

**Meeting of the Federal Open Market Committee on  
September 16, 2003**

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, September 16, 2003, at 9:00 a.m. Those present were the following:

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

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

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

Mr. Reinhart, Secretary and Economist  
Mr. Bernard, Deputy Secretary  
Mr. Gillum,<sup>1</sup> Assistant Secretary  
Ms. Smith, Assistant Secretary  
Mr. Mattingly, General Counsel  
Ms. Johnson, Economist  
Mr. Stockton, Economist

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

Mr. Kos, Manager, System Open Market Account

Mr. Hambley, Assistant to the Board, Congressional Liaison Office, Board of Governors

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

Messrs. Clouse, Kamin, and Whitesell, Deputy Associate Directors, Divisions of Monetary Affairs, International Finance, and Monetary Affairs respectively, Board of Governors

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

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

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

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

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

Mr. Bullard, Vice President, Federal Reserve Bank of St. Louis

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<sup>1</sup>Attended portion of the meeting relating to the discussion of the August 12, 2003, minutes.

**Transcript of the Federal Open Market Committee Meeting on  
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CHAIRMAN GREENSPAN. Good morning, everyone. I'd like to point out before we get started that today is the last FOMC meeting for Gary Gillum, who as you may know has been a member of the Secretariat for the past fifteen years and is completing forty years of service in government, twenty-three of them at the Board. I was informed very late in the game that he is the only economist in the Federal Reserve with a degree in metallurgy. [Laughter] And when I think of all of the questions I've had on metallurgy! [Laughter] I'm actually not joking. I had this big fat book on the shaping and making of steel; it was so large that if you could lift it, you'd win a prize—and here we had a resource of which I was never even aware. The Federal Reserve, I think, is startling in all respects. In any event, Gary, we wish you well in your new endeavors. [Applause] If you get back into metallurgy, let me know.

The first item on the agenda is the minutes. This is usually boilerplate, as somebody said last night, but it isn't this morning. We have to discuss a proposed addition to the minutes, which relates to the special session that we had last evening. I call upon President Parry.

MR. PARRY. Mr. Chairman, with regard to the first sentence of the proposed addition, it seems to me that in the past we've referred to the objectives of fostering economic growth and price stability as long term. So it would make some sense to stay with language that refers to our objectives as being long term.

CHAIRMAN GREENSPAN. I know our objectives are for sustainable long-term economic growth and price stability, but is either objective itself only long term? I think each goal is ongoing. "Long term" may mean we're not always focused on our objectives but only in the longer term. Is that what you mean?

MR. PARRY. No. I don't think that's what we meant in the past when we've used that language. I think we knew that we couldn't achieve our objectives in every instance, but they were set out as long-term objectives.

CHAIRMAN GREENSPAN. Well, maybe I'm splitting hairs. But an objective is by its nature something that one seeks. We're always seeking long-term sustainable growth.

MR. REINHART. Mr. Chairman, "long-term" could be moved to the end of the sentence.

CHAIRMAN GREENSPAN. That's what I'm trying to get at. I'm just being a nitpicker.

MR. PARRY. No, that's fine.

MR. POOLE. There's language in the Bluebook on page 10 that we've used for a long time.

CHAIRMAN GREENSPAN. Well, it could be wrong! [Laughter]

MR. POOLE. There's something to be said for consistency.

CHAIRMAN GREENSPAN. But is it a virtue to be consistently wrong?

MR. POOLE. The language in the Bluebook on page 10 under "directive wording" is actually broken into two parts. The second sentence starts "To further its long-run objectives," which refers to the objectives specified in the first sentence.

CHAIRMAN GREENSPAN. Well, I'm going to appoint a committee to relook at those two sentences! [Laughter] Does anyone disagree with what I just said?

MR. GRAMLICH. Well, are you proposing to put economic growth and price stability in the long run at the end of the sentence or are you proposing not to have it at all?

CHAIRMAN GREENSPAN. I think our ongoing, unchangeable objective is to seek long-term stability, defined in terms of prices and other things.

MR. GRAMLICH. Right, so I think what you're proposing is "a fostering of sustainable economic growth and price stability in the long run," which as President Poole points out is not the language we've used up until now.

CHAIRMAN GREENSPAN. It's not standard. I know exactly what it is that we want to do. I'm not so sure what the appropriate English terminology is.

MR. BERNANKE. Is "fostering" used in the sense that we are trying to create a movement toward an objective, such as in the case of foster parents?

CHAIRMAN GREENSPAN. Yes. The substantive point is that an objective is an absolute and invariant to the issue of time. And that objective is to seek sustainable economic growth over the long run. Now, I don't know what the appropriate wording—

MR. KOHN. Mr. Chairman?

CHAIRMAN GREENSPAN. Yes.

MR. KOHN. I could complicate things further by reading the Federal Reserve Act. [Laughter] That says that we should keep long-run growth of monetary and credit aggregates commensurate with the economy's long-run potential to increase production so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates. It doesn't say to promote those goals over the long run. It just says to promote those goals.

CHAIRMAN GREENSPAN. No, I admit that there is a problem in the wording of the Federal Reserve Act as well.

MR. FERGUSON. Mr. Chairman, I would suggest, given this discussion, that we not change the wording.

MR. PARRY. I agree.

CHAIRMAN GREENSPAN. I think for the moment the answer is that we should review it but not change it here. It doesn't add to anything except the level of confusion. Is that acceptable? President Minehan.

MS. MINEHAN. I actually didn't raise my hand, and I'm certainly not going to now! [Laughter] But I think this is proof positive that editing by nineteen people is really too hard to do. So I'm happy with this, Mr. Chairman.

MR. FERGUSON. May I raise my hand in lieu of President Minehan?

CHAIRMAN GREENSPAN. Well, what do you want to do by raising your hand?

MR. FERGUSON. I know I'm not being very helpful—and I agree that we can't edit as a group—but I have a slight concern with the last sentence because of the words “members recognize that going forward they should consider some changes.” I'd like to propose that we say that the Committee “may well consider some changes.” If we tell the public that we should consider some changes, my expectation is that Michelle's phone will ring a lot, we'll be questioned almost incessantly on exactly what changes we are considering, when we are going to introduce them, and whether we creating another subcommittee to look at this.

CHAIRMAN GREENSPAN. There's also another consideration. Suppose we conclude that we don't think any changes are necessary?

MR. FERGUSON. Right. So I would change that to “may well consider” because we may well do that. We're a lively, vibrant group.

CHAIRMAN GREENSPAN. Does anybody object to that?

MR. MOSKOW. Just on that point, Mr. Chairman. Another way of phrasing that sentence would be not to commit to anything but to say that on an ongoing basis we would

consider changes. That way it doesn't appear as if there's one distinct time when we're going to be recommending some changes.

MR. FERGUSON. Michelle has given me some wording here that may help. It reads: "Nonetheless, members recognize that going forward they could consider changes that might improve the Committee's communication of its assessment of the economic situation." It's the same sort of concept. I don't have a strong view about the precise wording. Michelle's words seem absolutely fine to me.

CHAIRMAN GREENSPAN. Does that seem adequate to you?

MR. MOSKOW. Say it again.

MR. FERGUSON. Michelle, would you read it?

MS. SMITH. Okay. "Nonetheless, members recognize that going forward they could consider changes that might improve the Committee's communication of its assessment of the economic situation."

MR. GUYNN. I think "may" would be better.

MS. SMITH. "May"?

MR. FERGUSON. Yes, I think "may" is a little better.

MS. BIES. But I rather like President Moskow's approach that we should be reassessing our communication policy as part of our normal procedures. That's what I read in his suggested wording. We talked about a wide range of possibilities last night, and we may not come out with all the changes at once. I like that approach.

CHAIRMAN GREENSPAN. I agree with that.

MR. FERGUSON. Why don't we say "may from time to time consider," which conveys that point?

CHAIRMAN GREENSPAN. Yes.

SEVERAL. That would be good.

MR. FERGUSON. So it's Michelle's sentence with "may from time to time consider changes," etc.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. On this same point, I'd like to throw out an option to consider, though I'm not sure that I'm even in favor of it. I think it's going to become generally known that we're going to continue our discussion of communication issues in January. What I worry about is that this paragraph coming out in the minutes released on Thursday is going to generate a whole lot of questions. When are they going to do it? What are they thinking about? Why is this here?

CHAIRMAN GREENSPAN. That's what keeps Michelle employed!

MR. POOLE. I understand that. The question I'd raise is whether we couldn't diffuse some of the sense of immediacy—the expectation that we might make some changes at the next meeting or some time relatively soon—by simply saying that the Committee agreed to continue this discussion at its January meeting. That would take the immediacy out of it.

CHAIRMAN GREENSPAN. Well, that may restrict us. We may actually want to make changes before January, so I'm not sure your proposal is a good idea. Look, press questions do not strike me as an insurmountable barrier for us to move forward in what we're trying to say on this issue. If there were no questions, that would mean people were not interested in what we are doing. So let's take it as a positive if they ask a lot of questions. Let's use this particular discussion as a definitive example of why it is not in fact possible, as Cathy Minehan says, to edit anything serious with nineteen people. The length of this is maybe one-twentieth of a

communiqué. It's scary. Let me ask if what we have worked out here is acceptable. Does anyone want it reread? What is the Committee's wish?

MR. GUYNN. Yes. Could you reread it with Roger's final edits?

CHAIRMAN GREENSPAN. Why don't we just read the final sentence.

MS. SMITH. "Nonetheless, members recognize that going forward they may from time to time consider changes that might improve the Committee's communication of its assessment of the economic situation."

MR. FERGUSON. There's a general nodding of heads.

MR. GUYNN. Yes.

MR. MOSKOW. That's a good solution.

CHAIRMAN GREENSPAN. Okay, why don't we wrap it up? Would somebody, therefore, like to move approval of the minutes?

MR. FERGUSON. I'll move approval of the minutes.

CHAIRMAN GREENSPAN. Without objection. Dino, you're on.

MR. KOS.<sup>1</sup> Thank you, Mr. Chairman. I'll be referring to the charts that are on the table in front of you. During the intermeeting period, fixed income and equity prices were first driven by growing expectations of a strong pickup in the global economy in the second half of 2003 and into 2004. Global yields and equity prices both rose during August. Those expectations have been tempered somewhat in recent days because of some disappointing data in the United States and as questions about the sustainability of the recovery became more widespread.

The top panel on page 1 graphs the U.S. three-month cash deposit rate in black and the three-month deposit rate three, six, and nine months forward in the dashed red lines. The three-month deposit rate nine months hence continued to rise in the intermeeting period to nearly 2 percent after the ISM report on September 2. The wide gap between that rate and the cash rate was consistent with expectations in the futures markets at that time suggesting a tightening of policy by next spring. However, after comments by Governor Bernanke and other Committee members on September 4 and the weaker-than-expected employment report on September 5, forward rates fell sharply, and adjusting for term premiums, that took out most of the

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<sup>1</sup> The materials used by Mr. Kos are appended to this transcript (appendix 1).

expected tightening that had earlier been priced into the forward curve. In a similar pattern, Treasury yields initially rose after your August 12 meeting, despite the Committee's announcement that policy would likely stay accommodative for "a considerable period." The two-year note yields, shown in the middle left panel, pierced 2 percent in early September. Around that time, some market commentary briefly raised concerns about nascent inflationary pressures, but those concerns proved to be short-lived, and the two-year note yield fell sharply after the employment report. This morning it was trading at about 1.6 percent. The ten-year yield traded around the pivot point of 4½ percent for most of the period before declining to a range around 4¼ percent. The strong technical factors that had accelerated the upward move in yields, especially the hedging of mortgage securities, ran their course, and trading conditions were somewhat less volatile in recent weeks.

A separate issue that could affect Treasury yields prospectively is supply. With the deteriorating fiscal situation, the Treasury has had to increase the frequency and size of auctions to finance the growing deficit. This could become the subject of increased market focus, especially if it should be coupled with a weaker dollar. Finally, the bottom panel on page 1 depicts the breakeven inflation rate, calculated by subtracting inflation indexed yields from nominal yields. The red line graphs the ten-year breakeven rate and the blue line the five-year rate. Both have stabilized in the 2 to 2½ percent range after rising earlier this summer.

For the euro area, the top panel on page 2 graphs the three-month deposit rate in black and the three-, six-, and nine-month forward rates in the dashed green lines. With the more upbeat sentiment about the economic outlook in the United States early in the period, the nine-month forward rate rose in much the same pattern as its U.S. counterpart. Like the U.S. nine-month forward rate, it fell back in the past two weeks, typically responding more to U.S. data and suggesting that market participants still view a U.S. recovery as key to better European performance. Long-term bond yields also reflected this improved sentiment about the global outlook. The middle panel graphs the ten-year yield of U.K. gilts and yields on ten-year securities of the four major euro-area governments. All had risen sharply since their June lows before edging down in recent days—again as questions about the sustainability of the recovery emerged. Finally, the bottom panel graphs a sample of both developed and emerging country equity markets since May 1. All have appreciated sharply, especially markets, such as those in Korea and Taiwan, that are perceived to be more leveraged to the global economy. Whereas changes in global bond yields seem to reflect a reappraisal of the intermediate outlook, equity markets have continued to rise and, therefore, are perhaps more vulnerable should disappointing news arise.

Interestingly, among developed markets, the strongest equity market in recent months has been Japan's. As shown in the top panel of page 3, the Nikkei and TOPIX indexes have risen about 30 percent since May. Overnight the Nikkei rose more than 1½ percent. The bank sub-index has risen even more, as perceptions about the global recovery grew and the bailout of Resona Bank earlier this year removed what had been very negative sentiment toward the financial sector. That rally

continued overnight, and bank stocks rose another 8 percent. With Japan reporting somewhat better economic data in recent weeks and months, the JGB market—which even by Japanese standards had reached extremely low yields in mid-June—began to be repriced to reflect that stronger growth. By August some market participants even began to talk about the Bank of Japan (BOJ) moving away from its zero interest rate policy at some point next year. The middle panel graphs two snapshots of the yield curve—as of June 12 and September 12. The entire curve moved sharply higher and steepened in that three-month span. With yields rising that quickly, the BOJ moved in recent weeks to calm the markets in two ways. First, in late August, the BOJ conducted two operations involving long-term repos with maturities of nine months in an effort to signal that the market was getting ahead of itself. Both operations were conducted at 4.5 basis points. Second, Governor Fukui on September 3 offered reassuring words that the policy stance would be maintained and that in his view long-term yields had risen too far too fast. As shown in the bottom left panel, the Bank of Japan's current account balances remained at the upper end of its target range of 27 trillion to 30 trillion yen, well above requirements of about 6 trillion yen. In recent days, Japanese money markets have stabilized somewhat. However, the steps taken by the BOJ may have established a new minimum benchmark that the market will expect the next time the BOJ's commitment is tested. That may have raised the hurdle for an exit strategy whenever that point may come.

There is little new to report regarding the yen's movements against the dollar in exchange markets. The rate continues to be trapped between 119 and 116. Commercial and speculative flows again have tended to place upward pressure on the yen. However, continuing to counteract those pressures was aggressive intervention by the Ministry of Finance. Since late August—and including the activity overnight—the Japanese authorities have purchased about \$41½ billion in the intermeeting period, most of it in September. That has raised their total intervention for the calendar year to date to \$113.7 billion. Having established a firm line in the sand at about 115 to 117 yen, the Ministry of Finance has its own exit strategy to consider. Various analysts expect the pace of intervention to be maintained until the upcoming LDP elections and possibly even until the general elections that are expected to follow later this fall.

Turning to page 4, the Treasury and mortgage markets have been grappling with the problem of chronic settlement fails, a subject you've heard about in recent weeks. Let me spend a few minutes on this issue. As a starting point, fails are a routine feature of the landscape and are usually caused by miscommunications about the details of a trade in the confirmation and settlement process. Typically a fail to deliver is cured after a day or two. The party that has been failed to has use of its cash an extra day. A fail that lasts longer than a few days can lead to credit exposures if the price of the security has moved in the interim. For that reason, the SEC applies capital charges to aged fails. Elevated and chronic fails have the potential to diminish liquidity in the market if market participants step back from trading because of uncertainties about settlement, concerns about credit exposures, or concerns about the capital that they may need to allocate for aged fails. The top panel on the page graphs

aggregate fails in Treasuries and Treasuries only for trades cleared through the Fixed Income Clearing Corporation, or FICC. Many of you will know that organization by its predecessor name, the GSCC. Although the level of fails varies, it was relatively low until May. That level rose sharply as the short base grew—particularly in the ten-year on-the-run—given the backup in yields and the demands to hedge other instruments with the ten-year Treasury. Typically, dealers will short Treasuries and deliver by borrowing that security from custodians and other securities lenders, including the Federal Reserve. Fails have been most concentrated in the ten-year note maturing in May 2013, as shown by the red bar in the top panel. That security continues to trade consistently at the fails rate in the specials market. Chronic fails in that ten-year issue reflect a sizable short base that has accumulated during its on-the-run life. The persistence of fails reflects, in part, the minimal cost of failure in the current interest rate environment and the correspondingly low incentives for holders of that security to make their supply available for lending. Although this situation has created disruptions in the back office, to date there has been no spillover that we can see into the front office. Recent weeks have witnessed reductions in fails in the aggregate and in the May ten-year issue. The trend is in the right direction but fails volumes remain high by historical standards and continue to be a matter of considerable market attention. The tightness across the specials market has resulted in a noticeable increase in borrowing from the SOMA securities lending program, as can be seen in the bottom panel. Unfortunately, SOMA's holdings of the May ten-year note in particular are meager, at only \$251 million, preventing the program from providing the relief that it might if our holdings were more sizable.

Let me turn briefly to the functioning of the fed funds market during the blackout in the Northeast on August 14 and 15. All in all, the fed funds market continued to function reasonably well for clearing purposes, but disruptions to payment flows caused by wire transfer problems at individual institutions were a source of some dislocation, primarily among foreign institutions. The top panel on page 5 graphs total Fed balances. As shown by the top red bar, on August 14 there was some borrowing at the discount window, mostly by one foreign institution that was short at the close of the wire. On Friday August 15 the Desk did a large \$20 billion RP and provided a very high level of excess reserves. But these reserves had a surprisingly limited effect on reducing rate pressures in the funds market—again, as it turns out, primarily because of a few foreign banks that were experiencing systems problems that prevented them from making payments. This can be seen in the shaded inset of the top panel, which shows the distribution of end-of-day Fed balances between foreign banks in red and all depository institutions in blue. Typically foreign banks have virtually no balances, given that the vast portion of their liabilities is nonreservable. On August 15, however, foreign banks as a group ended up with \$17.7 billion in Fed balances. More than \$15 billion of that was held by just two moderately sized foreign branches that were not able to make payments until late in the day, or not at all, and hence they absorbed much of the liquidity that the Desk injected that day. With that background, it is not surprising that the funds market on Friday was elevated, but rates never exceeded the primary credit rate that day despite all of these problems. Two institutions did borrow funds in the market at rates above

the primary credit rate on Thursday. They paid about 2½ percent for a total of \$1.4 billion. One was a foreign institution that did not have collateral eligible for borrowing at the discount window; the other was a domestic institution that we heard did not want to borrow from the window. Perhaps more significant for evaluating the effectiveness of the new primary credit facility, however, over \$7 billion was traded in the funds market at 2 percent on Thursday, indicating that the primary credit facility was acting as a ceiling for most institutions.

Finally, let me go back to a subject we looked at last time—currency growth—on which several Committee members had questions at the August meeting. The bottom panel updates the same chart shown last month and, as indicated, currency growth slowed sharply and suddenly this summer. It has shown a bit of a rebound lately, however. I should note that the last bar for August—estimated on the chart—has been finalized, and in that month currency actually grew at a 5.6 percent rate. Getting back to the reasons for the dramatic downward shift in currency growth, it was depressed in June and July because of exceptionally high foreign reflows on top of weak domestic demand. Foreign reflows have been fairly persistent for many months now from Latin American countries, acting as a partial offset to domestic demand. But this was compounded by large reflows from the Middle East despite the currency shipments to Iraq following the end of the major combat operations there in April. Again, that source of reflow has abated. In addition, our contacts among note dealers in Europe suggest that consumers in some countries—Russia, in particular—are more willing to hold domestic currency notes. As I mentioned a little while ago, domestic demand has shown a pickup in August from its recent sluggish pace and seems to have coincided with some signs of strength in consumer spending. As a result of the pickup in currency growth, we have returned to the market, purchasing securities on an outright basis recently for the first time since mid-May.

Mr. Chairman, in this period once again there were no foreign operations. In fact, this coming Monday, September 22, will mark exactly three years since the last U.S. intervention in foreign exchange markets and will extend what is already for this country the longest period of non-intervention in the floating rate era. I will need a vote to approve the Desk's domestic operations, and I'd be happy to take any questions.

CHAIRMAN GREENSPAN. On the chart showing the European ten-year government yields, why are the U.K. yields so persistently higher than those on the continent?

MR. KOS. I don't know that I can give you a single answer. In part it may be that the general economic performance of the United Kingdom has been better, so real yields are higher. Another possibility is that because there seems to be a 25 to 35 basis point difference—

CHAIRMAN GREENSPAN. It's a remarkably stable spread.

MR. KOS. Yes, and the fact that the United Kingdom has a 2½ percent inflation target whereas the ECB has a target of 2 percent or less may also account for the difference in yields.

CHAIRMAN GREENSPAN. I doubt it.

MR. KOS. I'm offering various explanations; you may think of them as a menu from which you can pick the ones you like.

MS. JOHNSON. May I have a choice? The United Kingdom is running a current account deficit. As the U.K. economy has outperformed the Continent, it has come to be a bit like the United States in worrying about its external situation and its external deficit. If a risk premium is built into the market for the possibility that the exchange rate will have to depreciate, that would push the long-term interest rate up.

CHAIRMAN GREENSPAN. It can't be the heavy mortgage borrowing because that's all floating, as I recall.

MS. JOHNSON. Right.

CHAIRMAN GREENSPAN. I like Karen's explanation better than yours. Yours may be true, but I don't—

MR. KOS. I'm happy to have assistance where I can get it!

CHAIRMAN GREENSPAN. Further questions? Yes.

MS. BIES. I have a question about your comments on borrowing at the window during the blackout and the one institution that didn't want to come to the window. Do you have a sense that we learned anything in terms of communicating to banks about the window? Are you comfortable that our system worked as planned?

MR. KOS. I'm pretty comfortable with the way it worked. I'm comfortable given that on Thursday—and for that matter on Friday—we didn't have a spike beyond 2 percent for the

most part, again except in the limited instances I cited. And we had a lot of trades that took place at 2 percent or just below 2 percent, so the primary credit rate did seem to act as a ceiling.

Obviously, for whatever idiosyncratic reasons, some individual institutions may have decided either that they couldn't or didn't want to come to the window. But that's just one of those data points that we may have to live with. On the whole, I think the discount facility did its job in capping the funds rate. Over time, as institutions get used to the new facility, we hope that the residual stigma on borrowing will fade even more.

CHAIRMAN GREENSPAN. Further questions? If not, would somebody like to move to ratify the domestic open market transactions?

MR. FERGUSON. I'll move to ratify the open market transactions.

CHAIRMAN GREENSPAN. Without objection, they are approved. Dave Stockton and Karen Johnson, please.

MR. STOCKTON. Thank you, Mr. Chairman. The data that we have received since the August Greenbook support our view that an acceleration of activity is under way. A pickup in the second half of this year has been a feature of our forecast since last January. But for the first time we can say that the expected improvement in the economy is based on some fact and is not just forecast. If anything, the data have, on net, been stronger than we had expected. Looking back, the economy was not so weak in the second quarter as was previously estimated; and looking forward, surprisingly strong readings on private spending have led us to revise up projected growth of real GDP in the second half of this year from 4 percent to 4½ percent. Even the components of the projected step-up in activity are roughly in line with our story. Consumers appear to be spending out of the considerable slug of disposable income that has been delivered through personal tax cuts; low interest rates are providing support to housing activity; and capital spending is poised to post a second large quarterly increase.

The skeptical among you could certainly be forgiven for asking, "Haven't we heard this before? Is this any different from 2002?" But there is an important difference. Nearly half the growth of real GDP that we experienced over the first three quarters of 2002 resulted from efforts by firms to stem the rapid liquidation of their inventories; improvement in the pace of final sales in that period was minimal. By contrast, the acceleration of activity this year has been more than accounted for by larger increases in final sales. Indeed, inventories have been drawn down sharply as

spending has picked up. Needless to say, this is a more auspicious configuration for future activity than occurred in 2002.

Obviously, the congruence of recent developments with our long-standing forecast of a second-half acceleration is heartening. But we aren't declaring victory yet. It's more like being pleased that your luggage has arrived with you on the plane to Katmandu for your trip to climb Mt. Everest. To be sure, the trip is off to a good start, but you probably shouldn't conclude yet that you will reach the summit. We are simply too early in the process to know whether we are on the front edge of a powerful expansion that will begin to erode the margin of excess productive capacity that has built up in the economy over the past three years.

There are basically four elements central to our projection that we will achieve and sustain above-trend growth over the next two years. First, monetary and fiscal policies provide a positive impulse to the growth of spending. Second, that impulse to spending boosts income, which feeds back to more spending through the multiplier effect. Third, the combination of more spending and higher output raises the demand for capital and, through the accelerator effect, boosts the growth of investment spending. Fourth, as the signs of sustainable growth become more convincing, there is a gradual improvement of business sentiment and some lifting of the restraint that we have seen on hiring and spending. Because all these factors operate simultaneously, no simple accounting of these influences is possible. But let me offer some impressions.

As I noted earlier, we are seeing clear signs that fiscal and monetary policy are providing a boost to growth. Although the pattern has been choppy, defense spending has contributed importantly to the growth of real GDP this year. Reductions in marginal income tax rates and advance-refund checks for the child tax credit no doubt help to explain the strength of consumer spending. Meanwhile, favorable financing conditions and improved balance sheets have supported interest-sensitive outlays in the household and business sectors.

But moving beyond this policy-induced push on spending, the picture is considerably murkier. For example, gauging current business sentiment is not easy. Judging from reports in the Beige Book and from our business contacts, the mood seems to have improved marginally. In 2002, many business people said that they simply didn't see any signs of improvement in underlying economic conditions, and they were quite emphatic in stating that the economists were crazy. While I wouldn't want to endorse that particular psychiatric evaluation of the profession, I'd have to admit that they were right about business conditions. The prevalent mood now seems to run between skepticism and guarded optimism, with less outright hostility to the view that conditions are improving. Still, it is clear that businesses remain cautious and are behaving accordingly. Inventories are under tight control, and firms have continued to be reluctant to add to their payrolls.

We may, however, be seeing some evidence of a greater willingness to engage in capital spending. Real spending on equipment and software was up about 8 percent at an annual rate in the second quarter, and the data in hand suggest to us an even stronger 16 percent gain in the current quarter. This may reflect some brightening of sentiment, but the fundamentals have been improving as well. In addition to the drop in borrowing rates, the partial-expensing provision is holding down the cost of capital. Moreover, business output, final sales, and cash flow have accelerated this year, and that also is likely supporting capital outlays.

However, to move more firmly onto a sustained path of above-trend growth, we will eventually need some help from the labor market. In our forecast, as the impetus to incomes from tax cuts fades, faster growth of employment and labor income more than fill the gap, sustaining relatively rapid growth of consumer spending. This part of the process is not yet in evidence. The biggest surprise we have experienced over the intermeeting period has been the weakness of the labor market. Private payrolls declined again in August, and initial claims for unemployment insurance have edged back up over 400,000 during the past two weeks. As a consequence, we have pushed off again the time at which we expect to see an upturn in hiring.

One should be careful not to exaggerate the extent to which the multiplier process depends on job growth. Large gains in output by definition result in large gains in income. To date, those gains are coming from faster growth of labor productivity and the income is flowing heavily to profits. Corporate earnings are boosting cash flow and likely are helping to finance some of the increases in capital spending. Moreover, heightened corporate profitability has provided a lift to equity prices, which in turn support business spending through a lower cost of capital and household spending through the wealth effect. Indeed, taking all of these channels into account, the propensity to spend out of capital income is only marginally smaller than the propensity to spend out of labor income. So the multiplier effect is attenuated but not eliminated when output gains are generated through faster productivity.

Still, I think that only limited comfort should be taken from that observation, largely because the recent configuration of the growth of output and productivity is not sustainable. Ongoing declines in hours worked and employment will be associated with a rising unemployment rate—a development that could at some point sour consumer attitudes. Even setting aside that possibility, increasing slack will eventually put downward pressure on inflation; with an unchanged funds rate, the accompanying upward pressure on real interest rates will have negative consequences for aggregate demand.

As seems so often to have been the case in recent years, interpreting developments on the supply side of the economy has been just as central to our forecasting enterprise as getting a good fix on aggregate demand. The performance of productivity over the past year has remained phenomenal. Over the year ending in the second quarter, productivity in the nonfarm business sector is estimated to have risen more than 4 percent—a pace that we think is likely to be matched or exceeded

in the current quarter. Moreover, the historical revisions to labor productivity released by the BLS after their incorporation of new estimates of hours worked point to larger increases in output per hour in both 2001 and 2002 than previously estimated. In light of these developments, we thought adjustments to our estimates of structural productivity and potential output were needed to better balance the risks to our forecast. In the end, we raised the estimated level of structural labor productivity by a cumulative 2 percent by the end of 2003, after accounting for a break in the series. We also increased the growth rate of structural productivity about  $\frac{1}{4}$  percentage point over 2004 and 2005 to  $2\frac{1}{2}$  and  $2\frac{3}{4}$  percent per annum respectively. Owing to a downward revision to the trend in the workweek implied by the revised data, our upward revision to potential output was slightly smaller.

There are several plausible explanations for the exceptional performance of productivity. For one, firms are likely using more fully and effectively technologies and capital that were introduced and installed in the late 1990s. The boom years may have masked inefficiencies that had built up. But in the more difficult circumstances of the past several years, firms have been under intense pressure to cut costs in order to improve the bottom line. Some of the gains may also be coming from developments at the industry level. Many startups and firms that entered new lines of business in the boom period never gained any traction and eventually folded their tents in the intensely competitive environment of the past few years, leaving the most efficient producers with a larger share of the market. Finally, advances in technology and organizational know-how are probably providing a bigger boost than we had previously recognized to the growth, and not just the level, of structural productivity. Hence, we nudged up further our estimates of the growth of multifactor productivity for the next two years.

With the upward adjustments we made to aggregate supply exceeding those we made to aggregate demand, we are forecasting both stronger growth of real GDP and a slightly higher output gap than in our August forecast, a gap that is not expected to be eliminated by the end of 2005.

As you know, current market expectations, as well as those of many professional forecasters, are that you will begin to tighten by the middle of next year. In contrast, we have assumed that the federal funds rate is held at its current level until the middle of 2005. On the surface, it might appear that the staff is assuming not only that the punch bowl will be left on the table after two years of partying but also that the central bank will be ladling out punch faster than fraternity brothers on pledge night! Needless to say, that is not how we view our policy assumption.

In our forecast, we expect the pressures on inflation over the next two years as more likely to be down than up, and thus there will be little urgency to begin the tightening process. The margin of slack in labor and product markets is expected to recede only slowly over the next two years. This reflects both our relatively optimistic outlook for the growth of potential output and our forecast that growth of real GDP will slow in 2005, when fiscal policy swings from a position of

considerable stimulus to one of slight restraint. Slack in labor markets should help to keep downward pressure on labor compensation. At the same time, the sustained strong uptrend in structural productivity should then translate those modest gains in labor compensation into minimal increases in structural unit labor costs. Barring some exogenous shock, it is difficult to envision any noticeable deterioration of inflation expectations. To us, these influences, taken together, seem a recipe for subdued inflation. In our forecast, headline CPI inflation declines from 2 percent this year to about 1 percent in 2004 and 2005. Core inflation edges lower over the next two years, and energy prices decline in line with expectations embedded in current futures prices. We believe the risks are comfortably balanced around that projection.

The mean Blue Chip forecast has an unemployment rate of 5¾ percent by the fourth quarter, very similar to ours but with CPI inflation remaining at 2 percent next year. Obviously, it is difficult for us to take a firm stand on the wisdom of our forecast relative to that of the Blue Chip. Their 2 percent CPI forecast is at the upper end of the 70 percent confidence interval around the staff projection—so their forecast is clearly a credible one. Of course, I'd also note that the lower end of the 70 percent confidence interval around our forecast includes a small decline in headline prices in 2004—so that outcome cannot be written off yet either. Karen will now continue our presentation.

MS. JOHNSON. Since the Greenbook forecast was completed, we have received additional data about the U.S. external sector—the figures for July nominal trade, August prices for internationally traded goods, and second-quarter balance-of-payments statistics. The nominal trade deficit in July was a bit smaller than we had anticipated, mainly owing to stronger exports. We were pleased to be a little surprised in the positive direction by exports, and we read the July data as consistent with our forecast that real exports of goods and services will rebound during the second half of this year after a very weak performance since the fourth quarter of last year. In July, both exports and imports of services continued their recovery from the contractions in spending on travel and related categories that we saw in the second quarter as a consequence of the war in Iraq and then the SARS outbreak. All in all, the changes to our forecast suggested by the July data are small and only slightly alter our view of real net exports in the near term. The prices of non-oil merchandise imports and merchandise exports both declined marginally in August. The decline in the price of natural gas from its previously elevated level continued to hold down prices for imported goods. The balance-of-payments data for the second quarter were also close to our Greenbook projections. Private portfolio inflows remained very strong in the second quarter, with especially strong demand for Treasuries and corporate debt securities. Nonetheless, official inflows picked up from their extraordinary first-quarter pace as intervention purchases of dollars increased. The one relatively weak spot on the financing front has been direct investment inflows, which have languished with the dearth of merger activity.

These data, along with those that became available over the intermeeting period, increased our confidence that the pace of economic activity abroad is accelerating and

led us to revise upward somewhat our outlook for the second half of this year and for next year. We see foreign financial conditions as reflecting positive developments across a range of countries and as contributing to the conditions that will support further strengthening of business and consumer spending. Stock prices moved up noticeably in most foreign countries since the August FOMC meeting, particularly in Japan and in some emerging-market economies. These price increases should ease some financial sector vulnerabilities by strengthening the balance sheets of Japanese banks and lessening somewhat problems at pension funds and insurance companies abroad. Higher share prices should lend support to domestic demand through household wealth effects and business willingness to invest. Yields spreads of emerging-market sovereign bonds narrowed as well, reflecting an improved access to capital more generally in several of these economies.

Market participants have interpreted the stronger signals of recovery as implying no likelihood of further monetary easing by the major foreign central banks. For example, near-term futures curves have priced out expectations of additional cuts that, in some cases, were there earlier in the summer. We generally agree with this inference and have incorporated into the September baseline forecast a prolonged period of unchanged official rates. Nevertheless, market participants may be expecting tighter conditions to emerge sooner than we—or the relevant central bank—now envision. The Bank of Japan has taken action with respect to the tenor of some of its discount and repo operations in an effort to reinforce the view that it will not be raising the overnight rate anytime soon.

Although the more optimistic tone of financial markets is shared by some improvement in confidence readings and survey results, hard data on actual production and spending rebounds remain limited. Some third-quarter figures for production in emerging Asia are encouraging, and we have revised up our forecast for developing Asia from 4½ percent to about 6½ percent for the second half of this year. To be honest, that revision reflects in part the fact that second-quarter declines in those economies most damaged by the SARS outbreak exceeded our expectation and set the stage for a somewhat stronger rebound. The emerging-market economies in Asia should also benefit from gains in the global high-tech sector and from the recovery projected for the U.S. economy. They stand to benefit as well from the strength of domestic demand in China and from spillovers from China to its trading partners, as China has increasingly become a source of net trade stimulus to its Asian trading partners, including Japan.

We see the Latin American emerging economies, particularly Mexico, and the other industrial countries as poised to recover as well, although less vigorously than emerging Asia. Broadly supportive monetary conditions and fiscal stimulus in a few cases should support some acceleration in domestic demand. The strength of activity in the United States will be particularly important for Canada and Mexico. Although we have projected only a gradual acceleration in euro-area real GDP to rates of about 2½ percent by the second half of next year, we expect euro-area domestic demand to grow somewhat faster, reaching nearly 3 percent in 2004:H2.

Overall we see a global recovery that is somewhat unbalanced, with momentum concentrated in the United States and the Asian emerging-market economies. But most of the major regions of the global economy should benefit from the spillovers from these regions and from more-favorable global market conditions. Of course, one consequence of relatively strong income growth in the United States is a further widening of our external deficits, with the current account deficit on track to reach about 5½ percent of GDP by the end of the forecast period.

In addition to the data already mentioned, since the Greenbook was distributed we have learned about some progress with respect to Argentina's negotiations with the IMF. An agreement was reached and Argentina eventually made the payment that was due on September 9, thereby avoiding the problems that would have followed from a technical default. The program includes a commitment to a primary fiscal surplus of 3 percent of GDP in 2004 and greater independence in the implementation of monetary policy going forward. However, several of the contentious issues that had delayed the negotiations were resolved only in general terms, with specifics to be determined later. That concludes our prepared remarks. We'll be happy to take questions.

CHAIRMAN GREENSPAN. I notice that consumer spending in the first part of September seems to have sagged from the August levels. We know that motor vehicle sales came off their hyper highs of the latter part of last month; and while the data released this morning on chain store sales are not weak, sales clearly slowed recently. Since we have fairly explicit federal government tax adjustments day-by-day through the months of July and August and into September, do we have enough information at this stage to infer the marginal propensity to spend from the reduced withholding and the two large payments, the childcare credit and the refunds?

MR. STOCKTON. I think the answer to that is "no" in the sense that, while we could do a numerical calculation, I don't think it would convince anybody that what we were estimating was necessarily the marginal propensity to consume out of those monies.

CHAIRMAN GREENSPAN. What would you call the relationship between the tax reductions and spending?

MR. STOCKTON. What we've seen, obviously, is a very significant jump in disposable income that, as one would expect, was not matched fully by an increase in consumer spending of the same magnitude in July. But just because the amount spent of that increased disposable income was 50 percent or a bit more, I don't think we'd say that it is a measure of the marginal propensity to consume out of those tax cuts. As you know, Mr. Chairman, in the research on the 2001 tax cut and even the tax change in 1990-91, there is still some academic controversy regarding the propensity to consume. We took a stand in 2001 that the tax cuts would be spent. I don't know whether they were or weren't, but we think the data lined up pretty well with our forecasts in that period. We took a stand once again this year that the tax rebates and the addition to disposable income would show up as increased consumer spending, and that has been the case thus far. So we're taking from that experience the belief that the broad construct of our story is in the right ballpark. Some people argued that the bulk of the tax checks would just go straight into savings and would not really show up as spending. We didn't think that was going to happen, and we don't think it has happened—though given the noise in the data, one can't necessarily be sure.

CHAIRMAN GREENSPAN. It is true, however, that the big cash flow effect from the tax cut was in July and August and not in September. Is that correct?

MR. STOCKTON. The rebate checks were mailed in July and August.

CHAIRMAN GREENSPAN. I'm really raising the question of whether the weakening in sales in September is a coincidence or possibly a reflection of that phenomenon.

MR. STOCKTON. I think that would be something to monitor. The chain stores sales have softened a little, but the indicator content of those sales is not huge. You're right that motor vehicle sales through the first ten days of the month appear to have dropped back from the

August pace, but they're stronger than the estimate we had written down in this forecast and still seem to us to be suggesting quite good numbers.

CHAIRMAN GREENSPAN. We were getting sales at a 17.2 million annual rate in July. That's the total of autos and light trucks. They were 16.3 in the previous couple of months.

MR. STOCKTON. Right, and we had penciled in 16.1. So we're taking that recent higher sales pace as potentially a positive innovation to our forecast.

CHAIRMAN GREENSPAN. So what you're basically saying is that there has to have been a big increase in personal saving for July, if I can put it that way, and that obscures whatever effect one can pick up from the tax cut?

MR. STOCKTON. On the point you're raising about whether or not the effect of the higher cash flow from the tax cuts begins to peter out, I think we're going to have to watch spending carefully to see. As I indicated in my remarks, while we don't really expect any significant strength in the labor markets to occur until next year, we do expect to go from declines in employment to some small increases by the end of this year.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Dave, you said one thing about productivity that puzzled me a little. You were talking about the apparent huge burst in productivity recently. The argument was that there are some incentives to raise productivity, so firms have been doing it. Comparing now with the late '90s, labor was impossible to find—according to everybody who came and talked to us—in the late '90s. There was a chronic labor shortage. Now the reverse seems to be true. So it would be a little puzzling to me if a shortage of workers were the reason productivity would rise now. One would think productivity would have risen in the 1990s, when firms couldn't find

workers and had to make do. Now there are workers all over the place. Have your people thought about this issue at all?

MR. STOCKTON. There are workers all over the place now. But perhaps in the late 1990s firms were simply spending a lot to increase their capital stocks in order to overcome that labor shortage—investing in computer equipment, networking equipment, and so forth—without fundamentally reorganizing their production processes or the way they did business. The pressures in that period were on expansion and sales, so companies may have been more focused on those efforts than on using the technology to reshape their business processes. With the lower opportunity costs of undertaking more fundamental reorganization measures in a period of slack demand such as we've had the last couple of years, it could well be that firms are beginning to integrate more fully the technology they've acquired. People talked a lot about that happening in the second half of the '90s, but many companies may not actually have been doing it. I'm throwing out a few hypotheses. Obviously, there's still a huge puzzle here about productivity, and I wouldn't begin to argue that we fully understand what has been going on.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Dave, the Greenbook projects that the bond rate will fall as markets learn that the economy can grow at above-potential rates without stoking inflationary pressures. As you noted, the estimate of structural productivity growth has been revised up significantly. That, of course, should raise equilibrium real rates. Do you think the market will begin to incorporate the higher equilibrium real rates at some point? Wouldn't that counteract the tendency for bond rates to fall in response to changing market expectations for the funds rate?

MR. STOCKTON. It would certainly work to offset that effect. As we look further down the road beyond the Greenbook horizon, we do see the equilibrium real rate rising in part

because of the stronger productivity that we're projecting and in part because of the deterioration in the fiscal situation. Over the period of this forecast, we still have an elevated equity premium and some lingering weakness in total business fixed investment. It's true that equipment spending is picking up, but in our forecast we still have quite weak spending on structures and a relatively elevated level of the dollar. Those things are working in the opposite direction to hold down the equilibrium real rate over the next few years. So I think you're right; certainly a recognition that the economy is going to grow much faster in the long term would tend to keep real interest rates high in order to ration current production to meet rising demand. But we don't think that the surprise, if you will, on the funds rate that will occur if our forecast comes to fruition will be large enough to offset that tendency for the real rate to rise over the longer term.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. The discrepancy between the market assumption and the Greenbook assumption for the funds rate path is as large as it has been in a long time. So I would like to come back to a point that I've argued before, which is that the Greenbook baseline ought to be conditioned on the market's expectation of the federal funds rate path. I say that because the market's expectation is consistent with the term structure of interest rates and all sorts of other data that are incorporated in the starting point, so to speak, for the forecast. Using the market assumption would seem to me also to have the advantage of getting the Board staff out of the business of making an assumption regarding the path of the funds rate, which I understand is necessarily awkward. The alternative simulations could then be built around that market-based expectation. The staff could say, for example, that if one thinks the Committee is going to stay with a lower federal funds rate longer than the market anticipates,

these are the consequences for the outlook—with perhaps symmetrical consequences on the other side. In any event, we currently have one of the largest discrepancies between the market's view and the Greenbook baseline that we've seen for a long time.

There's also a covariance here across the various things that might happen. I'm guessing—just guessing—that the reason for the market's expectation could be a stronger baseline outlook for investment. That would be a reason that credit demands would be growing and the economy would be strong, and it would be a logical basis for the expectation that the Committee would likely respond by raising the federal funds rate. I know we've talked about this issue before; we've actually had some correspondence about it. Nevertheless, I would put in a plea for you to reconsider the baseline that you use for the Greenbook assumption.

MR. STOCKTON. Just to reiterate some of the discussion we've had on that point, I certainly agree with you that my life would be much simpler if I could just pick off that market-based funds rate path and plug it into the forecast. But as I think about what has transpired over the last several years, many times that procedure would have had us writing down a forecast that I think would have looked quite absurd to you. In 2001 and 2002, for example, the markets kept expecting a much sharper turnaround in the funds rate than in fact was consistent with our view about the underlying strength in aggregate spending. So we would have been showing a forecast that would have had as its baseline policy assumption your taking actions to further raise the unemployment rate and to drive inflation down even lower. One can see that even in the alternative simulation, which we do include in the Greenbook, using the market-based funds rate.

If we had built in the market funds rate path this time, we would have been suggesting—given the rate increases that the markets are currently anticipating to begin in the middle of 2004—that the Committee would drive the growth rate of GDP well below its potential in 2005.

That would effectively stall out any improvement in the unemployment rate—with the rate at a level we view as considerably above the natural rate—and further drive down inflation. So I'm not sure whether that's the appropriate point of departure for us to take. We think it's more helpful to put out our story and try to be as transparent as possible about what we're assuming and then let you decide where the various weaknesses are in our analysis. I'd leave it to the Committee to decide which method is better. I don't think it would be any more difficult to base the forecast on the market's expected path for the funds rate. It might be a little more awkward to write that story occasionally, using policy assumptions that would in essence be fostering disequilibrium in the economy rather than moving over the longer run toward equilibrium. However, we think—we hope—that we're putting on the table something that is useful to your discussion.

MR. POOLE. I'm certainly not arguing against receiving your best judgment. I'm just saying that I think your best judgment would be better displayed by taking the market assumption as your baseline. Then you could show that the consequences going forward are as you suggested in this case and that's the reason you don't think the economy is likely to evolve that way. I believe that would be an easier way of structuring that argument. That would be my preference.

CHAIRMAN GREENSPAN. You know, these actually are two separate ways of looking at a forecast. Incidentally, my recollection is that in 1994 or 1995 the forward funds rate was extremely high—well above 6 percent—so that would have been an even more important differentiating factor then. There is no doubt that using the approach President Poole is suggesting results in a consistency between the forecast and the yield curve as it goes out to two-year rates, four-year rates, and ten-year rates. Because of the anomaly of those rates being

embodied in intermediate interest rates now, our assumption that we will keep the funds rate flat for a very protracted period of time leads one to the conclusion of necessity that the long-term rates have to come down. So we have this odd problem of choosing between two paths, both of which are uncomfortable. I'm uncomfortable making a forecast out a year from now about what long-term rates are going to do. That's a loser's game, I think. But there is the other side, as Dave points out, in that there have been fairly significant periods when the forward federal funds rate was way beyond any level I ever would have anticipated going toward—and indeed in the end we didn't.

These are two different types of ways of looking at the outlook. In one we have to adjust the long-term rates because they are inconsistent. In the other we get a future level of short-term rates that no one in this room has any interest in implementing. So I don't think there's a solution here, and there are arguments for both sides, I think.

MR. STOCKTON. I'd just note that I'd be happy to solicit the views of the Committee on this point. We're trying to produce a product that will be helpful to your discussions. That's the object of the Greenbook. We like to be right, but what we are really looking for is to have some value added in terms of the quality of your policy discussion. I'm skeptical that making this change would be a move in that direction, but I'm not stubborn. So if there is a significant sentiment otherwise, we would obviously want to respond to that.

CHAIRMAN GREENSPAN. Historically, the usual issue was whether the staff should make a forecast with an unchanged funds rate, giving the Committee the evaluation of what would happen if we didn't change anything. So I think this procedure of doing several separate simulations probably is the only way out. I've noticed that nobody has raised the question in recent meetings of holding the funds rate unchanged throughout the forecast period to give the

Committee a sense of where the pressures lie. We decided that that isn't very helpful. In any case, I think there is no real solution to this, and I'm not sure that it matters all that much so long as we know the premises underlying the federal funds rate forecast.

MR. POOLE. There would be a way, in principle at least, of getting some evidence on this. I don't know how far back in the past we could look at the Greenbook assumption for the funds rate and compare it systematically with the contemporaneous market assumption to see which one turned out to be closer to the way things evolved. Certainly, if the evidence on that is decisive, to me that would help to make the case that at least the baseline outlook should be structured one way rather than the other way. I know that in the earlier Greenbooks the assumption wasn't displayed explicitly. There was obviously some assumption there. It may have been more conventional; I don't know. But in principle one could get a handle on which method is likely to be more useful.

MR. STOCKTON. In some of the work that we did for you a year and a half ago—I will have to dig it out—we looked at that question, and it turned out that the Greenbook assumptions were a little better than the market forecasts. However, we didn't want to draw from that the conclusion that we do better than the markets—first, because it was an assumption and not necessarily a forecast and, second, because anything could happen in a small sample. But the evidence certainly wasn't decisively against the Greenbook-type assumptions. We can update that work, although if we update it for the past year and a half, I think if anything we've been closer than the markets in anticipating that there was not going to be a need for any immediate tightening.

CHAIRMAN GREENSPAN. President Broadus.

MR. BROADDUS. Dave, an element of this forecast that interests me a lot is that, even though you've revised upward the output gap, you still have some marginal further disinflation going forward. I think I would benefit from a little more understanding of how you arrived at the inflation forecast. I know you look at output gaps and labor market gaps, and I know the two are related; but what I'm really trying to get at is the confidence interval around this forecast. In particular, what is the risk of a significantly greater disinflation in the context of the way you arrive at this projection?

MR. STOCKTON. Using the error pattern of past Greenbook forecasts, a 70 percent confidence interval on our inflation forecast for 2004 was roughly plus or minus 1 percentage point. That means that 30 percent of the time the errors will be larger. As I indicated in my remarks, there is a 15 percent chance that we'll get something at or above the Blue Chip's 2 percent forecast if our error history holds going forward. But there is also a 15 percent chance that the CPI could be at or below zero in 2004. So the confidence interval is wide, and it would include both headline inflation that shows no deceleration and headline inflation that shows considerable deceleration.

Now, as to the logic behind our forecast, one of the things that we talked about a year ago in July, when we had this conversation about Phillips curves and gaps in output, is just how flat the aggregate supply curve or the Phillips curve has gotten in recent years. In our view, that reflected in part the fact that the Committee had done a good job of tying down inflation expectations when those expectations were moving, but it also did not rule out the possibility that structural changes could be occurring as well. In periods of low inflation, there may be more of a tendency to commit longer term to price contracts and so forth and that might actually flatten out the Phillips curve. So with the gap especially large and diminishing over the projection

period, we still see the pressure as down but not sharply so—especially in light of very little evidence that inflation expectations are moving dramatically one way or the other. In fact, I think implicitly in our forecast we assume that there actually will be a little further decline in inflation expectations. So we think the change in inflation is going to be modest but more likely to be down than up.

MR. BROADDUS. Thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, Ned Gramlich asked a good portion of my question, so I'll pass now.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. This is coming at the same questions we've been bouncing around here from a little different angle. Compared with most forecasters, you are still right up there with Genetski.com in terms of your growth expectations, but you have diminishing inflation and less progress on the unemployment side. Clearly, it seems to me that you have a higher productivity number embedded in your forecast than the market does. That fundamental difference that we're talking about here seems to be driving the market's expectations for when we're going to raise interest rates. I'm wondering when a better shared sense of that will occur, if it happens at all. What kind of time frame do you think we might be working with here?

MR. STOCKTON. I think you're absolutely right that one of the biggest differences between our forecast and the consensus forecast is a more optimistic outlook on aggregate supply. A number of you, in fact, have remarked on how optimistic our forecast is. I really don't view it as all that optimistic because the gap is large and it diminishes only very slowly. Now, we could be wrong about that. But if we're wrong, our productivity assumption doesn't

necessarily mean that we will be wrong significantly about the output gap going forward, too. It could very well be that, if we're wrong about underlying productivity, we'll see faster employment growth but also less demand going forward because the economy will be generating less potential income expectations going forward. So to be honest, we think we have the risks reasonably balanced around our productivity forecast. But I must say that our statistical filtering models are chomping at the bit to have us move our forecast higher. Our recent pattern of errors would suggest the same thing. We thought we had solved this problem, but we've been making consistent errors in underforecasting the strength of productivity.

MS. MINEHAN. To anybody who has watched the economy over the last several decades, it's hard to say that the forecast is for 5 percent GDP growth on the one side and an increasing output gap, inflation going down, and a need for accommodative monetary policy on the other side. There's something about it that just doesn't go together.

MR. STOCKTON. Obviously, the first possibility is that we could be wrong.

MS. MINEHAN. The markets could be wrong.

MR. STOCKTON. The second possibility is that the markets and maybe the policymakers, too, have to adjust their sights regarding what the economy is going to be capable of doing. You can do that only on the fly. As the Chairman indicated again, to my chagrin, we really can't forecast very well. It's not possible to look very far ahead. The Committee will have to be groping its way toward learning how much of these recent gains in productivity can persist going forward—whether the level will persist and whether the higher growth rate that we are forecasting will persist. But we don't think there is anything inconsistent between a period of 5 percent GDP growth and a funds rate that remains at 1 percent. There is considerable slack in the economy. The underlying growth of the potential of the economy is relatively rapid, but that

growth can occur in the context of a decline in the inflation rate. A lot of people in the early 1980s thought that, once the economy came out of the recession, inflation was bound to rise to 5 or 6 percent. The reality was that the economy could grow quite rapidly in that period because so much slack had built up. We know that there are a number of uncertainties and risks surrounding our forecast. We realize that you know that as well. So I don't want to make too strong a case. But the simple notion is that a pickup in the economy's growth or even a sustained period of relatively strong gains doesn't necessarily preclude inflation pressures remaining diminished.

CHAIRMAN GREENSPAN. Any further questions for our colleagues? If not, who would like to start the roundtable? President Hoenig.

MR. HOENIG. Thank you, Mr. Chairman. To begin with the region, our Tenth District economy actually has shown further improvement since our last meeting, although District firms remain reluctant to hire strongly or to spend a lot of money on capital. At the same time, manufacturing activity has expanded, retail sales were solid heading into the fall, and residential construction and sales rose to new levels. I would also note that we've had reports that state and local tax revenues are now starting to come in above projections.

Layoff announcements for District firms are continuing to trend downward, although we haven't seen a pickup in employment, as I mentioned. While large firms we contacted indicated that they are not planning much in the way of new hiring, it is interesting that a substantial number of small to midsized manufacturers said that they do expect to add to payrolls in the coming months. The picture for capital spending is similar; it's sluggish overall but with a few signs of a possible turnaround, especially among small and midsized firms. This includes a pickup in nonresidential construction due to some plant expansions now being talked about.

Also, there is some increased interest among manufacturers in the new investment tax incentives. As for inflation in our area, raw materials prices and benefits costs have continued to rise significantly. Also, in keeping with the stronger economic picture, there has been less evidence of price cuts on finished goods.

Turning to the national picture, I agree with the staff's assessment that the economic forces are in place for a sustainable recovery, with growth above trend this year and next year the most likely outcome. As has been noted, we have an accommodative monetary policy, stimulative fiscal policy, strong productivity, and a healthy financial system that can support the credit needs of businesses when those needs materialize. In addition, economic data released since our June meeting have been consistent with stronger growth this year and next. More specifically, I expect growth over the rest of this year to be at least at the 4½ percent mark. I would note also that I know of more people now expecting growth to be north of 5 percent in the third quarter and I've seen projections here and there of 6 percent growth.

Of course, I am aware that there are downside risks to the outlook as well. Obviously I remain concerned, as do others, about foreign economic growth. As the Greenbook notes, the foreign outlook has been revised upward, but that's primarily because the forecast for the U.S. economy has been revised upward. So to some extent we're looking at one another and saying that we each should get a better economic outcome, and I think we have to be sensitive to that. I'm also concerned that while CEO confidence is improving, it's not taking off strongly. Though we've seen some increase in capital spending, we do not yet have a clear "self-sustaining" recovery, as they say, on the business fixed investment side. Without that, we all are concerned about the continuation or the sustainability of the recovery itself. The largest question mark remains the labor market. I realize that employment is a lagging indicator, but the lags seem to

be especially long this time. Strong productivity is affecting this situation, obviously.

Nevertheless, I expect that we will be seeing an increase in employment, as the Greenbook projects, by the end of the year if not before and then a decline in unemployment beginning next year.

Let me speak very briefly about the inflation outlook. I expect core inflation to remain relatively stable at its current level, which I think is a good thing. While the output gap may put some downward pressure on inflation, I am cautious about putting too much weight on the output gap as a predictor of inflation trends. For one, there's the issue of level and speed effects and so forth, which I believe Dave mentioned also. In addition, market economists are expecting somewhat higher inflation, not lower, and I think that's because they also question the role of the output gap or its change in determining the course of inflation. My own view is that the near-term inflation risks are about balanced. Inflation may move higher or lower but probably not much in either direction if it does move. Given the outlook, I think the risk of an unwelcome decline in inflation—one caused by a collapse in aggregate demand—is in fact negligible. I do recognize, as I noted, that with continued strong productivity growth we could get a reduction in inflation. But I would be hesitant to call such a development an unwelcome event. Thank you.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Since the time of our last FOMC meeting, the tone of our District's meetings and much of the recent data have been providing more tangible evidence that economic activity in our region is picking up. This does not reflect an abrupt acceleration but rather the cumulative effects of positive readings since late July. In particular, retail contacts were more positive about sales activity, and the manufacturing sector has displayed some welcome signs of improvement.

Despite the recent run-up in mortgage rates, single-family construction and sales in our area remain flat to up slightly. We particularly attempted to determine from our directors and their contacts whether the continuing strength in housing was solely a pipeline effect that predated the recent rise in mortgage rates or if it was reflective of continuing activity. The sense was that, while there was a bit of a “get it while it lasts” attitude among borrowers, rates were still low and should not depress residential construction unless they moved significantly higher.

There are still few signs of business willingness to invest except to cut costs. The stories we are hearing suggest that firms will continue to constrain investment spending until they are more convinced that the pickup in activity is permanent. We also asked our contacts about job creation. Consistent with a reluctance to invest, District firms remain extremely cautious about adding jobs. In Florida, businesses have continued to squeeze more out of less, and some of this was attributed to the ability to better utilize existing technology.

The other point made by many of the people we talked with was that, while output was increasing, they were skeptical that it was due to true increases in underlying productivity in the sense that we usually think about productivity. Finally, as for inventory investment, our contacts suggested that they can make do with less and will not rush to replenish inventories let alone increase inventories to historical ratios even as activity rises. All of this supports the view that the acceleration ahead could be somewhat more subdued than some anticipate.

As for the national outlook, there is little need to repeat the positive and encouraging developments that were well documented in the Greenbook. While a significant pickup in GDP is looking more and more likely, I too remain frustrated by the lack of job creation. That said, my discussions with business people in our District suggest that the loss of manufacturing jobs, for example, is structural and not cyclical. Most of these jobs have been lost permanently; they

will not come back even as demand picks up. Restructuring is the major explanation offered by other types of firms for employment declines. Again, I don't see many of the jobs that have been shed coming back quickly even as the economy improves. For this reason I remain somewhat skeptical about the relatively near-term and strong pickup in employment that is forecast in the Greenbook. Regardless, it's also the case that further decreases in interest rates will not induce firms to add jobs because expanding demand is not there. My sense is that monetary policy remains appropriately accommodative. Fiscal policy is supportive. And it seems to me that there is less reason to be concerned about deflation at the moment. I'm pretty comfortable with where we are at the present time. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. Economic conditions in the Third District have improved slightly in the five weeks since our last meeting. Regional manufacturing output continues to firm. In August our business outlook survey index of general activity advanced sharply to 22.1 percent, up from 8.3 percent in June. In our September survey, which is confidential until Thursday, the index will post its fourth consecutive positive reading, at 14.6 percent—down somewhat from August but still clearly in positive territory. The indexes of new orders and shipments have improved over the past three months, showing strong positives. Manufacturing employment, on the other hand, has not yet shown an increase. In response to a special question, 30 percent of the firms reported that they have revised up their plans for fourth-quarter production over the past several months, whereas only 10 percent have revised down their plans. Of those firms expecting to increase production in the fourth quarter, most expect a 5 to 10 percent rise.

After improving in the second quarter, our labor market showed a slight weakening at the start of the current quarter. Payroll employment in our three states declined slightly in July, and the unemployment rate edged up to 5.8 percent, but it remains below the national average. Retail sales in our region have improved modestly in recent months. Sales of general merchandise rose in August compared with July. Some merchants indicate that they've seen a pickup in sales due to the first round of the federal income tax rebate checks. So I found the discussion we had just a moment ago interesting. But others say that consumers continue to be cautious in their spending. Although retailers expect the pace of sales to improve in the autumn, they have noted the tendency for consumers to delay purchasing a product until they feel they really need it. As a result, retailers plan to introduce cold weather merchandise later than usual this year and to keep inventories limited.

Although the residential real estate sector in our region is not as strong as a year ago, it continues to perform well, with construction up somewhat from the first quarter. Real estate agents and builders indicate that sales of new and existing homes accelerated because of the recent upturn in mortgage rates. That goes back to what President Guynn was saying—that homebuyers apparently are trying to make purchases before rates advance even further. Builders report that they expect sales to remain strong, although some indicate that the backlog appears to have peaked. In contrast, commercial real estate continues to be soft, and office vacancy rates remain elevated. However, we've seen some pickup in the value of nonresidential construction contracts in our region in recent months.

In summary, the economic outlook for the District is positive, and the region's business community remains optimistic that conditions will continue to improve. However, the rate of expansion is expected to be modest.

Economic conditions in the nation have generally improved as well since our August meeting, as several others have mentioned here today. The recently released data lend credence to the staff forecast that a substantial increase in the pace of economic activity is under way. The data indicate that manufacturing output is firming, and the orders data suggest that business investment in equipment and software, after growing in the second quarter, is likely to strengthen further. Yesterday's industrial production report showed that factory output continued to rise at least marginally. At the same time, corporate profits are up, which should buoy business spending. Growth in consumer spending picked up in the second quarter, and that strength appears to have carried into the current quarter. However, we must keep in mind that some of the acceleration may prove to be temporary, so I found the discussion about the tax rebate checks and how they work their way through the system particularly relevant.

The improvement in the data has led many forecasters, including the Board staff, to revise up their projections for the second half of the year. For the moment, the possibility of substantial deflation appears to have subsided, at least in my opinion. Still, most forecasters do not expect economic growth to become strong enough to generate robust job growth until next year. In fact, the labor market remains the economy's biggest trouble spot. Payrolls continue to shrink, and new claims for unemployment insurance remain near 400,000, which points to further employment cuts at least in the near term. Moreover, the rate of job loss is not slowing. Instead, firms cut payrolls at a faster pace in July and August than they did in the second quarter, and the loss in August was relatively widespread across sectors.

I generally agree with the Greenbook forecast that the weakness in the labor market will continue through the end of the year. However, the Board staff projects a strong rebound next year, with payrolls rising by over 250,000 per month in the first quarter and by 400,000 per

month in the fourth quarter. I think that may be optimistic. Nonetheless, I share the view of most forecasters that economic growth will strengthen over the next several quarters. Recent data support that projection. Financial market indicators point to such a resurgence. In fact, markets are now expecting policy to tighten sooner, as President Poole indicated, than is incorporated in the Greenbook forecast. They may be right. Nonetheless, at this point I believe that monetary policy can and should remain accommodative for a substantial period of time. That said, we have to be careful once again about how we couch today's decision in our press release. This obviously harkens back to yesterday's discussion and what Vincent Reinhart referred to as the communications channel. I look forward to seeing the proposed wording of the press statement later in the meeting. Thank you.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Ever so gradually, things seem to be turning around in the First District. To be sure, labor markets remain weak, and confidence about current conditions is uneven. But there is a sense that the regional economy may have bottomed out, and forward-looking indicators of both business and consumer confidence are positive. Contacts in the business services area—IT and software providers and temporary help firms—report more-upbeat conditions. Venture capital financing for software and Internet firms has increased, and the market for this financing has become competitive. Sales cycles have shortened; advertising by IT firms is up; and the number of software companies is rising after a sharp decline over the past several years.

The head of a large semiconductor manufacturer located in New Hampshire commented earlier this year that demand showed signs of increasing and, absent any further shocks this summer, production would follow. National data seem to reflect the accuracy of that remark.

Still, job postings remain at record lows relative to total positions in the software and IT industry, indicating that job growth in this area is still very slow. Similarly, although vacancy rates in major metropolitan and suburban areas remain high, contacts report that these markets have stabilized though they may not be growing overall. In fact, more vacant space is expected to come on the market; but some positive absorption has been registered, and the rate of deterioration is slowing. Obviously, the employment situation has to brighten to significantly reduce vacancy rates, and industry contacts clearly see the current situation as requiring a long, slow workout. Still the overall sense seems to be more positive, at least compared with recent months.

Other areas of the District's economy also seem to be coming along. Residential real estate sales remain strong, and the prices of repeat-sale homes are rising considerably faster in the region than in the nation as a whole. Retail contacts were more upbeat than they have been; and after a very slow, rainy midsummer, tourism seemed to have picked up in August, bringing needed income to many areas in the region. Finally, New England remains relatively more defense industry intensive than the rest of the nation despite many base closings and downsizings over the last several years. Each of our District states saw healthy increases in defense contracts in 2002, and we expect that to be the case in 2003 as well. This has not halted layoffs by defense contractors; the increase in business is important nonetheless.

Turning to the nation, I have been pleased to see that the acceleration in economic activity we expected at the time of our last meeting is beginning to appear in earnest. Consumers are increasingly confident and continue to be willing to buy big-ticket items such as houses and cars. Businesses have begun to spend more, and their laser-like focus on costs has prompted a productivity boom. Profit growth has accelerated, and analysts are now writing up projections

for the third and fourth quarters rather than writing them down. Financial markets have been positive as well, with narrowing credit spreads, growth in equity markets, and some flattening of the yield curve. Moreover, the external world seems to be on the mend, though domestic demand growth in most of our trading partners remains slow. The major continuing issue is the strength of U.S. labor markets.

It must be said, however, that the pace of this economic acceleration is due a lot to the aggressiveness of both monetary and fiscal policy. Even with the rise in ten-year yields since our June meeting, mortgage rates continue to be at the low end of decades of experience. The drop-off in refinancing activity may simply be a temporary lull until credit markets stabilize further and yields retreat, as they have begun to do.

Tax cuts and investment tax credits have buoyed both the consumer and businesses. Without tax changes, disposable personal income growth would have been nearly flat. Instead it jumped 1.3 percent during the month of July alone, allowing—in my view anyway—both growth in expenditures and a small pickup in the saving rate. It's not clear from either the data or anecdotal reports that tax credits by themselves are boosting business spending on equipment and software right now, but certainly growing consumption plays a role here. In the high-tech world in particular, spending plans seem stronger than they were, though caution is still the byword.

That takes me to what I believe continues to be the primary challenge facing this economy, namely an excess of business caution and uncertainty that brings into question the durability of the current acceleration in growth beyond the coming two quarters. Will businesses increase spending even after consumers' income growth and their desire to spend is no longer

bolstered by tax cuts? Will consumers continue to spend if labor market prospects don't brighten?

The forecast we've done at the Boston Fed for the period between now and the end of 2004—as we've talked about, many other private forecasts for that period as well—differs a bit from the Greenbook projection. The Greenbook sees real GDP growth in 2004 at 5 percent on a Q4-over-Q4 basis. In Boston, our forecast for GDP is a bit above our estimate of potential, somewhere in the upper 3s. The Greenbook sees consumption staying particularly strong after outsized increases in federal spending this year and has growth in private domestic final purchases nearly double our projection by the second half of next year. This growth in 2004 is stronger than the staff projected at our last meeting, even despite a forecast—comparing Greenbook to Greenbook—of about 800,000 fewer jobs. As Dave noted, rising equity markets and productivity growth act not only to buoy demand but also to increase potential, resulting in little progress in reducing the output gap or increasing employment, at least in 2004. Not surprisingly, inflation trends downward. Thus, the Greenbook sees what could be termed very strong GDP growth, especially in a large developed country like ours; but in the end excess capacity remains until 2005. In our Bank's forecast we reach much the same conclusion although on a lower growth path.

It seems to me that this is a very interesting time from a policy perspective. Conditions are improving. But even with the Greenbook's optimism, the improvement is not enough to close the output gap for a considerable period of time. If one thinks the risks are that growth will be slower than in the Greenbook but productivity will still be healthy, the gap grows even wider. So there is support for remaining accommodative for some period, as we've been saying, or maybe becoming even more so. But as logical and defensible as that approach is, I think it is

right to be a bit agnostic now that the momentum in the economy seems to have shifted.

Certainly the market is agnostic about this. I think we need to be humble, as Dave has clearly said, about our ability to see out to 2004 and 2005, given this unique confluence of very high productivity growth and an increasing output gap in the context—at least historically speaking—of high demand and high GDP growth.

In particular, I take note of the surge in profit growth. Absent any further major corporate governance issues or geopolitical events, I think this profit growth could give businesses an incentive to hire faster than even the Greenbook is predicting. Obviously the initial effect would be reduced productivity but increased employment and a flattened inflationary pattern. So I think there is some balance out there in terms of the possibilities. I'm a little agnostic about the growth of potential that the staff has in its forecast. But I'm also a bit agnostic on the issue of whether the output gap will grow as fast as projected. In any event, I think we have some time to consider the possibilities here.

CHAIRMAN GREENSPAN. First Vice President Stewart.

MR. STEWART. Thank you, Mr. Chairman. The Second District seems to be doing at least as well as the nation. Payroll employment has risen modestly in New York and noticeably in New Jersey. Office vacancy rates across the New York metropolitan area have generally leveled off and even declined in some areas, most notably lower Manhattan. Our September Empire State manufacturing survey suggests that conditions in the manufacturing industry improved for the fifth month in a row. As a reflection of this broad-based improvement, state tax revenues have picked up noticeably, leading to a greatly improved fiscal situation in both New York and New Jersey. Like the nation, employment is at best sluggish, with New York City just

now seeing some improvement and with considerable weakness in employment in some of the major manufacturing areas of the District.

For the nation as a whole, certainly there is a great deal of forward momentum evident in spending and production. The major issues now are the sluggishness in employment and the sustainable aspects of rapid growth. We have emphasized that a good deal of the job losses over the last few years have been structural in nature, occurring in the process of strategic reorientation of firms and industries. These jobs are not coming back; on that we agree with President Guynn. If we look at the manufacturing sector, the best we can hope for is that employment will level out. Manufacturing employment didn't grow significantly in the 1990s, and there is no reason at all to expect it to grow now. The big disappointment is that we do not see any dynamism in employment in the services sector. Industries like retailing, where we would normally expect to see fairly vigorous growth at this point in a recovery, continue to stagnate. The process of structural change may be spreading widely outside of manufacturing.

We have reason to expect recoveries to be considerably more sluggish now than they were in the past, just as we expect recessions to be less severe. The rapid recoveries of the past were inventory-driven, but closer inventory control means that firms today are not likely to engage in a massive inventory buildup in the way that they used to. At this stage of a recovery in the past, we were seeing output growth at least twice as high as we are seeing currently, and much of that reflected an inventory buildup. While we might have to adjust our expectations for growth in the early periods of recoveries, the absence of these large inventory-driven swings in production seems to be a good thing for the economy. Changes in management practices, aided by technology, contribute to firms' ability to produce more in a period of modest demand growth without boosting employment significantly. In manufacturing, we see this in changes in

assembly line setups and machine tool technology. In wholesale and retail sales, we see this in a movement toward massive centralized distribution centers, satellite tracking of orders, real time electronic data-sharing between suppliers and retailers, and greater use of temporary and contract workers. There has also been a rapidly growing and widespread tendency toward outsourcing and vertical specialization. Tasks ranging from human resources in hospitals to consumer support in banking to R&D in Silicon Valley are now being outsourced.

Nonetheless, if the recent pickup in spending is sustained, we should see some modest job growth and a pickup in inventories. However, it may be that we will continue to be surprised by the strength of productivity growth and stagnant employment. While all of us would be disturbed by continued sluggishness in employment, consumer spending and the expansion in output should remain intact as long as aggregate income holds up. There clearly is a large margin of excess productive capacity in the United States and other industrial nations, and capacity continues to grow briskly in developing nations. As the staff outlook suggests, it is likely that the economy can expand at a fairly rapid pace for quite some time before we see inflationary pressures develop. Thank you.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. Economic activity in the Twelfth District appears to have picked up recently, but employment remains flat overall. Our contacts in the manufacturing sector indicate that, although they've been continuing to shed jobs, they're more upbeat about business prospects. Several high-tech producers are reporting improvement in their businesses. Revenues and production have been rising at Intel, and higher prices for memory chips over the summer reflect the stronger demand at firms such as Micron.

The improvement goes beyond the high-tech sector. For example, machine-tool makers and metal fabricators in the District indicate that orders are up, and the majority of those businesses are telling us that they are increasing capital spending. Consumer spending also is rising. Back-to-school sales are reported to be strong in southern California. More broadly, retailers are saying that price discounting has become less prevalent as demand has increased. Several District tourist destinations have started to see a rebound in activity after the lull associated with SARS and the Iraqi war. At Los Angeles International Airport, international air traffic has been increasing strongly, and some domestic routes are seeing increases as well. In fact, Southwest and Song Airlines, a subsidiary of Delta, reportedly are planning to add flights from Los Angeles to Las Vegas. San Diego hotel occupancy hit more than 83 percent, which is among the highest in the country. In Hawaii the increase in domestic travelers has more than made up for the decline in international travelers. At this point, total visitor traffic for the State of Hawaii has regained pre-September 11 levels. Housing markets remain strong throughout the District, especially so in southern California, Arizona, and Nevada. Along with that housing strength have come reports of significant spending on major appliances and furniture.

The fiscal situation in the District remains challenging. [Laughter] The Oregon legislature decided to meet its budget shortfall by passing a temporary increase in personal income and corporate taxes, which will expire when the economy improves. In one of the more original new tax proposals—and hoping you are all still alert—the citizens of Seattle will vote soon on an initiative to place a tax of 10 cents a cup on espresso drinks. [Laughter] In California, with a structural shortfall of nearly \$8 billion looming and uncertainty about the recall election, investors still are requiring a premium on the state's general obligation bonds of

about 40 basis points, only about 10 basis points lower than before the signing of the state's budget.

For the national economy, the recent positive data strengthen the case that we're finally in a sustained rebound. I'm encouraged by the broad-based increase in demand, especially in the key element of equipment investment, and by the upbeat news about corporate profits, equity values, and productivity. Still, I won't be convinced that we're out of the woods until I've seen some job growth. We're not quite as optimistic as the Greenbook, but we have revised up our projection of real GDP growth moderately—to 4 percent in the second half of the year and 4¾ percent in 2004. Although this faster growth absorbs some excess capacity and therefore tempers my concerns about further declines in inflation, it doesn't entirely mitigate them. Recent productivity data do raise the odds that the trend is a bit higher than we thought. Of course, that would offset some of the gains against excess capacity that we might have expected. The GDP growth we anticipate going forward doesn't appear to be fast enough to eliminate excess capacity by the end of next year. This is an issue—considering that we expect core PCE inflation to average only about 1 percent both this year and next, which is already at the low end of what I consider to be the desirable range. Thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Although our Seventh District contacts remain cautious, many more of them now say that business is improving compared with just five weeks ago. Business spending appears to be firming. Our manufacturing contacts still aren't planning much capacity expansion, but they are reporting a pickup in orders for items such as construction equipment, airline equipment, and intermediate production materials. And businesses may be loosening the purse strings on travel. United Airlines reports that rising

business travel has contributed to a 30 percent increase in their average fare since April, and they think there is still more pent-up demand for business travel.

Household spending also strengthened somewhat. Home sales were again very strong and retailers reported that consumer spending picked up from earlier in the summer. Auto sales have been improving since February and have come in well above automakers' expectations. The 18.9 million sales rate for light vehicles in August was described by one Big Three executive as astonishing. He reported that September sales should exceed 17 million units, which is a bit higher than the number he had mentioned before. In general, automakers see a more profitable mix of sales, with a larger percentage accounted for by luxury cars and SUVs. Even though the auto companies built up inventories in anticipation of contract negotiations, strong sales have pushed stocks slightly below desired levels.

The strengthening demand in manufacturing appears to be leading to some firming of output prices. Examples include steel, wallboard, plywood, and construction machinery. The District's labor market is still soft, but we've heard some glimmers of good news. Most of our contacts remain very reluctant to make permanent hires. However, one major retailer indicated that he would like to add programmers and systems analysts but they are hard to find in the Chicago area. It has been a long time since we've heard such a concern.

With regard to temporary employment, last time I mentioned that our contacts at Kelly and Manpower were reporting that their businesses were only so-so. They were very suspicious of the Bureau of Labor Statistics report that indicated strong employment growth in temporary help. This time I have two additional pieces of information. First, the president of one of these companies put considerable effort into understanding this discrepancy with the BLS. He found among other things that data from his own firm's establishments were not getting to the BLS in a

timely fashion—something he suspects was also true of the other large temporary help firms. So he got his numbers in and encouraged his colleagues to do the same and, possibly as a result, there was a significant downward revision to the BLS figures. They now line up much more closely with what industry analysts were seeing. The second piece of news is that contacts at one temporary help firm report that they have now had three consecutive weeks of strong growth in worker assignments. They're not ready to say that they are out of the woods but they are quite encouraged.

Turning to the national outlook, the incoming data suggest that output is rising a good deal faster than we had forecast in both June and August. Most notably, consumption and business investment appear to be on track for strong growth over the second half of the year. So far, this increase in demand has been satisfied with outsized gains in productivity, so we still haven't seen a recovery in labor markets. Our projection is that the current pace of demand growth is sufficient to begin to narrow the resource gaps by early next year. However, there is a good deal of uncertainty about how to interpret the strong productivity performance over the past two quarters. In his comments or answers to questions, Dave called it the productivity puzzle. That, of course, translates into more uncertainty about the outlook for employment and output growth.

With regard to inflation, we see it changing little over the forecast period. We think the odds of unwelcome disinflation have diminished. However, the probability still is high enough so that it cannot be ignored. Accordingly, I continue to favor our "steady as she goes" stance on policy.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. Overall, the data on the District economy and the anecdotes that have come in indicate that, as usual, it is tracking quite closely with the national economy. So the regional economy is improving. Consumer spending is strengthening pretty much across the board, and some auto dealers report that this clearly will be their best year ever. Residential construction spending remains strong. Commercial construction for the most part remains rather soft, and I'd say the leaders of the large commercial construction firms in the District continue to be concerned about the outlook, although there has been a pickup of construction activity in some of the midsized cities in the District. Manufacturing activity is improving overall, particularly for firms that make products related to housing. There are some signs of improvement in employment there as well. Although I'd say that overall employment is probably stable in the District, there are signs of some net hiring under way. Perhaps the only reservation I'd note about the signs of improvement we've seen lately is that overall business attitudes still appear to be very cautious.

As far as the national outlook is concerned, the general contours of the Greenbook forecast—namely, reasonably rapid growth over the next two plus years and subdued inflation—seem to me to be fairly well grounded and justified at this point. If I have any reservation about the forecast, it relates to the productivity/employment split. Clearly there will be a cyclical improvement in the labor market at some point. But the gains in employment forecast for a good chunk of next year and into 2005 strike me at this stage as somewhat unlikely, in part because I think the productivity improvement we're seeing is going to prove to be longer-lived than the Greenbook forecasters apparently anticipate. As far as manufacturing is concerned, I think that at some point there will be a cyclical improvement in employment in that sector as well, but I

believe it's worth bearing in mind that manufacturing employment in this country actually peaked in 1979 and it hasn't surpassed that peak since.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. My Wal-Mart contact was at pains to tell me that business isn't as good as it looks; same-store sales seemed better because of weak year-ago data. Wal-Mart had been anticipating a 3 to 5 percent gain in August, and the actual increase was 6.6 percent—so it was a little better. But he indicated that the underlying improvement, abstracting from weak year-ago data, was more in the 50 to 80 basis point range. He made a number of specific observations suggesting that Wal-Mart's clientele, at least, continues to suffer a lot from liquidity strain. He dated the pickup in sales as beginning in July, which he attributed to the cut in income tax withholding. He didn't think the child tax rebate checks had done very much for retail sales. When Wal-Mart cashed those checks for its customers, only about 14 percent of the money was being spent at the store. Some of it was spent on typical big-ticket items—say, a down payment on a TV or something like that—but surprisingly, the second most frequently purchased item on their sales tickets was a money order. Apparently people were buying money orders in order to pay other bills—that was his interpretation. He said that a lot of small items, such as cereal and prepaid phone cards and so forth, were also on the sales tickets.

My Wal-Mart contact reported that survey data suggest that consumers are still quite concerned about economic issues. In a survey taken in July 2002, 46 percent of the respondents noted concerns that had something to do with the economy as opposed to, say, the war on terrorism. In July 2003, a higher proportion—51 percent—cited economic worries. In terms of the more detailed answers, fear of job loss was cited by 8½ percent of the respondents in July 2002 and by 13.8 percent in July 2003; the comparable figures for concern about personal

financial stability, were 11.5 percent and 16.8 percent, respectively. So these economic concerns continued and indeed were higher than they had been in the past.

My contact also reported that people are still shopping at the opening price point. They buy the cheapest item in a line of shirts, for example. And focus group information suggests that people are increasingly shopping at what he called the dollar stores. Moreover, shoppers are buying smaller packages of items such as diapers. I don't know how many diapers there are in a pack. [Laughter] I haven't shopped for those for a long time. But apparently people are becoming more hard pressed financially, so instead of buying a regular-sized package they buy one with few diapers even though the cost per diaper might be higher. They don't want to make the outlay for the package that costs more. His general message in citing these types of anecdotes was that a lot of consumers are constrained by liquidity pressures.

My UPS contact reports that nothing much has changed. In particular, UPS is not seeing, as it sometimes does, special charters out of Asia where a company will hire an entire plane to bring in garments, computer equipment, leather goods, or items like that. On the other hand, my FedEx contact said that business very clearly is picking up. He noted that for the first time in eleven quarters there is now positive growth, year over year, in the domestic express business, and he said that activity in the pipeline is robust. FedEx has just finished reviewing information on 200 accounts, and 90 percent of them are projecting increases in shipments in the coming period. The ground business is also picking up. He said that he sees some signs that customers are rebuilding inventories. He used the term "a significant pickup," which is a rather different message than the one conveyed by the other respondents I mentioned. In the trucking business, my contact at J.B. Hunt reported that he sees a small but definite pickup. "A little breeze in the air" was the way he put it. So things are looking better there as well.

Let me make just a few other very brief comments. I want to reinforce a point that Jamie Stewart made about whether the economy is likely to stall out if we don't see employment growth. Obviously, we all want to see employment growth. But if employment remains about where it is, let's say, I don't understand why that should lead to the economy stalling out. We will have continued income growth through wage growth. And with productivity increases we should see very good profit growth, which should certainly support expansion of capital spending. I note that money growth as measured by both M2 and MZM remains healthy, at about 8 percent in the last twelve months and 10 percent in the last six months. So its growth is rising. As I look ahead, it seems, to me anyway, that the time is eventually going to come when this pervasive air of caution is going to give way to a fear of missing the boom. I don't know how long that transition is going to take, but at some point I think we're going to see that switch in attitudes. In such circumstances, the business environment could change relatively rapidly.

CHAIRMAN GREENSPAN. Why don't we break for coffee and come back in 10 to 12½ minutes. [Laughter]

[Coffee break]

CHAIRMAN GREENSPAN. President Broaddus, please.

MR. BROADDUS. Thank you, Mr. Chairman. I want to spend most of my time today on the national economy. I won't say very much about the District because not a lot has changed in our region. Activity appears to be picking up in several sectors such as textiles and apparel. Furniture manufacturers in the southern corridor of the District are still laying off people. I agree with Jack and Jamie that a lot of the job loss is structural, but I think some of it at this point is probably still cyclical as well. The comments we hear from our business contacts, as others around this table have said about their Districts, are generally more optimistic than two or three

months ago. But I would characterize business people as still quite cautious and wary. Of course, speaking of wariness, we have a hurricane bearing down on our District. So we'll see what that does to us. It may reduce excess capacity in the District! [Laughter]

MR. KOHN. In the boating industry!

CHAIRMAN GREENSPAN. I was just saying that hurricanes usually destroy things and that the reconstruction, when it takes place, adds to the GDP.

MR. BROADDUS. That's right. It probably will reduce the disinflation pressure on our District's economy.

With respect to the national economy, to me the most striking feature of the current Greenbook is that, even though the projected path of GDP has been revised up—actually fairly substantially—in accordance with the stronger economic data, the path for potential GDP has been revised up even more. That implies that the output gap is even greater now than it was at the time of the August meeting. The Greenbook projects that aggregate demand growth will accelerate from here, overtake the growth of potential output, and begin to close the gap next year, with only marginal further disinflation. I think that's a plausible scenario, and I would agree that it is the most likely particular outcome among the array of possible outcomes.

But I still believe, as I did at the August meeting, that there's a significant downside risk in the outlook, especially a risk of greater disinflation or conceivably even deflation going forward. The weak August jobs report seems to me to highlight the need to remain alert at least to this risk. In this regard, I think it's helpful to try to understand as clearly as possible the process that has produced the disinflation we've experienced recently. As we all know, in the mid-1990s productivity growth also accelerated sharply and that held down increases in unit labor costs and inflation. But that really was not disinflationary because labor markets in that

period were tight. Consequently, the upward pull of higher productivity growth on real wages showed up to a significant degree as increased competition by firms for workers, and nominal wage increases were reasonably high in that period. Of course, productivity growth again is increasing strongly in the current recovery, but this time it's accompanied by very weak labor markets. As a result, the upward pull of rising productivity on real wages hasn't led to as much nominal wage growth. Instead it has shown up mainly in increased competition in product markets, and actual declines in unit labor costs have been passed along to households through lower prices for both goods and services but to a large extent in prices for goods, especially manufactured goods.

For me at least this background is helpful in understanding and appreciating the disinflation risk in the period ahead. The Greenbook forecast is predicated on the view that firms have been reluctant to hire to meet rising demand because they're worried that the expansion is not going to be sustained. The Greenbook assumes that, as time passes, firms will become more confident and that by next year they will be hiring at a remarkably robust rate—at least according to the projection. In this situation, measured productivity growth goes down from 4½ percent this year to 1½ percent next year despite the upward revision of projected structural productivity growth. With demand forecast to grow 5 percent next year, the output gap closes relatively quickly—not immediately, but relatively quickly and steadily—and there's only a little further disinflation. Again, I think this is all plausible.

But there's an alternative outcome, which may have a lower probability, that I would argue is also quite plausible. In this alternative scenario, structural productivity growth is even higher than in the upward-revised projection in the Greenbook, which as I recall is 2.6 percent for next year. That's a lot higher than the average productivity growth rate over the period

between the mid-1970s and the mid-1990s, but it's not terribly different from the average rate of productivity growth in the U.S. economy over the last century or so. If structural productivity does turn out to be higher than projected and if demand growth in the currently subdued—and I would argue, still cautious and distinctly nonexuberant—economy comes in a little weaker than anticipated, the output gap would close more slowly or possibly widen even further; and disinflation could continue or conceivably even accelerate. This outcome may have a lower probability than the Greenbook scenario, but in some contrast to you, Tom, I would argue that it would be an unwelcome outcome. So in the spirit of your Jackson Hole speech, Mr. Chairman, I think it is a risk that needs to be managed carefully.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. As we've been discussing this morning, the staff projection contemplates a very good business environment for the next couple of years. Aggregate demand and real GDP are expected to expand very rapidly, and an amazing 7 million net new jobs are created. The business fixed investment climate improves considerably, and by the end of 2005 the economy is producing near its potential output level and expanding at about the same rate as potential. And, of course, inflation is even lower than it is today. I think most people would be pleased to see that projection become actual experience. I know I would.

However, I've been confronted almost daily during this intermeeting period with a dichotomy between the economy described in the Greenbook and the economy as it is characterized in the reports of the business people I talk with in the Fourth District. I've been hearing a rather consistent story during this period from CEOs—many of whom are heads of companies that operate internationally—across a wide spectrum of manufacturing and service industries. Their story goes something like this: We invested heavily in equipment and software

during the latter half of the 1990s, and it has taken us a while to figure out how to use all of this in a productive manner. We've learned that, in addition to putting in the new technologies, we have to develop different business practices and retrain our employees—which is similar to a comment Dave Stockton made this morning. We found out that in the late '90s we expanded our capacity too rapidly, and therefore we're planning to expand more slowly this time around. At the moment we find that we can generate additional output from our current payroll and capital stock more readily than we thought we could. We need to take steps to avoid increasing costs, and we don't have to add to capital as much as we thought.

Allowing for some occasional variation, that's the story I hear. So I conclude from my business contacts that they remain guarded in their willingness to take on new employees and to invest domestically. Their concern doesn't appear to be a lack of demand for their products but rather how much risk they're willing to take on to meet that demand. The lack of hiring, as we've been talking about this morning, is amazingly widespread. Only about one-third of U.S. industries are adding to domestic payrolls today as compared with nearly two-thirds of our industries at a comparable stage of the so-called jobless recovery of a decade ago.

My business contacts are confirming that a great deal of industrial restructuring is occurring, as President Guynn and First Vice President Stewart have noted. Many firms are continuing to reevaluate the economic value of their current employment base and their fixed investments as they develop their hiring and investment plans for the next year. Some of that labor and capital may simply be less valuable to them now than they had previously thought to be the case. Now, the usual process of reallocating physical capital is for the ownership to change through a sale of the assets without a need to move the buildings or equipment. But the International Steel Group, which just acquired assets from both LTV and Bethlehem Steel,

announced that it's selling two of its quarter-mile-long strip rolling mills to a Chinese company and will relocate those mills to China. One news account estimates that it's going to take several years to dismantle, ship, and reassemble these mills. It's a transaction that provides a vivid illustration of a different way to reallocate resources that is evolving in this global economy.

As I said at the outset, I would welcome the Greenbook baseline projection. However, it's not the picture of the outlook that my business contacts are painting. They seem to be harboring a fair amount of uncertainty about the environment in which they're operating, as many others have said is the case in their Districts. If the Greenbook projection proves to be accurate, it's going to be fascinating to watch the perceptions and actions of these business people as they change their behavior to converge in the direction of the scenario in the Greenbook. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. President Pianalto highlighted the difficulties and problems the economy has encountered in working through the excesses that built up in the late 1990s. In my view we've had some further evidence over the intermeeting period that the economy may finally be working through these adjustments and that, absent further negative shocks, it is poised for sustained robust growth under the added impetus of highly stimulative fiscal and monetary policies. Not only does the pickup in activity that began in the second quarter look as if it has gathered momentum in the third quarter, but also the source of the momentum has been a strengthening in private final demand. As Dave noted, this is very different from early 2002, when the pickup came importantly from an abatement of inventory runoffs. Persistent reductions in investment since 2000 have been the main drag on the

economy, and it's especially encouraging to see the pickup under way in orders and shipments over a wide range of capital equipment and the ebbing weakness in nonresidential structures.

As many of you have noted, businesses are still very cautious. The astounding productivity numbers indicate that firms continue to find ways to expand output without increasing either labor or capital. So it's quite likely that much of the investment is for replacement and modernization, not expansion. But the very fact that businesses no longer seem to be stretching out replacement cycles and are taking steps to upgrade capital stocks indicates their greater comfort that they have worked off many of the excesses. It suggests that the capacity they have will be needed over time and that they have increased confidence about the future.

Investment fundamentals, which have been favorable for some time, are becoming even more so. Including the staff forecast for the third quarter, businesses have seen two quarters of substantial acceleration in output and three quarters of large increases in profits and cash flow. They have seen an unusually low cost of capital for non-high-tech equipment even after the recent backup in long-term rates and an accelerated decline in the cost of capital for high-tech equipment. And this is all before taking into account the temporary expensing provisions in the tax code. Against this background, if businesses are more comfortable with the present and more confident about the future, the pickup in investment spending should continue.

The shift in attitudes is reflected in financial markets, and the adjustment from the overexuberance of the 1990s also seems largely behind us. Yield spreads have retraced all the run-up since 2000. Fortunately, they have not returned to the unsustainably low levels of the middle 1990s. The slightly positive tilt to earnings surprises after a long string of shortfalls suggests a more realistic set of expectations in equity markets. At the same time, the equity

premium remains unusually wide, indicating still-cautious pricing relative to those expectations and a lowering of the odds that another collapse in stock prices will undercut household spending.

Despite the positive prospects for growth, developments on the disinflation front have been more mixed. The immediate news has been encouraging in that the pace of disinflation has been a bit slower than we might have feared. Consumer prices have turned up—and a bit more than expected. I don't know if that's the case in this morning's CPI report, which was somewhat damped, but at least the previous few readings were up. Inflation expectations have been falling but by some measures are still higher than a few months ago, providing an anchor against substantial decreases in actual inflation.

At the same time, however, the staff has interpreted recent data on productivity as suggesting that the growth of potential output has been higher and the output gap larger than previously estimated. So that gap is now likely to close more slowly despite a more rapid expansion of activity. While precise estimates of potential output need to be taken with a very large grain of salt, we do know that employment has continued to fall and that capacity utilization remains stuck at a very low level. So we can be confident that slack isn't declining and probably has increased in recent months. That slack will continue to put some downward pressure on inflation, as it does in the staff forecast. My concern about the level of inflation and its path isn't so much about the current and the next few quarters. It's about a longer time horizon, including where inflation might be when the economy eventually does approach full utilization. As President Hoenig noted, lower inflation can be consistent with rapid growth when productivity rises quickly. But the low inflation and low nominal interest rates will leave the economy and policy with less of a cushion against negative shocks in the future.

In this regard, developments over the intermeeting period, such as the apparent pickup in activity and prices, have relieved my concerns only a little. Until waning business caution together with fiscal and monetary ease show through definitively to increases in activity that begin to eat into margins of slack, the jury will be out on whether growth is above the growth rate of potential. Given the uncertainties about the pace of structural productivity growth, I suspect we will want to see sustained and substantial growth in employment to make this judgment. Moreover, the economy will need to grow at a pace in excess of the growth rate of its potential for a time before we can be confident that the risks of further unwelcome disinflation have materially diminished. Until we can see this sort of growth firmly in prospect, the inadequacy of demand and the associated risk of disinflation should continue to be our primary focus and policy should remain quite accommodative. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. The key question at this meeting is whether the incoming data from the real economy, market developments, and ultimately the outlook are sufficiently changed from our last meeting to warrant a change in either our policy or our tactics. I'll discuss each of these in turn but—not to be mysterious—have concluded that no midcourse correction seems called for at this meeting.

First, from the data, one sees that signs of economic acceleration are indeed more widespread and probably firmer than at our last meeting, but with some important exceptions. Households continue to be the basis of this expansion. Sales of consumer durables and retail sales in the control category are both consistent with a growing economy. This is important because many had thought that the household sector might eventually falter. In that regard, I do take note of the conversation that Dave Stockton and the Chairman had with respect to questions

about the impact of the recent tax cuts. But given the basic strength of the economy, I also believe that we're likely to see increases in income that will be sufficient to support the expansion going forward.

However, the important question has been when, if at all, the handoff will take place between households and the business sector. I would say at this stage that the household sector still is the bulwark, but businesses may be in the initial stages of picking up their portion of the burden. Orders and shipments for capital goods have firmed, and anecdotal reports and surveys have both become a bit more upbeat. However, thus far the participation of businesses in the turnaround is very uneven. Anecdotal evidence suggests that we're seeing only replacement investment and not yet expansion. Similarly, business investment in inventories has yet to pick up, and one is hard pressed, I think, to support the notion that all the drag from inventories is due to improvements in supply chain management and some permanent lowering of the desired inventory–sales ratio. I believe that businesses still face some lingering uncertainty about sales that seems to be weighing on their decisions with respect to rebuilding inventories.

Finally, and already much discussed, labor market conditions are clearly not consistent with the kind of well-established firming of activity that our economy has experienced traditionally. Of course, the issue in this regard is that labor market conditions may be likely to firm only slowly in this environment of improved structural productivity and that the past may not necessarily be prologue.

So if the data indicate ongoing but still uneven firming, what can we take from the financial markets? I conclude that financial markets are certainly supportive of a continued and more rapid expansion of the U.S. economy. Several indicators—including bond issuance, flows to mutual funds, risk spreads, pricing of credit default swaps, and valuations of high-tech

stocks—indicate that risk appetites have increased somewhat. Additionally, the much-discussed backup in long rates does not seem to be a limiting factor in the turnaround. Indeed, I think it is really more a signal of an expectation of a turnaround. However, the absence of truly robust expansion plans on the part of businesses is clearly seen in the relatively lax demand for C&I loans. The commentary from banking sector contacts such as FAC members indicates that, at most, bankers expect only demand for replacement investment and not expansion just yet. As with the data on the real economy, therefore, I think the financial markets are painting a picture of an improving but still uneven economic backdrop and outlook.

Finally, let me turn to the outlook itself. I have no strong quibbles with the baseline forecast. However, I note—as did President Broadus in the Q&A session after the staff report—that since the previous Greenbook the staff has marked up real GDP growth for the forecast period while also marking up the unemployment rate for the next five quarters. At the same time, they've left the inflation rate basically unchanged or actually down slightly. This clearly is a reflection of the fact that they have taken some of the productivity surprise into structural productivity increases. I also note, however, that the output gap remains an important element of this forecast into 2005, suggesting to me at least that deflationary pressures have not lessened and are not likely to do so quickly.

While I have no major quibbles with the staff forecast per se, I must say that I do see some risks on both sides with respect to the growth outlook. First, as I think a few others have mentioned, there's the fact that our staff's forecast seems to be somewhat above the Blue Chip forecast but still below the most optimistic of the outside forecasters. I think we should give at least some weight to the views of those more optimistic individuals. But I'd also observe that there might be some downside risks around the staff's current forecast. First, I fear that the

inventory–sales story is not fully understood and that the ratio of inventory to sales might not be as out of line with business desires as the staff seems to think. If that's the case, the bounceback in inventories might not be as strong as in the baseline. I also have some concerns that the fixed investment story, which depends very much on the so-called lifting of gloom that also plays an important part in the equipment and software story, might not emerge as quickly as the staff assumes. This issue obviously should be resolved in the near term because we're in the period when businesses are planning their budgets for next year, so we should have some better sense of equipment and software plans by the time we meet again. Given that configuration, this seems to me to be a good time, as I said in my opening remarks, to maintain as unchanged a policy posture as possible.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. As far as spending demands go, everything looks good. The recovery seems to be proceeding in a healthy and balanced manner. Consumption has continued to be strong; personal saving rates have been fairly steady at around 4 percent; housing is strong—although it will be clipped some by the rise in mortgage rates—investment in equipment and software has finally started to move; foreign economies and exports are recovering; and inventories are lean. We all know what's going on with federal government spending. Virtually every forecaster seems to be revising upward these days, and nearly all of the forecasters project healthy growth rates for the next year or so.

So what's our problem? Two that I've worried about for the long run are the persistent current account deficits and the growing budget deficits. Both in their separate ways could severely burden or dislocate the economy down the road. But in the short run, the biggest puzzle is the strange performance of employment. There has been much press commentary that, of

course, employment is a lagging indicator. In fact, that's not true. Until the 1990s, employment was considered a coincident indicator; and by normal postwar standards, employment growth should have turned up several quarters ago. Employment did lag output in the recovery of the early 1990s but not by nearly as much as today, as the evidence that Sandy gave earlier supports. As long as employment does lag, we can't fully rest easy. Lagging employment could threaten the sustainability of consumption, though as many of you point out, that argument is debatable. What I think is less debatable is that the implied output gaps could also pull inflation down below our target range—the proverbial unwelcome fall in inflation.

There's both an optimistic and a pessimistic explanation for this unusual behavior of employment. The optimistic explanation, which is more or less implicit in what most of you have said today, is that the lag reflects a huge burst in productivity, which will benefit the economy greatly down the road. The displaced workers will get back to work, output will rise, and trend rates of productivity and economic growth should be higher.

A potentially more pessimistic explanation has been featured recently in a J.P.Morgan newsletter. The explanation focuses on high and rising labor costs. Basically, real wage rates have grown at nearly normal rates, but benefit costs for health and retirement programs—notably including payments to reduce the huge actuarial deficits that have sprung up in many firm defined-benefit programs—have been rising sharply in real terms. Coupled with the generally high level of the dollar, labor costs have also risen significantly relative to those of our trading partners in tradable goods sectors. These rises in labor costs have damped hiring and have in effect induced the high levels of labor productivity. If one looks at the picture this way, the forced rise in productivity may not translate to such higher future productivity growth. But that's exactly what I asked Dave earlier, and he gave a more optimistic answer on that issue. Some

data from recent articles by staff members at both the New York and the Kansas City Federal Reserve Banks shed some light on this issue. The authors find that, in contrast to earlier recessions, a large share of the employment change in this recession is structural not cyclical. Temporary layoffs were not high in the downturn, and job losses from nontemporary layoffs are high now. New hiring is sluggish, and longer-term unemployment is still rising this late in the recovery period.

I personally don't know how much weight to put on this pessimistic interpretation. At this point all we can really say is that hiring hasn't picked up yet. The weight of past evidence and virtually all forecasters, including our own, are predicting strong employment gains throughout 2004. In this sense the smart money does seem to be on the fact that the so-called jobless recovery of 2003 will eventually become a fleeting phenomenon. But central bankers are paid to worry, and persisting employment reductions in the context of strong output gains do provide at least one thing to worry about. Is there something different about this recovery? How long will hiring remain sluggish? Will this sluggish hiring eventually translate to a rise in NAIRU? What does it really mean for productivity in the long run? This set of worries can tide us over until the twin deficits really give us something to worry about! [Laughter] Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. The economy in the Eleventh District is beginning to show more-widespread signs of improvement. Employment data for June and July were on the weak side, but the anecdotal reports from our Beige Book contacts and from last week's meetings of our board of directors and our Advisory Council on Small Business and Agriculture are becoming more optimistic. Manufacturing, of course, remains the exception.

The housing sector has strengthened as buyers have rushed to buy before mortgage rates move higher. On the commercial side, leasing activity has improved, and vacancy rates have stabilized instead of rising further. Even two of our weakest sectors, airlines and trucking, have strengthened somewhat. The demand for computers and semiconductors has continued to improve. Our director from a large specialty semiconductor manufacturer gave the most positive report she has given in several years. Semiconductor prices have stabilized, and capacity utilization is running at 86 percent. With inventories very low, she's hoping that capacity utilization will reach 90 percent soon, which is where pricing power can be regained. She's anticipating output growth of between 15 and 25 percent in 2004, depending on the type of chip. With no new capacity coming on stream before 2005, she's optimistic about the improved outlook. Her company recently announced plans for a new chip manufacturing plant in Dallas in 2006. Meanwhile, even though things are looking up, she reported that for her firm the United States is still the weakest market in the world.

Another anecdote is that the volume of diesel fuel being sold in Texas has risen about 6 percent over the last month, a sign that more goods are being moved to market. Each of the members of our small business council provided a long and detailed analysis about how his or her business was showing definite signs of turning up in the last several months, depending on the industry. That was the good news. They were concerned, however, that the positive direction might last for only six months or so. They all feared that larger companies would remain cautious about capital spending and hiring and that a continued recovery was far from certain. Their worries echoed the concerns I heard at a couple of CEO breakfasts that I've hosted since our last meeting. From those meetings it was clear that CEO hesitancy regarding new investment or hiring hasn't abated very much, and a lot of those who did have expansion plans

mentioned that they were plans for expansion abroad. One of our newer El Paso directors, who was at our board meeting last week, runs a maquiladora plant in Juarez. She lives in El Paso and is very active in maquiladora and Mexican industry associations, and she has been worried about the movement of jobs from Mexico to China. She announced last week that her firm was moving operations to China as well!

On the national economy, I must say that my outlook is similar in broad outline to that suggested in the Greenbook. At the June meeting I was a little skeptical about the strength of the resurgence that was being forecast, but the data available since then seem to substantiate it. The forecasted growth should begin to generate employment growth despite continued cautiousness among CEOs. I'm optimistic that the productivity growth we have going and the substantial slack we have in capacity utilization and in labor markets will give us the rapid growth with diminished inflation over the next couple of years that is forecast in the Greenbook—I hope with better progress toward reducing unemployment.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. I want to mention two additional data points that support much of what we have already talked about. First, from bankers we're getting increasing anecdotal evidence of renewed interest in either expansion or acquisitions but still only a limited number of actual deals. The change from the last meeting is only slight; the change from six months ago is quite striking. Using Dave Stockton's continuum on the psychology—ranging from skepticism to guarded optimism—I would say that bankers are fairly far out on the optimistic side of that continuum. Additionally, to the extent that they have surveyed their customers informally, bankers are reporting that they detect a significantly more optimistic outlook for expansion than had been the case in recent months. In part I think that supports Bill Poole's comment on

inventories—not his remark about just-in-time inventory ordering for diapers but his observation about the risk that businesses could miss this expansion by delaying action too long. That is a real concern, and it may in fact be reflected in a more rapid move by businesses at some point in the near future.

On fiscal policy, you may remember that at the last two meetings it has been reported that there is more fiscal stimulus in the pipeline at this point than at any time in the post–World War II era, including the Reagan era. And that stimulus is about to increase significantly as the Congress will within the next month approve the additional \$87 billion defense authorization and appropriation. That’s good news for the short run. As for the longer term, I share Governor Gramlich’s concern because there is no indication from the Congress of any inclination to reapply fiscal discipline to the system. I find the long-term considerations of that almost appalling. The two data points I’ve noted suggest more optimism for an improved economy but no indication yet of a change in pricing power or any other inflationary pressure.

MR. FERGUSON.<sup>2</sup> Governor Bies.

MS. BIES. Thank you. Let me start by adding to what Mr. Stockton and several others have said about the forecast in the Greenbook compared with the forecasts in the private sector. As I looked at the components of the forecasts, I focused again on productivity. I must say that the more I talk to business people, the more I really believe that we are at a sea change in productivity, so I’m very comfortable with the Greenbook forecast. Not to duplicate the comments of others, I would like to talk in particular about one aspect of the current situation. My remarks may be similar to what Governor Ferguson mentioned earlier about inventory management, but they may give a little different perspective based on what I’m hearing from some of my business contacts. Obviously, the pessimism about earnings growth among CEOs

and business people generally stems from their concern about the inability to raise prices in order to increase revenues. They still feel very constrained in that regard because of excess capacity and the competitive environment that have caused them to really focus on costs. So reengineering work processes and using resources more effectively than before are concepts that continue to drive business decisions and, from what I'm hearing as businesses plan their budgets and strategy for next year, that will continue in 2004.

We've talked a bit about how much inventory-sales ratios have dropped. One of the comments I heard from several folks I talk to in service industries relates to the way we measure inventories. We look at the ratio of inventories to sales, which tends to involve the manufacturing, wholesale, and retail parts of the distribution process. But we really don't have good data on the inventories that sit inside service companies, which is where the majority of the workers are and where most of our production and income growth is generated in this country.

Many service companies have just gotten around in the last couple of years to developing the same kinds of procurement policies that the manufacturers, wholesalers, and retailers have been using since the '90s. My contacts point out that, in the old days, individual departments all had big supply cabinets or supply rooms, and each department ordered its own supplies and tended to have on hand an excess supply of everything from fax machines to servers to paper and everything else. What has happened—and according to my contacts it's one of the reasons businesses have been buying fewer supplies—is that, in their reengineering efforts, large corporations have been centralizing procurement. Office Depot has become their supply cabinet, and basically firms are making do with less. Another change, in terms of equipment, is that many companies no longer have backup forklifts and other equipment sitting around; they wait and get the equipment when they need it. There's no way to measure this but companies say that

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<sup>2</sup> Chairman Greenspan briefly left the room, and Mr. Ferguson was acting Chairman at this point.

inventories within service businesses also have been decreasing and are still being worked down as a way to improve efficiency. The fewer times they now have to handle items in inventory creates big efficiencies in their cost structures, too.

Let me shift to the second point I want to talk about, which is the employment picture. My comments may reflect my naturally optimistic viewpoint in trying to find something good in these dismal employment numbers that we're seeing. I've talked to some people in leadership roles in the NFIB, the small business group, and one of the things they're focused on is the continuing dichotomy between the establishment data and the household data on employment. As we know, the two series have diverged for a long time. But as my contacts pointed out to me, a lot more time, energy, and people are being employed in sole proprietorships than previously. In fact, as shown in a Greenbook chart, the latest monthly survey shows that hiring plans of small businesses—bearing in mind that it's a very recent time series—are back to the levels recorded in the mid-1990s expansion. As these outside contacts like to remind me, most new jobs are created by small businesses. So for the first time in several years they are optimistic that small businesses are going to be the source of growth, while the structural kinds of layoffs we're seeing in big businesses will be a drag. In any event, they are seeing some signs that small businesses are beginning to grow and to hire people other than family members—who work extraordinarily long hours—and there is some optimism that real employment gains will be occurring in that sector going forward.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. Sometime soon we'll be approaching a critical juncture in this policy cycle. Output appears to be growing rapidly, but employment has not yet begun to recover and inflation so far is quiescent. The crucial question is, At what point

should we begin to tighten? There are important risks in both directions. We don't want to tighten too soon and short-circuit the recovery, risking further disinflation or even deflation. On the other hand, we certainly don't want to let inflation and inflation expectations get too high. The key element of our decision will be the view we take about the likely behavior of inflation over the next year to year and a half. We don't have much evidence to guide us on this, but let me offer a little from the only other jobless recovery of recent years—and the recession that seems broadly most like the recent one—the downturn in 1990-91.

It is interesting that initially employment and inflation followed very similar patterns in 1991 and 2001. Both recessions lasted eight months according to the NBER. Employment kept falling after the trough in both recessions whereas labor productivity rose sharply. In the earlier case, twelve-month growth in nonfarm payroll employment hit its minimum value, minus 1.5 percent, in May 1991, two months after the NBER trough date. In the more recent episode, employment growth hit its minimum value in February 2002—also at minus 1.5 percent—three rather than two months after the trough date. In both cases also, core inflation was virtually flat during the recession itself.

The closely parallel evolutions of the 1990-91 and the 2001 episodes ended, however, shortly after the recession troughs. In particular, the rebound in employment growth was much stronger in the earlier episode. In 1990-91, employment growth stabilized eleven months after the trough date; and by eighteen months after the trough, employment growth had reached 1 percent annualized. In contrast, eighteen months after the trough in the current episode, employment growth was still negative. By three years after the 1991 trough, in March 1994, employment growth was 3 percent at an annual rate. In short, the 1990-91 and the 2001 episodes

looked very similar initially, but the recovery of the labor market after the trough was considerably faster in 1991 than it has been recently.

What happened to inflation subsequent to the troughs? This is the critical point. During the three years following the March 1991 trough, core CPI inflation fell from 5.2 percent to 3.0 percent, and core PCE inflation fell from 4.4 percent to 2.2 percent. Both inflation measures declined further subsequently. That is, inflation fell more than 2 percentage points during the three years following the 1991 trough. Moreover, most of this decline occurred after employment growth had turned positive. For comparison, in the current episode core CPI inflation has fallen about 1.2 percent since the November 2001 trough, and core PCE inflation has fallen about 0.5 percent. Because the post-trough recovery in the labor market has been so much slower this time around, the inflation experience in the earlier episode suggests to me that further disinflation or at least stable inflation may be on the horizon.

I realize this is a crude comparison. Inflation was more volatile in the earlier episode, reflecting less anchored expectations. Policies were different, and it's only one data point. But it is at least a little evidence that a jobless recovery is likely to be associated with very weak upward pressure on inflation even during the initial period after employment growth turns positive. All else being equal, that suggests a strategy of vigilant patience for monetary policy.

Thank you.

CHAIRMAN GREENSPAN. Vincent Reinhart.

MR. REINHART.<sup>3</sup> Thank you, Mr. Chairman. I will be referring to the materials that were distributed during your break, which may seem as if it was a long time ago.  
[Laughter]

CHAIRMAN GREENSPAN. Do you want to revise these charts?

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<sup>3</sup> The materials used by Mr. Reinhart are appended to this transcript (appendix 2).

MR. REINHART. I guess I could update the financial market quotes by now! As Dino has already related, the message from financial markets about today's meeting is fairly straightforward. As indicated by the path of the expected federal funds rate in the top left panel, investors apparently anticipate that the Committee will stay with the current level of the intended federal funds rate for about one year. As to other aspects of today's decision, the Domestic Desk's survey of the twenty-two primary dealers reported in the top right panel revealed that virtually all are betting that the risk assessment to be announced this afternoon will be the same as that in August. Indeed, the probability that the nominal funds rate will touch a very low level in the next five months—inferred from Eurodollar options—has receded considerably from its height of early summer, although it has ticked up since the August employment report. On balance, recent quotes on options produce a probability distribution for the expected funds rate—the red bars in the middle right panel—not much different from that prevailing just before the August meeting.

Two other aspects of recent financial market experience that are shown in the bottom panels are worth highlighting. First, the chart at the left depicts a measure of the volatility of expected federal funds rates—the average of the absolute value of daily changes in futures rates—across maturities measured on the horizontal scale. The average changes in futures rates over the past four months (the red bars) have been much smaller at short maturities than has been the norm over the prior decade (the blue bars). Second, as shown by the bars at the bottom right, expectations about the funds rate across the maturity structure have tended to move less on average in response to the last four monthly surprises in the unemployment rate than was the historical experience. Taken together, this suggests that the Committee has been able to anchor expectations about the very near term course of policy—in effect making them less volatile and less sensitive to revisions to the expected path of the economy.

The case for contradicting those prevailing expectations by easing policy 25 basis points at this meeting is presented in your second exhibit. As has been a feature of the past few Greenbook forecasts, considerable resource slack is seen lingering over the next few years. Indeed, as shown in the middle left panel, the expansion of aggregate supply is now anticipated to be sufficiently vigorous that the unemployment rate runs noticeably above the path projected by the staff in June, when the Committee last eased policy. While monetary policy no doubt works with a lag, action today should help to foster a quicker working-down of resource slack in 2004 and 2005.

Another way of making this point is shown in the bottom panel. Given the staff's assessment of the forces impinging on the economy, the actual real federal funds rate is not obviously below some estimates of its equilibrium value. The Committee may harbor doubts that the expansion of aggregate demand will have as much vigor as in the Greenbook forecast that underlies this analysis. For example, if your own assessment of the prospects for capital spending is more similar to the "weak investment" alternative in the Greenbook than to the baseline (including the financial market repercussions), a ¼ point ease at this time may be viewed as desirable. As can

be seen by comparing the black bars of the baseline with the red bars depicting the alternative in the middle right panel, the unemployment rate would be more than 1 percentage point higher on average over the next two years if you held policy steady in the face of investment expanding 4 percentage points less than in the baseline, at least according to the staff model.

This scenario, however, is an alternative, not the baseline. As outlined at the top of your next exhibit, the Committee may be willing to keep policy unchanged at this meeting if it finds both plausible and attractive the forecast in that baseline that inflation will hold fairly steady at around 1 percent, which might be seen as consistent with a working definition of price stability. The Committee may be especially inclined to keep policy unchanged, at least for now, if it thinks that there are other sources of impetus to economic growth that may make it difficult to restrain inflation to its current pace. In particular, as shown in the middle panel, the term structure of nominal yields is unusually steeply sloped, at least by the experience of the past twenty-five years. As was discussed earlier, in the staff's view this unusual configuration will not persist because longer-term yields edge lower as market participants come to see that inflation pressures remain muted and monetary policy can remain on hold for some time. But you may feel that the staff went only part way in anticipating the market response should events in coming quarters convince investors that both inflation and the policy rate will stay on hold. A more substantial rally in the bond market in those circumstances would probably provide considerable additional financial impetus to support capital spending and the housing market.

The other way the yield curve could shift to a more typical configuration over time is by its short end rising. As noted by the third bullet in the top panel, this alternative seems part of the thinking of many market participants, who are apparently expecting that building pressures on inflation next year will lead you to tighten policy sooner than foreseen in the Greenbook. Some concerns in that regard may be raised by the 50 basis point runup since June in inflation compensation derived from the Treasury market, which is plotted in your bottom left panel. As shown in the bottom right panel, the recent inflation forecasts of major investment banks—listed in the second column—are generally higher than the Greenbook projection, whereas their GDP growth projections, shown in the first column, are uniformly weaker than the Greenbook—an observation several you have already made. This apparently less appealing mix of output growth and inflation on Wall Street might arise because market participants project either slower growth of aggregate supply going forward or a less benign Phillips curve—either of which would make holding steady seem more appropriate.

In addition to its rate decision, the Committee faces nettlesome questions regarding its assessment of risks to the outlook going forward, the subject of your final exhibit. With three potential characterizations of risks—downside, balanced, and upside—to two objectives (price stability, shown along the horizontal dimension, and sustainable economic growth, shown along the vertical dimension) the current policy announcement allows nine combinations. The Committee ended its August

meeting in the blue box, in which balanced risks to the growth objective and downside risks to the inflation objective reduced to an overall assessment that the risks were tilted to the downside. As was discussed last night, the meaning of words does matter. If you take the phrase “sustainable economic growth” to stand in for the growth rate of potential output, then you well may envision a transition from that blue box to the yellow box directly below. In that case, the risks are individually characterized as upside to sustainable economic growth and downside to inflation, revealing the implicit judgment that the level of output probably remains below that of its potential. The resulting balance of those two risks depends on the welfare weights attached to those outcomes and span from upside to downside. While it seems a stretch to consider such a change at this meeting, that shift seems more likely in the near term than to either of the boxes highlighted in red associated with balanced risks toward inflation, absent surprising developments.

A more immediate concern is whether to retain the last sentence of the August statement, which, as shown in the box at the lower left, held that “the Committee believes that policy accommodation can be maintained for a considerable period.” In last night’s meeting, most members expressed discomfort with extending some form of commitment about the future path of the policy rate. At the same time, some noted that, in unusual circumstances, guidance offered to market participants about near-term intentions could amplify the effectiveness of policy. It is probably the case that the sentence about “a considerable period” helped to anchor near-term expectations about policy in a manner reflected in the unusual behavior of futures rates I reported on at the start of my briefing. But if you see the need for tightening closer down the road than, say, in staff forecast, you may want to begin thinking at this time about an exit strategy from this part of the statement. Market attention to those words and the likely reaction were they to be excised, however, may make you hesitate to head for that exit too abruptly.

There is one aspect of the current sentence and one potential wording change that might blunt a tendency for market participants to view the statement as a hard promise to keep the funds rate at its current level—the notion so many of you objected to last night. The first applies as a matter of meaning once again. The Committee has indicated its expectation that policy can be kept accommodative for a considerable period. Determining whether the stance of policy is accommodative is a matter of judgment in setting the real funds rate some distance below an estimate of its equilibrium value. In circumstances in which economic fundamentals are improving, the stance of policy can be kept accommodative, even with increases in the nominal policy rate, as long as the associated rising real rate does not move up faster than the rising equilibrium real rate. It is instructive that, as shown in the lower right panel, the Committee has been describing its policy as accommodative since January 2002, shortly after the funds rate moved down to 1¾ percent and before two additional policy easings. That said, market participants seem to have rebased their view on what is accommodative to the current setting of policy. To avoid disappointment in financial markets at some later date, it will be important that public statements as a rule do not equate accommodative policy with the current level of the

nominal short rate. Second, the Committee might want to shade its current implicit commitment away from being based on a period measured in chronological time to one determined by economic events. For instance, the Committee could assert that its judgment was that policy could stay accommodative for the considerable period it currently assesses will be required to foster the containing of disinflationary pressures. That concludes my prepared remarks.

CHAIRMAN GREENSPAN. Questions for Vincent? If not, let me proceed. As I listened to the comments around the table, I noted something that is self-evident in a way but that we really ought to think about. I observed that the correlation between the regional reports at the previous meeting and those at this meeting is extraordinarily high and virtually everyone's assessment of regional economic conditions moved to about the same extent. In effect, that is telling us that we have a truly national market. That was not the case fifty years ago. Back then, mortgage interest rates were 50 basis points higher on the West Coast than on the East Coast; and if we go back even further to the early years of the Federal Reserve System, we find different discount rates at the Federal Reserve Banks around the country. It is important to recognize that we have a unified national market, even though we may take it for granted. The reason it matters is the same as the reason that the increase in globalization matters.

Over the last decade or so we have seen a fairly dramatic rise in globalization. That development coupled with significant deregulation and major technological advances in the United States, as I've commented previously, has led to a marked increase in competition; that increase has been slow but persistent and more and more evident as the years have passed. This growth in competition and the related evidence on disinflation are clearly a global, not a national, phenomenon. Inflation has been falling everywhere. So it is not idiosyncratic to the United States but is occurring increasingly throughout the globalized world economy.

In my view we are seeing a different type of phenomenon with respect to the inflation and disinflation process than we saw in previous cyclical periods. I don't know at what point the

accelerating pace of globalization began to occur, but I do think its emergence bears critically on the reason we favor maintaining our accommodative policy posture for a significant period of time. All this is unlike what we would have done in previous cyclical periods, when the first signs of accelerating economic activity would have led us to move aggressively to tighten monetary policy.

We are not likely to tighten quickly. Indeed, the evidence in support of that conclusion is clear even among those of you who are questioning, and probably correctly so, how much weight we should place on the gap analysis and on expectations that inflation will stay near its current low level. I think our general view is that inflation is probably going to stay down. There is no evidence of a break in the disinflationary forces. Those forces may be diminishing, and indeed they may be in the process of being gradually contained, but if so this process clearly is a fairly lengthy one.

This raises the obvious question of whether we are observing an ongoing trend. I suspect the answer to that is “no.” We’re getting all sorts of indications, regrettably including an important one just yesterday, that the process of globalization is slowing down. We had a breakdown yesterday in the WTO negotiations. Protectionism is emerging in this country in areas where it was not evident previously. Recent developments indicate that the politics of protectionism, which were fairly well contained as the economy moved through the whole deregulation-technology period, are beginning to surface in a variety of places. If indeed this political trend continues to strengthen, then the competition that has been holding down the price level will begin to weaken. As that occurs, we can expect inflationary pressures to reemerge.

I think it’s important for us to recognize that we may be going through what I suspect is a unique period. I think policy has been adjusting to that development over the years and very

specifically in the most recent year. My own judgment is that the current situation is not permanent. It is a transitional phase that has led us away from a fairly high degree of regulation and control and has fostered a very significant shift away from the old views regarding the regulatory structure. Many observers once perceived that structure to be appropriate, though I exclude myself from that judgment.

The bottom line in all of this—and what I think emerged in our discussion last evening—is the recognition of the need to begin to think about where we should go from here. The next step is clearly either to confront serious disinflation, which has been our concern through most of this year or, what I see as far more likely, to move away from that concern. As Vincent mentioned, we ought to think about an exit strategy that will let us find our way back to a more conventional Federal Reserve policy.

In retrospect, I think it was a mistake to include a sentence in our press statement in August indicating that an accommodative policy can be maintained for a considerable period. It may not have created an immediate problem, but I don't think we should be judging policy in terms of any fixed time frame. Instead, it should be judged with respect to the process of implementing our objectives. As Vincent just suggested, we need to begin to consider how we will work our way out of this. Rephrasing the sentence in the press statement, as he put it, is a way out because we could readily translate “considerable period” into the notion of a “process” that involves a change in the disinflationary outlook. If we decide to introduce the notion of such a process in our statement today by adding a reference to the containment of disinflationary forces, we could drop the “considerable period” from our statement at the next meeting but retain the new reference. We would then be in a position to drop that new reference at a later time when we perceive that disinflation is no longer a significant concern. In fact, initiating that

approach is what I would like to recommend today, namely to retain the balance of risks statements exactly as we had them in August, with the sole exception of adding to the “considerable period” statement a reference to its process equivalent relating to our effort to contain disinflation.

In sum, what I would like to put on the table for a vote is holding the funds rate unchanged and retaining the balance of risks language we had the last time, with this minor change. The statement, if you go along with this, would be exactly the same as our last statement apart from some updating of the economic references and the addition of a reference to the containment of disinflationary forces to the existing sentence relating to the maintenance of policy accommodation for a “considerable period.” Before we vote, I would like to distribute the draft of the statement so you can see what it looks like. Governor Gramlich.

MR. GRAMLICH. I’m about 0 for 27 in suggesting changes.

CHAIRMAN GREENSPAN. That’s not true. You had a single the last time!

MR. GRAMLICH. I’m 1 for 27. In the last sentence, I don’t think we need the word “considerable.” I think the sentence could be written more simply with something like this: “In these circumstances, the Committee believes that policy accommodation can be maintained until disinflationary forces are contained.”

CHAIRMAN GREENSPAN. But that’s different from this draft in the sense that I’m using the term “considerable period” so it’s not changed and then redefining it. What you’re doing involves moving faster than I think is wise to do.

MR. GRAMLICH. Okay. I see your point. The complication is that this is a very ungainly sentence, but I do see your point.

CHAIRMAN GREENSPAN. We’ve used such sentences before. Is that okay?

MR. GRAMLICH. I still like my sentence better, but I see your point. I'm not going to make a big issue of that.

MR. STERN. One for 28!

MS. MINEHAN. But who's counting?

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Let me continue the usual tradition by commenting first on your three-part recommendation and then I'll talk about the statement. First, I think you're right that we shouldn't move the funds rate. While I am always influenced by the chart that shows the current funds rate versus the real equilibrium rate, I think financial conditions actually have been rather accommodative. Also, a change in the funds rate would surprise the markets. I don't think we should move the rate. With respect to the balance of risks, I support your recommendation to stay pretty much with our tri-partite statement. In my view it has worked well. You added another component to your recommendation for the press statement, and I want to focus on that next. I think it is important, as Vincent suggested and as you also implied, that we move from chronological time to economic time because what is going to drive our policy decisions is not the passage of months but what we see happening.

Then we get to the question of what we want to see happen. Obviously, it seems right to talk about that in terms of containing disinflationary forces. That is a key economic issue that worries us, and it will be the issue that we will continue to focus on. I rather like your addition of this concept of fostering the containment of disinflationary forces. My son's seventh grade English teacher probably would not be ecstatically happy with the resulting sentence, but then he's not in this room. I like what you've proposed here because it gives a sense of an ongoing process, and I think it will give us some flexibility when we start to see things coming together.

That is, when we feel we have succeeded in fostering the containment of disinflation, that might be the time to make a policy move, and we can all decide when that point has been reached. So while this is not necessarily beautiful English, to me it is a good description of when a responsible Committee might think about changing its policy. That's really all I want to try to signal this time. So, in light of my view that nineteen people can't redraft a press statement very readily and my sense that we want to move from chronological toward economic time in our statement, I can support all three parts of your tripartite recommendation.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I'm obviously in agreement with your recommendation on the funds rate. Actually, I don't see any alternative to keeping the language on the risks—the risks to sustainable economic growth, the risks of inflation, and the balance of risks—the same as the last time. Not enough has changed. Growth is clearly a little stronger, but we have labor market constraints. So I think it would be difficult to change that wording, even though it brings to mind last night's discussion about how none of this language is particularly satisfactory right now. Nevertheless, I don't see a case for changing it at this time, which was one of my basic points last night. The last sentence in the draft is ungainly; there's no question about it. But I follow your logic that this approach is a way, over a meeting or two, to back away from prescribing a time period and move toward mentioning a set of circumstances—or however we want to characterize it—that would affect our future policy course. I think this sentence is probably a good way of doing that. So I'm in agreement with all three parts of your recommendation.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I certainly support the recommendation that we keep the funds rate where it is. Let me try not to get into the wording issue but discuss what

in my view is the substance. First, I want to talk about the probability distribution rather than just the word “risk” for the moment. On the inflation rate my own view is that the probabilities going forward are roughly symmetric around the average inflation experience of the last six to twelve months. I believe the situation is different from what we had in the spring because there is a noticeable pickup in activity. On growth, I think the distribution is roughly symmetric around the consensus forecast. But I also believe that growth modestly above the consensus forecast is both desirable and sustainable. I don’t think that would cause us any problems; in my view the economy has room to run at a faster rate. So I don’t regard an upside surprise—provided it’s not an outsized surprise—as a risk to the sustainability of the economic advance.

I agree that it’s important to try not to rock the boat but to attempt to evolve this language. My preference would be to work at this by going in a slightly different direction. Given my view of the probabilities, I would go for balanced risks on inflation because with the price stability outlook my view is that the probabilities are more or less balanced. I do believe that, going forward, the risks to price stability on both sides are relatively muted. So in the last sentence, I would say something along the lines that we can “maintain an accommodative policy for the considerable period in which we expect the risks to price stability to remain muted.” That makes the accommodative policy conditional on the maintenance of low risks to price stability.

CHAIRMAN GREENSPAN. May I make a suggestion? You know, that’s not bad phraseology for our statement two meetings from now. That’s where we are going. I just don’t think we gain very much by moving in that direction too soon. In fact, I’m sure that we probably lose something. But keep that phraseology in mind. That’s not a bad way to say what we mean.

MR. POOLE. I won’t destroy my notes as I usually do after each meeting.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, given the strength of the economy that we see, at least on the basis of the most recent data, I support leaving the funds rate at 1 percent. However, even with the expected pickup in growth, there's an uncomfortably high risk that inflation may move lower than would be desirable. Certainly in the Greenbook, with the revision to productivity, it's clear that the gap is probably greater today than we thought was the case in the past.

I favor retaining our current risk assessments, with the risks being balanced for growth and weighted toward the downside for inflation. But I do want to make a parenthetical point. When I read the Bluebook and heard Vincent's presentation, I was struck by the case that was made for an easing. In particular, one or two scenarios seemed to indicate that an easing might be appropriate as something of an insurance policy—and one that I can't see as having any cost. So I would suggest that, if indeed there is a perceptible lull in the economy, we ought to jump on the chance to ease and the exit strategy will not be an issue.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I support your fed funds target and the balance of risks—the risk assessments, if you will—as stated. Frankly, if I had my druthers I would wait one more meeting before I would change anything in the wording about policy accommodation being maintained for a considerable period of time. I'd come back next time and change that sentence. At the moment we're seeing signs of growth and some positive developments in the economy. I agree that eventually we're going to have to change these words and start to exit from this strategy of describing our policy expectations for a “considerable period.” I just think that “eventually” should be next time.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support all the pieces of your recommendation. On the balance of risks statement, I agree to a large extent, though not entirely, with what President Santomero said, which was to change as little as possible in that statement. I would reserve these changes until we agree on what we mean by the words we use. I think it would be a big mistake to start changing them at this meeting before we go through the stress-test that President Moskow suggested last night. So in my view we ought to keep the balance of risks wording exactly as it is now until we have time to think about it more thoroughly.

As for the balance itself, I happen to agree with the current assessment. I think the risks are balanced even on my definition of sustainable growth, which isn't everybody's, given that we have strong demand but very weak labor markets. So whether the output gap will close over the next few quarters is a very open question. In that sense the risks are balanced, as stated in the first sentence of that paragraph. I do think we have persisting risks of disinflation, so I agree with the second sentence and also the sentence that sums up our assessment of the risks.

On the "considerable period" sentence, I think we need to set ourselves up sooner rather than later to get to the exit strategy. This is where I part forces with President Santomero a little. I believe this wording is moving toward an economic rationale, and I'd prefer to get going in that direction. We can't be sure where the economy is going to be in coming months and when we're going to need that rationale, so the sooner we get there the better. With regard to Governor Gramlich's suggestion that we drop "considerable period," I believe it's going to be a big deal when we do that. Getting to that point very rapidly would have market repercussions. I think it would be interpreted as a signal that we were getting ready to do something that we're not

getting ready to do. So I agree that we have to move in a more gradual fashion toward this exit strategy, as you suggested.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I agree with leaving the funds rate target unchanged at this meeting. My own view is that we are in an environment where we're close to price stability, with low and stable inflation, and I think the risks are balanced. I will tell you that trying to figure out what to say in this statement right now makes the early release of the minutes seem more appealing to me than it did last night. In any event, I don't think we can do much to change this statement given the current circumstances, so I'm not going to argue any further. I'll live with this language, but I hope we do develop a very carefully crafted exit strategy fairly soon. Thank you.

CHAIRMAN GREENSPAN. First Vice President Stewart.

MR. STEWART. Mr. Chairman, I support your recommendation. In my view the recovery still is fragile in terms of employment and the business psychology. I think it's too early to start an exit strategy from our statement about our accommodative policy being maintained for a considerable period of time. I have no regrets about having made that statement, and I think it's still relevant to repeat it.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I certainly support leaving the federal funds rate target at 1 percent. As for the other issues, the overriding concern in my mind is the potential reaction in the marketplace. I will say a bit more about that in a minute. Because of that I feel rather constrained as to what we can or should do at this meeting. So I will certainly accept your recommendation on the balance of risks statement, although my instinct is to agree

with those who feel that the risks on the inflation side are moving in the direction of balance. If they're not balanced yet, I think they may well be shortly. Also because I feel constrained, the language you're proposing here on fostering the containing of disinflationary forces is okay with me. But presumably the reason we want to tread slowly and carefully here is that we're concerned about creating all sorts of turmoil in the financial markets. The likelihood of that is hard to gauge. I'm certainly prepared to go along with this, but I do think that concern is the reason to proceed cautiously. And it's not just the question of the reaction of the financial markets but what that reaction could do to what we think is a gathering momentum in the economy.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. I support your recommendation on the federal funds rate target and your recommendation on retaining the balance of risks statement as it is currently. As I said last night, though, I am uncomfortable about signaling our future policy actions in our statement and, therefore, at the August meeting I was not in favor of the considerable period of time sentence. But I also agree with your assessment that dropping it at this meeting would confuse the markets. So I support the statement as written.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman I support no change in the funds rate target. I remain concerned about striking a better balance of risks statement, but that's not something we can deal with today. I hope we will keep in mind a fundamental review of that.

I also like the idea of trying to find an exit strategy. I've read the new final sentence three or four times, and I wish I could be more comfortable that I know how people are going to interpret it. I'm not sure it's going to get us where we're trying to go. Roger said he was

worried about the people in this room understanding it; I'm worried about the people outside understanding that last sentence. I think a lot is going to depend on what we say in subsequent days and weeks about disinflation as we speak on the economy. The fact is that in this paragraph we refer to disinflation three times. My suspicion is that at least some of us will continue to talk about disinflation, so I'm not sure this statement really gets us unstuck from what we did at the last meeting. On balance, I think I'd be more comfortable leaving the language as we had it in our statement last time and trying to find some better words for use at another meeting. But I'll accept this change in the language if that's the consensus of the Committee.

CHAIRMAN GREENSPAN. I must tell you that I'm listening to all of this, and I agree that it is an awkward statement. Essentially there are really two choices. One, we can literally stay with exactly what we had in our previous statement and try to figure out another form of exit strategy. Or two, we can go with the proposed new language. But if there are any doubts about the clarity of this new sentence—and I quickly acknowledge that there are—I think there's a valid point to be raised here about using the new sentence. President Moskow.

MR. MOSKOW. Mr. Chairman, I support no change in the funds rate, and I support the balance of risks recommendation. On the last sentence, I do think we need an exit strategy, and in my view this is a reasonable one. But I don't see the urgency to do it today that Governor Kohn does and others may. I would be very comfortable just leaving the sentence as it was.

CHAIRMAN GREENSPAN. You weren't raising an urgency of doing it today, were you, Don?

MR. KOHN. No, I was just saying that I supported the additional wording because it sets us up for a future meeting. So I'm not urging—

CHAIRMAN GREENSPAN. You're supporting the sentence as proposed?

MR. KOHN. Right.

MR. MOSKOW. Right, that's what I thought you said. But what I'm saying is that I would leave the sentence as it was last time; that would be my preference at this point. I think this kind of wording might provide the exit strategy we will want to use, but I don't see any urgency to adopt it at this meeting. I would prefer to wait and think a little more carefully about the best way to phrase this. That's my personal preference.

I would like to make a comment on your remarks about the pace of globalization and the possibility that it might be slowing down. I toiled in these vineyards for a bit in another position—and I have a lot of scars on my back from it, too! I come out with a little more optimistic view of the situation than you do. First, I would say that I believe protectionism does become more prevalent when the economy is weak or sluggish. As the economy improves, I hope that some of these protectionist sentiments will subside. Second, on the breakdown in the trade talks, this breakdown was different from those in previous trade talks—which often occur, by the way—and that's because the developing countries were playing a larger role this time. In any event, these global talks are always difficult. In my view the '05 deadline was very optimistic when it was set up, and I think the parties probably will not meet it now. Certainly, if they did meet the '05 deadline, it would be counter to all of our experience in previous global trade talks. So I guess I'm a bit more optimistic than you are on that side.

CHAIRMAN GREENSPAN. Well, I hope you're right. President Broaddus.

MR. BROADDUS. Mr. Chairman, I'm fine on the funds rate target and on the substantive aspect of the balance of risks. But on the press release statement I'm very much in Jack Guynn's camp. He expressed my concerns very well. I just don't know how this additional language is going to be interpreted. I've been trying to think about that. In my view, the

additional reference to disinflationary forces may well lead people to think that we are more concerned about further disinflation now than we in fact are as a group. Actually, that language fits my own personal view, but I don't know that it matches the sentiment I've heard around this table. More broadly, this new wording is another ad hoc change, and that's what is going to get the attention in the marketplace; and I don't know how market participants are going to interpret it. So while I understand the logic, in terms of the reasons that you want to put those words in, I think it may be expecting more than is reasonable of the ability of markets to parse this language. The bottom line here is that sooner or later, as others have said, we're going to have to take the word "considerable" out. That's going to be the key point, and in my view it's going to be very difficult for us to smooth that transition very much. I think that is just going to have to be faced at the right time. So my preference is to leave the wording unchanged from last month.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I support your recommendation to keep the fed funds target rate at 1 percent. At this time I still am quite concerned about the downside risk on inflation, mainly because of the forecast in the Greenbook and my belief that the productivity story is still being written. However, like others who have just commented, I would prefer to leave the last sentence of the statement as it was last time. In that last sentence, I think we're trying to say why we want to remain accommodative. But the sentence before, which relates to the balance of risks, says it already. It states that the predominant concern continues to be the risk of inflation becoming undesirably low. So, I don't think we need to say it again at the end of the next sentence. Again, I'm just worried about changing too many words. I could accept this language but since the sentence is rather awkward I'd really prefer to leave the wording as it was.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. I support both parts of the recommendation. Regarding the last sentence, I think the phrase that it is important to retain is “considerable period.” The phrase that I think is going to get a lot of attention is “to foster the containing of.” It will likely be the focus of attention just because it is awkward. It would be less awkward if we dropped the participle and just said “to contain disinflationary forces.” But to do so would be to promise more than monetary policy can probably deliver. So on balance, I’ll accept the statement as it is.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I’m okay with your recommendation.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. I accept the policy recommendation. On the last sentence of the press statement, my preference would be for this meeting to leave it as it was before—because I think that’s the safest thing to do—and to change it next time. I’d like to add my voice to President’s Poole’s suggestion of wording that was something to the effect of remaining accommodative for the considerable period that we expect the risks to inflation to remain muted. The distinction is that we would be accommodative as long as inflation remains under control as opposed to as long as inflation is actually falling. You can see the distinction. To contain disinflationary forces means as long as inflation stops falling. President Poole’s wording about the risks to inflation remaining muted suggests that as long as inflation stays where it is, which is actually very low, we have no reason to begin to tighten.

CHAIRMAN GREENSPAN. When we eventually get to that point, I think that’s where we’ll be in terms of conveying our assessment of the situation.

MR. BERNANKE. In any event, I think that might be a good way to go.

CHAIRMAN GREENSPAN. Yes, we start by getting the first difference, and then when we get to zero, we meld into it the concept of muted risks to inflation.

MR. BERNANKE. Well, if you start with the first difference then you might get an expectation in the market that we're going to begin tightening at some early point, say, just when the difference changes.

CHAIRMAN GREENSPAN. Well, that depends in part on how we change the statement as we go forward. That is the reason I thought the issue of the stress-test that Mike Moskow was raising last night was the right one. Governor Gramlich.

MR. GRAMLICH. Let me just propose another strategy here. It's quite possible that by next month we're going to have balanced risks. If that is the case, then we're going to have to do a lot with this paragraph. This sentence could just drop by the wayside at that point, and it would be one of many changes in the statement. So, we could leave the sentence alone today—have it the same as it was last month—and then just drop it next month. Also, the point that Jack first made and that others have also expressed is that mentioning disinflationary forces actually raises the issue that you talked about last night. That is, the more we say “remote” possibility, the less it is believed to be remote; and the more we say “disinflationary forces”—

CHAIRMAN GREENSPAN. That is a good argument. President Hoenig.

MR. HOENIG. Mr. Chairman, listening to this discussion, I want to say that I very much agree with those who say we should leave this wording absolutely the same as it was last time.

CHAIRMAN GREENSPAN. That's where I'm coming out as well, I must tell you.

MR. HOENIG. Keeping it the same tells the market something right there. It means that we don't want to change anything, and market observers will begin to think about the fact that we'll be backing off in the future. I think that will take us a step forward in an exit strategy.

CHAIRMAN GREENSPAN. On this issue I think the argument for doing nothing has won the day. There's also another marginal issue here. The data for the last week or two are not incorporated in the forecast presented in the Greenbook. There's a somewhat edgy element in those data, which I will grant you is more consistent with leaving the statement alone on the grounds that we will have another month to play with the wording. So as far as I'm concerned, the argument for leaving the statement unchanged wins, and I would make that recommendation. Incidentally, for the next meeting we ought to make sure that the statement on the balance of risks in the draft press release is the same as in the Bluebook. We don't have time to fix that today, so you'll have to bear with me on this temporary problem. But we'll get rid the inconsistencies. Would you read the inappropriate language!

MR. BERNARD. It's on page 10 of the Bluebook: "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 1 percent." For the risk assessment sentences: "Against the background of its long-run goals of price stability and sustainable economic growth and of the information currently available, the Committee believes the risks to its outlook for sustainable economic growth over the next several quarters are balanced. The risks to its outlook for inflation over the next several quarters are weighted toward the downside. And taken together, the balance of risks to its objectives are weighted toward the downside in the foreseeable future."

CHAIRMAN GREENSPAN. I want to make sure that the changes in the second paragraph in the statement are acceptable. Is that correct? Nobody has commented on them. Also, in the third paragraph we have said "remains" the predominant concern rather than "is

likely to be” the predominant concern. Is that acceptable to everybody? Does everyone know what I’m referring to? The “remains” is about three lines up from the bottom in the marked-up version of the draft. Okay, I will assume that there are no objections to those changes. Please call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Governor Bernanke	Yes
Governor Bies	Yes
President Broadus	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Guynn	Yes
Governor Kohn	Yes
President Moskow	Yes
Governor Olson	Yes
President Parry	Yes
First Vice President Stewart	Yes

CHAIRMAN GREENSPAN. Our next meeting is October 28. Let me just say that I will be appearing before the House Budget Committee before then. If it turns out that there is a need for us to communicate something officially, I could do it then, having preceded it with a telephone conference of the Committee. I don’t think that will be necessary, but I wanted to note that conditions in the economy might be changing faster than we anticipate and, if that’s the case, we have a vehicle that could be used to put a Committee view out on the table. Let’s go to lunch.

END OF MEETING