your comments to the Committee so we can look at it more carefully.

CHAIRMAN GREENSPAN. Certainly. Does anybody else want to say anything? Okay, would you read the directive again. [Laughter]

MR. BERNARD. I will be reading from page 13 of the Bluebook, and then coming back to page 12 for the last sentence. The first sentence, then, is under the "New Alternative" heading on page 13: "In the implementation of policy for the immediate future, the Committee seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 5-1/2 percent." Then, moving just below that to the "Current Wording" section for the second sentence: "In the context of the Committee's long-run objectives for price stability and sustainable economic growth, and giving careful consideration to economic, financial, and monetary developments, a somewhat higher federal funds rate would or a slightly lower federal funds rate might be acceptable in the intermeeting period." Finally, to catch up with the last sentence on page 12 under the "Standard Version" heading: "The contemplated reserve conditions are expected to be consistent with moderate growth of M2 and M3 over coming months."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman McDonough	Yes
President Broaddus	Yes
President Guynn	Yes
Governor Kelley	Yes
Governor Meyer	Yes
President Moskow	Yes
President Parry	Yes
Governor Phillips	Yes
Governor Rivlin	Yes

CHAIRMAN GREENSPAN. The next meeting as you all know is the 30th of September. There are no topics for the luncheon today because Bob McTeer has a 2:15 p.m. flight. [Laughter]

END OF MEETING