

**Meeting of the Federal Open Market Committee on
December 9, 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, December 9, 2003, at 9:00 a.m. Those present were the following:

Mr. Greenspan, Chairman
Mr. Geithner, Vice Chairman
Mr. Bernanke
Ms. Bies
Mr. Broaddus
Mr. Ferguson
Mr. Gramlich
Mr. Guynn
Mr. Kohn
Mr. Moskow
Mr. Olson
Mr. Parry

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

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

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

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

Mr. Kos, Manager, System Open Market Account

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

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

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

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

Mr. Hambley, Assistant to the Board and Director for Congressional Liaison, Office of Board Members, Board of Governors

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

Mr. Nelson, Senior Economist, Division of Monetary Affairs, Board of Governors

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

Mr. Kumasaka, Financial Analyst, Division of Monetary Affairs, Board of Governors

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

Messrs. Lyon and Werkema, First Vice Presidents, Federal Reserve Banks of Minneapolis
and Chicago respectively

Messrs. Fuhrer and Hakkio, Ms. Mester, Messrs. Rasche and Rosenblum, Senior Vice
Presidents, Federal Reserve Banks of Boston, Kansas City, Philadelphia, St. Louis, and
Dallas respectively

Messrs. Bryan, Elsasser, Sullivan, and Weber, Vice Presidents, Federal Reserve Banks of
Cleveland, New York, Chicago, and Minneapolis respectively

Mr. Trehan, Economist, Federal Reserve Bank of San Francisco

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MR. GEITHNER. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Welcome. I trust you've brought all of your wisdom with you. If not, go home and get it! [Laughter] Who would like to move approval of the minutes of our October 28 meeting?

MR. FERGUSON. I'll move the minutes of October 28.

CHAIRMAN GREENSPAN. Without objection they are approved. The next item is the election of a Vice Chair. Governor Ferguson.

MR. FERGUSON. My nomination for a new Vice Chairman of this Committee is Timothy Geithner, the President of the Federal Reserve Bank of New York.

CHAIRMAN GREENSPAN. Is there a second?

SEVERAL. Second.

CHAIRMAN GREENSPAN. Is there opposition? [Laughter] Congratulations! As you've observed, the democratic process has worked without a flaw. Let's turn to Dino Kos.

MR. KOS.¹ Thank you, Mr. Chairman. I'll be referring to the package that was circulated a short time ago. The intermeeting period was characterized by generally stronger data both in the United States and abroad but with a divergence of views about what that implied for near-term movements in interest rates. In addition, the dollar continued to depreciate regardless of the tenor of the accompanying data.

The top panel on page 1 graphs current three-month deposit rates and three-month deposit rates three, six, and nine months forward for the dollar and the euro since September. Dollar rates are in red and euro rates in green. In the days after your last meeting, the initial GDP report, manufacturing survey releases, and the October employment report were all stronger than expected, and forward rates (the dashed red lines) rose. Those rates subsequently retraced that rise after a succession of comments by Committee members emphasized that policy would not be tightened any time soon. The upward revision of third-quarter GDP to 8.2 percent, coupled with market sentiment that the Committee would remove the "considerable period" language from its statement, drove forward rates higher yet again. But this past Friday's

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

employment report and the *Washington Post* article about the possible content of your statement for this meeting caused a sharp reversal in forward rates, and on net forward rates are much as they were in mid-October.

Euro forward rates largely moved in sympathy with U.S. rates; but in Europe, too, the data improved, and European growth forecasts were revised higher. In particular, in Germany machinery and factory orders for October turned positive after several weak months. In addition, increased talk about the “stickiness” of European inflation emboldened those who are expecting the ECB to be aggressive if signs of inflation appear. Rate hikes by the Bank of England and the Reserve Bank of Australia and increases in some commodity prices provided traders with periodic reminders about the risk of not being positioned for a possible turn in the cycle. Shown on the bottom panel of page 1 are the two-year Treasury yield and the fed funds target since July 1, 2002. After a year-long period of narrowing, the spread between the two started to widen after the June reduction in the funds target and did so again more recently as the market was bringing forward the horizon for higher short-term rates. Even with Friday’s narrowing, that spread is fairly wide by recent standards.

Looking at a longer time period, the top of page 2 graphs the spread between the two-year note and the fed funds target since 1990. The recent peak in the spread is at the high end of the range since 1995. It is narrower, however, than the spread frequently observed in the 1991-93 period, when the funds target was anchored at what was perceived to be an unusually low rate at that time—3.0 percent. There have also been false alarms such as in early 2002, when the spread shot up to 200 basis points only to be walked back down by disappointing data in subsequent months. There is less ambiguity with credit markets, which continue to perform well. Spreads have continued to narrow even as they have approached 1998 levels. Optimists point to improving credit quality, a global recovery that will lift all boats, and anecdotal reports of less leverage in the system. Cynics counter that there is too much investor confidence and hence complacency, given the small room for error, and that the recovery is no sure thing—especially for more-leveraged companies and weaker emerging-market borrowers.

The two middle panels reflect the continued contraction of risk spreads. The investment-grade corporate spread narrowed to less than 100 basis points—the narrowest level since July 1998 and down from 265 basis points during the distress of early October last year. The middle right panel depicts the Merrill Lynch high-yield and EMBI+ spreads to Treasuries. At 425 basis points, the high-yield spread is at its lowest level since August 1998, just before the Russian default. The combination of low Treasury yields and narrow spreads has led to the lowest nominal borrowing rates for lower-rated borrowers since before 1990, as shown in the graph at the bottom of page 2.

While equities and fixed-income markets have performed well this year, the dollar has continued its steady depreciation. The chart at the top of page 3 shows the value of the dollar against five major currencies from January 1, 2003, to date. The pace of

depreciation has accelerated somewhat since early September. Part of the explanation is purported to be the G-7 communiqué in Dubai. But the dollar has continued to depreciate despite all the positive data of the last 2½ months. The dollar is at its weakest point against the euro since the euro's inception—at about 1.2260 as we speak. The British pound recently hit an eleven-year high versus the dollar, and other floating currencies have also hit multiyear highs. Part of the reason ascribed to the dollar's fall relates to reduced long-term private capital flows such as FDI or long-term equity investments. Instead, the funding for the current account deficit relies more on short-term capital flows such as official purchases. Excluding Japan and Switzerland, dollar interest rates are lower than those of most major currencies across the yield curve. The middle panel shows the yield advantage that five-year government bonds of Germany, Canada, the United Kingdom, and Australia have over the five-year Treasury. The picture looks similar at other maturities. With lower interest rates and an absence of long-term capital flows, what appears to be giving way is the value of the dollar. So far, the dollar's fall has been gradual, and volatilities have been low. The bottom panel shows implied volatilities for the euro-dollar and dollar-yen exchange rates. There has been little movement in euro-dollar volatility despite the move to successive new highs for the euro. This suggests some comfort with the direction and pace of euro appreciation. The implied volatility for the dollar-yen has continued to decline following its mid-September spike surrounding the G-7 summit in Dubai and the temporary intervention pause of Japan's Ministry of Finance. During the intermeeting period, the Japanese monetary authorities purchased another \$17½ billion, bringing cumulative purchases for 2003 to \$157 billion.

Moving on to page 4 and activity in the System Open Market Account (SOMA), tomorrow will mark something of a milestone. Fannie Mae's ten-year bond that was issued on December 10, 1993, will mature, and that is the last agency instrument held outright in SOMA. The top panel graphs the evolution of SOMA's outright holdings of agencies going back to 1970. At its peak, SOMA held about \$9 billion dollars of agency debt, accounting for about 6 to 7 percent of SOMA's holdings. That number shrank rapidly in absolute size and as a percentage of overall SOMA holdings with the decision in 1981 to cease outright purchases and to roll over maturing securities only when suitable new securities were available in the primary market. With the maturity of the Fannie Mae issue tomorrow, our outright agency holdings will be zero. The Desk does continue to accept agency debt as collateral in its repo operations, as shown in the bottom panel. Until the late 1990s the amount of agency collateral held was small, though as a percentage even that small number accounted for 10 to 30 percent of our collateral. That number shot higher in the late 1990s with the shrinkage of the Treasury market and the run-up to Y2K. In addition, the Desk also started to accept agency-sponsored mortgage-backed securities in late 1999, as shown by the green bars of the lower panel. The absolute level of our collateral comprised by agencies, including mortgage-backed securities, has declined in the past two years. As a percent of the overall collateral pool, the numbers are back to the high end of their historical range.

Mr. Chairman, There were no foreign operations. I will need a vote to approve domestic operations.

CHAIRMAN GREENSPAN. The domestic credit markets have been rather tranquil despite what is presumed to be a significant shift in the propensity of foreign holders to purchase U.S. assets. I assume that implies either that markets saw rates going down and have been supportive of that or that the sensitivity of market interest rates to the substitution of official for private purchases is really quite small. If the latter is the case, the notion that the official purchases had to be there to fill in the gap is in a sense really missing the point. Which of these two explanations, or a third if you have one, would seem most credible in this context?

MR. KOS. I'm not sure that I have a third. The way I would tend to look at it is that, to some degree, official holdings have had to fill in the gap to the extent that officials elsewhere have made a policy choice not to let their currencies appreciate. Now, exactly how that relates to the substitutability of domestic assets—

CHAIRMAN GREENSPAN. That's the crucial question.

MR. KOS. Yes, and that's the unknown. I don't have a way of quantifying that. I agree with you that it is the crucial question, but all we can see is the end result. Exactly how we got there is the more difficult question, and I'm not sure I can give you an answer that would be robust and would make sense in a full-scale econometric model.

CHAIRMAN GREENSPAN. Further questions for Dino?

MR. FERGUSON. May I ask one?

CHAIRMAN GREENSPAN. Sure.

MR. FERGUSON. We had a brief discussion yesterday at our Board meeting about the equity risk premium. It seems to be relatively wide, even somewhat wider than historically normal. It's not on your charts, but you mentioned the equity markets. Do you have a point of

view about why it is that the equity risk premium seems relatively high now and how it might evolve going forward based on your experience with the markets and from people you talk to in New York?

MR. KOS. I think the answer is “no”—I don’t have a view going forward. Certainly, there’s a lot of discussion in the markets—if one looks at what is going on in the junk bond market, for example—that low interest rates and the perception of abundant liquidity have helped to support risk assets be they high-yield bonds or equities. I don’t know whether or not that’s true, but that certainly is a perception. The flip side of that coin is that, if monetary conditions were to change, some of those markets would be at risk.

MR. REINHART. I would point out, Governor Ferguson, that financial economists refer to observed equity premiums historically in the neighborhood of 500 to 600 basis points as the equity risk premium puzzle. The fact that it’s now a little high in the range that has prevailed over the last decade doesn’t put it well out of the range of the last century or so. Economists have a hard time understanding the pricing of equities importantly because it depends on risk aversion and expectations. So I’m not sure that I’d feel comfortable saying that what we’re observing now is particularly at variance with the historical norm.

MR. FERGUSON. Okay, thank you.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. On page 3 of your charts you juxtapose the declining dollar with the positive interest rate differentials with our major trading partners. The obvious question is why hasn’t there been a sharp decline in the dollar followed by an expected appreciation of the dollar given the interest rate parity condition. How is holding U.S. securities at a lower interest rate consistent with the expectation of an ongoing depreciation of the dollar?

MR. KOS. Well, that's an excellent question. The way I tend to look at it is that we have a current account deficit and that deficit has to be financed somehow. The cost of financing that deficit can rise or fall at any given point in time. One way that the cost of financing can rise is that we have to offer higher rates to attract funds and interest rates here go up. Another way is that the dollar goes down. That is, a foreigner gets more U.S. assets for the same amount of local currency assets. So I think the exact mechanics of that are somewhat difficult to pinpoint. But that's at least a simple model of how I would look at this. There are a certain number of investors who are willing to buy dollars at a lower exchange rate with the expectation that the dollar will appreciate at some point. Now, that's a question of time horizon, and different investors will have different time horizons.

MR. BERNANKE. It's a puzzle.

MR. KOS. It's a puzzle absolutely.

CHAIRMAN GREENSPAN. A fairly significant amount of international holdings are tied to the dollar—I'm now talking about China in its current development stage. Do you have any evidence that that creates a more volatile exchange rate adjustment process for floating rates against the dollar? Theoretically, if 95 percent of the world's currencies were tied to the dollar and 5 percent were not, that 5 percent obviously would be moving around rather rapidly.

MS. JOHNSON. If I may? I would note that the mechanism by which the 95 percent are tied to the dollar is in some sense the willingness on the part of the holders of those currencies to provide the financing. So the job left for the other 5 percent to do would be considerably smaller than in another set of circumstances.

CHAIRMAN GREENSPAN. I think that is certainly a good point. Nonetheless it's hard to believe that you wouldn't get significant volatility. If you don't like 5 percent, try 1 percent, and I'm sure you'd get a lot of volatility.

MS. JOHNSON. Right, but as I said, the financing need would be so much smaller.

MR. KOS. I think that's a good point.

CHAIRMAN GREENSPAN. Okay. Any other questions?

MR. POOLE. Presumably part of the answer there is that the capital flows of private investors have declined substantially. A lot more of the capital flows are official than was the case last year or the year before, and official capital flows are not motivated by the same rate-of-return considerations that private capital flows are. I have a question about the Japanese holdings of U.S. dollar assets. How much of that is held in the central bank? What happens when the value of the dollars is measured in yen? The Bank of Japan has incurred a substantial loss on those assets. What happens as the Bank of Japan's capital position deteriorates? Is there a possibility that the Bank of Japan on paper could show no capital? They're also at risk because they hold a lot of government bonds that are subject to declines in price if the Japanese economy really starts to move.

CHAIRMAN GREENSPAN. I have a question for you. Suppose their capital is negative. Does it matter?

MR. POOLE. Well, I think there are two questions. One question is whether it matters to the economist; the other is whether it matters to the market. I think I know the answer for the economist. I'm not sure I know the answer for the market, and that's why I asked the person who knows.

CHAIRMAN GREENSPAN. As I'm sure you know, the Federal Reserve has continuously given away its surpluses for political reasons if for no other reason.

MR. POOLE. We have this issue potentially as well. Our issue is complicated a bit—or differs from the issue in Japan—because we have member banks that are shareholders and I think that under the law the member bank capital is actually at risk under the Federal Reserve Act. I'm asking the question particularly for Japan, but it does apply to us, too.

MR. KOS. I don't have the specific number, but I believe about 10 percent of Japan's overall reserves are held at the central bank.

MR. POOLE. Of dollar reserves?

MR. KOS. Of their overall reserves.

CHAIRMAN GREENSPAN. The rest is in the Ministry of Finance.

MR. KOS. The rest is in the Ministry of Finance. All of the intervention-related activity is by the Ministry of Finance. The bigger risk to the Bank of Japan's balance sheet is probably their holdings of government securities at interest rates of zero and credit risks based on borrowings from the Bank by some lower-rated entities. Recently you may have seen some press references to a loss that the Bank of Japan reported.

MR. POOLE. Well, there was an article in the *Financial Times*. That article also pointed out something that I thought was quite interesting. It said that the Bank of Japan is moving away from valuing its balance sheet on a current market value basis and toward valuing it on an amortized original cost basis. That, of course, would protect the appearance of the balance sheet, though not the reality, should there be a large depreciation in the value of their government bond holdings.

MR. KOS. Exactly what the market would do with any particular situation is hard to predict. But in cases where some other central banks have had low or even negative capital positions there hasn't been any material effect that I can think of. Mexico, for example, had this problem recently when its capital account was depleted. The market didn't seem to be concerned by that. That situation has reversed, and now they are back to a more normal capital posture. But I don't know that the market would react very much if the Bank of Japan reported the depletion of its capital.

CHAIRMAN GREENSPAN. Further questions for Dino? Would somebody like to move the ratification of the domestic policy actions?

MR. FERGUSON. I'll move ratification.

CHAIRMAN GREENSPAN. Without objection. Thank you very much. Let's move on to Dave Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. As I sat down to deliver my briefing at the last FOMC meeting, I was feeling pretty good. After all, the sizable acceleration in aggregate output in the second half that we had been projecting for some time seemed to be materializing. Even the more controversial aspects of our forecast—a pickup in capital spending and a turnaround in the labor market—were receiving some support from the incoming data. To be sure, it was early and considerable risks remained, but I thought the case would be easier to make than it had been in months past. Indeed, I figured that by 10 o'clock I'd be relaxing with a doughnut, listening to Vincent execute the more difficult assignment of laying out a 3 by 3 by 3 Rubik's cube of policy objectives, options, and risk assessments.
[Laughter]

So, needless to say, I was not prepared for the full extent of the resistance that our forecast met at the last meeting. In contrast to the situation in June, when our projection of a 4 percent annual rate increase in real GDP in second half of this year was widely viewed as too optimistic, there was considerably less consensus at the last meeting about the nature of our error. Some of you argued that the economy would not strengthen as much as we were projecting and certainly not to the point of eroding the margin of slack in labor markets as quickly as we were anticipating. In contrast, others of you appeared to be skeptical that we could hold the funds rate so low for so long without generating a larger boom in output growth, greater inflationary pressures, or both.

For two reasons, I thought I would address your critiques head on this morning. The first reason is that, from time to time, it is useful to remind the Committee that I did graduate summa cum laude from the “Mike Prell School of Charm.” [Laughter] Second, the issues that you raised at the last meeting were serious, central to your policy deliberations, and ones that we have continued to struggle with over the past six weeks.

So why do we believe that the economy will be strong enough to put a sizable dent in the slack that has developed in labor markets over the past few years? We start from the premise that monetary and fiscal policy will continue to provide a substantial dose of stimulus to aggregate demand in coming quarters. Real interest rates are low, and risk spreads have come in—making the cost of capital favorable to businesses and households. The stock market has increased markedly since March and is expected to rise still further over the projection interval. Those increases should encourage business investment and help to repair household balance sheets. Meanwhile, the exchange value of the dollar has fallen noticeably and is expected to edge down further, buoying the competitive position of U.S. producers on world markets.

The improvement in financial conditions has no doubt been a key factor supporting the recent upturn in capital outlays. Real spending on equipment and software seems likely to post an increase at an annual rate of about 14 percent in the second half of this year, with spending on both high-tech and more traditional capital equipment contributing to the upswing. From the vantage point of the second half, our projected increase in real E&S spending of 18 percent next year doesn’t look to us like too much of a stretch. After all, the cost of capital is projected to remain very low, and given the usual lags, the recent sharp acceleration of business output, sales, and cash flow should provide considerable impetus to investment spending well into next year. Moreover, the impending expiration of the partial-expensing provision should provide an additional fillip to spending in 2004.

The household sector also has been receiving a lift from expansionary fiscal policy. Consumer outlays soared this summer, as disposable incomes jumped in response to lower personal income taxes. Spending hit a bit of a pothole this autumn, but we believe that it will pick back up in coming months. The figures on motor vehicle sales in November provide some encouragement to that view, though broader reports on recent retail sales have been mixed. Households will receive another large slug of disposable income in 2004 from this year’s tax legislation. Lower taxes along with a pickup in hiring are expected to boost real disposable income by 5 percent in 2004, and real PCE is projected to increase about 4½ percent.

Monetary and fiscal policy are not the only sources of upward impetus to output. Inventory dynamics should also be lifting production in coming months. Indeed over the next four quarters, a gradual strengthening of inventory investment is expected to add nearly ¾ percentage point to the growth of real GDP. Even that trajectory for

stockbuilding is sufficient only to flatten out the inventory-sales ratio by the middle of next year at a level noticeably below our estimate of the long-run target. The recent data suggest that manufacturers are boosting production enough both to stem the inventory liquidation that has occurred for most of the year and to respond to the improvement in their order books. After falling earlier this year, manufacturing IP was up 3½ percent at an annual rate in the third quarter. And given the data in hand, factory output is likely to increase nearly 1 percent in November and more than 5 percent at an annual rate for the fourth quarter as a whole. So even the lagging manufacturing sector is showing reasonably widespread signs of life.

Will this faster pace of overall spending and production prove to be a temporary blip? That possibility still can't be ruled out. As I noted at the last meeting, estimating the short-run consequences of the tax cuts involves more in the way of educated guesswork than hard science. The recent softness in consumer spending could give one pause. On the other hand, the widening scope of the economic improvement that we are witnessing, including increased capital spending, an end to inventory liquidation, an upturn in hiring, and rising factory output, suggest that the forces at work are broader than just income tax cuts.

Of course, even if we are roughly correct about the course of spending over the next few quarters, our projected decline in the unemployment rate to 5¼ percent by the end of next year could be wide of the mark. Last Friday's report on the November labor market provided mixed evidence on our progress. Private payrolls rose 50,000 in November and have been increasing about 90,000 per month, on average, over the past three months. That's a bit less than we had incorporated in the December Greenbook. However, the workweek increased again last month, and aggregate hours worked actually came in a little above our expectations. Moreover, the unemployment rate declined another tenth, to 5.9 percent.

Our projection assumes that something akin to a cyclically normal recovery in employment begins by midyear. Because we are assuming that the participation rate will recover somewhat, after having fallen so much over the past few years, the ½ percentage point decline in the unemployment rate that we are projecting is actually a bit slower than the cyclical norm. Of course, that doesn't mean that it couldn't be slower still. The timing and magnitude of the improvement in the labor market, in addition to depending on the strength of aggregate demand, is a function of the ability of firms to continue to extract greater efficiencies from their operations. As an empirical matter, we lack any precise gauges here, and we can't rule out that we have been too pessimistic about the trajectory of structural productivity. We explored that possibility in an alternative simulation in the Greenbook. The consequences of such an outcome are both a weaker labor market and much lower price inflation than in our baseline projection. Although the recent data have certainly been encouraging, the step-up in the pace of the expansion is still relatively recent, and some combination of weaker aggregate demand and stronger aggregate supply could result in an economy that is slower to absorb the existing slack in resource utilization and produce even lower inflation than we are projecting.

However, as some of you have noted, there are sizable risks on the other side of our projection as well. Most notably, holding the real federal funds rate close to zero for another year and then only moving it up gradually in 2005 could set off a substantial boom in activity, higher inflation, or both. With real rates so low, why aren't we projecting a stronger expansion over the next two years—one perhaps that resembles a more normal cyclical recovery? There are several reasons. For one, some of the usual contributors to the upsurge in activity in the early stages of recovery are not expected to play their typical roles. In particular, outlays on housing and consumer durables have already increased steeply over the past couple of years, and while we expect low interest rates to help maintain that spending, we project outlays in these areas to decelerate over the next two years. Meanwhile, some other sectors have been and are likely to remain lackluster over the next year or so. Nonresidential construction activity still appears to be adjusting to high vacancy rates and weak rents, and we anticipate only gradual improvement in that sector next year and into 2005. Moreover, despite the past and prospective decline in the dollar and the modest recovery abroad, the external sector is expected to subtract from growth over the next two years. Finally and importantly, fiscal policy swings from a source of considerable stimulus early next year to some small restraint in 2005. From the perspective of our forecast, the shift in fiscal policy is doing some of the work that would otherwise be required of monetary policy.

Another concern raised about our forecast was that perhaps we will experience more inflation with output growth that is the same or weaker than we are projecting. This implicitly is a concern that we are too optimistic, in some respect, about aggregate supply. The outside consensus forecast appears to embody this view by combining higher interest rates, weaker activity, and more slack, with faster inflation. The basic contour of our inflation forecast hasn't changed since the last meeting. We continue to expect that declining energy prices will push down headline inflation and that core prices will increase in 2004 and 2005 at about the same pace as this year. The sources of that subdued inflation picture also remain the same. Economic slack is expected to diminish only gradually. Rapid increases in structural labor productivity hold down costs, and the markup of prices over unit labor costs, which has increased sharply in recent quarters, levels out. With headline inflation coming down, inflation expectations are anticipated to hold steady or drift lower. One hears a variety of stories expressed to support less favorable outlooks for inflation. One argument is that speed matters. Perhaps it is not the level of resource utilization but the change in resource utilization that influences inflation. The problem is that we can find little to no empirical support in the U.S. data for this story. The economy grew at rates well above trend in the early 1980s and early 1990s. And despite noticeable declines in the unemployment rate, core inflation moved down, not up. That casual observation is confirmed by a lack of econometric evidence for the existence of economically meaningful speed effects.

Another concern has been that the rapid rise in commodity prices could be signaling the emergence of more-intense inflation pressures. But it is very common

for commodity prices to rise sharply in the early stages of recovery without having much influence on the prices of final goods and services. Primary commodities have low labor content and are sold on auction markets that are very sensitive to changes in demand. They constitute a very small share of the value added of most finished goods and services, which typically are much more sensitive to movements in labor costs. As an aggregate inflation shock, we believe the recent surge in commodity prices is likely to be of minor consequence.

Another possibility is that inflation expectations will deteriorate over the next year or so in response to strong economic growth and our assumption of continued policy patience. This would seem to be a more serious risk, and we explored its consequences in an alternative in the Greenbook. But we don't think that that's the most likely outcome. Looking at Treasury indexed securities, inflation compensation over the next five years has moved up since the summer but only to the top end of the range in which it has fluctuated over the past few years. Likewise, inflation expectations from the Michigan survey have moved back up in recent months along with energy prices, but haven't broken out to the upside. We don't see in our projection the types of developments that would likely result in a serious erosion of your credibility.

Perhaps the most obvious source of upward risk to our inflation projection is that most or all of this year's slowing in core inflation reflected transitory factors that will be absent or—worse yet—be reversed next year. For example, the smaller increases in residential rents, motor vehicles, and medical services may prove short-lived. As you know, we discounted a great deal of the slowing observed earlier this year, and the bounceback in the data in subsequent months has been very close to our expectations. But perhaps we haven't discounted enough of this year's low core inflation. If so, then price increases next year will be higher than we are currently projecting. However, if that were to occur, it will be important to bear in mind that this acceleration of prices reflects the unwinding of favorable developments this year and is not the result of an overheating economy capable of generating ongoing increases in inflation.

In summary, we acknowledge that there are very large risks to virtually every important dimension of the staff projection. There almost always are. If it provides you with any comfort, we have placed at the very top of our holiday wish list the acquisition of shiny new models that will allow us to make it all clear for you in the coming year. But barring that unlikely outcome, we will simply need to be content knowing that, with the recent run-up of commodity prices, our lump of coal will at least go a little bit further this year than it has in the past. [Laughter] Karen Johnson will now continue our presentation.

MS. JOHNSON. With respect to economic activity abroad, our basic message for you this meeting is that the rebound in activity that we have been forecasting for some time has been confirmed in production and spending data for the third quarter. Indeed, we were sufficiently surprised by the strength of this rebound, primarily in

emerging Asia but also in some other regions, that we revised up our outlook for foreign real GDP growth in the current quarter about $\frac{1}{2}$ percentage point.

The list of countries reporting double-digit real output growth in the third quarter includes China, Hong Kong, Taiwan, and Singapore. No doubt these remarkable magnitudes reflect a bounceback from the contraction of output in the second quarter in those economies and the fact that the SARS epidemic, by its nature transitory, accounted for the declines. Nevertheless, real GDP reached levels ranging from about 2 to 9 percent above one year ago. Robust growth was also experienced in Korea, Indonesia, Malaysia, and the Philippines. Vigorous expansion in the global high-tech industry has boosted growth in many of the emerging Asian countries although other factors, such as strong expansion of domestic demand in China, have also been important. Trade within the region has helped to spread demand broadly across a number of countries, including Japan. Japanese exports, particularly to China, have contributed substantially to the strong growth reported in recent quarters. Although some measurement issues raise concerns that the reported Japanese real GDP data overstate the true pace of output growth, sustained positive growth has occurred, in part because of stimulus from elsewhere in the region.

Among the other foreign industrial countries, the euro area was another region where growth came in noticeably stronger than we had expected in October. Of the member countries, France and Italy have provided some positive surprises, whereas Germany continues to perform at a subpar pace. Even in Germany, however, survey data and some recent indicators show signs of coming improvement, and we again have forecast an acceleration of economic activity in 2004. To be fair, I should admit that there were some important exceptions to the generally optimistic outcome in the third quarter. Real GDP growth in both Canada and Mexico, two very important U.S. trading partners, came in below our October projections. We think that, at least in part, the reasons for their weak performances will prove transitory, and so we expect a rebound in growth in the current quarter. All in all, we read the most recent data as consistent with a rise in the growth rate of aggregate foreign output from an annual rate of about $3\frac{1}{2}$ percent last quarter to $3\frac{3}{4}$ percent this quarter. Although we do not think the very rapid pace that was recorded in several countries for the third quarter can be sustained, we see the recovery in production in many regions, the favorable developments in labor markets in some cases, and the strength of domestic demand in several key regions as confirmation of our forecast that average growth near the current rate will continue over the forecast period.

For the most part, developments in global financial markets are consistent with and supportive of ongoing economic expansion abroad. Stock markets are generally up over the period and since early in the year. Foreign monetary conditions remain accommodative. Official rates were raised by the Bank of England and by the Reserve Bank of Australia. In the other major foreign industrial countries, policy rates were left unchanged, and long-term interest rates are little changed to up slightly on balance since the October FOMC meeting. The generally positive news about real economic activity abroad was about matched by the indicators released for the United

States, yet the dollar depreciated further on balance over the period, a trend that seems to have intensified since the G-7 meeting and communiqué in Dubai in September. As Dino reported, some recent events seem to have spurred market participants to exert downward pressure on the dollar, including the emergence of new trade frictions with China and renewed geopolitical risks associated with violence in Iraq, Turkey, and elsewhere. Yet it is also the case that dollar weakness over the past few months has coincided with reduced private capital inflows into the United States. As we reported to you in the Greenbook supplement, the October data on international financial transactions revealed that private demand for U.S. securities remained weak. These data are confidential until their release on or about December 15. The dollar moved down when market participants reacted to the information that in September private foreign investors sold on net U.S. Treasury securities, agency bonds, and corporate stocks. Treasuries and equities were again negative in October; agencies showed only small net purchases. In contrast, private foreign demand for U.S. corporate bonds remains healthy. Ongoing demand on the part of U.S. investors for foreign securities has added to the financing need for foreign savings to balance the international accounts.

The reasons for the reduced inflow are unclear. Relatively low U.S. interest rates could be one factor. A perception that the Administration is less committed than previously to a strong dollar could be another. As market participants come to expect near-term dollar declines, the incentive to reduce dollar holdings rises, creating the risk of yet more selling pressure and price drops. We do not have a complete picture of financial flows in the third quarter. To some extent foreign official purchases of dollar assets have taken the place of private purchases. Significant foreign official acquisitions of dollars continued in October and, according to data from FRBNY custodial accounts, in November. Data on foreign direct investment are not yet available. In the months preceding September, private foreign demand for U.S. securities had been quite strong. Data for two months are not sufficient to convince us that a major reversal is under way.

Accordingly, in the December forecast we have adjusted down the starting point of the projected path for the real foreign exchange value of the dollar to reflect exchange rate developments over the intermeeting period. As one more bit of evidence that our crystal ball is a bit cloudy where exchange rate fluctuations are concerned, the dollar has weakened further since we committed to that path in the Greenbook. The nominal index in terms of major foreign currencies is already about 1 percent below the Greenbook projection for the first quarter. The projected path remains tilted slightly down as we judge that, over some extended period, the pressures exerted by the need to finance a widening current account deficit and growing net international indebtedness likely will result in some further decline in the dollar. But we recognize that the dollar is likely to fluctuate up as well as down at times. Moreover, the current Greenbook assumption that you will begin to tighten somewhat earlier than was incorporated into the previous Greenbook lends support to possible upside pressures on the dollar in the coming year. That concludes our presentation, Mr. Chairman.

CHAIRMAN GREENSPAN. In recent days there has been some discussion among those in the international oil markets that OPEC is becoming increasingly sensitive to the fact that the dollar is declining. The notion is that the OPEC price range of \$22 to \$28 a barrel that they allegedly are endeavoring to maintain is becoming obsolescent, largely because of the change in the dollar's exchange rate. That raises a question as to whether there is any evidence at this particular point that oil consumption in Europe, for example, is actually stronger than otherwise would have been the case—obviously at the prevailing dollar price. Or are the taxes in Europe so large that the price of crude really doesn't matter all that much, and hence there is no significant exchange rate effect on the supply–demand balances for oil?

MS. JOHNSON. I cannot answer the specific question regarding oil consumption in Europe, although I will follow up on this. We do judge that there is an exchange rate effect in the market determination of oil prices in the sense that the demand for oil reacts to local currency prices everywhere on the globe. So as those currencies fluctuate against the dollar relative to a relatively sticky dollar price for oil, they see changes in the relative price of energy, and they react to the changes in those relative prices. That feeds back, on a short-term, day-by-day basis, onto the demand for oil in the spot market, and it shows through to the oil price. I honestly don't have in my head a number in terms of how strong it is, but it's not zero. Of that I'm quite sure.

Now that's a different question from the strategy of OPEC, which might shift the band as a consequence of seeing a reduced international value of the dollar that is eroding somewhat the price OPEC is getting for its oil. What we're seeing now are fluctuations that are staying high in the band partly as a consequence of exchange rate developments. If that persists and if the dollar were to fall further, we might see the band shifting so that OPEC puts the spot market price back in the middle of the band.

CHAIRMAN GREENSPAN. It looks as if the OPEC price is \$2 to \$3 a barrel under that for West Texas intermediate. Is it something like that?

MS. JOHNSON. Yes, I think \$2 is the number we usually cite. So both of these factors are at work. We think we see the exchange value of the dollar showing through to the gold prices, for example, and we think we see it in some commodity prices. It certainly comes through to oil in the sense of where the demand curve is. There is the larger question of whether OPEC might change its strategy as well.

CHAIRMAN GREENSPAN. The issue came up at the Board meeting yesterday about the relationship between the gap and the rate of inflation outside the United States. In other words, the model in the United States is reasonably robust for that type of calculation. Historically we've never been able to get reasonable estimates of a relationship between gap and price elsewhere. Has that improved in recent years? Or is there any deeper insight into whether it's a data problem or an economic problem?

MS. JOHNSON. Well, for places where one looks the hardest, say Europe, I'm not aware that people see it as a data problem. I believe it's still the case that what we would call a Phillips curve analysis is not well confirmed in empirical estimates for most major foreign industrial countries, with maybe one or two exceptions. People keep trying to find a relationship, and I think in some sense if you want to believe one exists, you could find some evidence for it. But the evidence is not sufficiently persuasive that the relationship has become an accepted characteristic. It is true, given that these are poorly fitting equations with big standard errors and a tendency to go off track outside of sample and so forth, that there is probably a bit of evidence supporting speed effects for some of these countries. As Dave just commented, that differs from the situation in the United States in terms of the speed effects here. Most of the rhetoric about

speed effects comes from colleagues outside the United States. Central banks outside the United States point to these issues as a problem, and they usually explain it in the context of a wage determination process. So I think in fact econometrics hasn't really answered the question of how prices are determined in many European countries and in Japan too. Japan may be the biggest puzzle of all, given that there is probably as much evidence for speed effects as there is for gap effects in that country. That has opened up the door to this ongoing debate and some behavior responses on the part of foreign officials.

CHAIRMAN GREENSPAN. Do we have any explanation of why a phenomenon such as we observe with some robustness in the United States could conceivably exist here and not in similar market-oriented economies abroad?

MR. STOCKTON. Let me mention two possibilities. Just in terms of cross-country comparisons of wage and price determination, there was a line of work that suggested that in the United States nominal wages are sticky but real wages are flexible whereas in Europe everyone's wages are so tightly indexed that there is more real wage rigidity. That could lead to a situation in which one gets something akin to hysteresis in unemployment in Europe, which in essence says that whatever the unemployment rate has been recently is more or less the natural rate. Therefore, it becomes the changes in the unemployment rate that matter more than the level of the unemployment rate.

MS. JOHNSON. It was somewhat the story of the 1980s. That's when a lot of this work went on and where the word "hysteresis" came from. I think people do look to labor markets for the explanation. I can't say that I've seen studies that have revisited this question the way it was looked at in the '80s and have concluded that nothing has changed. I think things are changing. France is a country, for example, where a lot has changed by way of labor market regulation and

the like. Nonetheless, the process of wage setting is certainly more political in Europe than it is here, and the capacity of the unemployed to matter either politically or in the markets seems enormously less in Europe than here. That's perhaps a reflection of the fact that most Europeans have a more generous safety net than is typical in this country, so the unemployed may be exerting less pressure. Moreover, the deck seems stacked against them a bit in that the European labor unions don't cry many tears over the unemployed outside their own particular union. The political process is responsive to some degree, but the answer from the political arena seems to be to provide much more in the way of safety net solutions as opposed to better working markets. There are other countries—Canada, for example, or Australia or New Zealand, with tremendous regulatory changes—where we might look for the sort of phenomenon you're talking about. I don't think the issue is black and white. It's not that the phenomenon exists only in the United States and nowhere else. There is a gradation. But the econometric analysis doesn't really provide a clear answer; the relationships are murky.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. David, in reading the Greenbook and listening to your comments this morning, you've indicated that, as we go through the next several months and through 2005, the economy will move back to its potential. Yet the associated real fed funds rate at the end of the period is less than 1 percent. If one were to look at this option as a policy prescription, is the idea that you want to ensure a move back toward potential as quickly as possible and then worry about how far below equilibrium the short-term rate is? Is that the suggestion rather than that we should plan to move the funds rate up as the economy moves back toward potential?

MR. STOCKTON. Let me state emphatically at the outset here that what we put down in the Greenbook was not a policy prescription. I understand your question, but our forecast was

not meant to advocate a particular path or strategy for you to take. I do think, however, that it's not an implausible baseline assumption—obviously it's something we arrived at in our forecast—that the economy will be growing at potential at the end of 2005 with a real funds rate that is still below its equilibrium. We think that, going into 2006, we will have some continued acceleration in underlying potential output that is being driven by the speed-up in investment spending that we expect to get over the next two years. So we believe we can enter that year with a below-equilibrium funds rate and still not generate any acceleration of inflation until later in 2006. This is all model construction, obviously. I'm still mostly worried about trying to figure out what happened in the last quarter. If you're asking me if I know with any confidence what will happen in 2006—

MR. HOENIG. I understand.

MR. STOCKTON. But suppose at the end of 2005 the nominal funds rate is at 2 percent and you thought that a 4 percent nominal funds rate—a 3 percent real funds rate and 1 percent inflation—was where the rate had to go. Could this Committee raise the funds rate 200 basis points in 2006? I think you certainly could. You raised it 250 basis points in 1994. So you're not that far from equilibrium on the funds rate, given what you've demonstrated in the past as a reasonable willingness to be aggressive. In 2005 as the economy slows down in accordance with our baseline forecast—if that were to happen—I think you're going to be confronted with some uncertainty about what the sources of that slowdown are and how persistent they are likely to be. And that could potentially make you want to be somewhat cautious about how quickly you remove the monetary stimulus. So that was the basic logic. We did not see this as a forecast in which you are definitely falling way behind the curve by the end of 2006 and we see inflation

pressures as extremely subdued. And we didn't see that you would have to go that far beyond the forecast horizon to remove the remaining monetary stimulus.

MR. HOENIG. Thanks.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. I have two questions on the inflation outlook, and I'll put them in the context of the Phillips equation, which has an inflation expectations term, a gap term, a shock term, and a disturbance term or random term. You talked about the inflation expectations terms. You talked some about the gap term. Certainly from Orphanides' work we know that there can be a lot of hazards in that gap. I'm wondering if you could comment on the standard errors associated with that gap calculation. There are different views about what potential output is and also, of course, exactly where we are today. But you didn't talk at all about the shock term and I think that a significant part of the R^2 of a standard Phillips equation is coming from the commodity and exchange rate shocks. What are the magnitudes of those, and what is the speed with which those effects are transmitted into the price indexes? Can you give us just a rough, ballpark idea on that?

MR. STOCKTON. First of all, the standard errors are large on both the output gap and the natural rate of unemployment.

MR. POOLE. Whichever way you want to express the gap.

MR. STOCKTON. Yes. So I would certainly say that a percentage point band around our estimate of the natural rate of unemployment is probably a one standard deviation event. As you know, over the years we've made adjustments in our estimates, both for things that we could identify in terms of structural changes in labor markets and also just to conform our estimate to what was happening out there in the real world. So there is a lot of uncertainty about that

estimate. In terms of the shock effects, I tried to touch on that a little with the commodity price comment. If we were to take literally some of our stage-of-processing type models, the run-up we've had thus far in commodity prices—and we're expecting some deceleration of that going forward—might be worth a couple of tenths at most to final goods and services inflation.

MR. POOLE. That's for the total or the core?

MR. STOCKTON. That's for the total. That's a pretty small effect. On the energy side, following what we see as expectations in the futures markets, we think that energy prices are likely to come down and that that will feed through favorably not just to indirect business costs but also on the inflation expectations side.

In terms of the effect on non-oil import prices of the decline in the dollar that has occurred, our forecast is that, after increasing 1¾ percent this year, core non-oil import prices are going to rise only 2 percent next year and then actually decelerate some in 2005. So that is measured in basis points, not even tenths of a percentage point, in terms of its overall effects on inflation. That's just measuring the import price part alone, not necessarily how the decline of the dollar is likely to feed through to aggregate output. So again, in our model and our forecast of the important exogenous variables, we just don't see the big shock coming through. I think on the inflation expectations side there is a risk. In essence, we are assuming that next year there will be some further edging down of inflation expectations especially as energy prices decline and headline inflation rates recede. But that could prove to be wrong. Also, as I indicated in my remarks, another significant risk is that we got extremely good inflation numbers in the first half of this year and we fed a little of that through into our forecast next year. That might be ascribing too much of a signal to the slowing we've seen this year, and we could get some bounceback just from an unwinding of these favorable effects.

MR. POOLE. Thank you.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Dave, your comments today as well as a memo that was sent to the FOMC contained a discussion of how rapidly employment is likely to grow. The view is that employment growth basically is going to be consistent with what we've seen in the past. Frankly, I don't really have much of a problem with that view. But one certainly hears a lot in the public arena—from editorial writers, commentators, and so forth—about the impact of special factors that are going to make such growth less likely to occur. These observers refer, of course, to outsourcing, the loss of manufacturing jobs, and those kinds of things. My impression is that the numbers attributable to those developments are really too small to make much of a difference. Do you have a view about it?

MR. STOCKTON. Again, hard data on the magnitudes of outsourcing are not available. But I'm skeptical about that being a major impediment to employment growth. Many of these forces have been in operation or have been under way for the past decade in a period when our economy was generating lots of employment growth. We had a very strong manufacturing sector and tight capacity utilization just a few years ago. So the notion that the world has changed in such a fundamental way that an appropriately accommodative monetary policy and a stimulative fiscal policy won't be able to take up slack seems to me to be far-fetched. I think that places too much emphasis on these effects.

To me the more important risk to our employment forecast is that we see the level of productivity as having moved up so much that we think it's probably well above its structural level. In essence we believe there will be some increased hiring in an effort to begin to relieve pressures that have developed as businesses have pushed very hard on their existing workers and

facilities to improve the bottom line. Unfortunately, we can't have much confidence in our ability to have that gauged very well. It is possible that the stock of efficiencies for businesses to draw on is still quite large and that the need to increase employment might be significantly less than we're thinking. Obviously, that doesn't mean that policy couldn't crowd in those jobs. If that's the case and the supply is in fact bigger than we think, then demand needs to be stronger to take up the slack.

CHAIRMAN GREENSPAN. Maquiladoras were emerging in the 1990s with far greater numbers of people outsourcing from the United States as our unemployment rate continued to fall.

MR. PARRY. Well, I think what's involved now is a rather vocal group of skilled workers, who are getting a lot of attention. We hear stories about financial analysis being conducted in India.

CHAIRMAN GREENSPAN. Do you want to know something? These workers are not as skilled as some people think. The entire skill level in the United States continues to rise, and these jobs that are being outsourced require what we now would call below-average skills. We're not sending off to India the work that requires really sophisticated software knowledge. A good deal of the work being sent off is the overnight processing and standard data-crunching services that in the twenty-first century involve a relative skill level not significantly different from certain important manual labor skills a hundred years ago.

MR. PARRY. I agree. But nearly everybody one talks to believes this is happening. That's the point I'd make.

CHAIRMAN GREENSPAN. Some of what people believe just "ain't so." President Moskow.

MR. MOSKOW. We even believe the Cubs are going to win the World Series!

[Laughter]

MS. MINEHAN. No, I think it's going to be the Red Sox. [Laughter]

MR. MOSKOW. I want to get back to the discussion of inflation expectations in this alternative scenario that you said is a risk. I think it's a risk that we have to take very seriously because it would be a great shame if inflation expectations did in fact increase significantly. I'm certainly hearing a lot of comments about inflation from people I talk to, particularly because of concerns about the size of the budget deficit and the long-term problems of Social Security and Medicare, which we all know about.

The TIPS spread was mentioned in the staff briefing yesterday, and in your comments today you said that for the period over the next five years there has been a bit of up-and-down movement but that the five-to-ten-year period has shown a quite dramatic increase in inflation expectations. In the staff briefing yesterday part of the explanation was the increased liquidity in the market. But it was clearly noted that that was not the only reason. I was wondering if you could talk about some of the other reasons for the increase in the TIPS spread—which is really inflation compensation—in that five-to-ten-year period. Is this a warning sign for us that a significant number of people in the financial markets are concerned that we're losing control over inflation?

MR. STOCKTON. I mentioned the five-year inflation expectations, in part, because we don't think the five-to-ten-year inflation expectations are conditioning current wage and price setting decisions. I don't think anybody is setting a wage contract over the next year or two or three based on five-to-ten-year inflation expectations. But those expectations obviously would matter for the real rate on longer-term securities. I think Brian Sack, our briefer yesterday,

mentioned that there is a liquidity story but that there is also a possibility that market participants have shifted their views as to your longer-term inflation objective. It seems a bit far-fetched that so big a change in expectations could have occurred over such a short period of time. So we're somewhat skeptical about that. Brian also mentioned hedging demands, but we think that was probably a relatively short-lived effect. I don't know whether Brian Madigan or Vincent wants to say any more about that.

MR. MADIGAN. I don't have too much to add to that. I would just note that probably the mortgage-hedging activities that were very prominent in the summer did play a role, and that makes it a little difficult to interpret the exact timing of the movements in the inflation expectations series. But I personally wouldn't be inclined to completely rule out the possibility that market participants may be looking at longer-run inflation trends and that a slightly larger premium may be built in there now.

MR. REINHART. The other point I'd add, President Moskow, is that the difference between the nominal and the indexed yield is inflation compensation that includes both inflation expectations and an inflation risk premium. So it wouldn't be that far-fetched to say that, while market participants may not believe that the Committee's views on longer-term inflation expectations are materially different, people in the markets might be a little more uncertain about whether that's the case. They might well have greater uncertainty about that, given various comments about the range of views among Committee members in terms of how they interpret their longer-run inflation goals.

CHAIRMAN GREENSPAN. Are we seeing it in the tranches of the longer-term issues—say the thirty-year bond or even the ten-year note? Are those tranches moving up? Or as you pointed out yesterday, is this a reflection of improving liquidity in the TIPS market to the

extent that we're getting a lower TIPS yield and hence an artificial liquidity-related increase in inflation compensation implied in the five-to-ten-year part of the TIPS structure?

MR. REINHART. There are two points to make about that, Mr. Chairman. The first is that we do think the TIPS market is more liquid. That's in part a reflection of the fact that more instruments are tied to TIPS, including some exchange-traded products that are priced relative to TIPS. So that provides more liquidity and more opportunities to trade, and there are more mutual funds that use those products. So we think it's a more liquid instrument and that is associated with the declining bid-asked spreads and the increased trading volume.

I'd also point out that one of the other briefings yesterday looked at the inflation compensation measures from the euro market, Canada, and the United Kingdom. As was noted, there was a considerable synchronicity to the run-up in inflation compensation in those markets. That would make one think that perhaps there was something about the overall liquidity and arbitrage across those markets rather than an unraveling of investors' confidence in the long-term inflation target of three different central banks.

CHAIRMAN GREENSPAN. What has happened to the one-year maturity ten years out?

MR. REINHART. In terms of implied forward rates?

CHAIRMAN GREENSPAN. Yes.

MR. REINHART. Over the intermeeting period that forward rate structure really hasn't changed much at all.

CHAIRMAN GREENSPAN. Is it correlating with what is conceptually identical to inflation expectations for a forward period? Do the two give the same answer? My recollection is that they do not.

MR. REINHART. They don't in part because the inflation risk premium and the potential for differential term premiums between the indexed and the nominal securities drive—

CHAIRMAN GREENSPAN. Which is not an inflation premium issue.

MR. REINHART. Right. So one can't read it as an inflation premium. We've found historically that the slope of the term structure does not do a particularly good job in forecasting either activity or inflation. There's a little information on the further-ahead forward rates but not a lot. It is the case that the very far ahead forward rates were up a bit up over the intermeeting period. But the ten-year was actually down. So it isn't as if there are some obvious sets of signals there. Nor is it the case if you look at volatilities that we could get from swaptions. The implied volatilities on ten-year instruments are higher, but all interest rate volatilities are a little higher.

CHAIRMAN GREENSPAN. Yes, but President Moskow is raising a question based on looking at that chart. I think he called it scary, and it is scary if you believe what it implies. If it is indeed is telling us something, it's obviously very important for policy. If it is not, it's important that we know that.

MR. REINHART. And that's where we are expending a lot of effort to try to figure it out.

MR. STOCKTON. We've certainly seen no corroboration in any other survey of inflation expectations that there has been any deterioration.

MR. MADIGAN. Coming back to your question on forward rates, Mr. Chairman, over the past year it looks as if one-year forward rates of the ten-year maturity haven't really done anything on balance. They did decline in the spring and then moved back up in the summer. They have been roughly flat in recent months.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. This is interesting, but I want to switch gears a bit and ask a question about the real net export dynamics in our forecast, if I could. The depreciation of the dollar has improved the outlook for real net exports in a lot of private-sector forecasts, but hasn't done so in the Greenbook. What are the reasons for that difference? Does this imply that we may be find ourselves with greater depreciation later on down the road? Could you just comment on how you view this and why you think it looks so different to the private sector?

MS. JOHNSON. To be honest, I haven't checked what the private-sector forecasts are saying, so I can't comment on that. It's certainly not the case that the projection for the dollar has not shown through to our forecast. In fact I tried to suggest in the Greenbook that we're finally at the point now where past dollar appreciation has exited the very long lagged term, particularly on the export side. So the consequences of the dollar depreciation since its peak in early 2002 are now more or less fully coming through without being moderated by some of the lingering effects of past dollar appreciation. In the export equation in particular we are seeing some significant effects from the fact that the dollar is lower and going forward is projected to come down. Now, in all honesty, in our forecast we don't have a lot of dollar depreciation yet to come. So it's mostly a backward-looking effect of relative depreciation that we already have experienced that is showing through to exports. We have export growth rebounding to something like 10 percent. A significant portion of that is due to the exchange rate effect, and some of it is due to the improved outlook for foreign economies that I talked about this morning.

On the import side, it's a little more difficult to say exactly how the dollar's decline is having an effect because import prices have been surprising us. We haven't gotten the increases in import prices that the econometric relationships would suggest we should get. So with that,

we have been chipping away at how much of a given dollar change we are willing to put into the import price change. It's only through import prices that the dollar is going result in imports being restrained by the falling dollar. If import prices don't rise in response to the dollar falling, then the effect of the dollar's decline doesn't show through to the relationships that guide the way we project imports.

All in all I think we have fairly vigorous import growth here. As a consequence, we have net exports becoming yet again a drag on output. We've had positive contributions from the net export sector in somewhat anomalous ways during the slowdown because, while we had exports falling, we had imports falling, too. Going forward, everything reverts to its usual sign. Exports contribute positively; they contribute about 1 percentage point on average over the forecast period in most quarters. But the contribution from imports rises to about minus $1\frac{1}{3}$ to minus $1\frac{1}{2}$ percentage points. So we get a net drag from the external sector reemerging, as is usually the case, if I may put it that way.

Now, how powerful is the dollar to do this? We have the usual elasticities in our equations. I don't think our trade relationships differ greatly from those used by most of the other forecasters that I know of. What is usually the culprit here is the fact that imports are so much bigger than exports. What happens to imports really, really matters. The fact that we aren't seeing the depreciation of the dollar reflected in import prices may be a source of difference between what we're forecasting for net exports and what others are forecasting. We would have slower imports and stronger GDP if we had the pass-through to import prices occurring more quickly in the forecast.

MR. SANTOMERO. That is what forecasters in the private sector have. I was curious about how it worked and why that difference exists.

MS. JOHNSON. If I give Dave any more GDP he's not going to buy it anyway!

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. I'm going to switch gears back to the inflation issue. In your comments, Dave, you addressed some of the risks toward higher inflation. Of course, our statement still says that the probability, though minor, of an unwelcome fall in inflation exceeds that of a rise in inflation. In June you prepared and shared with us some probabilities of the economy falling into deflation. I would like to know you have rerun those simulations and whether they've changed very much or if that is just not a concern any longer.

MR. STOCKTON. We've continued to tinker with both the models and our definition of deflation since June. Let me put it on a consistent basis with the numbers we provided in June so you can actually compare how economic events have changed those probabilities. We would calculate that the probability in 2004 that core PCE prices would be running below $\frac{1}{2}$ percentage point—which is our estimate of the measurement error and thus would be real deflation—has fallen to about 23 percent. That probability on our June baseline forecast was 35 percent. The probability of what we would call a more pernicious deflation—that is, prices declining on a measurement-adjusted basis and the unemployment rate remaining at or above 6 percent in 2004—has fallen from 7 percent to about $3\frac{1}{2}$ percent. So those probabilities have receded. I'd leave it to you to judge whether you thought those were big numbers or small numbers. But clearly the improvement in the underlying baseline forecast has made deflation a less likely event than we calculated in June.

MS. PIANALTO. Thank you.

CHAIRMAN GREENSPAN. Any further questions? President Minehan.

MS. MINEHAN. I realize that this discussion is going on a little longer than we probably all expected, but let me just follow up with one more question. In the '90s I think all of us were struck by the degree to which companies said that they were never going to raise prices. They felt that global competition or domestic competition or whatever one wants to call it had put them in a position of not viewing price increases as an option available to them. There were a lot of factors helping them in that regard, particularly in terms of the cost of labor. They were paying people with stock options, which they didn't have to account for. The stock market was helping on benefit costs. The rate of increase in health costs was going down at the time. There were any number of accounting tricks that we now know companies were using to figure out how to show a level of earnings and revenues and so forth that the market expected.

More recently we've had slow growth in demand, but at the same time the factors that kept the costs associated with hiring people low have all disappeared. Firms don't have the same beneficial impact from benefit programs. Health costs are clearly escalating. Businesses can no longer pay people in ways that are not transparent; those costs have to be accounted for in some fashion or another, at least for most companies. Clearly the emphasis on improving productivity is a reflection of the desire not to increase prices. But I'm wondering if we are still hearing with the same intensity the view that raising prices is just not something that firms would ever consider doing again.

MR. STOCKTON. I think one reads and hears more about a return of pricing power than was the case a few years ago. I'm not quite sure what that means. There has obviously been a significant firming, as I indicated, not just in commodity prices but in intermediate materials prices too as the economy has picked up some speed. Again, we don't think that is going to be a major source of positive inflation shock. But I think one hears more about pricing power there.

There have been other areas, too. For example, in education and medical care, one never heard that there wasn't pricing power.

MS. MINEHAN. Right.

MR. STOCKTON. I would note two things that I think are relevant. First, given the spectacular increases in productivity, if one assigns even some small portion of that going forward as an increase in underlying productivity, that's still a major factor that will be relieving cost pressures on the business side. Second, we think there were some special factors in the second half of the 1990s. The inflation outlook that we're showing you in this forecast is nowhere near as benign as what happened in the late 1990s, when the unemployment rate fell through 5 percent to below 4 percent and we didn't get any inflation. In this forecast, with an unemployment rate that remains at or above our estimate of the natural rate, we think we will not be getting much further deceleration in inflation. Part of the reason relates to some of the factors that you mentioned—for example, that on the compensation side things are going to be a bit firmer. We think we're not going to see much downward pressure there in part because of medical costs and in part because employers might be relying primarily on more traditional means of providing labor compensation. So in essence we believe that we have built into this forecast the broader effect that you're getting at in your question. I'm skeptical about the view that the world has become less competitive and that there will be a return of more-significant pricing power. If anything, I'd say that factor might be a downside risk to our inflation projection. Given the strong burst of productivity, the markup over unit labor costs has increased in the nonfinancial corporate sector almost back to its peak in the 1990s—a peak from which it subsequently fell—and that was a force that contributed to disinflation in that period. So

although we have that markup more or less leveling out, one could just as easily imagine that going down as up.

CHAIRMAN GREENSPAN. Who would like to start the Committee discussion?

MR. BROADDUS. Could I just ask one other brief question? I know we've gone on for quite some time, but this is just a quick question for Karen building on the same theme. Karen, do you have any sense that any of the weakness in the dollar may reflect concerns in foreign exchange markets, and especially on the part of foreign investors, that U.S. monetary policy is too accommodative? In other words, is there some sense of inflation expectations that may not be showing up in the other indicators you look at?

MS. JOHNSON. I guess I'd say "no" as a short answer. It's certainly true that some other central banks comment from time to time on their sense of monetary accommodation. But there are other central banks with a different position. For example, the Bank of England has already raised rates, and the Reserve Bank of Australia has raised rates twice. But I think the notion in international financial circles that the global economy has turned and it's time to start raising rates—there was even a time when people somehow thought the Fed would have to go first—is not prevalent. We occasionally might hear in the press about worries voiced in other countries that, if the Fed doesn't act, how can we act? But it turns out that we don't have to go first. The Reserve Bank of Australia can certainly go first, and it did.

CHAIRMAN GREENSPAN. Well, isn't it mainly the issue of house-price inflation that is scaring both of those central banks you mentioned rather than—

MS. JOHNSON. Well, that's certainly a piece of it, although both of those banks I think quite legitimately see themselves as having a zero output gap. The Australian economy has

performed remarkably strongly. So they need to have their policy rates much closer to equilibrium than we do.

CHAIRMAN GREENSPAN. Well, we just discussed the notion that the output gap doesn't make any difference there.

MS. JOHNSON. Well, I would use that language even if they don't. And I would say that they are growing—

SPEAKER(?). With speed limits.

MS. JOHNSON. For various reasons their economy has been growing around 4 percent at times and rather consistently. Now, in England, I think there is an enormous tension over the housing prices on the one hand and other prices on the other. Not all prices are rising. There's a sense of the service sector of the economy versus the manufacturing sector of the economy. One monetary policy just won't do for the United Kingdom anymore, but of course, they can have only one monetary policy. So there is a certain tension there. But I think in the international setting it has become clear that, depending on the inflation situation and the macroeconomic picture more broadly, some central banks need to be acting now and some do not have to yet. But I have not detected a sense that the reason the dollar is being sold is that we're failing to address an emerging inflation problem. I have certainly heard often—and Dino may confirm this—that the Australian dollar is one of the currencies that has appreciated the most against the U.S. dollar, so just the interest differential in the normal course of transacting is looming in people's conversations.

MR. KOS. There is a minority that would say that the low interest rates here are affecting the dollar. They would also say that that doesn't mean that our policy isn't the right one. It's just that one of the side effects of having that policy is that the dollar will depreciate.

CHAIRMAN GREENSPAN. Okay, can we move on to the economic discussion?

President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. The Seventh District economy continues to improve. Much of the uncertainty that was pervasive earlier in the year has dissipated, but many of our business contacts suggest that economic growth in the region is still somewhat less robust than what they see in the national numbers.

The holiday shopping season got off to a reasonably good start. Most retailers said that sales in the days following Thanksgiving met their expectations. Even the old line department stores were said to have fared well during the period. Several contacts noted that inventories were lean and that retailers were trying to cut back on discounting. But consumers still seem to be very price sensitive. Many retailers reported to us that the strong post-Thanksgiving sales largely reflected purchases of deeply discounted merchandise. One national specialty retailer who sharply cut back his discounting noted that sales at his company slowed considerably and unexpectedly in the last few weeks.

As you know, nationally light vehicle sales picked up in November and were slightly higher than automakers' expectations. With the generally improving economy, automakers have raised their sales forecasts for next year. This Friday the Chicago Fed will be hosting its annual economic outlook symposium, and the auto industry participants are forecasting light vehicle sales between 16.6 and 16.9 million units in 2004, which is at least 300,000 units below the Greenbook projection. More broadly, 35 individuals submitted forecasts for 2004 for the overall economy, and the consensus among them was generally similar to the December Blue Chip consensus.

At our last meeting I mentioned that we were waiting for manufacturers to shift from being cautiously optimistic to just plain optimistic. That now seems to be happening. We're hearing more and more reports of strong orders, increasing backlogs, and in some cases even firmer prices. For example, the vast majority of participants at the fab tech trade show held in Chicago last month said that new orders for fabricating equipment are up. This was especially encouraging given the low capacity utilization rates. In addition, producers of heavy equipment in a variety of sectors noted strengthening demand; examples include construction, agricultural food processing, drilling, and airline service equipment.

Labor markets continue to improve. Our contacts at two large temporary help firms said that the number of workers on assignment continues to rise steadily, but they also indicated that the increases were below their expectations given the strong GDP growth we've seen. We've received preliminary results of Manpower's first-quarter hiring plan survey, and the index improved moderately from the fourth quarter of 2003 to the first quarter of 2004, but was slightly below the year-ago level. Let me note that this information will not be released publicly until December 16.

Turning to the national outlook, most of the recent data have been encouraging. Employment and hours continue to improve, although Friday's report was somewhat weaker than expected. Household sector demand remains solid, and at last corporate decisionmakers have become more optimistic. This confidence appears to be translating into the broad-based increase in spending that we've been waiting for. Firms seem to be shifting from inventory liquidation to restocking, and the orders data point to further robust gains in expenditures for equipment and software. Of course, resource gaps remain. But given that the expansion finally seems to have gained traction, I feel more confident that the gaps will narrow a good deal over

the next year. In my view this puts the risks regarding inflation outcomes into closer balance. So I think we need to start preparing markets for inevitable rate increases. My preference is to start doing that today, perhaps with some minor changes in the wording of our statement.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. The Twelfth District economy gained momentum in recent months, posting solid growth in a broad range of sectors. Consumers continue to do their part. Early reports for the Thanksgiving holiday weekend suggest that shoppers were out in force and were spending. Contacts noted that retailers are approaching the holiday season with leaner inventories, hoping to avoid the heavy discounting that cut into margins last year.

District businesses also increased spending by entering into contracts with advertisers, marketing firms, and IT support firms. One advertising consultant said that, after months of cutting costs, firms have begun to turn their attention to building revenues. The improvement in business conditions has been good news for commercial landlords. Several contacts noted a pickup in the number of firms renewing rather than relinquishing their leases. Finally, the effects of sustained economic growth have started to show up in the labor market. The pickup in hiring has been broad-based, with only a few sectors still shedding jobs. Contacts suggest that this improvement is not transitory. Many firms say that they will need to increase payrolls as demand grows; nonetheless, they plan to remain cautious.

Despite improved economic conditions, state budget troubles continue to be an issue, especially in California. California lawmakers once again are in a special session in an effort to gain control of the state budget. First they need to close a \$17 billion hole in the current fiscal year. Once the near-term hole is filled, legislators will still need to close a \$14 billion structural

gap for the coming fiscal year. The governor has proposed resolving the near-term shortfall with \$15 billion in deficit-reduction general-obligation bonds and \$2 billion in spending cuts and deferrals. He wants to close the longer-term structural gap with a cap on expenditures next year and rules limiting spending growth for all future years. The governor is taking his budget plan to the public, campaigning across the state. At the same time, State Treasurer Angelides also is going to the public, making a case against the governor's plan. Angelides and other Democrats prefer to cover the near-term shortfall with tax increases and intermediate-term borrowing. Their plan for closing the \$14 billion structural gap consists of modest reductions in spending together with ongoing deferrals and additional loans. Despite the vast differences between the parties, the heat is on to reach a compromise. The governor's proposal requires voter approval, and the legislature will need to act quickly to get the proposal on the March 2, 2004, ballot. Without some resolution, California will be in a cash flow crisis next June and in fiscal trouble for some time to come.

Turning to the national economy, recent data have been better than expected once again; and like the Greenbook, we are optimistic about the economy going forward. We expect real GDP growth to be about 4 percent this quarter and to average about 5 percent next year and 4 percent in 2005. Unlike the Greenbook, this forecast assumes that the funds rate will begin to move up as early as the middle of next year. Naturally, these growth rates imply rising levels of resource utilization over the forecast period. We expect the unemployment rate to fall to about 5¼ percent by year-end next year and to 5 percent by the middle of 2005. Still, the economy will have considerable slack over the near term, so inflation is likely to remain subdued, with core PCE prices rising a shade more than 1 percent in each of the next two years.

Although this inflation forecast is about the same as last time, it seems to me that the risks are not the same. Specifically, the recent data appear to have reduced the risk of deflation. I've already mentioned the faster-than-expected output growth; I am also less concerned about the inflation data than I was earlier. You may recall, and I think this was even mentioned earlier today, that core PCE inflation showed zero growth during several months in the first half of the year. That has not been the case of late. Financial market developments point in the same direction. For instance, the dollar obviously has been falling recently. I don't mean to claim that there's no risk of deflation. Continued high productivity growth, for example, could exert downward pressure on prices. However, I'd be less worried about deflation from that source. In any case, my point is that the risks with respect to inflation appear balanced now, and it seems to me that our statement should reflect this change in the risk assessment. Thank you.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. My contacts have somewhat different views on the situation. A number of people have said that the economy just doesn't feel like one in which GDP growth is 8.2 percent. I think there may be some explanation for why the perception doesn't match the data. On the trucking side, my contact at J.B. Hunt reports that they are seeing a modest upswing in business though not a huge improvement. He notes, however, that drivers are in tight supply.

My contacts at FedEx and UPS have a considerably more buoyant outlook. At FedEx the word is that all arrows are up by a fairly substantial amount. FedEx is expecting a good holiday season. Even the express business is showing growth in volume and revenue at this point. It was not earlier. Moreover, based on contacts with customers, FedEx expects further increases in growth. FedEx anticipates that, for the next six months, express business will be up at a

4½ percent rate, ground business at a 10 percent plus rate, and freight at a 9½ percent rate. My contact at UPS started off by saying, “We’re getting the doors blown off with volume.” He noted that a lot of the volume is driven by sales over the Internet and by phone sales for holiday season packages. So the retail firms shipping packages to people are driving that volume. In fact, the volume has been great enough that the huge automated facility in Louisville has been operating at capacity on a number of days. UPS actually has added legs to its aircraft, sending some of the packages to other facilities to be sorted because the Louisville facility is operating at capacity. My contact said that UPS has been revising up its projections for the holiday season. Business in Asia is picking up tremendously, and in Europe the projection is for 8 percent growth in business next year. In South America, no growth is expected, nor is much expansion anticipated in Mexico either.

I talked twice recently to my Wal-Mart contact. He also started out by saying that the economy doesn’t feel as if it is growing at an 8.2 percent rate, and he noted that Wal-Mart suppliers agree with that assessment. In my conversation with him last Friday morning he said that Wal-Mart had never been particularly optimistic about the holiday season this year and that its sales experience has been about as expected. There are a number of press reports about holiday sales being less buoyant than the optimists had hoped. My Wal-Mart contact pointed particularly to what to me is an interesting phenomenon regarding the so-called retail blitz, the day after Thanksgiving. He said that once the parking lots are full—and that was true for Wal-Mart this year—the only way their stores can post increased dollar volume is if consumers are buying more-expensive goods, particularly the consumer electronics that have the bigger price tags. But given the deflation in consumer electronics—he said those prices are 15 to 20 percent lower than last year—it requires a huge increase in volume for the dollar sales to go

up. Retailers in particular look at dollar sales; they make their comparisons on the basis of dollars, not so much on volume. He was very optimistic, however, about the first quarter—anticipating substantial effects from the tax refund checks that will be going out because of overwithholding of income taxes. We must have some estimates of how big that is going to be. We didn't talk about that earlier.

I think there are a couple of puzzles in the national situation. I see lots of very buoyant data, but I find the financial data—the actual declines in the money stock and in bank credit—quite unusual and something of a puzzle. I'd also note that the latest employment report showed a very large discrepancy between the household and payroll surveys. The payroll survey gets all the press. In the last two months, taking the two months together, payroll employment was up 194,000 whereas household employment showed an increase of 1.03 million. That's a very, very large discrepancy. Now, we know that the payroll survey has problems picking up births and deaths of firms. So if we are in a period with a lot of births—new firms coming along—it's possible that the payroll data are not picking up some of them. We won't know until February 2005, I suppose, because in February of next year we'll get the benchmark revision through March of this year. So we're not going to know that for quite some time.

My Wal-Mart contact pointed out that its Sam's Club sales are very, very strong. He said that Wal-Mart has been emphasizing sales to small businesses. Small businesses buy a lot at Sam's Club; they stock up on supplies, including items such as toilet paper and paper towels. He noted that business memberships at Sam's Club have been rising at double-digit rates. A year ago the growth in business memberships was flat, but a surge in the number of business people taking out individual or business memberships began about nine months ago. My contact says that the evidence is clouded, however, by the fact that Wal-Mart initiated a big promotion with

small businesses. So it is unclear whether the surge is just a reflection of the promotion taking hold or of some fundamental change in the small business sector.

I agree with a couple of earlier comments that the inflation risks now are surely symmetrical and not tilted to the downside. Thank you.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. With both political parties in California proposing to borrow money to get out of debt [laughter] and with UPS adding legs rather than wings to its planes, everything in Texas is relatively good! Our District economy has been showing signs of consistent but gradual improvement with each successive snapshot throughout the year, and we're now looking at a pretty strong outlook for the region, mirroring that of the nation. We had been lagging behind the nation.

We believe that conditions are in place for strong employment growth in 2004. Corporate profits are much improved, as is business sentiment. The airline shakeout appears to be behind us. Texas cattle producers are back in the saddle again, with the price of beef rising 20 percent over the last few months—thanks in large part to the Atkins diet. The local defense industry, notably Lockheed Martin and Bell Helicopter, is flush with new contracts. Productivity and exports in the Texas high-tech sector are stronger than we had expected, which bodes well for income produced in these industries. Aided by the continued boom in single-family housing, construction employment remains strong. Also, there are increasing signs that the office sector has bottomed. The medical services industry continues to expand at a rapid pace, with employment growing at a 6 percent annual rate in October.

The negatives for the District are manufacturing and Mexico, but the latter may be more yesterday's story than tomorrow's. In the last few years, 500 Mexican maquiladora plants have

closed, with 177 of them moving their operations to China. Mexico—I think this applies to officials in Mexico—has finally recognized that its comparative advantage no longer lies in low-wage jobs but in moving up the food chain to a higher productivity product mix. However, I was at a maquiladora convention in Guadalajara lately, and a lot of the owners of maquiladoras seemed to be in denial about that. They're just looking for the old ways to come back. Mexico is still in the doldrums but should show improvement as the recovery in our manufacturing sector takes hold. Although the District's manufacturing sector continued to shed jobs in October, signs of strength in orders are becoming more widespread, and exports have been growing as the world economy continues to improve. Overall, the District outlook is for economic growth to pick up steam in 2004 with employment to follow suit.

Last Friday I met with a group of CEOs from San Antonio and South Texas, and for the most part they concurred with this view. One of the interesting items to note from this meeting is the increasingly bifurcated nature of the household sector. Two major auto dealers were in the group, and both lamented that an increasing proportion of car buyers is having difficulty getting credit. One of the dealers, who is a member of our San Antonio board, mentioned that one of his dealerships had forty-four prospective deals the previous weekend but only four qualified for credit. Both dealers expect that this situation will continue to put a crimp in car sales. I might just say that many customers who come into the dealerships to trade are already under water with the car they have to trade in. When they successfully trade, they walk out the door even more under water. These dealer contacts also indicated that buyers of high-end cars are having no trouble financing and that a lot of those buyers pay without any financing. This underscores some of the information that Bill Poole has been reporting from his Wal-Mart contact about

liquidity-constrained households—or maybe they're income-constrained households—barely making it from paycheck to paycheck.

Turning to the national economy, so much for the Greenbook staff being overly optimistic about growth! [Laughter] It seems clear that virtually all of the economic data we've seen since the last FOMC meeting both here and abroad has been positive to strongly positive. After the investment bust and the slowdown associated with wars in Afghanistan and Iraq, a robust expansion is clearly under way. We now know that job growth has been under way for four consecutive months, even on the establishment survey basis, with improving prospects for continuing declines in the unemployment rate.

The two issues that this Committee needs to address are (1) when and if this improved economic outlook might translate into higher inflationary pressures, and (2) when monetary policy will need to shift into a less easy posture. A third issue involves how to manage that policy shift without unduly disrupting financial markets and thereby the recovery.

As I look at the balance of risks going forward, it seems to me that the risks on both growth and inflation have become much more evenly balanced or are approaching balance. As I reviewed the alternative simulations in the Greenbook, the scenario I considered the most likely was the one that assumed faster structural productivity growth. That scenario would get us to an inflation rate of about ½ percent at the end of 2005, which would put us rather close to the zone that Vincent has characterized as being on the edge of price stability and potential deflation. The staff suggests that we'd also get faster GDP growth and possibly a higher unemployment rate than in the baseline forecast, although I'm not so sure about that.

In the late '90s capital deepening was occurring as a means to deal with labor shortages. Over the last few years the next phase of the high-tech revolution kicked in with an

organizational revolution. Outsourcing, networking, and globalization are taking the benefits of comparative advantage and specialization to a new level or dimension. This increased specialization is one reason that productivity gains are spreading outside the manufacturing sector. The greater ability to outsource some service-sector jobs to foreign workers is enabling many companies to reduce costs and to increase the flexibility of their production process. To the extent that globalization in IT has made many previously nontradable goods and services imminently tradable, we should expect to see some significant changes in the relative inflation rates of goods and services. I don't think it is unreasonable to expect that services inflation could end up a lot closer to goods inflation as a result of these developments. That is just one more reason that I'm reluctantly thinking about raising interest rates at this time.

Rapid GDP growth is not our enemy, though I am willing to concede that rapid growth sustained primarily by substantially negative real interest rates may prove to be a problem. But that problem is not imminent given the degree of productivity growth and slack in the economy and our ability to capitalize on the slack in the economies of other countries. I believe that the outlook for growth in real GDP is either balanced or biased toward more growth, and I think the outlook for inflation is now balanced. With regard to the "considerable period" of accommodative policy that we've mentioned in our press statement, I think we have to honor that promise when it comes to policy changes in the next little while. But I believe it's time to withdraw that phrase, even though the initial market reaction will likely be negative. The clock doesn't even start until that phrase has been removed from our statement. That phrase has become a liability to our credibility. Thank you.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Since the last FOMC meeting, economic activity in the Sixth District has continued to expand at a reasonable pace, with strength fairly broadly based. Compared with the rest of the nation, the region's growth appears robust, suggesting that our area may be leading again as we did in the recovery from the 1990-91 recession. To illustrate the breadth of the strength we're seeing regionally, retailers are upbeat about sales in recent weeks, and prospects for the holiday season appear to be better than last year. Auto sales, which had weakened in October, bounced back in November. Commercial real estate markets are improving, especially retail and distribution expansions. Residential housing markets remain generally stable at very high levels. While office vacancy rates remain high, we're now getting positive absorption with subleased space no longer coming back on the market the way it did earlier. The tourism industry reported a rise in visitors and a positive outlook for the winter season, especially for cruises. Visitors from Europe are returning, buoyed by an appreciating euro, although traffic from Latin America has dropped. This is the third FOMC briefing in a row in which we've had reports from our banking sector suggesting that loan demand is picking up, primarily in the service sector but with some new borrowing now showing up for commercial real estate projects and manufacturing. Trade and transportation activity improved in the District. Indeed, truck manufacturers are noting a sharp increase in orders. One local trailer manufacturer said that his company had an inventory of 1700 trailers just six months ago and today they are struggling to keep up with demand. They have a backlog of orders through the end of the first quarter.

The District is also leading the nation in job growth, as it did coming out of the 1990-91 recession. Recent job momentum for Georgia in particular was exceeded by only two states, and metro Atlanta had the fastest job growth in recent months of any metropolitan area in the

country. It's difficult to pinpoint a distinct source for this growth, such as a few large employers bringing back workers. All indications are that, outside of manufacturing, it's quite broad based. The rise in employment is being reflected in improving state sales tax and income tax receipts. Every state in the District now has an unemployment rate below that for the nation, and Georgia's stands at 4.2 percent. That said, it's also true that job growth in our District is considerably more muted this time than in the post-recession period in the early '90s. We have yet to see the surge that would significantly push down unemployment rates.

As for inflation, price increases still appear muted except for health care and the pass-through of higher natural gas prices. We also hear some scattered anecdotal reports of higher prices in trucking, where shortages of equipment are beginning to affect truck and trailer prices.

On the national front, I count myself among those skeptics who were surprised by the sheer strength of the third-quarter growth and productivity numbers. Perhaps even more encouraging are the signs that investment has begun to pick up and the signs of life in labor markets. In anecdotal reports, revisions to inventory numbers suggest that accumulation has now begun, further complementing the other signals. All this bodes well for this year and next. I, like others, expect some slowdown in the fourth quarter from the third, but I do anticipate that 2004 will be even stronger than 2003. Any quibbles I might have with the Greenbook over point estimates for growth are minor because the baseline forecast path in the Greenbook is consistent with our own Atlanta model forecast.

I find it more difficult to work through the longer-term outlook for inflation and to reconcile the Greenbook's very benign outlook with the somewhat earlier upturn in the inflation path suggested by private-sector forecasters, some of our own modeling work, and financial market views. Certainly, the less than benign views regarding the inflation outlook seem to be

reflecting fundamentals in one way or another. Those fundamentals include money growth for several years in excess of the nominal rate of economic growth, real interest rates near zero or negative, a surge in government spending with very large short-term deficits, a drop in the value of the dollar, a growing trade deficit, and increased leanings toward trade protectionism. I would conclude that the inflation risks are currently close to balanced. The growth that we have seen recently and that we expect to continue into next year certainly reduces the probability of worrisome further disinflation. That should remind us as well as others that inflation could move sooner than expected in the other direction.

Looking ahead just a bit to the policy discussion, I would guess that there will be a sense that we continue to have the luxury of being able to be patient in terms of adjusting the stance of policy. At the same time, we're at a point where we can and should begin to turn more attention to the longer term and the process of ultimately adjusting policy, hopefully gracefully, initially back to a more neutral setting. In preparation for those later discussions, I would suggest that our ultimate policy adjustment would need to take careful account of certain existing conditions in the economy that may affect the underlying policy transmission channels.

What I have in mind is the following: Approximately 40 percent of the increase in GDP since the trough is due to housing and durable goods purchases, which usually need to be financed and were clearly encouraged and supported by low interest rates. Measures of consumer debt produced by the Board's staff show that consumers clearly have increased their debt burdens and their financial obligation ratios. Delinquency rates on subprime mortgages far exceed those of other mortgages. Finally, while credit card lenders remain profitable, their chargeoff ratios are now approaching 7 percent. As a result, current profit levels are being maintained by low commercial paper funding costs and not by increased charges on loans.

Should we raise rates too high too quickly this time, we risk choking off demand for housing and durables, a situation that will be exacerbated by a profit squeeze on lenders, particularly credit card lenders, who will be forced to curtail lending or tighten standards. There's also a risk, with business investment still tentative, that precipitous rate hikes might heighten businessmen's risk aversion and lead them to postpone planned investment. But smaller rate hikes might have a greater economic impact this time than in previous expansions. These structural issues suggest to me that we may need to be more concerned than usual about exactly what evidence or signals we will need to see to trigger a preemptive policy reversal, given the lags in the transmission of policy. These considerations also seem to argue for preparing people at the right time for a smooth transition to a less accommodative policy. It's nice to come to a point where we can begin to sort through those longer-term issues. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Economic activity in New England continues to lag that of the nation, but much of the regional slowness seems concentrated in Massachusetts. Elsewhere there are indications that a more solid pace of growth is taking hold. For one, merchandise exports for the region climbed almost 13 percent in the last quarter from their low point in early 2002, with the largest growth in chemicals and computer and electronic products. More notably perhaps, despite the downbeat nature of some of the regional data, consumer confidence rose sharply in November, with improvement in views regarding both the present situation as well as future expectations. Confidence is now back to levels seen just as the recession ended. Hopefully that's a precursor to a brighter tone overall.

I say “hopefully” because some important data remain relatively downbeat. Employment levels in the region dropped again in October. The two most populous and richest states, Massachusetts and Connecticut, led the way with year-over-year job losses of nearly 1½ percent. For the other states in the region, however, the job count was either unchanged or marginally positive versus a year ago. Moreover, even though Massachusetts and Connecticut employment declines over the year were comparable, Massachusetts accounts for nearly all the recent drop. Thus there is some reason to believe that five out of the six New England states are moving in a positive direction, with only Massachusetts stuck in contraction mode.

Commercial real estate markets remain weak in the region, with office rents falling. Again, the Boston market seems to be the most sluggish, with contacts reporting stability elsewhere. Not surprisingly, a survey indicated that business confidence in Massachusetts slipped a bit as well, falling slightly below 50 in October after strengthening through most of the summer. Employers were reported to have significant concerns about the present and a wait-and-see attitude regarding the future. Similarly, an economic index of Massachusetts growth fell off a bit from both a month and a year earlier. The state’s economy is nonetheless expected to grow over the next six months but at a slower pace.

Moving beyond the data, and particularly the data from Massachusetts, there are uneven signs of vitality. Beige Book contacts in retail and manufacturing were more upbeat than they were the previous time we talked to them. Temporary-help firms report that activity has picked up in recent months. Revenues are up, and the excess supply of available labor may be moderating. Software firms were more upbeat as well, with more specialties showing better growth than earlier. Contacts in the chip-making industry say growth should be at 10 percent globally in the fourth quarter, a good pickup for that sizable industry. Paper mills and packaging

industries continue to see only slow growth in demand, and consumer electronic sales through October seem to signal a reasonable but not a great Christmas season. Nevertheless, consumers continue to be willing to spend relatively large amounts on entertainment. One large sports venue reports high per capita spending at recent games. In sum, New England still faces challenges, though for the most part Massachusetts seems worse off, with the other states on a more positive trend. Conditions are slowly improving though the degree to which this is happening varies.

On the national scene there are many more signs of a solidly growing economy. Clearly the 8.2 percent pace of growth in the third quarter won't be repeated if only because consumers won't find their pockets lined as greatly with tax cuts and child tax credits again. It does seem now that, while consumer spending is ebbing a bit, the business sector is picking up. New orders data, a surge in corporate profits, and continuing favorable financial market conditions all suggest that business spending will continue on the upward growth path seen in the second and third quarters. In this context I was a bit dismayed by the November jobs data. It seemed clear that the benefits of the recent productivity surge—that is, high real incomes for those people who are working and low price pressures—are likely to remain fixtures on the landscape for a while. But I do think the caution that has characterized labor markets recently is ebbing. Businesses have begun the hiring process. We've seen that over the last three or four months, and I think it's likely that process will accelerate and create a sustainable growth pattern for 2004.

Outside the United States, prospects for growth have picked up as well. Most of the world's economies registered an uptick in growth in the third quarter, and monetary and financial conditions in the big three developed areas—the United States, the euro area, and Japan—are

stimulative as we head into 2004. There are geopolitical risks, but the world overall seems to be dealing with the uncertainties they present in ways that less and less affect the growth process.

I continue to find the Greenbook's estimates of growth in the 4s and 5s for this year and next and into 2005 with declining inflation rather optimistic. Our calculations in Boston suggest a more moderate path. But I have to admit to a great deal of uncertainty about any particular forecast. It's clear that activity is growing solidly, but given the slow pace at which the output gap is likely to close in almost any scenario, price pressures are low and may remain so. But there are sizable risks around that. I am less concerned than I ever was, and that was not much, about a period of truly harmful deflation. The risks around the inflation forecast appear balanced, as several others have mentioned. On the other hand, there are some upside risks to what could be an overly sanguine view of the inflation process if stronger growth than projected in the Greenbook actually occurs. In that regard, I found the policy tightening embedded in the Greenbook comforting. I think we may need to begin taking rates to a more neutral place faster than is expected in the Greenbook. For now I continue to believe that we have some time to wait and that policy may continue on an even keel for a time. But what we say about it has become more of a concern. I expect we'll talk about that a little later.

CHAIRMAN GREENSPAN. Thank you. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. Economic conditions in the Third District continue to improve, and business sentiment has turned more positive. Manufacturing activity in the region is expanding, and forward-looking signs are positive. The index of general economic activity in November from our business outlook survey was plus 26, down slightly from the October reading of plus 28. The forward-looking indicators from the survey suggest that production activity should continue to strengthen. Although the indexes of new orders and

shipments were a bit lower in November than they were in October, they are still at the highest levels we've seen since 1999. Firms that make electrical machinery, instruments, and metal products were more positive, while firms making lumber products, plastics, and transportation were among the more negative. That itself I think is rather interesting. Another positive sign is that more firms are telling us that they plan to increase capital spending in the next six months than were saying that earlier this year. And positive capital spending plans are more widespread across sectors than we've seen in quite some time.

Special questions in our November survey addressed one of the long-term trends affecting manufacturing and a topic that came up here earlier—namely, outsourcing and foreign competition. Not surprisingly we found that many local firms are being affected by globalization. More than half of the respondents reported that they had lost domestic customers to foreign competitors in the last three years. One-fifth of the respondents indicated that they had outsourced production for support activities to foreign countries. About 40 percent reported that they have increased purchases of imports from foreign sources in the past three years. Two-thirds said that their foreign outsourcing activity had risen in the past three years as well. This phenomenon is likely to continue to affect the manufacturing industry in the long run both in our District and in the nation as a whole.

Retailers reported that sales picked up fairly well in November from a weak number in October. They attributed the weakness in October to unseasonably warm weather, which discouraged sales of winter merchandise. I think this week will solve that problem! [Laughter] Auto dealers reported a rebound in sales in November, and manufacturers increased incentives. Our retailers expect holiday sales to be stronger this year than last, but their forecast for sales growth is in the 3 to 4 percent range, somewhat weaker than the national number.

In a new development, business lending in the Third District is beginning to pick up. We have heard this from a number of sources and institutions of various sizes. The increase is in middle market companies across a wide range of industries, and firms are beginning to implement expansion plans or purchase capital equipment for replacement needs. Construction activity maintains the pattern it has shown since the recovery started. Residential construction and home sales continue to show strength, while the commercial real estate market remains soft. The job market in our region continues to outperform that of the nation as a whole. Payroll employment in the three states in our District edged up in October after being flat in the third quarter. The tri-state unemployment rate stands at 5.5 percent compared with 5.9 percent in the nation. So the recovery continues to build momentum in our District. This improvement is being reflected in a more positive mood and sentiment among our business contacts. I would describe them as seeing the glass half full now rather than half empty, which was the case a year earlier. They are now more willing to believe the forecast that economic activity will continue to strengthen next year.

Turning to the national scene, economic conditions have also improved since our last meeting. Third-quarter growth was even stronger than the initial report indicated, and fourth-quarter growth ought to be quite acceptable, though not up to the third-quarter figure. Although significant slack remains in both product and labor markets, businesses have increased capital spending and have started to hire workers. Both business and consumer sentiment have improved. The improvement in fundamentals implies that the economy will expand at a robust rate through next year.

I welcome this period of strong growth. Core inflation remains subdued, and more-rapid growth will help reduce economic slack, putting more people to work. A year from now, when

we look back, I expect we will see the autumn as the inflection point in the recovery, the point at which it became self-sustaining.

I agree with the Greenbook that inflationary forces are likely to be muted over the forecast period. But I also believe, as others have indicated, that the risk of disinflation is subsiding substantially at this point. Although the level of inflation may be somewhat lower than my target, the current and forecasted output growth rates make it much less likely that low inflation will create the kind of zero-bound problem we have been concerned about. In fact, I believe the risk of inflation moving upward over the medium term is now about balanced with the risk of it moving downward, a sentiment I've heard rather frequently around this room recently—as a matter of fact over the last twenty minutes. [Laughter] The recent and forecasted future depreciation of the dollar, higher oil prices, and continued growth in raw materials, not to mention higher benefits costs, will all put upward pressure on prices going forward. Obviously, now is not the time to change interest rates. But it is the time to be particularly watchful and prepared to counter any substantial negative change in inflation or inflation dynamics as well as rising inflationary expectations. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. As for the District economy, things look fairly good, as appears to be the case elsewhere in the country from the comments we've heard so far. Based on our service-sector and manufacturing surveys, activity expanded strongly in October. It appears that activity may have slowed a little in November, but conditions are still very healthy in the District. Factory orders and shipments in particular strengthened further, indicating some strength in demand in manufacturing for the first time in a while. Employment in manufacturing is still soft, but the pace of layoffs appears to have slowed noticeably recently,

including in the basic manufacturing belt in the Carolinas, where the problem has been centered in our District. Residential construction is still very robust, and for the first time in a while we are seeing a few signs of life in nonresidential construction. One of our directors is a member of a REIT board. He reported recently that absorption rates in the office sector have risen in several area markets. Another director, who owns a large number of so-called necessity shopping centers, which are anchored by grocery stores, indicated that his occupancy rates have increased recently. Like Bill Poole, we have several trucking companies based in our District. What we're hearing from most of them suggests that shipments are increasing in a fairly marked way. So conditions look fairly strong in our District. Every silver lining has a touch of gray though, as Jerry Garcia once reminded us. The good news is that another new company opened shop in Charlotte recently. The bad news is that its business is helping other companies outsource their activities to India. [Laughter]

On the national economy, in the spring and summer of this year some of us were needling the staff about being too optimistic; they were much more optimistic than other forecasters. But let the record show that they got it right—at least in terms of the broad direction if not all of the details. The third-quarter growth rate in GDP, of course, exceeded even the October Greenbook projection, which at the time seemed to be a very optimistic forecast. Earlier Greenbooks also had predicted that employment would finally begin to grow, and it has, if less robustly than we might have hoped. Given the recent improvement in business fixed investment and the persistence of solid household spending, it seems increasingly likely that this recovery is going to develop into a balanced expansion. The principal risk in the outlook at this point, as I see it at least, is that the output gap may not close soon enough to avert a further fall in inflation. Weak wage growth and strong productivity growth in the third quarter combined to deflate unit labor

costs at an annual rate of about 6 percent. We probably won't see anything like that kind of decline in the current quarter, but the Board staff is projecting a further small decline, and it could be larger than they have forecast.

From my standpoint there is just no way to get around the fact that this kind of unit labor cost performance constitutes a moderate disinflation risk in the outlook, at least for now. I recognize that, with economic activity clearly accelerating, there is now an upside inflation risk as well as a downside disinflation risk. This is clearly going to be a tricky passage for monetary policy over the course of the next several months. But given that we are now at the lower bound of what I'll call—for lack of a better term—our inflation tolerance range, I think we should continue to be concerned primarily about preventing a further decline in inflation. We should have ample time to react to any evidence of incipient inflation pressures, and I just don't see such evidence at this point.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. Thank you, Mr. Chairman. Conditions in the Fourth District have improved notably since our last meeting, as was described in some detail in our latest Beige Book report. Consumer spending and housing remained buoyant, and now a broader mix of business persons are willing to express satisfaction with their profitability and their order books. Nevertheless, those I talk to remain cautious about their capital spending plans and are still tentative about hiring plans. I get a lot of questions from business people in our District about where this 8.2 percent growth is occurring because they just don't see it. I suspect that the Fourth District is going to be one of the laggards as this economywide expansion extends into the next year.

Although the media like to report on the manufacturing sector as if it's some type of one-dimensional animal, the performance in that sector has been quite mixed. Certainly there are differences among companies due to the manufacturing sub-industry in which they operate since some sub-industries are experiencing stronger demand than others. Defense-related industry is the most obvious example. However, small firms that supply components to larger companies are having an extraordinarily difficult time in the current environment. These small firms typically buy raw materials in world markets, and they have no bargaining power over the prices they pay. Their final customers can source components, even custommade parts on world markets as well, and those customers are forcing the component suppliers to compete against one another strictly on spot prices. The result is that the component suppliers are being squeezed from both sides.

An example of this in my District was related to me by a contact whose firm makes a variety of small rubber parts. He sells those parts to larger companies that are producing automobiles, computers, and consumer goods. One of his customers recently asked him to reduce his price for a component from \$1.15 to \$.40. If that price request could not be met, the customer said he was going to have to take his business offshore. My contact couldn't produce the component at that price so he went offshore and found a producer who could. He then was able to sell this part to his customer for \$.38 apiece, just slightly under the \$.40 price requested. The part costs my contact \$.09 plus \$.05 shipping, so he's still making a profit. I find two aspects of this story noteworthy. The first is that my contact, when asked to reduce his price, thought the product could not be made at that price. But he found that it could be produced offshore with technology that he didn't even know existed. He was unaware of the technology until he visited the shop floor and actually saw that technology being used. So it wasn't labor

cost that was driving down the price but the technology being used offshore. The second aspect that I find interesting is that many large U.S. manufacturing companies are now depending on inexpensive offshore sourcing to keep their own products competitive. So if there are disruptions in the relations with emerging economies, that is going to help some U.S. industries but will hurt many others.

Collectively these circumstances suggest to me that we are still in the process of adjusting to the globalization in trade that is occurring and that the adjustment process is going to last for some time. Again, I don't think I will be surprised to learn that this adjustment process is altering some of the economic relationships that we have used in the past as guideposts, such as measures of capacity and its utilization. I think it's clear that international trade and productivity patterns have been instrumental in driving down prices of both goods and services, especially manufactured consumer products. CPI goods prices are still falling and by enough arithmetically to hold the overall core rate of inflation at a low level. In fact, as we've discussed extensively this morning, inflation rates are somewhat lower than various estimates of expected inflation.

As has been reported in the media lately, some Wall Street economists think that we're trying to communicate that we want the inflation rate to move up about 100 basis points from where it is today. Others seem to think that our statements are designed simply to communicate something about the amount of slack that we see remaining in the economy through the next year. This confusion leads me to want to be a bit cautious about changing our communications significantly at this meeting. It reinforces to me, though, that we need to be clear about our intentions and I am looking forward to our discussions next month, which I hope will help us communicate more effectively to the public in that regard. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Let's take a break and be back in ten minutes.

[Coffee break]

CHAIRMAN GREENSPAN. First Vice President Lyon, please. Welcome, incidentally.

MR. LYON. Thank you, Mr. Chairman. Overall for the current quarter economic conditions have continued to improve in the Ninth District. This improvement is attributable primarily to continued strength in residential real estate markets, an uptick in manufacturing, a modest increase in consumption, and an improved agricultural picture. Other sectors—including commercial real estate, mining, and energy—are holding steady. There are no reports of significant increases in prices or wages. I'll have a little more to say about wages and prices in a minute, but first and perhaps most important, it appears that labor markets have stabilized. One of our Minnesota directors noted recently that for the first time in a number of months none of his contacts had plans to decrease jobs at their companies. He did add, however, that employers he spoke with were still cautious about hiring additional employees.

Next week we'll announce the results of our annual Ninth District business survey. Preliminary results show that 34 percent of the respondents expect to increase employment at their firms in 2004, whereas 16 percent plan to reduce jobs over the coming year. If the stories we're hearing from our directors are any indication, some of the job losses will be due to outsourcing and the movement of operations overseas.

Other anecdotal information we've received lately reflects a similar moderately optimistic tone. For example, business conditions in the information technology sector are reportedly improving, albeit slowly. And some business expansion was noted, including by a telecommunications firm in southwestern Wisconsin and a window manufacturer in Minnesota. Agricultural conditions appear favorable, with a solid grain harvest and high cattle prices bringing mostly good news from our Agricultural Advisory Council—a relatively rare event.

According to our advisers, this good news for agricultural producers is creating positive spillover effects in rural communities.

Returning to the question of wage and price increases, according to our recent business poll, almost 80 percent of respondents expect wages at businesses in their communities to increase between 2 and 3 percent. Only 4 percent of the respondents predict that wages will grow 4 percent or more. At the same time, respondents report significant productivity increases this year and plan to increase capital investment in 2004. Lastly, more than half the respondents predict that prices for their products and services will remain unchanged, whereas 30 percent expect price increases next year.

Turning to the national outlook, there are many indications that the solid expansion will continue over the next several quarters. Firms are hiring again, payroll employment has increased in each of the past four months, and hours worked are up sharply. Initial claims for employment benefits have been generally declining, and the unemployment rate has fallen slightly. The weak manufacturing sector appears to be turning up. While consumer spending has slowed, data on orders and shipments of nondefense capital goods indicate that last quarter's rebound in business spending on equipment and software is continuing into the current quarter. Further, residential construction continues to be quite strong. There are also indications that real growth in foreign economies is picking up, which should improve exports.

We are optimistic about the performance of the real economy next year, but we're not quite as optimistic as the Greenbook. Moreover, we see weaker growth in employment and hours worked and stronger growth in productivity next year than the Board staff does. With respect to inflation, we're also somewhat less optimistic than the Greenbook. We see headline rates of inflation either unchanged or modestly higher over the next few quarters. This view is

based both on our models and on recent movements in market interest rates. We see core inflation rates remaining roughly at current levels. Thank you.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I think we all could agree that the shift in sentiment around the table across almost all the Districts has been one of the more unusual changes in a positive direction that we've seen in a very long time. I think it provides us with further confirmation that we don't have to rewrite the textbooks, at least the standard new Keynesian ones. In the absence of downward shocks, massive amounts of fiscal and monetary stimulus interacting with the natural resilience of the economy will boost demand and put the economy on a track on which output is growing faster than potential.

To my mind the global character of the strengthening in demand is particularly noteworthy in that it suggests a broad base for improving economic conditions. We've had positive surprises, as Karen noted, almost everywhere in the world—even in economies in the euro area that aren't especially resilient and where fiscal policy isn't that expansionary. To some extent this is a reflection of the strength in the U.S. economy, but I think domestic demand has picked up in many countries, responding in part to widespread expansionary monetary policies. And with our exchange rate falling, greater worldwide demand should show through at least to less leakage from U.S. production than we might otherwise have expected from strong U.S. demand going forward.

The upward revisions to central tendency forecasts for both output and inflation—and just as importantly the substantial reduction in the downside risks around those forecasts—should make us considerably more confident about the outlook than we were a few months ago.

It seems likely that the economy will grow rapidly enough to begin to erode slack and that inflation will hold near current levels instead of moving substantially lower.

The continuing surge in capital spending and the pickup in hiring suggest a rebound in business confidence that is unlikely to fade quickly. In the household sector, housing demand has remained strong even after the earlier rise in long-term interest rates. Other household spending hasn't fallen back and may have risen modestly further even as the effects of tax rebate checks and the earlier surge in mortgage refinancing wear off.

Private domestic demand for the third quarter was revised up 1 percentage point, and this revision doesn't seem to be borrowing from the immediate future. Incoming data have led the staff to add another $\frac{3}{4}$ percentage point to private domestic demand in the fourth quarter. In financial markets, greater confidence continues to be reflected in the persistent erosion of risk premiums, especially on lower-rated issuers, and in rising equity prices. Taken together with the falling dollar and stable Treasury bond rates, these developments indicate that financial conditions are becoming more accommodative even as the faster economic expansion takes hold.

On the inflation front, the declining dollar and stable inflation expectations should provide a counterweight to continuing, if eroding, output gaps to stem the drop of inflation. I agree with the rest of you that the risks of pernicious deflation, which never were very large, have almost disappeared. But in my view some downward risk to the overall outlook for inflation remains. The major unknown is productivity, where I suspect there is a greater possibility of an upward than a downward surprise relative to the pattern of slowing productivity growth in the staff forecast. Faster productivity growth, if it is not a consequence of capital deepening, could slow the decline in the output gap and could put further downward pressure on prices, especially if it comes more quickly than anticipated increases in worker compensation.

Partly for this reason, the shift in the balance of risks around achieving our objectives for output and prices does not call for a change in policy any time soon in my view. Moreover, what hasn't changed in the United States is the cost of missing to one side or another of these forecasts. Inflation is low and, as many of you remarked, close to the lower edge of our price stability comfort zones. And output gaps remain sizable. Shortfalls from expectations for output and prices would have a greater deleterious effect on welfare than overshoots, including an overshoot that results in a small rise in inflation down the road.

So we should continue to take our risks on the easy side of policy. But policy is quite easy, quite stimulative. We got here by aggressive easing to deal with the threat of deflation and the zero bound, and in the unusual circumstances that we faced last spring and summer, we reinforced that stance in market expectations by our "considerable period" terminology. As the threats recede, we need to be thinking about whether we have the flexibility to react if upside risks materialize or even if the economy evolves as expected. A zero real funds rate may not be way out of line for a 2 percent output gap, but it would be unusual to keep the funds rate that low as the output gap is closing next year. We can see this in the various versions of the Taylor rule, which all point to higher rates next year. This was a feature of Governor Bernanke's presentation last time and is even more so in the calculations using updated actual and forecasted values for output and inflation gaps. Taylor rules are just rough benchmarks, and I would not argue that we ought to follow them in any mechanical way. But these results do underline the questions about how we position ourselves going forward.

I look forward to the next part of the meeting to a discussion of how in our announcement we can acknowledge a shifting balance of risks and begin the process of ensuring for ourselves sufficient flexibility to react to potential changes in circumstances.

CHAIRMAN GREENSPAN. Vice Chairman Geithner.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. You'll find that we're fairly close to the center of gravity in this discussion. Let me start with the greater New York region in the Second District, where we see growing signs of strength, most notably in the financial and the business investment sectors. Early results from our forthcoming December Empire Survey—I don't think "Empire" refers to the imperial New York Fed—[laughter] show widespread improvement in business conditions. A rising proportion of firms—higher than the already high number in November—reported increases in employment and in the workweek. Notably, the December survey shows strong expectations for higher prices paid and received six months ahead.

The Securities Industry Association, as you may have read, projects that bonuses will be up 20 percent from a year ago. The leaders of the financial community in New York generally express growing confidence in the strength of the recovery, though they cite varying degrees of concern about strategic or terrorism risk, about the caution induced by legal and corporate governance accounting uncertainties, about the nation's external imbalance, its fiscal deficit trajectory, and about what one might call a modest erosion in the credibility premium that the U.S. financial system in some sense has enjoyed.

For the U.S. economy as a whole, we are encouraged by the breadth of the strength in recent data and by signs, of course, that policy works. With consumer spending recently strong, the initial signs of growth in employment, the strong response in capital spending, and low levels of inventories, we feel more confident that the foundations have been laid for a sustained expansion. Our forecast shows somewhat less confidence in the strength of consumption and in the pace of employment growth than does the Greenbook, and we show a modestly higher

negative contribution from the external sector. But overall, we think the evidence supports the view that the economy is growing at a reasonably healthy pace and will do so over the forecast period at a strong enough level to begin to absorb the available slack.

These factors and the initial signs regarding prices suggest a more balanced inflation outlook. The extent of the remaining slack in the economy, the slow pace at which we expect it to be absorbed, and the strength of productivity growth all suggest little basis for concern that inflation will rise appreciably in the coming year. Yet the dollar's decline, the run-up in commodity prices, and the rise in some measures of inflation expectations suggest that the risk of further declines in key price series has diminished.

It's important to note that we face a fair degree of uncertainty over many of the key elements of this recovery. Consumption may decelerate more than we anticipate, as the force of tax changes and monetary stimulus fade. The strength of underlying growth may surprise us still and with that may come more modest job growth. The confidence necessary to sustain strong business investment could still falter. Growth in Europe and Japan still looks very slow, even if the downside risks have diminished. Emerging Asia is, of course, very strong, and there are better numbers across most emerging markets. But many emerging economies remain very vulnerable, with very large balance sheet exposures, weak institutions, and political systems very open to populist pressure.

The scale of dollar reserve accumulation and the exchange rate regimes that support that demand for dollars seem unlikely to be sustained indefinitely. The combination of the sheer magnitude of our external imbalance and the size of the gap in potential growth between the U.S. and other major economies will leave us exposed to considerable risk in financial markets, with potential cliffs for the dollar and a sharper rise in interest rates. These risks and the troubling

fiscal trajectory mean that monetary policy will carry a greater burden for sustaining confidence in U.S. financial assets. The extent of the decline in credit spreads and the magnitude of opportunities for the development of leveraged positions combined with the large scale of the mortgage-backed market mean that we have to be attentive to the risks that will come from a sustained period of low rates and to the forces that will be unleashed as its end approaches. This requires careful attention, though it's not clear what that really means for the policy judgments ahead.

On balance, we see the prospect of stronger real growth and a higher underlying rate of potential growth, and we have greater confidence about a more benign inflation outlook. We're approaching a point at which we need to consider how to move to a more neutral, less accommodating, policy stance. We will have time and perhaps reason to begin that discussion in the New Year, probably sooner than we had thought would be necessary. I'll wait for the discussion on policy and our press statement to address those interesting questions. Thank you.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. It can be very frustrating when one's intuition does not square with the results of one's models. College football has this problem right now. [Laughter] It should be obvious to everybody that USC is the best team, but when the model builders try to develop a system that weighs whom each team beats, the strength of opponents on the schedule, and other variables, they get the wrong answer. I can see a similar problem coming up for us, if not today then fairly soon.

Compared with most of 2003, the economy seems clearly to have turned. Almost every forecaster is now quite optimistic, and for two months the data have consistently exceeded expectations. Even Friday's labor report, viewed as lukewarm, could be interpreted as fairly

strong with the rise of self-employment and the rise in hours. And the slight decline in manufacturing employment coupled with strong manufacturing productivity implies a sharp rise in industrial production. Given all this and given my feeling that at the previous turning point, November 2000, the FOMC may have been a bit slow to recognize a downturn, it is important that we stay ahead of the curve. It is way too soon to start raising rates, but it may not be too soon to change some of our rhetoric and even go toward a neutral bias. That's what my intuition says.

As for the models, let me use the output and inflation building blocks the way the Bluebook does in the chart on page 10. For the output side, the staff forecast shows an economy clearly pointed in the right direction. Over the next few quarters, growth should proceed at a rate that exceeds the trend level, enough to be ultimately consistent with maximum sustainable employment. Note the familiar words. There are both upside and downside risks, of course, but overall output risks seem balanced.

On the inflation side things get trickier. My own preferred target range for core PCE inflation, for which I cited my reasoning in a speech I gave a few weeks ago, is from 1 to 2½ percent. By that standard, inflation is now near the bottom of the target range. Will it increase or decrease? On the one side, output gaps are large, imparting downward pressure. On the other side, output growth is rapid, imparting upward pressure if there are speed limit effects. To compare these pressures, one can first look at historical data. In the early 1980s we had almost exactly the same situation, large output gaps and rapid growth. Inflation definitely fell in that episode, as Dave Stockton noted earlier. Another place to look is at price-cost margins. These are currently very high, leading to an expectation that price growth could be soft. A third place to look is at the staff regressions explaining prices or wages or both. As usual, the staff has

lots and lots of regression models. All of them have strong negative gap effects; some have zero speed limit effects; and others have small and generally insignificant speed limit effects. Rapid growth does seem to drive up commodity prices but not overall prices or wages, at least not very much. The clear verdict here is that output gaps impart powerful downward forces on inflation whereas speed limits impart weak upward forces. This means that inflation should be more likely to decline than to rise. This, by the way, is essentially the argument that the *Wall Street Journal* this morning criticized Governors Ferguson and Bernanke for making. If the *Wall Street Journal* editorial page criticizes an argument, there must be some merit to it! [Laughter]

Since core inflation is already near the bottom of my preferred range and is more likely to drop than increase, that should show up as a negative bias for the inflation term. A negative for inflation and a neutral for output should lead to an overall negative. But my intuition suggests that the overall bias should be neutral. That's the difference between intuitions and models. How to resolve this? One possibility, as Dave mentioned earlier, involves some of the upside risks on inflation coupled with the foreign exchange risk that we mentioned and the oil price risk the Chairman mentioned. Another possibility is that, although the inflation bias is still negative, it is moving toward neutrality, as is the overall bias. Whatever the case, I think we ought to start preparing the world.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, the Tenth District economy is similar to the District economies others have described in that it continues to expand and has done so fairly clearly since our last meeting. Businesses are showing some real confidence that the recovery now is going to sustain itself.

Let me talk just a minute about regional developments. Our labor markets have indeed firmed since our last meeting. According to the payroll data, employment rose in October for the second month in a row. Moreover, layoff announcements have subsided, and hiring announcements have picked up, suggesting that job growth will continue to strengthen further in the coming months. Manufacturing activity also has expanded. Production and new orders rose strongly during the last two months, and expectations for future activity have moved higher. Employment is no longer falling, and for the first time since the slump began, firms in manufacturing appear willing to hire additional workers to meet anticipated increases in demand. Capital spending also continues to improve, with considerably more firms planning to increase than to reduce investment in the coming months. Consumer spending looks solid despite reduced stimulus from the tax rebate and the slowdown in mortgage refinancing activity.

Anecdotal reports suggest that the holiday season has gotten off to a good start in our area, particularly in the east side of the region, with stores feeling less need to discount merchandise this year than last year. Travel and tourism are also doing well, with convention activity continuing strong and ski bookings in the western part of our District running quite high. Housing activity remains robust. And though commercial real estate is still in a slump, we're beginning to hear that the bottom has been reached, at least in the view of our local developers. Energy activity remains strong.

With respect to inflation, wage pressures are still minimal, but price pressures have increased slightly. Manufacturers not only expect substantial increases in raw materials prices in the next few months but also anticipate having somewhat more success in passing the cost increases on to the customer. That's the anecdotal comments we're receiving from them. In agriculture, incomes are up. They were adjusted up another 6 percent in November. The only

fly in the ointment is some of the upsetting information relative to China. That has affected our agricultural outlook to a small degree.

Let me turn to the national economy. To repeat what many others have said, recent indicators have been strong and more so than generally expected. As a result, many people have revised upward their forecasts for growth in 2004. Overall, I expect growth to be in the 4¼ to 4½ percent range in 2004 and stronger than that—maybe 4¾ to 5 percent in 2005. Obviously my forecast is lower than the Greenbook's but somewhat higher than the December Blue Chip numbers that came in at just under 4 percent. The reasons for the strong outlook are the same as they have been for some time: accommodative monetary policy, stimulative financial conditions, cumulative effects of fiscal policy, and strong productivity. In addition to these, I would add strong forward momentum and improving business confidence as important factors. Moreover, employment is finally rising, and the unemployment rate is falling. We also are seeing more signs of recovery in capital spending on a national level, as I've heard around the table. The growth in profits and business fixed investment seen in the last quarter along with strong orders and shipments of nondefense capital goods suggest that the recovery will continue to improve as we move forward.

While there are risks to the outlook, I think they are probably balanced now or on the upside, depending on one's definition of upside. At the last meeting I felt, as did others, that there was a fair amount of uncertainty with regard to capital spending and employment. While risks in those areas perhaps remain, they are clearly much smaller today than just a short time ago at our last meeting. In addition, the upside surprises we have been seeing may continue as the recovery gains momentum.

Let me turn to the inflation outlook. I take the view that inflation will rise, but I agree with those who say it is likely to increase only slightly, perhaps by $\frac{1}{4}$ point in 2004 and 2005. I would add that, while I think the argument that the output gap will tend to hold inflation down is a fair one, I believe the highly accommodative stance of monetary policy in an accelerating economy balances out those deflationary risks. As it settles out for me, Mr. Chairman, I would suggest that at worst the output risks are balanced. I think the inflation risks are also balanced. In my view we really do need to reconsider the last sentence of our statement. I think we can change the language—and perhaps at this meeting—in a way that moves us more toward neutral, with balanced risk assessments, without necessarily upsetting the markets or the mainstream. Thank you.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. A few months ago the nation embarked on an important and interesting experiment in macroeconomics. Most of us had confidence that the stimulative policies being put in place would have the desired effect, but the timing and the magnitude of that effect were a bit uncertain. The question was how stimulative the set of fiscal and monetary policy changes might actually be. The answer today, as many of you have already said, is that the combination of historically low interest rates, the home refinancing boom, and this summer's tax cut does seem to have succeeded even better than earlier expected. The incoming data since the last meeting clearly indicate that household consumption and residential investment have remained robust. Importantly, I think the data indicate that the participation of the business sector through business fixed investment is also starting to become firmer. In short, as I think the consensus has emerged here, the turnaround seems relatively firmly entrenched. The Greenbook takes on board the strength of the incoming data by raising the forecast for the

next year, and I must say that I find the baseline forecast acceptable. While I suppose there is still a slight possibility of growth stalling out, that prospect is certainly much less palpable than just a few months ago and seems to recede with almost every data release.

With the growth forecast seemingly reasonable, the major question appears to be the risks around the baseline inflation outlook, given the already low level of inflation and the size of the pool of underutilized resources. I must admit that I concede, as do others, that there are both upside and downside risks around the baseline inflation outlook in the Greenbook. On the upside, the risk is that the economy will heat up and interest rates will remain inappropriately accommodative for a little too long, allowing inflation expectations to build as in one of the alternative scenarios in the Greenbook. That scenario is not completely without validation; inflation compensation has ticked up recently, though the reasons, as we discussed earlier, may be subject to some questions. And labor compensation may well have to play catch-up if you will, given the fact that wages have lagged the increases in productivity for several quarters now.

On the downside, however, there is some risk that inflation might soften even further from this point. While there is some validation for the upside risks, I would say that in fact the downside scenario still carries slightly more weight. Now, we may have underestimated the degree to which trend productivity has increased and overestimated the willingness of businesses to hire new workers. But the ambiguity, shall we say, of the relative weakness of the most recent employment report compared with both expectations and with earlier reports suggests that we cannot discount this prospect completely. The steady erosion of unit labor costs, which President Broadbuss referred to earlier, and the rise in the markup over unit labor costs also gives some further weight to concern about the downside risk. Moreover, recent research has shown that, as inflation has been brought down over the past two decades, the sensitivity of prices to the level

of resource utilization has also fallen. Consequently, I think the faster structural productivity growth scenario in the Greenbook deserves some attention from this Committee.

All in all, recognizing that the inflation call is much more balanced now than it was even a little while ago and that the risk of a pernicious downward spiral seems to have been removed completely, I would still put admittedly marginally greater weight on the downside inflation risk. Given the low level of inflation, I hope that when we get to the policy discussion we can give some due regard to the balance of risks in this key area.

Finally, since a few have already raised the question of the last sentence of our statement, I will say that my preference is to move away from it gradually. As I've tried to convey in a couple of other meetings, I think perhaps the best way to do that at this stage is to make it much more conditional and much more closely tied to economic reality as opposed to just to the passage of time. I won't go any further into that topic, but I thank you all for your attention.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. I'd like to bring up two points that largely haven't been talked about here. The first involves fiscal policy issues. I'm sure you've noticed that the government is being funded at the moment on a continuing resolution. The House yesterday passed an omnibus budget bill that I think is totally consistent with Greenbook expectations of what that bill would include. The Senate undoubtedly will not pass a budget bill this year. The significance of that is that, for the Congress, the Presidential election year starts the first day following their return after the recess. It will be interesting to see the extent to which budget issues are dealt with; I have some concerns about it. The hopeful sign from my perspective is that for the first time since September 11, 2001, we are seeing some concern about fiscal discipline. You may have noticed that the bill passed yesterday had almost as many Republicans voting against it as Democrats

voting for it. I think this country received a free pass for a period of time post-September 11, during which it did not need to maintain the same fiscal discipline that it did for almost the entire decade of the '90s. I can't help but believe that some of the concern about the dollar from foreign investors reflects the seeming lack of concern for fiscal responsibility, particularly when one considers that the most significant legislative accomplishment of this Congress will have almost no budget implications until 2006. So while I don't see anything resembling a return to the pay-go spending restrictions in this Congress, it seems to me that at least it will be a campaign issue for the first time since the year 2000. I hope so anyway.

With respect to how the banking industry has responded in light of the improved economic performance, you may have noticed that the third-quarter results indicated a significant improvement in banking industry profitability. But it's a different mix even from six months ago. Six months ago the improved profit picture was based on fee income and securities transactions. It is largely this time a result of improved asset quality. In fact, there was no need for loan-loss provisioning that would indicate any weakness in asset quality. I think this supports what Dino suggested also—that we are seeing very strong asset quality. This means two things to me. First, the fact that we have not seen any growth yet in commercial lending means that there is still a significant amount of firepower in the banking industry to fund a continuing expansion. Second, to the extent that there's a tightening in credit standards, it has nothing to do with the availability of funds. I think those are two important points. We do not hear from bankers the same concern now that the economy is not turning around. There is clear anecdotal evidence that it is, but that hasn't resulted in increased loan demand up to this point.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. The economic news since our last meeting has been heartening. The odds that we have begun a strong and sustainable expansion have risen significantly. Because of the rise in growth, we're going to see even more op-ed articles, wire stories, and editorials opining that the Fed needs to tighten soon to avoid a repeat of 1980s-style inflation. The *Wall Street Journal* today has an editorial along those lines. I believe these critics are not particularly well informed and that, as a Committee, we should continue to remain patient and not choke off growth unnecessarily. In particular, though of course we have to be vigilant to detect any change in the inflation trend, the odds of inflation rising significantly any time soon from its current very low level seem small.

Let me make a few points. First, those on the Street and elsewhere who lately have been worrying about inflation have tended to point primarily to raw materials prices, which have been rising, and to the dollar, which has been falling. Here I will largely reiterate some things that Dave Stockton said. The Board staff's Monday briefing, which I believe has been posted electronically, debunked the importance of the raw materials argument quite convincingly in my view. The briefing includes a graph of the historical data, which shows that even very large movements of raw materials prices—which are quite common by the way—appear to have muted effects on intermediate goods prices and, most important, no discernible effects at all on final goods inflation. Presumably this lack of inflationary impact reflects the fact that raw materials are only a small part of total costs. As another figure in the briefing showed, unit labor costs—which, of course, have been falling rapidly as productivity has surged and wage growth has slowed—are far more important in inflation determination than are materials prices.

An analysis similar to that for raw materials would apply to the dollar. As we've been seeing, large movements of the dollar against major currencies tend to translate into smaller

movements against the U.S. trade-weighted basket of currencies and into still smaller effects on import prices because of imperfect pass-throughs. Nonoil import prices, in turn, are a relatively modest part of the overall price index. In short, the ultimate effect of the dollar depreciation of the magnitude we have seen on broad measures of core inflation is likely to be quite small indeed.

I noted the key role of unit labor costs in inflation. Of course, unit labor costs will not continue to fall at the recent rate. Indeed, as employment picks up, productivity growth in particular will slow markedly. Critics may point to this decline in productivity growth as another incipient source of inflationary pressure. I would just note that this prospective productivity decline is fully incorporated in the Greenbook forecast that we have before us. In particular, the Greenbook forecast assumes that productivity growth will fall significantly below trend in 2004 and 2005 as employment picks up, specifically to 1.7 percent in 2004 and to only 0.5 percent in 2005. Given recent experience, it seems entirely possible that these assumptions are conservative and that productivity growth, though decelerating, will nevertheless be higher than what the staff has assumed for the next two years. If so, that would tend to increase the risks of further disinflation.

Finally, although output gaps are of course very hard to measure, the weight of the evidence continues to support those who believe that considerable slack remains in the economy. Let me give one bit of evidence on this point. The recent *New York Times* article by Chicago economist Austan Goolsbee argued that the rise in the unemployment rate in the past two years understates the degree of labor market weakness. The reason is that today a large percentage of job losers, a greater fraction than in the past, simply withdraw from the labor force, for example, to apply for Social Security disability benefits. I looked at data on the ratio of employment to the

working age population, which combine information on both unemployment and labor force participation and found that they confirm this general observation. Between its peak in April 2000 and its trough this past September, the employment-to-population ratio fell 2.8 percentage points. With the strong gains in the household survey of the past two months, the net decline in the employment-to-population ratio since 2000 is still 2.4 percentage points. For comparison, the combination of the 1980 and 1981-82 recessions, during which the unemployment rate peaked near 11 percent, produced a peak-to-trough move in this ratio between September 1979 and February 1983 of 3.0 percentage points. The decline attributed to the 1981-82 recession alone from its local peak in April '81 until February '83 was 2.5 percentage points. So on this particular metric—and of course it's only one metric—the deterioration of the labor market from 2000 until now is comparable to what occurred during the deep 1981-82 recession. For comparison, the movement in the employment-to-population ratio from its peak to its trough during the 1990-91 recession period was 2.0 percentage points.

Possibly the extent of the recent decline is exaggerated because employment was unsustainably high in 1999 and 2000. However, even relative to a more neutral benchmark of 5 percent unemployment and a participation rate at its long-run trend, current household employment—the more optimistic of the surveys—remains some 2.9 million jobs below normal. That number fully incorporates the rise in self-employment about which much has been made. On balance, the large decline in the share of the population that is working suggests that employment can rise significantly before we see pressure on wages and unit labor costs.

To summarize, vigilance on inflation is absolutely essential. I do not disagree with that one bit. But we should not overreact to purported signs of inflation that are in reality no such thing. Thank you.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. Since our last meeting the news about economic growth, as many people around the table have already said, is much stronger. One point I'd note is that I'm very happy to see that growth is more balanced in terms of coming from more sources. It is no longer relying totally on consumer spending; business capital investment has resumed. We continue to be amazed that inventories are still falling, which leaves room for further expansion as inventories get rebuilt to supply sales growth. Moreover, the international economy is picking up and should support some modest expansion of exports. As business spending continues to grow, more workers will also be added to payrolls. That will support consumption and to some extent offset the lower impetus from tax cuts and mortgage refinancing in the future.

When I look at the risk with regard to economic growth—if the risk is assessed just on the growth rate—I'd say the risk is on the upside. However, if we look at the economy's performance relative to the level of potential output, the gap is significant. As many people have already mentioned, the estimate of the output gap is very hard to come by. In the Greenbook forecast we see that unemployment continues to run relatively high, and we're assuming 5 percent as full employment from a NAIRU perspective. However, as Dave Stockton already mentioned, the standard deviation is 1 percentage point on this unemployment rate. Many of us remember that in the late '90s unemployment got well below 5 percent without any inflation pressures.

After talking to human resource executives at several corporations about the way they manage people today, I also am optimistic that wage pressures will continue to be more muted than they might have been in the past. Businesses today have much more flexibility in the way

they manage human resources. Management tends to compensate people more through the use of incentive pay so that employees earn more money either as productivity targets are met or as revenue comes in through sales commissions. Businesses accept the practice of outsourcing and contract employment so that functions that are not core to the organization are now contracted out to other organizations that have much more productivity and effectiveness in handling those particular functions and can do the work at a much lower cost. Companies continually look throughout the organization for such opportunities whether sales are up or down. Improvements in technology now allow services and businesses to be supplied by accessing labor resources internationally so that we're no longer confined to U.S. workers even for services. All these mitigating factors lead me, looking forward, not to be so concerned about the impact of compensation as a force to drive up inflation in the short run.

The exceptionally large jump in productivity that we saw in the third quarter is not likely to be sustained, especially as growing business confidence leads to new hiring. However, because of the factors above, I think the pace of productivity growth may well continue to run above historically high levels. Like Governor Ferguson, I believe that productivity growth may not slow as much as in the Greenbook baseline forecast. Corporate profits in the third quarter were significantly higher than they have been recently. In fact, the profits were back to levels recorded in quarters of the boom years. Interestingly, the consensus forecast for corporate profits for all of 2003 is running at twice the level that was expected at the beginning of this year.

What about inflation? Inflation does appear to be turning up, but it remains at very low levels. The Greenbook continues to forecast that core inflation will be in the low 1 percent range for the next two years. Nevertheless, as Dave commented in response to President Pinalto's question, the probability of inflation getting into that dangerous zone of under ½ percent is still

running at 1 in 4, which I consider to be a significant risk of unwelcome inflation with substantial costs to the economy.

The markets and private economists have different forecasts from the one in the Greenbook. The outside forecasts tend to have much lower growth and much higher inflation. But it's interesting to compare today's Blue Chip forecast for 2004 with the Blue Chip consensus at the beginning of the year. The projection for real GDP growth has moved up 80 basis points, and the expectations for inflation have moved down 40 basis points—closer to what the Greenbook is showing for 2004.

CHAIRMAN GREENSPAN. Thank you very much. Brian Madigan, please.

MR. MADIGAN.² Thank you, Mr. Chairman. I'll be referring to the material that is being distributed now. Financial markets were subject to two strong crosscurrents over the intermeeting period: generally robust economic data and policymakers' statements emphasizing that policy could remain accommodative for a long time. As of the close of the Bluebook on Thursday evening, the economic data had predominated. Although market participants saw no chance of policy tightening at this meeting, a majority thought that, in view of evidence that the economy has turned the corner, you would modify or drop the "considerable period" sentence today to begin laying the groundwork for an eventual move away from accommodation. As shown in the top left-hand panel of exhibit 1, the expected path of the federal funds rate estimated from futures market quotes (the blue line) had steepened a little relative to that prevailing at the previous meeting (the red line). The top right-hand panel shows that yields on Treasury coupon issues were up 10 to 25 basis points for the period.

However, Friday's employment data proved disappointing to traders, and the picture in financial markets has changed noticeably as a result. Treasury yields now are about unchanged to up several basis points for the period. The expected path of the funds rate over the next eighteen months (the red line in the left-hand panel) has tilted down a touch. Its trajectory remains notably flat for the next few months, testifying to the efficacy of your statements in anchoring near-term expectations. Indeed, as indicated by the probability distribution in the bottom left-hand panel, markets see good odds that the target funds rate will still be at 1 percent around midyear. Still, the five bars to the right of 1 percent indicate that markets place considerable weight on a tightening over the next six months.

² The materials used by Mr. Madigan are appended to this transcript (appendix 2).

Much of the market debate on monetary policy over the past six weeks has focused on just when this firming process will begin and, especially, on how you will adjust the statement in advance of that tightening. As shown in the bottom right-hand panel, about half the primary dealers now expect you to modify or drop the “considerable period” language at this meeting. That fraction was noticeably larger before Friday, but the employment data prompted some to revise their predictions. Only a few anticipate any change in your individual risk assessments at this meeting, and five of the twenty-two expect you to shift to an indication that, overall, the risks are balanced.

The Bluebook similarly devoted much attention to alternative balance of risk assessments and “considerable period” statements. By the way, as noted in the top panel of your next exhibit, the Bluebook also discussed two policy alternatives: an unchanged stance of policy and a 25 basis point easing. Our decision to include some discussion of easing was motivated partly by the Committee’s existing risk assessments and “considerable period” language. Support for that alternative came as well from the staff’s projection that an output gap would persist over the next year and that, as a consequence, inflation would tend to edge down further from an already low level. From one perspective, a case could also have been made for consideration of a tightening. Aggregate demand has heated up, the real funds rate appears to be below its longer-run equilibrium; and in the Greenbook, the next policy move is the first in a sequence of tightenings. Nonetheless, we didn’t discuss the pros and cons of policy firming at this meeting because any near-term move in that direction would seem completely out of sync with both the existing balance of risks statement and the FOMC’s indication that policy can remain accommodative for a considerable period.

Indeed, judging by your comments so far at this meeting, the issue on the table today would appear to be not what to do but what to say in the rationale paragraph of your announcement, in your risk assessments, and in the “considerable period” sentence. The main changes to the rationale paragraph, outlined in the top right panel, presumably would be to update the analysis to reflect the recent data—for example, by characterizing the expansion as now “brisk,” or something along those lines, rather than as “firming,” and perhaps by describing the labor market as “improving modestly” rather than as “stabilizing.”

The balance of risks assessment, however, is considerably more complicated. To help address this issue, the middle panel repeats table 1 from the Bluebook. The two columns present what would appear to be the plausible choices for the balance of risks on inflation—the risk of unwelcome further disinflation and balanced risks. The two rows refer to balanced risks to sustainable economic growth and upside growth risks. As Vincent noted at your last meeting, the Committee’s current communications structure gives it plenty of toggle switches, and those rows and columns, together with the numerous entries in the table, plus some less plausible choices that have been omitted, reflect that multitude of options.

Beginning with the current configuration, indicated in the top left-hand cell, the Committee could choose to retain its assessment that the risks to sustainable growth are

balanced, that the risks to inflation are weighted toward an unwelcome fall, and that a decline in inflation is the predominant concern. This assessment would seem especially warranted if the Committee interprets the phrase “sustainable economic growth” as allowing for expansion for a time at a rate above potential—an outcome that recent data seem to be suggesting—so long as growth is expected to moderate to a pace that would eventually bring the level of output into line with that of potential. In this case, the likely persistence of an output gap for several more quarters even in the context of above-trend growth—and the possibility that productivity could continue to come in above expectations—would seem consistent with downside inflation risks. With these individual risks, the Committee presumably would again indicate that the risks are weighted toward an unwelcome decline in inflation, although it could also assess the risks as about balanced if it saw the downside inflation risks, while still present, as having diminished substantially.

You might instead view the risks to inflation as now balanced. Although you might project that an output gap could well persist for some time, tending to tilt inflation down, you might also now see some upside risks. These upside risks could stem from a variety of sources, including the possibility of speed effects caused by strong economic growth, inflation expectations that may have edged up—at least as inferred from financial markets—dollar depreciation, or even economic growth that could turn out to be rapid enough to push the level of output above its potential in the foreseeable future. As shown in the upper right-hand cell, the combination of judgments that inflation risks as well as growth risks are now balanced presumably would be accompanied by an assessment that the overall risks have been equalized.

The bottom two cells pertain to cases in which the Committee judges that the risks to the attainment of sustainable growth have shifted to the upside. This assessment might be appropriate if the Committee sees a strong chance that the economic advance will remain rapid for a while and would be especially consistent with an interpretation of “sustainable economic growth” as strictly denoting growth at the same rate as that of potential output. Even with this appraisal of output risks, the Committee could still see the risks to inflation as weighted to the downside in view of the likely effects of the output gap, as noted in the bottom left cell. With these two component judgments, the Committee would likely conclude either that the overall risks are balanced or that undesirably low inflation remains the predominant concern. The choice between those two conclusions would depend on the Committee’s assessment of the relative probabilities as well as the relative costs of the various possible outcomes. In particular, the Committee might feel that the risks are still predominantly to the downside if it saw the potential economic costs associated with significant further disinflation as especially acute. But if the Committee saw the downside inflation risks as now smaller, it might view the overall risks as balanced. As noted in the Bluebook, a third net assessment—that unsustainably rapid growth is now the main concern—would also be a logical possibility in this cell. But it seems unlikely that the Committee would make such a sharp change in its assessment of the overall risks while making no change to the risks to inflation. The final set of choices, shown in the bottom right-hand cell, would arise if the Committee concludes that the risks to growth had moved to the upside and that the inflation risks were now

balanced. Particularly if the Committee had arrived at this judgment partly because it interpreted “sustainable economic growth” as the growth rate of potential, then it might gauge the overall risks as balanced. That’s because the expansion of output at a pace above potential would presumably not involve any significant economic costs as long as the level of output remained at or below that of potential. However, if the Committee had concluded that the risks to growth were to the upside even using a more liberal definition of sustainable expansion, then it might also see the overall risks as skewed to the upside.

As noted just below the table, the Committee could also choose to qualify any of its judgments about the risks—for example, by indicating that the risks to inflation are now only marginally to the downside. Particularly if the Committee saw one of the component risks as just slightly out of kilter, there are cases in which gauging the overall risks would seem to involve excessive hair-splitting. If so, you might see advantages in refraining from characterizing the overall balance of risks, letting the individual assessments in the context of the overall announcement convey your sense of the risks. In that regard, your treatment of the “considerable period” sentence will be key in terms of the market reaction. Some options for this decision are outlined in the final panel. Obviously, retention of the sentence is one option. It would seem to be warranted if you saw a reasonably high likelihood that the stance of policy could be left unchanged for some time. Repeating it might seem particularly appropriate if you were fairly confident that markets have built in a steeper trajectory for the funds rate than will prove necessary. However, you might be inclined to modify or delete the sentence for any of several reasons. You might be uncomfortable as a matter of principle with a policy precommitment, particularly one that seems tied simply to the passage of time rather than to economic developments. Alternatively, you might feel, at a more practical level, that the statement has served its purpose but is no longer necessary. Or in view of the recent economic data and the relatively low real federal funds rate, you might think that the time at which policy might need to start moving toward neutral is drawing closer.

A range of possible modifications to the sentence in question also could be considered by the Committee, with the intention that the sentence could be further adjusted in the future and eventually dropped. One approach would be simply to vary the words slightly, say, by substituting “for a while” instead of “for a considerable period.” Even such a slight change would be read in the markets as significant. Another option is to explain why policy accommodation can be maintained by incorporating a preface to the sentence: “With inflation quite low and resource use slack,” etc. A similar approach would be to declare that, in view of the substantial slack and low inflation, the Committee can be patient in adjusting the stance of policy. These formulations would hint not only that policy tightening need not start soon but also that it could be implemented at a measured pace when it does begin. Still another approach would be to condition the maintenance of policy accommodation not on the passage of time but on economic developments, such as a substantial reduction in disinflationary risks. A final option would be just to drop the sentence.

As I mentioned above, the Committee now has several dimensions along which it can adjust the communication of its monetary policy intentions. Because of this complexity, predicting the market response to any particular configuration has become even more difficult. Nonetheless, the “considerable period” sentence probably is key. Given current market expectations, interest rates likely would tend to fall somewhat in response to combinations that leave that sentence more or less in place, although that effect could be offset at least partly by other changes to the announcement. But dropping or significantly modifying the “considerable period” sentence at this time could prompt a noticeable sell-off in fixed-income and equity markets.

CHAIRMAN GREENSPAN. Questions for Brian?

MR. GRAMLICH. I think I’m speaking for most of us when I say that I hope this table doesn’t get more complicated than it is. [Laughter]

CHAIRMAN GREENSPAN. You haven’t seen the three dimensional one yet!

MR. GRAMLICH. No, I haven’t, and I don’t want to!

MR. MADIGAN. Those who participate in drafting the Bluebook would share that view.

CHAIRMAN GREENSPAN. Further comments or questions? If not, let me get started. It’s fairly evident that the economy is at a turning point by virtually all the measures that we have. Historically, it has almost invariably been the case that the Federal Reserve would tighten under such conditions. Indeed, preemption is something that has filtered its way into the monetary policy lexicon. The issue of preemption implies, of course, that we will adjust our policy ahead of anything that we can readily foresee. In current circumstances, therefore, there is and there will continue to be a lot of pressure on us to move rates higher. We have resisted because of a quite considerable and significant difference in the present economy from what we have observed in the past.

In recent decades, the turning point toward accelerating economic activity usually occurred when the inflation rate was 3 percent or 4 percent, sometimes even higher, and the

necessity for preemption was critically obvious. The problem with preemption, though it is something that is very interesting to observe in retrospect, is that it doesn't necessarily follow that we are preempting future developments that will actually occur the way we expect. So, we have to be careful not to try to preempt something that is not fairly likely to happen. There is a risk and indeed a cost to being wrong. The risk was one that we were willing to take in earlier years because the economic outlook was such that we could not really afford not to be preemptive, even if we recognized that we might misread a turning point and act prematurely, with clearly negative effects.

The markets obviously are presuming that the earlier sort of paradigm is currently what is in place. It is not. It is not because we are at a very low inflation rate, 1 percent or thereabouts, and the output gap, however one measures it, is quite sizable. As a consequence, what we have been trying to communicate to the markets is that we don't wish to take the risks of preemption when we don't have to. That is what induced us awhile back to put a reference to a "considerable period" in our statements to underscore the fact that we are in a different type of period. It's very evident that our effort to communicate that message succeeded. We succeeded in the sense that the basic tilt of the yield curve is reasonably consistent with the presumption that we will not adjust policy right away or that we need to move right away. Leaving aside the issue associated with the five-to-ten-year inflation compensation measure that we were discussing earlier, there's very little evidence that the markets are pricing in a buildup in long-term inflation expectations.

Consequently, I think we may reasonably conclude that the markets believe us. In Al Broadus's term, we clearly have "credibility" in this regard, and it's very important that we not squander it. The reason I say that is that we took a risk with the insertion of our reference to a

“considerable period,” not a risk so far as economic policy or monetary policy were concerned but a risk that what we said could significantly erode the credibility of this institution, with negative effects. That did not happen. We chose to take that risk rather than to take preemptive actions that could have been a mistake. As a consequence, we are now in a position where we have to figure out how we should gradually move away from our statement regarding a “considerable period.” It’s fairly apparent that for a central bank to forecast how long it is not apt to move is a mistake, of which we are all aware.

In my judgment, what we have to do at this stage really rests on how best to disengage ourselves from this problem with minimal negative effects and, I hope, major positive effects. In this regard I’m inclined to the view, but I’m not certain, that if we use “considerable period” this time we can change almost anything else in the statement without fostering any adverse impact. Indeed, that’s what I would suggest that we do. I do not deny that the most likely outcome is that inflation will continue to recede. The problem in acting on that belief, however, is that if we are wrong the consequences will be quite negative, to say the least. The chances of being wrong are there. I don’t think they represent the majority probability, but as we were discussing earlier there are large variances among some of the equations that link the output gap and inflation. We also discussed the fact that this phenomenon is very difficult to filter out in other economies. Moreover, we have the problem of taking a regression analysis largely based on periods with an inflation range of perhaps 2 to 10 percent and extrapolating that regression linearly to below 2 percent and presuming that we are getting the same interactions. So, not having past observations of how this augmented Phillips curve functions at this low inflation level, we’re just making an extrapolation, and it could be wrong. If it is wrong in the context of an economy that

is accelerating rapidly and a marketplace that is getting fairly jittery, the costs to the stability of the markets are in my view potentially too high.

Therefore, my general view and approach here is to presume that the inflation risks are close to balanced. What that does for us, if we also have balance with respect to growth and retain the words “for a considerable period,” is to give us the flexibility to do several things. For one, if our statement regarding balanced inflation risks turns out to be incorrect and the rate of inflation continues to fall, it doesn’t cost us very much. We can very readily move rates lower if necessary in the context of a statement referring to a “considerable period.” Moreover, my proposal would also put us in a position where we may be able in January to change the reference from “considerable period” to some concept of “patience” or the “ability to have patience.” In turn, that would provide us with the flexibility to move, possibly as early as March if we have to but certainly by May.

In any event, so long as we have a reference to either “considerable period” or “patience” in our statement, we will have the capability of moving the funds rate lower. In my judgment, putting out a statement that essentially captures that capability gives us, as far as I can see, the maximum flexibility that we can achieve at this point. It also gives us an exit strategy that puts us in a position where we can be adjusting our policy. One needs to remember that the current federal funds rate is well below any estimate of the equilibrium rate. That is, when we start to raise the rate, we may have the problem of having to return to the equilibrium rate relatively quickly. As many of you have mentioned, a quick adjustment in the rate structure at this stage could destabilize a number of the elements in our forecast. We will want to move as moderately as we can in the process of returning to a neutral position at a point when the output gap is declining but still there. Obviously, we can’t wait until the gap closes to begin to move because

financial markets may be adjusting well in advance of that. Expectations of growing pressures will be there. We also have to bear in mind that our estimate of the output gap is not all that clear-cut. Fifty years ago we had no difficulty knowing what capacity was in a lot of industries. Open-hearth furnaces produced a certain amount of steel, and the chemistry prevented them from doing very much else until steel manufacturers started putting in oxygen lances and eventually going to oxygen furnaces. Assembly lines for motor vehicles involved very rigid systems a half century ago. Now, manufacturers use batch processes, and consequently the notion of what is capacity is an increasingly flexible concept. But in order to generate an output gap we need a point estimate of capacity, and that's what we use. As a result, there's a question as to whether the gap means the same thing today that it meant twenty years ago. I think not. I believe the potential variance of that measurement has increased considerably, and I think we have to take that into account.

My bottom line in all of this is that I would recommend that we not move the funds rate and that we communicate in our announcement something similar to the type of risk balances I've just mentioned for growth and inflation. Let me read a way of doing this. It's only five lines: "The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. The probability of an unwelcome fall in inflation has diminished in recent months and now appears almost equal to that of a rise in inflation. However, with inflation quite low and resource use slack, the Committee believes that policy accommodation can be maintained for a considerable period." You will observe that the previous statement of balance for growth and inflation combined is not in here and that the "considerable period" reference is employed in lieu of that and I think for appropriate reasons. So that's my recommendation. Who would like to comment?

MR. GRAMLICH. Well, I support the recommendation. As I said, I have a hard time getting the right flavor, given the logic of the table that Brian has in exhibit 2. My logic is that we are in the northwest and we want to get to the northeast, or from low inflation as the predominant concern to a balanced inflation risk assessment. I think the statement you propose migrates us over. I'm not so sure it's a bad idea—it might be a good idea—to get rid of that overall balance of risks statement when it becomes very awkward, and this meeting may be one of those times. So I think your recommendation has all of these elements, and I support it.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. At the end of the earlier discussion I was going to say that the policy decision continues to be a “no-brainer” but that what we say about policy has become a headache. I'm not sure about the no-brainer part anymore, but I am sure about the headache! I agree with you that we don't want to move policy now. I think the uptick in the economy is just beginning to be sustainable on its own without an excessive amount of policy stimulus, and I'd like to see that play out. Whatever we do in the future, I agree with President Guynn that, when we do decide to move, the risks inherent in raising rates in large steps early on are quite sizable. So I think we ought to be willing to begin earlier in order to move the funds rate up slowly when we do begin to tighten.

When one thinks of the number of what might be called “moving parts” we now are dealing with in our statement, as discussed in Brian's presentation and in the Bluebook, the complexity is really quite stunning. We're not looking at a 2 by 2 matrix. There are some extra dimensions of this that are beyond my capability to describe correctly in mathematical terms. As far as I can tell, something like six or seven moving parts are involved. They include what we did, why we did it, where the risks are on growth, what we mean by sustainable growth, what the

risks are on inflation, the balance of the risks, and now the “considerable period” language.

There can be a number of variations on those six or seven moving parts, and that profusion is multiplying and increasing the headache associated with how to talk about our policy decision.

I agree with the thrust of your recommendation, Mr. Chairman, which is to reduce the number of moving parts. I’m not sure I would have started with the references to the balance of risks. My preference as a place to start would be with the “considerable period” sentence—by modifying it or even taking it out. As a central banker I am growing more and more concerned that we’re in a very difficult place with that language. President Geithner’s remarks on the credibility within financial markets at a time of a declining value of the dollar and other developments suggest to me that we should start to look a bit more conservative than we have been—even recognizing that the evidence points to a wide output gap. That said, I am happy you are willing to start modifying this language and reduce the number of moving parts. I think the steps toward modifying it could be taken faster than you’ve outlined, but I am willing to go along with your proposal at this time.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I think your proposal is an excellent one. I very much like the fact that you’ve narrowed the balance of risks on unwelcome disinflation versus inflation. I think that’s desirable. I like dropping the overall balance of risks statement, and I particularly like conditioning the “considerable period” of time phrase at the end of the statement. I think putting in the additional words, “with inflation quite low and resource use slack,” is an excellent way to condition it. I assume, although you didn’t mention it, that you will also be suggesting some changes in the rationale paragraph in terms of what we say about the labor market.

CHAIRMAN GREENSPAN. Yes. Let me just quickly read that paragraph. It's very short. "The Committee continues to believe that an accommodative stance of monetary policy, coupled with robust underlying growth in productivity, is providing important ongoing support to economic activity. The evidence accumulated over the intermeeting period confirms that output is expanding briskly, and the labor market appears to be improving modestly. Increases in core consumer prices are muted and expected to remain low."

MR. MOSKOW. I think that's very good. I spent a lot of time trying to figure out how we were going to get out of this dilemma we have with the language and what the wording should be. I think you've captured our assessment of the situation very, very well.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. The way I tend to approach this is that I want to be very clear in my own mind about what I believe before I try to talk about how to communicate it. So let me start with what I believe.

I think that the inflation risks are balanced and that the output risks are balanced. I believe there is a lot of room for the economy to grow. I don't think we're likely to press upon any speed limit issues, and in my view even very robust growth is not likely to cause imbalances that are going to get us into trouble. So in that sense I think we could have output growth significantly above—I hope not below—the Greenbook forecast without causing problems.

I realize that a lot of people are concerned about the zero bound issue, although as I think most of you know my personal inflation target is perhaps at the bottom of the range deemed desirable by Committee as a whole. At any rate, for those concerned about the zero bound, I think that issue is going to arise primarily in an economy that is weakening—one that needs the support provided by pushing real interest rates down below zero. That doesn't seem to be the

prospect. Therefore, if in the next year the inflation rate stays below what one would like as a long-run target, it seems to me that it's very unlikely to cause any problem in an economy that is growing robustly. In my view, there is some risk that inflation could run above the rate in the Greenbook forecast, and that could cause us a lot of pain. I think that could be a difficult situation to deal with.

I agree that this is not the right time to start raising rates. When I walked in here my view was to try to change the statement along the following lines. In the paragraph reviewing our assessment of the current situation, I would say that the inflation risks are balanced and that the output risks are balanced. In that case we wouldn't need to indicate which is the predominant concern; we could just eliminate that sentence altogether. I'd also delete the "considerable period" sentence altogether—making the statement a very lean and spare one—understanding that removing that sentence probably would produce a negative reaction in the markets this afternoon. But people would get over that. Then we'd have a chance to explain at greater length what is really involved here—that this is not a typical recovery period because we are starting with such a low rate of inflation and there is no immediate need, given what we now know, for a policy response. That would get rid of the problem all at once, and we would not have to deal with it again. We're going to have to deal with it again as long as we leave that phrase "considerable period" in the statement. So I think this might be a good time just to be done with it, which is the position I had when I walked in. Thank you.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. I think it would be a mistake to drop that language entirely. In my view making it conditional is the right way to proceed, and I support your recommendation.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Mr. Chairman, while I'm still uncomfortable with a policy commitment in the proposed wording, I feel much better with the introductory phrase "with inflation quite low and resource use slack," which makes it a conditional statement. I also like dropping the language that wraps up our assessment of the balance of risks. I think doing that helps. So I'll support your recommendation.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. This is a Committee of nineteen people, and I think we're in the area of a judgment call as much as anything else. If I were doing this individually, I would have retained the summation sentence and not changed it very dramatically, but I would have made the other changes you recommended. I don't feel so strongly about it, however, that I couldn't support what you've proposed. So I am supportive of your recommendation. And I don't want to lose sight of the fact that your initial recommendation is that we keep the funds rate at 1 percent, which I also support.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support your recommendation. I think we're moving in the right direction, recognizing that the balance of risks is in the process of changing or in fact has shifted. Over the last couple of months, the statement hasn't changed very much, but the economy has, and I think we're in the process of catching up. And we're preparing the markets for a modification of the "considerable period" language. I think they'll see that. I'm not concerned that there might be some adverse market reaction to this perception. I think the economy is sufficiently strong and robust to be able to handle a modest to moderate backup in rates. We will be considering the language more fully at our next meeting. So rather than try to fiddle even more with the wording, I think just dropping that overall balance of risks sentence is

probably better since we will all have a chance to look at the language with a more or less clean piece of paper next time.

I agree with you that the balance of costs and risks we're facing now is different from anything the Fed has faced since probably the 1950s in terms of a low inflation environment. I don't think that rules out preemption as you seemed to be implying. I think it does mean that we take the risk on a different side. We will have to be preemptive; we'll need to move policy well before we see inflation picking up. It's just that we won't need to move quite as fast. I see it as a lesser degree of preemption rather than no preemption.

CHAIRMAN GREENSPAN. I don't disagree with the way you phrased it.

MR. KOHN. Okay.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, obviously I agree with your policy recommendation for the funds rate. I don't agree with the change in the statement. I think we have an opportunity here to identify the risks as balanced and drop the "considerable period" statement. If we were to remove that statement, I think the market might, as President Poole suggested, exhibit some gyrations this afternoon, but I believe there's a fair amount of expectation in the market that we will drop that wording today. If we did, I think it would allow us more flexibility going forward. It would enable us at our January meeting to focus on more forward-looking issues relating to the policy statement. I must admit that that would be my strong preference.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, after the first go-around I made a note to myself during the break that if I were a committee of one I would drop completely the reference to further disinflation. I think we learned earlier that repeating phrases gets us into trouble. I noted also

that I would like to characterize the inflation risk as either balanced or close to balance. I think we're missing a chance to move a little further away from the "considerable period" language. I actually like the "can be patient in adjusting the stance of policy" phrase that was suggested as an alternative. However, I can and will support your recommendation. I'm not sure, given the hour, that I can convince myself—or anyone else—that my approach is a better way to go. So I am comfortable with your recommendation.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support your recommendation, Mr. Chairman. When I entered the room, the questions in my mind were how to deal with these risk-balance statements and how to deal with the "considerable period" sentence. I wondered whether or not the group would be willing to take steps to address both of those issues in one meeting. I think the balance of risks is correctly done in your recommended approach. I share Governor Gramlich's view regarding the summation of the balance of risks; I was never quite comfortable with it. So I view dropping that statement actually as an extra positive. Taking this in a two-step process—recognizing that we don't really have to move and that we don't expect to have to move very quickly—suggests that the "considerable period" sentence is probably still a factual statement. In that case, it seems to me that this is the appropriate way of getting the markets and the economy ready for the next step. So I can support your recommendation. I think it's the right way to go.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. As you know, I've indicated a preference for balance in terms of the inflation risk. It seems to me, however, that the suggestion you have made moves us a long way in that direction and, therefore, I'm very comfortable with your recommendation.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. I support your recommendation, Mr. Chairman. Brian indicated in his remarks that one rationale for dropping the “considerable period” language is that one is opposed to a policy precommitment. I’ve been opposed to the policy precommitment all along, but I don’t think dropping that sentence at this time conveys that message. I would prefer to do more work to improve our communications rather than have the markets try to figure out what we’re attempting to communicate by making a change in that “considerable period” language. I support your recommendation.

CHAIRMAN GREENSPAN. First Vice President Lyon.

MR. LYON. Mr. Chairman, I support your recommendation. The proposed language captures our view of the impact of recent developments and, as you have outlined, preserves policy flexibility.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. I support both the policy decision and the statement.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I support your policy recommendation. I especially liked what you said about preemption and particularly the issues we could face now in that regard versus what we faced when the inflation rate was 3 percent or higher in past periods. I could accept Don’s edit regarding preemption, but I like the general thrust of what you said. I think it’s especially relevant.

I can accept your recommendation with regard to the language. My own preference would have been to leave all of the statement unchanged under the circumstances. I understand the intuition, but I personally don’t see a compelling reason on the logic, given what I understand

to be the facts, for making a change today. But I can accept it. I'm very glad that we're going to leave in the "considerable period" reference. I think that's where the public focus is going to be. For me the key point, as I mentioned earlier, is that we had an extraordinary decline in unit labor costs in the third quarter. We may be looking at further declines, and that is a key determinant of inflation going forward. Again, the actual and prospective inflation rate is at the bottom of what I think most of us see as the desirable range for the longer run. Given that situation, I would not want to send a signal to the market that I think a significant modification of the language would have sent. That's my feeling, so I support your position.

CHAIRMAN GREENSPAN. Vice Chairman Geithner.

MR. GEITHNER. I'm comfortable with both the policy recommendation and the statement as crafted. I think the statement you've proposed is better than the alternatives. In my view we're at a point where it's appropriate to dial back a bit the forward-looking signal we're sending. You're proposing to do it in four different ways, and I think each of those is justified and helpful. People say that there's something of a paradox about policy and interest rates in that, by the time we feel the need to talk about an exit strategy, it may be too late. I don't think one can make the case that we're at that point yet, and I believe your recommended approach gives us a little more flexibility as we confront the more difficult choices we're going to face in the first two quarters of next year.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I support your recommendation. I would have preferred to eliminate the "considerable period" phrase, get it over with, and start the New Year out with a clean slate; but I support your recommendation.

CHAIRMAN GREENSPAN. Would you read the appropriate text, please?

MR. BERNARD. I'll be reading the directive wording on page 15 of the Bluebook and, with regard to risk assessments, the first two sentences that the Chairman read to you from the draft press release. That's what is being voted on. With regard to the directive itself: "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." With regard to the sentences going into the press statement: "The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal. The probability of an unwelcome fall in inflation has diminished in recent months and now appears almost equal to that of a rise in inflation."

CHAIRMAN GREENSPAN. Call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Geithner	Yes
Governor Bernanke	Yes
Governor Bies	Yes
President Broaddus	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Guynn	Yes
Governor Kohn	Yes
President Moskow	Yes
Governor Olson	Yes
President Parry	Yes

CHAIRMAN GREENSPAN. I suggest that we take a brief recess to get lunch and come back to the table here. Governor Ferguson will then give us a progress report on the activities of his working group.

[Recess]

CHAIRMAN GREENSPAN. Governor Ferguson has the floor.

MR. FERGUSON.³ Thank you, Mr. Chairman. Let me start by saying that this is merely a progress report from your working group on communications. How long we discuss this today is up to the Committee. I have some comments that will take about five minutes or so, and we can stop there. But there will be time for substantive comments later. The working group, as you know, asked for contributions from members of the Committee on how to handle the balance of risks statement or the risk assessment.

CHAIRMAN GREENSPAN. Why don't you indicate the members of the working group.

MR. FERGUSON. Okay. My colleagues on the working group are Governor Gramlich, Governor Kohn, Governor Bernanke, President Stern (who's not here today), President Moskow, and President Parry. Our group was asked to consider what Cathy Minehan has described as the headache part of the statement, which is the risk assessment. We recognize that the original language worked for two to three years but that circumstances have caused it to outrun its usefulness. We received from various members of the Committee eight or nine different recommendations. Some of the proposals focused narrowly on the risk-assessment paragraph itself. Some were more broadly focused on the overall process in terms of how we put together the statements and how that might interact with other possible changes to our communication policy, such as an earlier release of the minutes.

As you know from a memo that I sent you earlier, the members of the working group think that the overall Committee will benefit most from our efforts if we remain focused primarily on the risk-assessment paragraph. We may look at the slightly broader issue of how

³ The materials used by Mr. Ferguson are appended to this transcript (appendix 3).

the risk assessment would interact with the first substantive paragraph in the statement but not go much beyond that into thinking about the minutes and when they are released, and so forth. We believe that any decision on the minutes should be viewed as a separate issue and should be debated by the Committee as a whole. We don't necessarily, as a group of seven, add a particular value to the process of helping to think through the issues involved in that.

So in the context of focusing on the risk assessment, it turns out that the recommendations that came in basically had three different approaches, or flavors if you will, that differed in three basic respects. One difference involved the specificity with which the risk assessment was given—in particular the question of whether it had some sense of a benchmark associated with it. The second thing that seemed to divide the various options that were presented was how they dealt with the discussion of levels and changes in output gaps or inflation gaps. Some mixed them, and some tried to divide them very neatly. The third difference was the specificity regarding the length of the time period. Some of the proposals favored a fairly vague time frame, and some retained the language of “foreseeable future.” Other approaches recommended to us supported specific time frame references measured in terms of quarters, months, or even years. So we looked at those three elements and basically came up with three archetypes, if you will, of how to put together these various components; and that's what we're going to focus on for the remainder of the life of this working group.

What you have before you after the first page, which gives an overview, shows three types of proposals. I'm not going to ask you to comment on them or vote on them. I have provided them just so you can see what they look like, recognizing that the Committee itself will have plenty of time to work on the language.

The first proposal—just in terms of the elements that I talked about but not looking at the detail of the language—basically merges levels and changes. We had several suggestions that fell into that category; they merged levels and changes and alluded to benchmarks. There were a number of people who wanted to do that in the overall risk-assessment sentence. As you can see, in referring to long-run goals of price stability or long-run goals of sustained economic growth, the time horizon used in this approach is a very elastic notion of the foreseeable future. So this proposal represents that cluster of approaches to deal with the risk assessment. Notice also that this is only a risk-assessment paragraph, so that's what we're going to stress under this option.

Proposal B is somewhat more explicit about levels but addresses them in the first paragraph. This is an example with references to such things as inflation remaining well contained or slack remaining considerable. So it includes a discussion of levels, but that's separate from the discussion of changes. This one puts our judgment regarding changes in the second paragraph, reflecting a certain style that seemed to come through in several of the recommendations we received. It alludes again to benchmarks in the overall risk assessment but in a somewhat less structured or less quantifiable way, with terms such as “long-run sustainable pace,” et cetera. But it uses a much more specific time frame—the next few quarters—than the elastic concept of foreseeable future. So this proposal reflected another cluster of thoughts that we received. Again, you can see that this one works primarily with the risk assessment but does leave a clear expectation that the first paragraph would tend to have some language that deals with levels. So that's how we handled the levels versus changes dilemma.

The third proposal is much more focused on the whole statement. It again is explicit about levels, primarily in the first substantive paragraph, leaving the changes basically to the second paragraph on the risk assessment. This one alludes to benchmarks in the first paragraph.

It doesn't talk about inflation necessarily being contained just in and of itself but puts that in a broader context. This proposal moves us, frankly, very much in a direction that we've never traveled. It is in some sense the most radical of the options we are considering because it does talk about a forecast. It refers in the second paragraph to the Committee's assessment of the risks to the outlook in terms of its forecast of economic growth over the coming period. It is explicit about the forecast period—the next two years in this case—and references some potential developments that might change the forecast. Some of you really wanted to see us move in this direction. This would be very new territory for the Committee.

Importantly, if we go in the direction of proposal C, I think that really does imply a broader set of changes in our Committee dynamics. I say that because to get us talking about forecasts at every meeting will take more time and will be quite different from the risk-assessment discussion. So if the Committee were to adopt this approach, we ought to recognize the likely effect on the Committee dynamics—that it will require more time to look at the statement and more time to think through what our outlook might be. This in some sense is a logical progression from where we've been since the risk assessment was originally intended to have a forward-looking tone. But this puts much more weight on the forward-looking aspect and involves a forecast type of statement from the Committee. Going in this direction, I will repeat, reflects the desire of enough Committee members that our working group thought it was at least worth considering.

Those are the broad types of statements we are looking at. I would discourage you from getting terribly focused on any specific set of words but would ask that you really think about whether or not the mixture that we've put together is one on which you might like as a basis for our further discussions.

The second point I'd like to make in my part of the time allotted to this issue today is that we intend to stress-test these various options. A combination of Reserve Bank and Board staff will look at the six scenarios we've identified, including some of the recent episodes that have proven most challenging. Our goal here, as is always the case, is to try to see how these various types of risk assessments stack up against whatever developments are likely to occur or whatever curves we think the economy might throw us. Again, we're not going to be any more prescient than anybody else, but one hopes that with the six scenarios we'll cover most of the things that are likely to happen—or certainly all the scenarios that we think are most likely to be problematic. So when we come back in January we'll have the results of those stress tests, and we'll see which ones seem to work and which ones seem to fail in certain circumstances.

Recognizing that we have had some phone calls and letters asking us to think about our communication policy more broadly, the Board's staff will prepare some memos dealing with other suggestions such as expediting the release of the minutes. The staff also will look in general at going even beyond the types of statements I've outlined today and enhancing the role of forecasts, since some people have suggested that as an approach. Again, that is not something on which the working group is going to give you a proposal or recommendation, but it will be provided as input for the discussion we're going to have in January.

Finally, this material is going to be sent to everyone in advance of the two-day meeting in January so we think there'll be plenty of opportunity for level setting, if you will. That will give us the chance to talk about the risk assessment and the statement more broadly and even expand the discussion to the questions of the interaction of the minutes and of forecasting becoming a fairly normal part of the Committee dynamics.

So that's what we propose. As I said, at this stage the working group is not seeking specific comments on the language—though obviously you can do that if you want—but rather just an affirmation about the process I've outlined. We seek your views on whether the varieties or flavors of the statement that I've shown would be sufficient, as we think they would be, to give you the kind of thoughtful input that will allow us to have a focused and intelligent conversation at the two-day meeting in January. That's my six or seven minutes of time, and now it's up to you how much further we go today. Cathy Minehan.

MS. MINEHAN. Thank you, Roger. I'm a little worried here. I would just go back to what I said earlier. We have gotten ourselves into a situation where—in the terminology I used before—we have a lot of moving parts in this statement. None of these proposals that you have presented—without going into details on any of them—diminishes those moving parts at all. It's possible, based on a brief glance, that these proposals actually may add moving parts. I don't think that's the direction we want to go. I think we should be aiming to minimize rather than maximize the number of things we talk about in the statement we release after every meeting. I believe we get into increasing amounts of trouble as we try to expand on what we cover yet keep the wording short and pithy enough—that is, without the logic and back-and-forth discussion that went on in the Committee meeting—to be in the press statement for each meeting

In my view, and you and I had this conversation on the telephone, the endeavors of the working group should not preclude a discussion in January of having the statement be shorter and sweeter—perhaps confining it to what we did and why we did it. We could let some other vehicle—perhaps the minutes released on an earlier schedule—convey all the ins and outs and ups and downs of the Committee's discussion. You indicated that the January discussion would not preclude that possibility. My concern is that an intensive amount of stress-testing of three

alternatives with the same amount of moving parts—albeit phrased somewhat differently or focused somewhat differently—will result in our receiving huge papers on this topic five days, say, before the two-day meeting. We have enormous amounts of material to assimilate anyway, and this will give us no time to discuss any other proposal or perspective that might not be as well fleshed out as these. I'm worried that we're going to continue along a line here that I don't think has been very fruitful for us.

MR. FERGUSON. Okay. The Chairman wants to speak, and then I want to respond to your comments. Also, I have a list of people from the last meeting who wanted to speak on this issue but we ran out of time

MS. MINEHAN. Oh, I'm sorry. Did I speak out of turn?

MR. FERGUSON. No, you did not speak out of turn. I recognized you, so by definition you didn't speak out of turn!

CHAIRMAN GREENSPAN. I want to support what Cathy is saying, and I do so from the point of view of somebody who has to figure out how to get a consensus out of this group. It's far easier to get the requisite number of members to support a policy than to support what we say about it. For example, with twelve Committee members and, say, ten who favor the policy decision, there could be fifteen different reasons that might cause members to vote for it. Therefore, it is far easier to get a group to support the actual policy than to get a consensus on why it is the appropriate policy. The multiplication of the problems that emerge—just using Cathy's moving parts terminology—to get people to agree on why they voted a certain way is a wholly different ball game. I suggest to you that this is a remarkably uniform group in the sense that I think without exception we all hold a reasonably consistent view as to how the economy

functions and, therefore, which levers are required to do what. The only difference really boils down to questions of how we view the outlook.

Nonetheless, this is a very complex process, and I just want to agree with Cathy that reducing the number of moving parts is going to be very important. We also have to avoid like the plague, if Michelle Smith has a 2:15 p.m. deadline for releasing our statement to the press, anything that will extend these meetings well beyond when we ordinarily adjourn. Just take today as an example—today's agenda was not particularly extensive, but it's already twenty minutes before 2:00 p.m. If we start trying to discuss all the ifs, ands, and buts in the statement, we will not finish in time. But there is an alternative. We can go to a 4:00 p.m. announcement but let the press know well in advance that we are changing the time we plan to release our statement. We can go later than that if you want. But there are lots of other implications about this whole communications business.

MR. FERGUSON. Let me say a couple of things. One is that the Committee can collectively decide that this is more trouble than it's worth and that we are communicating more than we need to communicate. We can conclude that none of these options feels right for a variety of reasons. We can merely say that this is all very interesting but, having looked at the stress test results and everything else, we as a Committee think that we no longer want to try to provide anything in our public statement that is forward-looking. We may reach that conclusion for process reasons or for substance reasons. We may decide that we like having meetings that last only from 9 a.m. to 1 p.m. So nothing in this precludes, Mr. Chairman, the Committee's ultimately deciding that this whole risk-assessment approach or forward-looking approach that we've worked on is not worth a candle.

MS. MINEHAN. But we're likely to do so after having pored over a fifty-page paper!

MR. FERGUSON. We're leaving it to the Committee to decide whether or not we should have a risk-assessment or a forward-looking element in our statement. I don't think we felt that it was appropriate for our little subgroup to do anything more than to say that it is clearly an option not to have that in the statement. We're not taking that option away from you. We can follow a process in which we first side with those—if it is the majority view—who want us to try to work on this approach. We can certainly do that. But nothing in taking that step precludes the Committee from ultimately deciding that it doesn't want to go down this path. I do agree, however, that some of these options would imply a meeting that starts earlier or goes later than is currently the case, and I'm not sure that the Committee wants to do that.

I have one thing to do here because I have some notes from the last meeting that four members—Governor Bies, and Presidents Santomero, Hoenig, and McTeer—weren't able to speak on this topic because it was close to 2:00 p.m. and we had to adjourn. I don't know if any of you four wants to jump in at this stage, but I will call on you in that order. I also have Governor Gramlich and President Parry as indicating today that they want to say something. But as a matter of courtesy and organizational discipline, I think we owe to those who were precluded from speaking last time an opportunity to comment today if they wish. Therefore, Governor Bies, President Santomero, President Hoenig, and President McTeer, in that order, if you want to say anything please do so.

MS. BIES. Let me make a couple of comments. I would hope, as we make the decision on the statement, that we have the staff's input on the issue of moving up the publication of the minutes. I say that because I am very concerned about making the press statement the dominant issue. When people read the minutes, they do have a chance to see the variety of viewpoints expressed at that particular meeting. Just as we did today, we got around to a consensus. Some

of us are willing to bend or some get to the same answer from a different place, and I think the minutes reflect that more clearly. I worry that this statement may get very, very long, and I like the idea of keeping the press release cleaner and simpler. So I'm looking forward to seeing what practically can be done from the minutes perspective.

Second, I personally am very reluctant to go down the path of giving frequent forecasts or making commitments. To my mind that presumes that we're more omniscient about what is going to occur in the future than I think we are. It also raises questions of what to do when confronted with a situation such as we had in the spring with the Iraqi war, when we couldn't even assess the near-term much less the longer-term outlook. Presidential elections come up, and a lot of other things happen. I'm very concerned about trying to give a forecast of the outlook at each regular meeting. Now, we might want to think about how the Chairman communicates to the Congress twice a year in his testimony on monetary policy; we can do that separately. But to routinely try to do a forecast at every six-week interval I find very problematic. I also want to say that I do like the stress-testing idea. One of the things that we found out is that the relationship between falling inflation and economic growth—the Phillips curve kind of tradeoff—got a bit out of whack this year. So I like the notion of stress testing these various alternatives.

MR. FERGUSON. I have President Santomero next on my list.

MR. SANTOMERO. It's a little hard to pick up from the introductory discussion last time, but let me just respond to what I'm seeing before me. I think the idea of projecting out two years and continuously forecasting the outlook two years ahead is going to do more harm to our credibility than aid in clarifying our announcements. So I must admit that I don't see the use of these types of statements as likely to be a sustainable scenario. That would be one response.

Second, the question of how much we want to cover in the announcement, which is essentially the issue that President Minehan is suggesting that we think about, is worth addressing directly. If these options are A, B, and C, then option D ought to be an alternative to pare back the statement. Maybe the best way to get at some of these questions is to have people give you input in writing on what you've shown us today, so that you can determine a way to respond. If in fact everybody says that "C" is the way to go, that's fine. If everybody says "D" is the way to go, that will help the Committee as group figure out what we should do. I think we still have a lot of open questions here.

The third point I'd make relates to the question of time. As the Chairman noted, it's approaching 2:00 p.m. now. These are critical decisions, and the question of the time we need to discuss them is becoming an issue. The Committee may want to think about that—whether we want to move the announcement to 4:00 p.m. or start our meetings at 8:00 a.m. We ought to at least address the timing issue, so that we have an opportunity to talk about these matters in a way that will be constructive.

MR. FERGUSON. Tom Hoenig.

MR. HOENIG. I'm not quite sure what to say, Roger. I started out, as I've thought about our communications in the last few months, thinking that the earlier release of the minutes would provide us with an opportunity to cut back on the statement. You indicated in an earlier memo to us that cutting back on the statement, even coupled with an earlier release of the minutes, would be viewed as a step back in terms of the information we provide. That causes me to think that the forecasts we submit twice a year in preparation for our semiannual reports on monetary policy should be the focus of our communications about the outlook. I'd rather have the forecasts we provide to the Congress in those reports—along with the relevant Committee

minutes—be the vehicle we use to put out that range of views rather than the risk statement, which for me has been a very dissatisfying effort to communicate with the markets and whomever else. So, since we've opened up the door to having more options to choose from here, I would say that I really would like to pare back the press release. And I'd try to provide sooner rather than later a greater sense of the variety of very valuable views among Committee members and the differences that come through that ultimately lead to a consensus. So that's my two cents worth.

MR. FERGUSON. Okay. I have Bob McTeer on my list from the last time, and then I have Ned Gramlich, Bob Parry, and Bill Poole. I think we still have the same dilemma we had last month of having to end our discussion by 2:00 p.m.

MR. MCTEER. I agree with Cathy that the statement should be shorter and simpler—very much so. As I've long argued, I don't think we did ourselves a favor when we started announcing a bias vote. I would recommend not having a bias vote. If we don't have it, then we're not being nontransparent by not releasing it. If it's fairly obvious which way policy ought to be going at a meeting, I think we ought to just go there rather than do nothing and promise, through a bias vote, that we will likely do it next time. Whenever we act, people on the outside know pretty much the same information we do; they don't really need that much of an explanation of why we voted the way we did. So I think we leave ourselves much more flexibility if our announcements have fewer moving parts, and we have fewer ways to make a mistake if we just leave out the bias. If doing that requires releasing the minutes earlier, fine. That's all right with me. But I don't think we even have to do that. I'd just say that we've found recently that the lengthy press releases and announcements of various biases have not served us very well and we preferred to go back to the old system.

MR. FERGUSON. Ned Gramlich.

MR. GRAMLICH. I'll try to be quick. In terms of writing a relatively formulaic statement with few moving parts, which as you know I tried to do last time, what happens is that all sorts of difficulties arise. People ask, what are you going to do about this problem? What are you going to do about that problem? I don't want to be so clear on this issue or on that issue. And the statement just gets more complicated and murkier. So, frankly, I don't think that kind of statement is going to work.

My second point is that this group should not think of the minutes as a panacea. It's a separate issue. We might get them out sooner, but even if we do, we're still going to have to issue a statement on the day of the meeting. The world is going to want a bottom line, and either we can give it, or somebody else will give it. So I'd just propose, as Roger suggested, that we treat that as a separate issue and deal with the post-meeting statement as best we can.

Third, there may be an attractive alternative to the options in the material Roger passed out. It is exactly what we did today—to issue a short statement after every meeting. We vote on it and go forward. What happens is that the situations we face are so checkered and tailored and different that it's hard to design a formula with few moving parts that will work for every meeting. If we want to give a statement, it has to be reflective of what we think. That's the type of statement we agreed on today—a short statement that describes what we think is going on in the economy. If we were to do that, I would say that the statement should be short—no more than seven or eight sentences. I personally would recommend that we have a compulsory half-hour period to read a draft of the statement and think about it. We shouldn't rush and just ram it through. We can actually try to do something democratic and then talk about it. This will result in longer meetings, and that's all right with me. I don't have any more tolerance for meetings

than I think most of you have. But we are setting interest rates that will have an influence throughout the world economy. It just may take us another two hours to do that.

MR. FERGUSON. Bob Parry.

MR. PARRY. Roger, Cathy referred to these three options as having lots of moving parts. I think they are different. The number of moving parts and the number of things we have to agree on are very different. One of the proposals has language we've actually used for years and never had any problems with—or at least very few. While I agree that we don't want to have a lot of moving parts, I do not think that all three of the options are the same in that regard. So it seems to me that we can look at these three alternatives.

MR. FERGUSON. As I say, this is a judgment call, and obviously, we have nineteen different judges. Bill, what's your view?

MR. POOLE. I'd like to see a proposal that's pretty close to A—I'll call it A prime—that would focus on the reasons for the policy decision at the meeting and would have a minimal amount of forward-looking elements. So when we judge the risks to be roughly balanced, we leave the federal funds rate alone. When we judge that the risks are becoming unbalanced in a particular direction, we either raise the funds rate or lower it, and that risk assessment would be the explanation of why we took the action we did. That's point number one—that I think we could recast A along those lines.

Second, I would urge that the stress-testing take the actual situations we faced at the meetings of, let's say, the last five years and determine what we would have done with regard to the statement at each of those meetings. There may be some scenarios you would want to stress test in addition to that. But I would like to see history rerun, if you will, to see what the statement would have looked like in September 1998 or whatever under each proposal.

MR. FERGUSON. Well, I guess I'm going to have the last words because we have only a few minutes left. Here's what I've noted. I heard a range of views about these three options, but I don't think I heard anyone say let's not stress-test them. Some of you may ultimately say it's too complicated and let's not go to a new type of statement, but I didn't hear anyone say "please stop the process now." So I think we need to continue this process, perhaps broadening the stress testing a little, to make sure we pick up a range of situations that we know have occurred over the last five years. I'm not sure we have to do that for every meeting because one can recall that there were a series of meetings when inflation looked as if it was picking up and a series of meetings when it looked as though inflation was falling off. So as long as we cover that wide range of circumstances, I think we can respond to the issues raised about stress testing.

The second thing I heard clearly was that we have to keep on the table two options that aren't specifically set out in this material. One is simply to cut back on the press statement altogether and minimize the forward-looking aspects of it. So we'll include that clearly as an option to be discussed, but there's no stress testing to do on that—or no more that our little working group can do with regard to that option.

I'd say the same thing with respect to the focus on the minutes being released early. That's clearly something that people want to talk about. We have to leave enough time in our two-day meeting to cover that, though it's slightly independent from this other aspect of our communications policy. We already had planned to discuss expediting the minutes and, as I said, I think that requires some input from Board staff on how they think the market may react, and the pros and cons of taking that step, et cetera. Those two issues—what to do on the statement and the minutes—do interact a little. As Michelle has warned us a few times, if we appear to be stepping back from transparency in the statement but are giving something else in

its stead, that will make a difference in the public reaction. So those two decisions are interrelated to a degree. While I in some sense share Bob McTeer's frustration about the bias statement—had we never voted on a tilt we'd never have to disclose it—our problem is that we've voted on a tilt for many years. So eliminating that would lead to great market consternation. So, of course, we can't wind the tape back to whenever it was that the Committee decided to first vote on the tilt.

Those are the three things I hear. The fourth is that, as Ned Gramlich said, in some sense the length of our meetings is a relevant factor in all of this. I don't know what the right answer is to that. But I would say that it's certainly something we are going to have to consider. If Ned is right, and I think to some degree he is—we're setting interest rates at least for the world's largest and most complex economy if not for the world—the attempt of nineteen people to do that in three hours may be more than we can manage. We may no longer be at a stage where we can do that. We may decide that we're no longer just setting rates but we're talking about the economy and setting up the implications for policy in the future. We're setting rates, we're trying to figure out how best to explain it, and we're looking forward. That's a lot for nineteen people to do in three hours.

MR. MCTEER. I think that's a red herring. I don't think anybody in the room would argue that, if we choose one of these options, we will have short meetings. There's no argument about that.

MR. FERGUSON. No, I'm suggesting that one of the things that may come out of the January meeting is a general consensus that we need to start our meetings a little earlier. I don't know. I'm just saying that that's part of the discussion we're going to have to have. I'm not putting that as an option to be traded off against some of these other things.

MS. MINEHAN. But, Roger, I think it's important to recognize that for any of us who favor a shorter, simpler statement, the length of the meeting has nothing whatsoever to do with that preference. If we had to spend ten hours arguing over policy, I'd be happy to do that.

MR. FERGUSON. Well, in fact it's now 2:00 p.m. [Laughter] I was trying a filibuster to that. No, I did say that those two issues are not interchangeable. We may decide that we want a different length of meeting independent of what we decide about the statement. That is an issue that has bubbled up and has to be decided. Now, our Chairman may not be in agreement.

CHAIRMAN GREENSPAN. Let me just indicate to you that in good congressional tradition the clock has stopped at 2:00 p.m.

MR. FERGUSON. It's up to you how to proceed.

CHAIRMAN GREENSPAN. Well, unless somebody has some formidably important issues to raise at this point, the meeting is adjourned.

END OF MEETING