

**Meeting of the Federal Open Market Committee on
March 16, 2004**

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, March 16, 2004, at 9:00 a.m. Those present were the following:

Mr. Greenspan, Chairman
Mr. Geithner, Vice Chairman
Mr. Bernanke
Ms. Bies
Mr. Ferguson
Mr. Gramlich
Mr. Hoenig
Mr. Kohn
Ms. Minehan
Mr. Olson
Ms. Pianalto
Mr. Poole

Messrs. McTeer, Moskow, Santomero, and Stern, Alternate Members of the Federal Open Market Committee

Messrs. Broadus, Gwynn, and Parry, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

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

Messrs. Connors, Fuhrer, Howard, Madigan, Rasche, Sniderman, 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, Freeman, and Whitesell, Deputy Associate Directors, Divisions of Monetary Affairs, International Finance, and Monetary Affairs, respectively, Board of Governors

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

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

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

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

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

Mr. Moore, First Vice President, Federal Reserve Bank of San Francisco

Messrs. Eisenbeis, Evans, Judd, and Lacker, Ms. Mester and Perelmuter, Messrs. Rolnick, Rosenblum, and Steindel, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Chicago, San Francisco, Richmond, Philadelphia, New York, Minneapolis, Dallas, and New York, respectively

Mr. Kahn, Vice President, Federal Reserve Bank of Kansas City

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CHAIRMAN GREENSPAN. Good morning, everybody. The first item provisionally on the agenda was a discussion of the minutes of our January 27-28 meeting. But Michelle Smith is in the process of trying to shoot down a very peculiar headline in the *New York Times*, and she is writing something on that. So I'd like to postpone this agenda item until later in the meeting because I don't feel we ought to discuss it without her being in attendance. So first let me recognize the fact that, as all of you are aware and saddened by, Bob Parry is attending his last FOMC meeting—which means we give him two votes! [Laughter]

MR. PARRY. It's two more than I know about!

CHAIRMAN GREENSPAN. However, there is a restriction: One has to offset the other. We'll be feting you at lunch, hopefully, and obviously we wish you the best.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. Let's turn to Dino Kos.

MR. KOS.¹ Thank you, Mr. Chairman. I'll be referring to the charts that Carol Low just circulated. During the intermeeting period, markets fluctuated in response to somewhat tempered forecasts for economic growth. While some market segments appeared to be in a risk-reduction mode, others were in a risk-seeking mode. And in the foreign exchange market, the dollar appreciated after a long period of weakness. Most of the focus was on the dollar-yen rate amid continued very high levels of intervention by the Japanese authorities. I'll discuss each of these issues in turn.

Forward interest rates in the United States continued to grind lower as expectations for a pickup in the labor market were dashed yet again. The top panel graphs the three-month deposit rate and the three-month deposit rate three, six, and nine months forward going back to November 1, 2003. The green tripwires are dates of employment reports, and the number next to each tripwire is the difference between the expected payroll number and the actual number reported that day. In the November 7 report, the growth of nonfarm payrolls exceeded expectations by 61,000. But in the December 5 report, job growth undershot the consensus expectation by 93,000, and that was the first of four consecutive disappointing reports. I should note that for this graph we used the number in the initial release—rather than any

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

subsequent revisions—since the first report is the number the market responded to. In any case, the focus on the employment data has been intense. Although a lagging indicator, market participants are looking to the labor report to confirm other data that have already turned and thereby confirm that the recovery has durability. Treasury yields have been edging lower since January and declined sharply on March 5 after the latest employment report. This morning the ten-year note was yielding about 3¾ percent. Besides reacting to the employment report and other data, the Treasury market has continued to be preoccupied with the impact on Treasury yields of central bank buying. The Bluebook has a boxed section on page 2 examining this issue.

The middle panel on the first page of my handout graphs the ten-year note yield on the left scale and the aggregate amount of Treasury securities held in custody by the New York Fed on the right scale for the period starting in January 2003. From January 2003 to November 2003, foreign central bank holdings of Treasuries steadily grew from \$700 billion to about \$800 billion. The ten-year yield traversed a wide range from about 3.10 percent during late spring to a high of about 4.60 percent and by November 2004 yielded 4¼ percent. Since November Treasury holdings have gone up another \$100 billion or so, and yields on the ten-year note have declined about 50 basis points. But the direct quantitative links between the two variables are hard to find. In part the reason may be that we cannot gauge the direct impact of the purchases because, as with sterilized foreign exchange intervention, we don't know the counterfactual. But certain other factors cannot be ignored when assigning relative weights for why yields are at their current levels. First, as noted earlier, the data have been disappointing. Second, earlier comments by Committee members that short-term rates would stay low have affected the shape of the curve. And third, there is the possibility that some convexity-related purchases among MBS investors have also kicked in, though anecdotal reports suggest that these hedging programs have had only a limited impact so far.

Although the yield curve has flattened a bit in the past few weeks, it is still very steep by historical standards. The bottom panel graphs the spreads of the ten-year note less the three-month bill since 1990. Some investors believe that yields should be much higher at the long end of the curve, but they are battling a countervailing force that should not be underestimated—namely, the very attractive yield pickup between the financing rate and the return on longer-term securities. That dynamic has the capacity to keep bringing new investors into the trade for as long as investors believe financing rates will stay low.

Turning to page 2, breakeven rates on TIPS were rising—especially for the five-year maturity—until very recently when nominal rates moved lower and reduced the breakeven point. One interesting characteristic of recent price action has been the convergence of the five- and ten-year breakeven rates. What is unclear is whether this reflects a change in the inflation outlook for the second five years in that time span or whether it reflects technical reasons related to recent increases in the CPI that have had a greater impact on the value of the five-year maturity.

The middle left panel graphs the investment-grade spread, while the middle right panel graphs the high-yield and EMBI+ spreads and the Brazilian component of the EMBI. All of those spreads widened after the last FOMC meeting and the change in wording in the Committee's post-meeting statement. In Brazil, local events affected spreads as well as the fact that Brazilian paper is often used as a proxy hedge for other less liquid securities. These spreads may suggest the beginnings of a risk-reduction phase in markets. To some extent this widening was long awaited given the concerns that had been expressed for months about the underpricing of risk in these segments. Other price movements suggesting the onset of a risk-reducing phase include the decline of equity prices. Although all of the equity indexes started the year strong, the weakness in the past few weeks has now put all of the major U.S. indexes into negative territory for the year to date.

The pattern in European markets has largely paralleled events in the United States, though not always for the same reasons. As shown in the bottom panel, expected short-term interest rates have been falling in Europe as well. In part the economic data did not come out as strong as the markets had hoped. But perhaps the more important factor—until very recently—has been the strength of the euro. With the euro's appreciation in December and January, the markets came to believe that the ECB would ease policy to counteract the currency's strength. However, with the very recent depreciation of the euro from \$1.29 to about \$1.2350, some of the pressure was taken off, and the ECB kept rates steady at its last meeting. Nevertheless, the markets still seem to place fairly high odds that the next move could be an easing one.

The exchange value of the dollar has preoccupied both foreign and domestic asset markets. The dollar had been falling against most currencies into February, but it then rebounded sharply, as shown in the top panel on page 3. The reasons for the rebound seem to lie as much in the realm of technical analysis and position adjustments as in any interpretation of the fundamentals. Data on positions are hard to come by. But one source that gives us a glimpse is the commitment of traders report published by the IMM every week for currency futures market activity. Although admittedly imperfect, it does offer one window into the activity of noncommercial users of futures. The bottom panel graphs for the euro and the yen the number of contracts held at the end of each week since September 2003. The recent shift from more than 50,000 long yen contracts to about 10,000 short yen contracts represents the largest weekly shift in the history of this time series. During that week, there was nothing in the data that could explain such a shift. It may simply have been a case of the dollar having fallen too far too fast and a consolidation needing to take place. A variation on this has a link to the risk-reduction story: That is, if risk positions were being reduced, this would include the closing out of some of the large short dollar positions that had been built up. In any case, the longer-term forecast among Street economists is for the dollar to resume its decline, so the dollar's recent rebound has not changed the underlying sentiment. In part that reflects concerns about the current account, and in part, as shown in the two middle panels, it reflects interest rate differentials—except with the yen—that favor other currencies.

The yen story, as usual, is a bit more complicated. For once the recent data for Japan have been decidedly more bullish. Fourth-quarter GDP growth, for example, was reported to be at a 7 percent rate. Adding in the Japanese current account surplus and the inflows into Japanese equities from foreign investors, it's not surprising to see the yen facing upward pressures. The panel at the top of page 4 shows (in the red line) the depreciation of the dollar-yen exchange rate through mid-March. The blue bars graph the daily interventions by the Japanese monetary authorities. As the dollar moved down, Japan intervened steadily and sometimes in massive size to smooth the fall of the dollar. Market participants noted a change once the dollar began to rise. It appeared that the Ministry of Finance (MOF) was actively seeking to push the dollar higher—in contrast to its previous action of smoothing out the decline as the dollar was falling. The largest and most controversial intervention occurred on March 5, the day of the employment report. The middle panel graphs for that day the intraday evolution of exchange rates indexed from midnight eastern time for the yen, the euro, the Australian dollar, the Canadian dollar, and the pound sterling. At 8:30 a.m., the weaker-than-expected employment report was released. Yields and the dollar both fell sharply. The exception was the dollar-yen exchange rate, which disengaged from other currency rates and actually rose. The MOF bought \$11 billion dollars in the hours after the data release and, in effect, pushed the rate in the opposite direction than that suggested by that new piece of fundamental information. Market participants were confused by the price action, which threw some of the cross rates out of alignment and adversely affected liquidity. We've heard anecdotal reports that speculators have reduced their activity in the dollar-yen currency pair—reports corroborated by data from the major interdealer brokers indicating that activity in dollar-yen has been flat or going down in recent quarters. The dollar-yen rate fell again late yesterday and this morning following Japanese newswire reports that the Japanese authorities would cease large-scale intervention after the end of the fiscal year. This morning the dollar was down about 1 yen, at 109.35. During the intermeeting period Japan bought—including overnight purchases—\$76 billion, bringing to \$138 billion its purchases in the first two and a half months of the year. For comparison's sake, during a very busy 2003, Japan bought \$180 billion over the entire twelve-month span.

Leaving aside the trials and tribulations of the exchange markets, other Japanese asset markets appear unfazed by the scale of the intervention. As seen at the bottom left, equity prices in Japan rose, in contrast to the pullbacks in U.S. and European equity markets. Bank stocks have continued to rally as they have since the bailout of Resona in May. The recent IPO of Shinsei was in demand, and with GDP forecasts generally being raised, the bad debt situation is expected to improve somewhat. Though at one point there was a sharp selloff in the Japanese government bond (JGB) market, perhaps the most surprising thing about that market is how well it has performed. Ten-year yields still trade near 1.3 percent despite the better economic numbers. Although there has been chatter about the Bank of Japan's having to plan for an exit strategy from its very accommodative stance, most JGB investors still seem to think that is a long way off.

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

CHAIRMAN GREENSPAN. I noted in the chart on the Fed custody holdings of Treasury securities, shown in the middle panel on page 1, that there are a couple of periods of very significant rise. If one tries to compare them with the Japanese intervention data on page 4, it obviously doesn't square in the slightest. Indeed, it looks as though the intervention of very early 2004 didn't show up in the custody holdings until the third week in January. Is that the typical time lag?

MR. KOS. Well, there are a lot of moving parts here. The aggregate custody holdings are for all countries.

CHAIRMAN GREENSPAN. Well, I assume the Japanese are dominant.

MR. KOS. In terms of the delta, Japan is obviously a key contributor. But there are a lot of major players and many ins and outs in these figures. Also for Japan, their cash has actually been rising over the last few months. That is published on their web site. I believe almost a quarter of their reserves, if I have my numbers right, are now held in cash. So they are not automatically—

CHAIRMAN GREENSPAN. Cash meaning deposits?

MR. KOS. Deposits, right.

CHAIRMAN GREENSPAN. Where? In domestic banks or foreign banks? In dollars?

MR. KOS. In banks in dollars. So it's not that they are automatically buying dollars and immediately putting them into Treasuries. There has been a lag, and in fact that lag actually has been growing.

CHAIRMAN GREENSPAN. I thought the lag was just two or three days.

MR. KOS. Well, it is if they are immediately buying securities. But again, if we look at their deposit data, we see that their cash has been rising, so they are not immediately putting all of their intervention dollars to work.

CHAIRMAN GREENSPAN. Do the securities go into custody at the point of purchase?

MR. KOS. At the point of settlement.

CHAIRMAN GREENSPAN. I'm sorry, I meant at the point of settlement. So it's not an issue of their purchasing a security, taking it home, and then sending it back, so to speak. They purchase it, and at settlement it goes into custody as a book entry item, and that's it.

MR. KOS. Exactly. Again, though, one of the missing pieces is how much of their dollar purchases are staying as deposits rather than going directly into securities.

CHAIRMAN GREENSPAN. On the bottom chart of page 1, everybody uses that spread between the ten-year note and the three-month bill. But what the comparison in that chart is supposed to capture is better captured by using a one-year maturity nine years out because clearly the ten-year note is picking up an average of everything from one day out to ten years. I understand that it's not a market rate. It's a work of art, based on first differences in the chart. Is there any reason that we don't do that other comparison instead? That's the rate we really want to see.

MR. KOS. Yes, this is used because I think people tend to be more familiar with this relationship. I was not trying to be precise, but I wanted to show that there is a sense in which the people who have been saying that yields ought to be a lot higher are really fighting this in part. That is, the spread is so high that—

CHAIRMAN GREENSPAN. The spread is actually 5 points, not 3.

MR. REINHART. The contours of the chart would be the same if one used the ten-year-ahead forward rate less, say, the one-year-ahead forward rate. The amplitude would be higher, and the spread would wind up at something like $5\frac{1}{8}$ percent.

CHAIRMAN GREENSPAN. In the short term it would be, but not as the slope of the yield curve changes. The spread is affected by that slope. The point is that what you're trying to measure here is being muddled by the fact that the numbers are already partially in the numerator. With respect to the chart at the bottom of page 3, those IMM commitment data can't have anything to do with the dollar because the euro is unchanged. It's a technical issue with respect to the yen and has nothing to do with anything else as far as I can see.

MR. KOS. Well, that's a good point. In the interest of full disclosure, I must say that I put the euro in there just to point out that there wasn't a universal response from this group. Now, one of the anecdotal stories that we keep hearing is that there's a group of market participants—if not hedge funds then CTAs and model-driven accounts—that are becoming more and more important in the marketplace. A lot of these funds use the same kinds of models, and when their moving average triggers get hit, they all tend to move at the same time. So what we seem to have had is that kind of move—in the yen in particular.

CHAIRMAN GREENSPAN. Yes, it looks as though 100,000 contracts just got—is it yen delta hedging? It's curious.

MR. KOS. It was a dramatic move. Again, it seemed to be very much a position-adjustment story, and that was the point I was trying to convey. It seemed to be a change driven not by fundamentals but by technical factors—and those technical factors were most powerful in the yen.

CHAIRMAN GREENSPAN. Other questions for Dino? President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Dino, I was intrigued by your thoughts regarding the beginning of a risk-reduction phase. How strongly do you feel about that? I may be slightly behind the curve in terms of the way market participants are looking at this; but from people in the investment business around Boston, I seem to be getting more comments about the amount of risk that is out there.

MR. KOS. Yes, we're really seeing some crosscurrents. On the one hand, if we talk to people who are active in, say, Treasuries, we hear a lot about the carry trade and about an expansion of risk and leverage.

MS. MINEHAN. Right.

MR. KOS. On the other hand, there are pockets where risk-reduction moves do seem to be occurring—where people have had some losses and then reduced their other positions. It's not universal. This may be a very short-term phase that was localized or limited to a couple of market segments. We may not be talking about this in the next week or next month. So it seems as if we have some conflicting forces going on here.

MS. MINEHAN. Thank you.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. I wondered if you had any more thoughts on the dollar, Dino. The dollar's rise is rather surprising given the disappointing data we've had on the U.S. economy and the decline in U.S. interest rates. Do you have some sense that attitudes have changed from the pervasive expectations of further declines? Or is this the end?

MR. KOS. Well, explaining exchange rates is always a risky business. The rebound in part seems to have been technically inspired. It's hard to pinpoint, but I think a number of things were going on that had some effects. I didn't spend much time talking about economic

developments in Europe, but there has not been as much of an improvement in Europe as people thought there would be three or four months ago. If Europe had performed better over the last few months, then we might not have had this rebound in the dollar. On the other hand, as I pointed out, the underlying sentiment among the strategists on the Street really hasn't changed. When the euro got to 1.29, a number of people thought that the market was ripe for a correction. One fellow on our foreign exchange committee, which is a private-sector group, said when the euro was at 1.28, "We'll see 1.20 before we see 1.30." So this may be a natural process that we're going through of a flushing out of positions, and we may have a revival of the trend we were seeing. But that's one guess.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. As I understand it, Mr. Chairman, someone has to move for approval of the Desk's transactions, and I'll volunteer for that duty.

CHAIRMAN GREENSPAN. It's not a great burden, I hope! [Laughter]

MR. POOLE. It's a lot easier than talking about the exchange rates.

CHAIRMAN GREENSPAN. Any objections? Does anyone else want to speak before we close the questions? If not, I will accept your motion and assume, without objection, that the Desk's transactions are approved. David Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. As usual, we have received a mixed bag of data since the January FOMC meeting. Over most of the past six months, when we said "mixed" data, we generally meant data that were either *stronger* than we had expected or that were *a lot stronger* than we had expected. By contrast, during this intermeeting period, we received figures on both sides of our January projection. As you know, on net, we read the incoming information on labor markets, production, and spending as suggesting that there was somewhat less upward momentum to activity than we had previously thought. Our largest disappointment was centered in the labor market. Private nonfarm payrolls were flat in February and have been increasing at a pace of only about 65,000 per month since the upturn in hiring began last September. That is well below the pace we had envisioned several months ago. To be sure, initial claims for unemployment

insurance since the turn of the year have fluctuated in a range that in the past was associated with stronger employment gains than we have experienced to date. But those data likely reflect a decline in layoffs, and we have scant evidence, as yet, that new hiring has picked up materially. There have been a few hopeful signs in the recent data: Temporary-help employment has been trending higher since last spring, and the average workweek has moved up since the turn of the year. But those looked to us to be thin reeds on which to rest our earlier projection. As a consequence, we marked down considerably our projected improvement in employment over the first half of the year, and along with that lower employment path, we reduced the projected growth of hours worked.

If the pattern of the past couple of years had been repeated, this would have been yet another occasion for a weak labor market report to result in a further upward revision to productivity. But this time, somewhat softer readings on manufacturing production and on spending persuaded us to revise down our projection of the growth of real GDP by about as much as we revised hours, leaving our productivity projection about unchanged. Among the slightly softer indicators that influenced our thinking was manufacturing IP. Despite an increase of 0.8 percent in February, smaller gains in December and January took down our projected increase in factory output in the current quarter from 7 percent at an annual rate to 6 percent. Obviously, this is a revision best viewed as one of quantitative degree rather than one of qualitative substance. The anecdotal reports still seem to signal steady improvement in the manufacturing sector. We just don't see quite the degree of vigor that earlier indicators had suggested.

We also have had, on net, some negative surprises in the spending data. Perhaps consistent with the slightly softer readings on IP, both exports and inventory investment have come in below our expectations. The weakness in inventory investment is somewhat surprising to us in light of the low carrying costs of inventories. We have heard reports that some firms have encountered difficulties acquiring needed materials and some discontent on the part of businesses with breakdowns in their just-in-time inventory arrangements. These difficulties may have held down inventory investment. But we don't believe this is a phenomenon with sufficient breadth or magnitude to explain the meager additions that firms have made to their inventories in recent months. Instead, we think the subdued pace of stockbuilding likely reflects the same continued cautious behavior on the part of businesses that is evident in their hiring decisions.

The single largest source of downward revision to our GDP projection has been construction activity, where the recent data have come in below expectations for the residential, nonresidential, and state and local sectors. To be sure, we had anticipated some falloff in residential construction from the torrid pace set late last year. But the drop-off in starts in January, especially in the single-family sector, was larger than we had penciled in. Moreover, sales of new and existing homes also fell significantly, and as a consequence, the commissions on those sales, which are part of GDP, amplified the slowdown of spending in this sector. Homebuilding figures for

February were released this morning, and those data show another drop in single-family starts—from an upward-revised figure of 1.55 million units in January to 1.49 million units in February. Nevertheless, permits have remained quite firm, and they point to some bounceback in construction in coming months. All told, these data might take a tenth off of our current-quarter GDP projection. Nonresidential construction activity also has come in below expectations. Construction of office buildings, commercial structures, and manufacturing facilities continues to contract. Although there are faint signs of improvement, vacancy rates remain high and rents soft. Meanwhile, although budget conditions are improving among state governments, funds are still very tight, and these entities have further trimmed their construction spending.

The only other notable area of greater-than-expected softness has been spending on light motor vehicles. Sales averaged about 16¼ million units in January and February, about ½ million units below our previous projection. At the same time, production of light vehicles has come in above our expectations. As a consequence, inventories appear a bit high to us. In the projection, we resolve that tension through a combination of production restraint and a pickup in sales that is induced in part by a sweetening of incentives.

It is important to note that not all of the news over the past seven weeks was negative. Excluding motor vehicles, consumer spending was actually a bit stronger than we had expected. And business outlays for equipment and software were noticeably stronger in both the fourth and first quarters than we had projected in January. High-tech spending has continued to increase rapidly, while spending on capital equipment outside of high-tech and transportation has posted a marked acceleration in recent months. As you know, equipment spending had appeared to us to have been unusually weak over the past year or so given our view of the key fundamentals—a low cost of capital, accelerating final sales, and ample increases in cash flow. That gap is now closing, and along with the continued boost from the partial-expensing provision, we are projecting that real E&S will maintain double-digit gains through the end of the year.

Taken together, the incoming data led us to revise down the projected growth of real GDP by a little more than ½ percentage point at an annual rate in the first half of this year, after a bit larger revision in the fourth quarter of last year. All else being equal, multiplier effects would have argued for a lower growth rate in the second half of this year as well. However, the substantial rally that has occurred in the bond markets in recent weeks led us to mark down our projected path for long-term interest rates, and those lower rates are expected to provide a considerable cushion to spending going forward. Still, we do have on net a lower level of real GDP, and hence a higher output gap, throughout the projection period compared with our previous forecast. Whereas in January, the output gap was nearly eliminated by late next year, in the present forecast that gap remains at nearly ¾ percent of potential GDP at the end of 2005.

With more slack in resource utilization, you might have expected to see somewhat lower inflation in this projection. That effect, however, was offset by several countervailing considerations. First, the incoming data on core inflation were a bit above our expectations in recent months. Moreover, oil prices have moved up sharply and are expected to stay higher for longer than in our January forecast. And finally, the prices of non-oil imports have increased more rapidly of late than we had anticipated earlier. The bottom line is that we still expect core PCE prices to increase about 1 percent this year and next.

Stepping back from the details of the forecast, we continue to believe that the data and the anecdotes are consistent with an economy that is expanding fast enough to take up slack in the economy's utilization of resources. We expect fiscal stimulus, accommodative monetary policy, and ongoing rapid gains in structural productivity to sustain a brisk expansion through the end of next year. Coming as it has on the heels of an extended period of mostly upside surprises, the events of the past seven weeks, including last week's bombing in Spain, have clearly restored a sense of two-way risk to the outlook. Just how large are those risks? Well, that's a question that we have been working to answer more precisely for you.

As you know, we included confidence intervals around some key variables in our forecast as a standard feature for the first time in this Greenbook. Over the past few years, we have shifted somewhat the emphasis of our forecast presentation away from a single narrative focused on explaining the baseline projection toward inclusion of more material highlighting some of the chief risks surrounding the economic outlook. The presentation of confidence intervals for the projection seemed to us a logical extension of that effort. We have calculated those confidence intervals both using the real-time track record of the staff forecast and using stochastic simulations of our large-scale econometric model. We thought several purposes could be served by including these measures in the Greenbook.

One very important purpose is to illustrate how much uncertainty surrounds the staff baseline projection. For this purpose, the confidence intervals calculated using the actual forecast record of the staff projection would seem the most informative measures. Those intervals are, indeed, wide. The 70 percent confidence interval around our projection of a $5\frac{1}{4}$ percent unemployment rate in the fourth quarter of 2005 runs from $4\frac{1}{4}$ percent to 6 percent. Similarly, the 70 percent confidence interval around our forecast of a 1 percent increase in core PCE prices in 2005 runs from about zero to 2 percent. And it is important to remember that this implies that there is a 30 percent chance that the actual outcome will lie outside these bounds. The width of these bands does provide me with one small consolation. When asked in the past how confident I have been about various aspects of our projection, I believe the record will show that I have almost consistently responded "not very." It looks as though I'll be pretty safe sticking to that answer. [Laughter]

We also included in the table and as fan charts confidence intervals generated by stochastic simulation of FRB/US. The reason that we have added this second

approach to the mix is that it allows us to undertake calculations that cannot be performed with the Greenbook forecast errors. For example, we can decompose sources of forecast uncertainty in the way that we did recently in a pre-FOMC briefing for the Board, breaking out inflation uncertainty into uncertainty about supply, demand, and the unexplained equation residual. This approach also provides us with an ability to compute certain conditional probabilities—for example, probabilities of deflation under different monetary policies. We have provided some of this material to the Committee in the recent past, and we anticipate doing more of the same in the future.

We also will continue to plot in the fan charts the alternative scenarios that we present in the Greenbook. Like the confidence intervals displayed in those charts, the alternative simulations are generated using our large-scale model. A number of you have remarked on occasion that, after reading the descriptions of the alternative scenarios, you were surprised to see that all we got on GDP growth or the unemployment rate were a few lousy tenths and, in most scenarios, considerably less than that on the inflation rate. I have noted in response that a drawback to the alternative scenarios is that they do not account for all of the covariation in the shocks to which the economy is subjected. The confidence intervals generated by stochastic simulations do just that. By placing the alternative scenarios in the fan charts, we hope to provide you with a better perspective on just how much of the probability space we are exploring with those alternatives.

Finally, the confidence intervals may provide a context for the Committee to consider the uncertainty surrounding the projections that you include in the Monetary Policy Report to the Congress. As you know, those forecasts are presented as ranges and central tendencies. But, of course, ranges and central tendencies are measures of forecast consensus, not measures of forecast uncertainty. Based on our past forecast errors, the 70 percent confidence interval surrounding our forecast of the unemployment rate in the fourth quarter of this year is about $1\frac{1}{4}$ percentage points wide; in contrast, the width of the FOMC's forecast range of the unemployment rate in the fourth quarter of this year was just $\frac{1}{4}$ percentage point wide. So, while there is considerable consensus on the Committee about the expected unemployment rate late this year, there is probably much greater uncertainty associated with each of your individual forecasts.

Needless to say, advertising our ignorance in such an explicit fashion gave us some pause. But given the increasing prevalence of product liability lawsuits, we thought some appropriate warning on the Greenbook forecast was warranted. Perhaps the confidence intervals should be viewed as something like a warning label that reads, "Do not operate large economies while under the influence of a baseline projection alone." Karen will now continue our presentation.

MS. JOHNSON. The staff forecast for economic activity abroad this year and next is one of moderately robust growth and contained inflation. This favorable picture reflects the rebound in the global high-tech industry as previous

overinvestment has been worked off; the positive spillovers to the rest of the world of the expansion of the U.S. economy; and the fruits of the accommodative policy, particularly monetary policy, that has been in place in many foreign economies for some time.

Expansion abroad is no longer just prospective. Although foreign growth during the second half of last year did not match that in the United States, it rebounded sharply from the troubled outcome during the first half of the year, with total foreign real GDP growth averaging more than 4¼ percent. To be sure, there were substantial differences across countries, with those in emerging Asia charging ahead and those in the euro area only inching forward. Nevertheless, by the fourth quarter of last year the expansion was widespread and becoming more firmly established. Indicators for the current quarter confirm that this process has continued. In some economies where growth was unsustainably strong, such as Japan and China, we are looking for some moderation going forward. And we expect that output in the euro area will accelerate a bit further this quarter and next to come closer to the potential rate of growth for that region.

Of course, I would not be doing my duty to you if I did not look for the black cloud among all this sunshine. Two issues seem to merit further discussion: recent developments in oil and other primary commodity prices and concerns about the ever-expanding need to finance the U.S. external deficit.

Despite persistent forecasts of declining oil prices, spot prices for WTI have risen from about \$30 per barrel to \$37 over the past six months, including a \$3 per barrel rise since your January meeting. To some extent, the higher oil prices have been muted abroad as many foreign currencies have appreciated against the dollar. Accordingly, the balance of demand and supply in the global oil market would tend to push up dollar oil prices at a time of general dollar depreciation. Other factors supporting spot oil prices are the current low level of inventories, OPEC production policy, the risk of instability in some oil-supplying countries, and the strength of demand as the global economy expands. Nevertheless, futures markets continue to expect declines in the price of oil going forward. Were any of several possible supply disruptions to occur, the resulting spike in oil prices could threaten the global recovery and put some upward pressures on prices more broadly.

Nonfuel global primary commodity prices also have risen sharply in recent months. Utilizing spot and futures prices, we project that these commodity prices will increase at an annual rate of nearly 50 percent in the current quarter before decelerating sharply and even reversing a bit later this year and next. Such sharp run-ups in commodity prices have occurred previously. This forecast applies broadly to all the categories of nonfuel primary commodities. Thus the outlook is that the very rapid rate of increase in these prices will prove transitory, in part because of supply factors and the expected supply response to strong demand.

Some have expressed concerns that the inflation in commodity prices is a leading indicator of rising inflation pressures more broadly throughout the global economy. Within industrial countries, however, primary product prices are a very small input into the determination of prices for final products. And a relative price change in favor of primary goods will only partially retrace a trend against their relative price that has been ongoing for some time. Nevertheless, particular bottlenecks for some products could arise if demand for primary products remains strong, supported by continued rapid output growth in China and elsewhere.

Debate about the risks to the global economy posed by the large and growing U.S. current account deficit has been rising in volume as global recovery proceeds. Two data releases to the public since the Greenbook was distributed—the TIC data on January capital flows and the balance of payments data for the fourth quarter—provide some information on how that deficit has been financed in recent months. The TIC data were discussed in Part 2 of the Greenbook as we had that data before Thursday. As was the case in November and December, foreign private net purchases of U.S. securities were quite strong, reversing the sharp reduction in those purchases seen in September and October. Financial market concerns that these data might be signaling a major shift in foreign preferences away from U.S. assets appear already to have abated. When these data were released on Monday morning, there was little market reaction.

The balance of payments data contained new information on U.S. net investment income in the fourth quarter. That figure came in significantly more positive than we had been expecting and implied a current account deficit in that quarter about \$25 billion less than in the Greenbook. This positive revision is entirely explained by higher income receipts on U.S. direct investment abroad, which in part is due to the depreciation of the dollar and the resulting higher dollar value of recorded foreign profits. In response to these data, we have narrowed our projection for the current account deficit this year and next by about \$20 billion and \$10 billion respectively. These data only add to the mystery of how the world's largest debtor country can earn significant net income on its foreign investment position.

The balance of payments data also reported the complete picture of capital inflows and outflows for 2003 and gave us our first look at the foreign direct investment figures for the fourth quarter. For the year as a whole, the major components of foreign private capital flows to the United States, securities purchases and direct investment, remained very large—around \$450 billion—and were not much changed from the figure for 2002. Yet much has been made of the increase in the foreign official holdings of dollars. These net purchases doubled between the two years from around \$100 billion to a bit over \$200 billion. Two items in the balance of payments data reconcile these facts. First, U.S. investors switched from being net sellers of foreign securities to net purchasers and at the same time U.S. foreign direct investment abroad remained strong. So U.S. capital outflows experienced a swing of about \$100 billion to about \$220 billion. Second, the current account deficit itself widened about \$60 billion. Thus capital inflows faced a larger financing hurdle in

2003 than in 2002. Looking ahead, we see the current account deficit continuing to present a moving target, reaching \$600 billion by the end of next year. Capital outflows are particularly hard to forecast, but our projection calls for them to rise slightly over the forecast period.

Our forecast for only a slight downward tilt in the foreign exchange value of the dollar implies that some combination of private capital inflows to the United States plus increases in foreign official holdings will willingly finance the expanding deficit plus the outflows that occur at exchange rates near those of today. This may seem like a major challenge. But I point out that the foreign private net purchases of U.S. securities in December and January, when expressed at an average annual rate, by themselves come to nearly \$650 billion. Dave and I would be happy to take your questions.

CHAIRMAN GREENSPAN. Do you have any breakout on foreign affiliate earnings in foreign currencies and the extent to which earnings are converted to dollars—resulting in much larger amounts of dollars at the prevailing exchange rate?

MS. JOHNSON. I asked my staff if they could make that decomposition, and I basically got “no” for an answer. [Laughter] The dilemma is that we’re talking about looking at this across all the different currencies and all the different—

CHAIRMAN GREENSPAN. There’s a lot of hedging going on.

MS. JOHNSON. I understand. And that is shifting a bit when this valuation effect shows up and when there were offsetting gains on the one hand versus losses on the other. Remember we’re talking now about U.S. earnings abroad, not foreign earnings here. At any rate, the staff did not seem hopeful that they could disentangle the earnings in euro, yen, Canadian dollars, and pounds and the exchange rate effects as reported in these data. We know the general tendencies, but we don’t have enough data to do the actual accounting that would disentangle that.

CHAIRMAN GREENSPAN. I know you eventually get it, but at this stage do you have the foreign affiliate earnings by major geographic areas?

MS. JOHNSON. I raised that question. I think what we'd have to do at this point is to look at annual reports or something. At some later point we may have those data.

CHAIRMAN GREENSPAN. In other words, Commerce publishes the data but with a significant lag?

MS. JOHNSON. Right.

CHAIRMAN GREENSPAN. I ask because theoretically one could take the dollar earnings and literally convert them back to their foreign currencies.

MS. JOHNSON. Back to their foreign currencies.

CHAIRMAN GREENSPAN. Of course, you don't know what's hedging and what isn't hedging, but at least it gives you a rough idea. The problem is that you need to wait for the earnings data.

MS. JOHNSON. And we would have to do it over time in order to track foreign earnings versus the imputed exchange rate effects that we would have injected into that calculation.

CHAIRMAN GREENSPAN. Yes, a significant part of that is the oil earnings of U.S. companies. I must tell you, though, that if you try to reconcile company reports with the Commerce numbers you will think you're looking at two separate universes. The bookkeeping that goes on there makes Enron's bookkeeping look like Accounting I. President Poole.

MR. POOLE. I have a question about page 10 in Part 1 of the Greenbook, which has to do with the assumptions on labor productivity through 2005. You have productivity growth dropping to only 1.6 percent from 3.0 percent in 2004 and 5.3 percent last year. I asked Bob Rasche to look at the time series properties, and it looks as if labor productivity growth is pretty close to a random walk. Obviously it can't be literally a random walk. But you have a major drop in 2005, and perhaps you could explain where that comes from.

MR. STOCKTON. It's a deceleration, not actually a decline, in productivity. That deceleration in productivity is a function of the fact that by our reading, even with what we consider to be a fairly optimistic view on the growth of potential output, the level of productivity is above its long-run trend. This pattern looks to us like standard cyclical behavior. What we have is a deceleration in productivity as it goes from above trend back toward trend. That results in a slowdown in the growth of productivity and accounts for the step-up in payroll employment that we believe will occur. Again, that looks to us to be consistent with the cyclical time series performance of productivity around a spline function type trend, which is basically the way we put together the longer-run productivity forecast. So as many of you have noted over the past year or so, that forecast incorporates a significant element of risk. It certainly has been an area where we have been wrong and wrong rather consistently in one direction over this particular period—that is, in anticipating that some of what we perceive to be cyclical increases in productivity are going to abate going forward. As I think I responded to President Minehan at the last meeting, we really just don't have a lot to go on in terms of gauging how much of a backlog of one-time efficiency improvements still exists out there. So in writing down these figures in our forecast, we are trying to blend some judgment and some econometrics. But this is indeed an area where our confidence is not terribly high.

MR. POOLE. An implication would be a major swing in unit labor costs next year compared with this year, and presumably that might affect the inflation outlook. At any rate, I think this is a fairly important part of the outlook for 2005. Growth in productivity of 1.6 percent, of course, is equivalent to the miserable 1974-95 average. I understand the argument for it.

MR. STOCKTON. That would be an average over a long period of time whereas this would be a relatively brief period of somewhat lower cyclical growth. On the inflation point, I would just note that we don't think there is a big effect on prices from swings in unit labor costs that are associated with cyclical movements in productivity. We tend to believe that firms in their pricing behavior try to look through cyclical movements. So the implicit acceleration in unit labor costs that is incorporated in this projection does not exert much upward pressure on inflation.

MR. POOLE. But, of course, it also feeds into the employment outlook.

MR. STOCKTON. Right, employment and profits both. I think in some sense in the forecast we have a cyclical slowing in profits that also looks to us to be fairly typical. What we typically see is a big increase in profits when productivity is soaring in the early stages of a business cycle and then, as productivity slows down, profits growth slows as well and the labor share begins to recover. Admittedly this cycle has been one where everything has been more drawn out, so to speak, than has been the case in the past. And because of that we feel much less confidence in gauging the timing of that cyclical slowing in productivity.

MR. POOLE. Except for the second half of last year, we haven't had the typical recovery surge. So in one sense we may not be very far into the expansion phase of the cycle.

MR. STOCKTON. That's a very real possibility.

MR. POOLE. This is obviously part of the '05 projection, but I was very interested in where that came from. Thank you.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Dave, there is a simulation called "rising inflation expectations" in the Greenbook in which inflation expectations increase gradually by 1 percentage point. I don't

know from what level to what level, but I do know that some of the surveys that we see, such as the Blue Chip survey, suggest that inflation expectations are quite high—around $2\frac{1}{4}$ or $2\frac{1}{2}$ percent. I think it would be interesting to know what the results of a declining inflation expectations scenario would be because, if indeed the market expects 2 percent, it's possible that view could change. If that were to occur, I would assume that conceivably we could see inflation rates moving down from current levels. So I'd find that to be a more interesting alternative. But I just don't know what the levels were in the scenario where the inflation expectations number rose 1 percent. It went up from what to what?

MR. STOCKTON. Actually, I'd have to go back and ask our model folks because it's in terms of the implicit inflation expectation that is embedded in that model.

MR. PARRY. I bet it's a lot lower than $2\frac{1}{2}$.

MR. STOCKTON. I'm sure it's lower than $2\frac{1}{2}$ percent.

MR. PARRY. You could exogenously make it $2\frac{1}{2}$ percent.

MR. STOCKTON. We highlighted this scenario in part because the model probably incorporates lower inflation expectations than those of some market participants. And in light of the decline in the dollar and the acceleration of commodity prices, there are at least a few straws in the wind that suggest that perhaps inflation will not be as sanguine as we are forecasting. So we wanted to highlight that possibility to some extent. But I think you're absolutely right: Around our baseline forecast we see that risk balanced against a risk that inflation expectations could come down further and maybe even considerably further. If our inflation forecast begins to materialize in the data—surprising people in terms of how benign the behavior of prices will be—inflation expectations could decline. And if the increase in commodity prices and the

decline in the dollar really are not providing much upward impetus to inflation, one could see a break to the downside as well.

As we noted in the Greenbook, another downside risk that we see on the inflation side is that the markup over unit labor costs looks very high to us and that's associated with strong profitability as well. We have that only tipping down over the forecast period, in part owing to the assumed deceleration in productivity. It's certainly possible, though, that we could get a sharper decline as competitive pressures put more downward pressure on the price markup. That would be another source of significantly lower inflation going forward. So while we view the risks as reasonably balanced, we certainly think we could have declining inflation expectations as well as increasing expectations.

MR. PARRY. Okay, thank you.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I wanted to ask a question about the labor markets. The labor force participation rate has been declining, as has been widely described in the press. Some of us were talking about this earlier, noting that a significant part of the decline is due to a reduction in the teenage labor force participation rate. There has been a big increase in school enrollment rates for teenagers as well. I was wondering if you had any thoughts on these developments and their implications for the tightness or weakness of labor markets and also for inflationary pressures.

MR. STOCKTON. We have interpreted this downturn in labor force participation as principally a cyclical phenomenon. Nevertheless, we have revised down the level that we think the labor force participation will eventually return to; we've revised that down in light of the employment data. But the basic message of our forecast is that a lot of the people who have

withdrawn from the labor market will make themselves available again when the economy and job prospects begin to improve.

Admittedly, we can't see that from the discouragement data because, as you point out, the reasons people give for leaving the labor force include leaving for school or to take care of home responsibilities. And an increasing number of people are reporting that they are retired. So it's possible that the reduced labor force participation will prove to be more persistent than we are anticipating. If that's the case, then in essence there is less slack in our baseline forecast. If we get our growth forecast along with less of a bounceback in labor force participation, there will be a bigger decline in the unemployment rate than we're showing, and the labor markets could tighten more immediately. The result would be greater pressure on inflation than we're showing.

I was going to say that I feel reasonably confident, but I guess I should strike that word from my lexicon, so I will say that we feel comfortable in our belief that a significant part of this downturn in participation will prove to have been cyclical. That's in part because of the timing of the downturn. The peak in participation coincided so closely with the peak in the tightness of the labor markets and the deterioration coincided so closely with the period of persistently weak labor markets that it's hard to think that it was not cyclical. It would be difficult to consider it a coincidence that the trend turned significantly downward starting right at the peak of the business cycle. But obviously that remains a risk. We see the risks in this aspect of the projection more as one in which labor markets could tighten more quickly than we're forecasting.

MR. MOSKOW. So the increase in school enrollment is something that we'll see washing out as the labor market tightens?

MR. STOCKTON. Yes. Part of the complication that has arisen in doing this analysis is that the questions in the household survey on labor force participation were changed in the mid-

1990s, as you know. Consequently, we have no cyclical experience in terms of how people actually were responding to these questions about being in the labor force and why they were in or out of the labor force. So we're uncomfortable with our ability to look at past cyclical patterns and draw a lot of inferences from that going forward.

MR. MOSKOW. Thank you.

CHAIRMAN GREENSPAN. Bill Wascher and his group, as you may know, are trying to simulate the old breakdown. If they succeed, we'll probably learn a few things about this issue.

MR. STOCKTON. Yes, Bill has been working on the issue. But ultimately, though we may be able to draw some inferences, it's going to be hard to believe—given that the questions were changed—that we're getting something that tracks very closely with past cyclical behavior. But he is attempting to do that decomposition.

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

MR. MOSKOW. Thank you, Mr. Chairman. The Seventh District economy continues to improve. In general our contacts are still upbeat, but even as they tell us the good news about current conditions, scattered signs of nervousness about the future are creeping into the conversations, and we're not completely sure why they've become more nervous. Household spending generally remains robust. Many retailers tell us that sales are strong for a wide variety of merchandise. This strength has led some merchants to increase inventories and to cut back on discounts. In contrast, automakers are disappointed with sales so far this year, though they remain confident that sales will pick up later in the year, partly in response to higher incentives—which they expect to have to offer.

It is notable that this strength in household spending is occurring despite weak job growth. Many of our business contacts remain hesitant to hire even though they expect demand for their products to continue to improve. To this point they seem to think that they can meet improved demand through some combination of further process improvements, stretching their current workforce, using temps, and just-in-time hiring. Some still are concerned that the expansion will stall. They do not, however, give us very specific answers when we ask them to identify the downside risks and explain why they are weighing them so heavily.

On the other hand, the new CEO of Caterpillar reported that, because of strong demand for their products, they plan to hire 1,000 net additional employees in the United States this year. This is one of the few large firms that we are aware of in our District that has specific plans to hire a significant number of additional workers. Also, one positive category in the payroll survey was temporary workers. The large temporary-help firms we speak with are happy to have growth in billable hours, but the gains fall short of what they would have expected, given the strength in the overall economy. And I'm sure we've all seen the Manpower survey of permanent hiring intentions for the second quarter, which just came out early this morning; it showed for the headline numbers the strongest reading since before the recession.

Business investment continues to improve, albeit modestly. Much of the capital spending we're hearing about is geared to productivity enhancement, system integration, and automation expansion activities, which of course need not directly lead to new hiring. Also, we've been hearing recently about a different kind of capital overhang, which has to do with financial capital. This relates to the discussion that Cathy and Dino had earlier today regarding risk and liquidity. We continue to hear about investment firms that are awash with liquidity and straining

to place it. This money is chasing deals and reportedly bidding up prices of higher-risk investments.

Something else our contacts are talking about is the impact of the international economy on their business. Several manufacturers indicate that foreign demand and a weaker dollar have boosted orders and shipments. Demand from overseas, particularly China, has pushed import prices up sharply for products such as energy, paper fiber, and most metals including, of course, steel. It also has shown through in much higher shipping costs. Some firms have had success in passing these cost increases on to their customers.

On the labor front, a number of contacts said that the rhetoric surrounding the “off-shoring” of American jobs is overblown. For example, one temporary-help contact said that his orders for domestic call center jobs continue to increase despite reports of these types of jobs moving overseas. He added that the call center jobs being created here are more sophisticated and require more-nuanced language skills than the routine types of jobs that are leaving. Indeed, he reported that some companies that tried moving their more sophisticated calling operations abroad are now moving them back to the United States.

Turning to the national outlook, the most recent jobs data are obviously a big disappointment. Layoffs are down, but firms are still very reluctant to hire new workers. I wish we understood this better. Is it nervousness about the outlook, as a few of my contacts mentioned, or is it something else? In any case, the weak job market has not depressed spending by consumers, and the fundamentals still suggest that we’ll see decent job gains. As usual, it’s just around the corner. Unfortunately, we’re not sure which corner! [Laughter] So our outlook hasn’t changed much. We still expect output growth to remain above potential, eliminating resource slack sometime next year. Obviously, we’ll eventually need to adjust rates up fairly

substantially. But given the softness in the labor market and the low level of inflation, we don't need to be in a hurry to start that adjustment.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Recent data and reports from our board of directors and others confirm that the economy in the Eleventh District is growing but somewhat more slowly than the national economy. Home prices have softened a little in all of our major metropolitan areas. Apartment rents have fallen, and landlords are offering a month or two of free rent as an incentive. One member of our Small Business Advisory Council mentioned last Thursday that, if landlord concessions keep growing at their current rate, tenants will be able to get one year's free rent for signing a one-year lease. [Laughter] The office market, particularly in Dallas and to a lesser extent in Austin, is equally overbuilt. Dallas has a six- to ten-year excess supply of office space, and new projects are still being announced. Moreover, new money is flowing in to buy existing properties. The reason given is low interest rates. The reason is not just the low financing costs, though, but the fact that few other good investment alternatives are available. When rates rise, as they inevitably will, a wave of foreclosures and bankruptcies will likely follow.

The agricultural members of our advisory council mentioned that one factor that has sustained their industry through soaring energy and fertilizer costs is low rates of interest, thanks to the Fed. Here, again, when rates begin to rise, a lot of marginal producers are going to have some problems. The high-tech sector, particularly around Austin, seems to be in the early stages of improving. Venture capital is beginning to flow, and IPOs have resumed. Unlike the situation a few years ago, any company wanting to expand can cheaply acquire office space, workers, and equipment. Another turnaround affecting the Eleventh District is the Mexican economy, which is looking better than it has for a while. Mexico's industrial production has

risen in response to improvements in the U.S. economy, and employment and hours worked in the maquila industry ended the year on a high note. After declining for three years, Texas exports to Mexico climbed in the second half of 2003.

For the past year or so, I've been reporting a virtual absence of pricing pressures in our District. I regret to say that this is beginning to change, though I should add that it may be too early to conclude that the overall inflation situation has reversed. Our January Beige Book reported skyrocketing prices for primary and fabricated materials as well as shortages of steel and scrap. There were downward price pressures as well, including for apparel, telecommunications, and autos. Retail prices were declining, but at a slower rate than previously. The February Beige Book reported a continuation of all the upward price pressures seen in January and more. There were further pressures on energy and metals prices, but some manufacturers were reporting upward price pressures as well—and with great enthusiasm. Several noted that for the first time in years they have been able to raise prices and increase profits; hence the excitement. One of our contacts noted that in the last two months a basic shift had taken place in the construction industry from a buyer's market to a seller's market—a shift that, in his words “is unprecedented in its scope and staggering in its impact.” At both our board meeting and our Small Business Advisory Council meeting, a good deal of discussion was devoted to the spreading effects of higher steel and other building materials prices on the industry. We are hearing the term “double ordering” for the first time in many years.

As I look at the national economy, it looks as if the expansion continues to gain traction, but I remain concerned that the employment situation has been so resistant to improvement. At least the gains in productivity are restraining inflation; and weak job growth has restrained wage growth, which makes me less worried about incipient inflationary pressures stemming from

sharply rising commodity prices. Nonetheless, I think we've crossed a tipping point in the economy, where the prospects for increasing inflation far exceed the prospects for declining inflation. I don't think the situation calls for a shift in our policy stance just yet, but the situation does bear careful watching.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. New England mirrors the nation in that it seems to be experiencing both rising growth and a continued soft labor market. Positive reports from businesses large and small, rising sales and profits, gradually improving state budget pictures, and business and consumer optimism all are at odds with the employment situation. Massachusetts seems particularly hard hit on the employment side. Reflecting this, there are increasing calls for legislation to prevent outsourcing—or offshoring or whatever one wants to call it—or at a minimum to prevent the state government from dealing with companies who locate jobs in other countries. One hopes calmer heads will prevail on this.

On the labor market side, recently released employment benchmark revisions suggest that employment losses in 2003 were greater than previously thought, especially in Massachusetts. However, the new data also suggest that most recently the pace of job loss may have moderated a bit; while still declining, it may be falling by a lesser amount. Massachusetts has had the sharpest percentage drop in employment of any state during the recovery, and employment levels now are more than 6 percent below their pre-recession peak. The other New England states have fared less poorly, and some have done even better than the nation as a whole; but only one state, Rhode Island, has recouped to the point where employment is at its level prior to the recession. At the same time, businesses report that some skills are extremely hard to find, including at the

low end for hospitality jobs and at the high end for certain types of software support and for positions in health care and biotech.

New England's rate of inflation, as measured by the Boston CPI, is rising much faster than the nation's, largely because of a 6.3 percent increase in shelter costs versus a year ago. The high price of housing worries many in the region who find that hiring the skilled workers they need in health care, for example, is made even more difficult by high housing costs.

Moving away from the employment picture, the District's situation seems a lot brighter. Beige Book contacts were considerably more upbeat about current sales and profit margins. Manufacturers say the recovery has taken hold, while retailers expect steady growth over the next six to twelve months. The Bank's Small Business Advisory Council members also were generally upbeat at their recent meeting. Across a wide group of industries—from metal casting and stamping to home products, hospitality, and software development—most firms reported increasing revenues in 2004, rising net income, and plans both to increase capital spending and even to hire new staff. Many of these firms commented on the intense competition in their industries and on their current or planned investments in Mexico or China to improve their cost pictures and to meet foreign demand, particularly in the Chinese economy.

High-tech firms are reporting solid levels of growth, especially in security software, storage, and hardware. Boston area software job postings are up 16 percent from a year ago as compared with a reported 8 percent increase in the Silicon Valley. And the software industry group sees labor market tightening, particularly for certain jobs. These businesses all commented on rising insurance costs, and some pointed to the rising cost of nickel, cobalt, and steel scrap as limiting their potential profit growth but not causing prices of final goods to escalate. Apparently concerns about a lack of pricing power remain.

Our Bank's directors also noted an improving situation, though one that remains uneven. On the weak side are businesses that serve commercial real estate, which report declining sales and jobs. On the positive side, manufacturers of trucks and semiconductors are quite optimistic. In the latter case, businesses both locally and nationally are expanding solidly, with book-to-build ratios growing and some shortages building. Manufactured exports in the region were up sharply for the last quarter of 2003. Business confidence has brightened, and even the commercial real estate markets have shown a little stabilization or improvement. In short, New England is growing, and all would be well if only the job picture were a bit brighter.

On the national scene, the puzzle about the slow rate of growth in employment continues. Incoming data on business spending are positive for the most part. Corporate earnings are strong, credit quality has improved, and businesses have increased borrowing in early 2004, presumably to add to inventories. So, why aren't firms hiring? We've said all along that the recovery would be sustainable when businesses began to spend again, under the assumption that hiring would resume as well. The business spending part has happened. The big question is whether the consumer might falter before the second part, increased hiring, begins in earnest.

Our projections, like those of the Greenbook, suggest that the answer to when labor markets will improve is "sometime soon." [Laughter] Thus we agree with the overall trajectory of the Greenbook forecast, with GDP growth in the 4½ to 5 percent range in the first half of this year, assisted by continued fiscal and monetary policy accommodation. The impetus of fiscal stimulus eases in the second half of this year and in 2005, but private-sector demand takes over. We're a little less optimistic about the second half of this year than the Greenbook, but by 2005 our forecasts converge nicely, with GDP growth around 3 to 4 percent, the unemployment rate in

the low 5s, and inflation stable or slightly rising. It's not a bad picture. However, I wish I had some way of pinning down that "sometime soon" forecast for employment growth.

One hears anecdotes from all sides about the unwillingness of businesses to hire additional workers until doing so is absolutely necessary. In that regard, I read with some interest the article—I think it was in Monday's *Wall Street Journal*—about the surveys that ask about hiring intentions. Apparently responses to such surveys may be based more than usual on good intentions rather than firm plans. I don't know whether those surveys are really good predictors of future employment growth, but I would say that they are a source of some of the optimism about employment growth occurring soon.

In our pre-FOMC briefing at the Bank, one of the economists noted that something has to give. That is, the current situation of high productivity, strong demand, and zero job growth just doesn't seem sustainable. On the downside, if productivity growth continues to increase as it has, employment could languish further—even if demand is relatively good—and inflation could trend downward as well. This could happen, too, if consumers become disheartened by the job scene and stop buying houses and cars regardless of the low interest rates. Demand would falter despite solid productivity growth, and the output gap would widen.

On the upside, business uncertainty could well dissipate faster than we expect. Employment growth could come faster or be stronger than either our forecast or the Greenbook expects, pushing productivity down in the short run and pushing wages up, particularly for workers with hard-to-find skills. Prices of oil, certain metals, steel scrap, and other commodities have risen. The dollar seems bound to depreciate a bit further. And health insurance costs continue to accelerate. As one contact put it, the cost of all the "nice to have" things continues to drop while the cost of things people really need—like houses, health care, and education—keeps

rising. I recognize that this is not how our measures of price trends capture what is happening, but it may say something about both the popularity of Treasury inflation-protected securities and the resiliency of inflationary expectations.

I also remain concerned that the current very accommodative stance of monetary policy and the assurance that markets seem to have that we are on hold has increased leverage across all markets. When rates return to a more neutral place, as they ultimately will, this could create a burst of financial instability. Contacts tell me, as I noted before, that market participants are reaching out the risk curve for returns in this low interest rate environment. It's understandable that the risks that are being taken make these contacts increasingly nervous. In an environment of excess capacity, these concerns don't suggest to me that we should change policy in short order. But as I balance the risks of slower-than-expected growth against the risks of faster growth, rising costs, and financial instability, I am more concerned about the upside. My view is that maintaining a policy with interest rates too low for too long is in the end a bigger concern than the possibility of a widening output gap. To be sure, we have the tools to deal with either case. But I think the costs to us in terms of credibility would be greater if the situation got out of hand on the upside. Thus, assuming that the economy continues on track as projected, I think we need to begin to reflect in our statements a willingness to move the funds rate up. Then at some point after that, I hope we can begin a gradual move to more neutral territory. Thank you.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. I think our District's economic picture is not unlike Cathy's. There is certainly some good news in the latest information we have received, both in the data and the anecdotal reports. Activity continues to expand at a fairly good pace as best we can tell, at least for now. Manufacturing, in particular, is in much better health

now than it was a year ago—or even six months ago, I think it's fair to say. We do a monthly survey, and its latest readings indicate that factory shipments and new orders were very robust in both January and February. Consumer spending has also been reasonably strong in this period, according to both the monthly survey we conduct and anecdotal information.

At our board meeting last week, all three of our class A banking directors indicated robust growth in both business and household credit loan demand. And one of our directors, who is the CEO of a broadcasting company that has TV and radio affiliates not just in our District but in a number of major market areas around the country, indicated that recently there has been a sharp upswing in ad revenue in her business. So we currently see some positive indicators in our regional economy in general.

Moreover, there is at least one positive development in District labor markets, which is that factory employment is now stabilizing after declining for many, many months. I made that point at our last meeting, and as far as we can tell it's still basically the case. Obviously, though, after so many months of decline, manufacturing employment is stabilizing at a very low level, and it is stabilizing only; we don't have any evidence at this point that it's really moving up. More broadly, I don't have a sense of any significant firming in the job market overall in our region, and I think that is beginning to have a negative impact on confidence. I don't want to overstate that, but I hear indications of this impact in some of the comments I am getting from our business contacts.

Turning now to the national economy, the soft February jobs report got my attention, as it did everyone else's. In all my years in this business, I'm not sure I've ever seen a monthly report receive more attention than that one. And it provided what may well be a healthy reminder that this expansion does not yet have full momentum; in fact, I think there's some possibility that the

momentum is diminishing. The Greenbook has revised down fairly considerably its projections for real GDP growth for the first half of this year and to a lesser degree for the year as a whole. I think that was an appropriate revision, given what we know now, and as a result the projected output gap has increased appreciably. The wider gap presumably would put downward pressure on core inflation, other things being equal, but the Greenbook expects this effect to be offset in part by some spillage from higher energy prices into the core inflation rate. Of course, the weaker dollar also probably played into your overall inflation forecast, David.

I think the wider projected output gap is important, but I've always thought that a really important determinant of inflation and disinflation trends in the short and intermediate term is unit labor costs. So, when I try to assess the inflation risk, I tend to focus at least conceptually on some measure of the gap between actual and potential employment and on whether that gap is narrowing, staying constant, or widening. The last several job reports imply that the employment gap has been widening, given that job growth as measured by the payroll survey has fallen well short of most estimates of the growth of the working-age population. The Greenbook doesn't report its estimate of potential employment and the employment gap, so I don't know exactly what the forecast implies for that gap as we go forward over the forecast period. The gap may narrow. But it's not clear how sizable the narrowing will be if potential employment is growing at something like the growth of the working-age population.

Beyond this, as Bill Poole has already noted in his question, there's a wide range of plausible estimates of actual productivity growth over the forecast period. And obviously if productivity growth doesn't slow as much as expected, the employment gap would be commensurately higher for any given growth rate of GDP. There is, of course, the hopeful possibility that at some point rising productivity will produce a sharp further improvement in

expectations of future income and that, in turn, will give an upward boost to the growth of aggregate demand. But I don't see any compelling evidence that this kind of shift has occurred yet.

So bottom line, I come out in the opposite camp from you, Cathy. While the Greenbook's projections of the growth of aggregate demand seem quite reasonable to me—and I think the staff's overall forecast is the most likely outcome—the labor market considerations I've just summarized suggest to me that we may not be giving enough weight to the downside risk on inflation. I think Bob Parry's questions had a sense of the same sort of concern, and if others feel that way, I would hope that we could find a way to reflect this in our policy setting later in the meeting.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. My reading is that, in general, demand is coming in on the high side of expectations—not dramatically so but modestly so. My Wal-Mart contact said that he does not recall a time in the last ten years when the situation was more confusing. The internal data that Wal-Mart has from the paycheck cycle and other information suggest that demand should not be as strong as it actually is, with sales coming in at a pace 200 to 225 basis points higher than had been expected. My contact said that they have reluctantly increased guidance on sales to 4 to 6 percent, but they are nervous about that prediction. He also said that prices for general merchandise are falling at a rate of about 1 percent, but they had been falling at a rate of about 3½ percent. So, price changes are still negative, on average, but not by as much as before.

My contact in the trucking industry said that the January–February period was much stronger than last year; the two months together were about 8 percent higher, and for February

business was up 9 percent. The availability of drivers is very tight. He said that his firm is increasing its capital spending this year over last year; planned expenditures are \$250 million for 2004 versus \$180 million last year.

Probably the most upbeat of my contacts was from FedEx. He said that they see a very clear, progressive strengthening of demand. Year-over-year monthly comparisons for its domestic express business thus far in 2004 were January, down 2.1 percent; February, up 2.1 percent; and so far in March, up 4.0 percent. Ground business was up 0.5 percent in January, 4.6 percent in February, and 8 percent in March. So he sees progressive strengthening there. He also reported that the sales staff sees the pipeline as full, with both current customers and new customers. FedEx is now, for the first time in a while, discussing expanding its capital expenditures. They had expected their capital spending to be flat but are now talking about increases of 10 to 12 percent. He also said, in terms of international business, that for the first time in this recovery period the year-over-year change in U.S. outbound traffic is now positive. He pointed out, too, that they believe they've about reached the limit of output increases with their existing labor force. They anticipate hiring more workers, although they haven't done so as yet.

UPS did not have quite as robust an outlook, but business is generally stronger than they had anticipated. One of the most interesting comments I got from my UPS contact, though, involved the growing burden of security-related costs. He said that he himself now spends about 20 percent of his day on security issues, and a lot of his staff members are also very much tied up with security matters. The Transportation Security Administration is digging in deeper with various requirements. He cited as an example that their truck drivers are now required to—or are supposed to, anyway—lock the truck door when they go up to someone's door to deliver a

package. That's to ensure that nobody drops something harmful into the truck while the driver is gone.

I'd like to make a general comment on inflation. In terms of the core inflation measure, obviously the idea is to take out the price changes that are temporary. But a good part of what we take out—food and fuel prices—is not temporary anymore. The long-run oil futures are up substantially over the last two years—by \$5 a barrel or something like that. For all practical purposes, that part of it, looking forward, is now permanent and not just temporary. There's something to that; I understand that. The food part of the inflation measures is heavily influenced, of course, by the dollar because food involves commodities that are traded in world markets. And the best guess on the dollar is something close to a random walk. I think one would have to say that the best projection on the dollar is that it will remain about where it is now, though I know the Board's staff believes some further depreciation is in order.

As I look at the kinds of things we would identify as inflation shocks—where the effects should be about worn off—they are almost all in the same direction. Some examples, obviously, are fuel, commodity prices, health care costs, property and liability insurance—a lot of companies talk about that now—and security costs. All of these are shocks, and they may be about worn off. But the fact is that they are all shocks in the same direction; I don't know of any for which the prices are moving down. So I think we should not ignore the possibility that we have an inflation environment that's gradually going to be turning more adverse. Thank you.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, economic activity in the Twelfth District is moving ahead solidly, with some areas growing quite rapidly. Many of our retail contacts are upbeat about sales, even as they remain concerned about competitive pressures holding down prices. Housing

prices have boomed in many parts of the West recently. Low interest rates are part of the reason, but local economic conditions also are important. House prices are up the most in Southern California and in the state's Central Valley, two areas with relatively rapid population growth and expanding economies. At the other end of the spectrum, the hard-hit IT centers such as Silicon Valley have seen little appreciation in home values. Conditions in the manufacturing sector have become more upbeat. Part of the boost has come from a pickup in exports, including increased sales of semiconductors to Asia. Competitive pressures, however, continue to force IT producers to cut costs. That's why Intel plans to move production of flash memory chips along with 300 jobs to Oregon from its headquarters in California.

In some parts of the District, strong economic growth has translated into notable gains in jobs, though overall job creation has been tepid. Our contacts say that health care costs are restraining hiring. These costs were a central issue in the five-month long strike by grocery workers that was recently settled in Southern California. That settlement will result in a shifting of some health care costs to employees, and it likely sets the stage for a similar outcome in upcoming contract negotiations in Northern California. The cost of workers' compensation also is a big issue, especially in California. Governor Schwarzenegger wants the legislature to reform the law by the end of March. If the lawmakers don't deliver, the governor plans to put his own workers' compensation reform package before the public on the November ballot. This is being taken seriously given his recent success in convincing voters to pass two propositions that make up phase 1 of the governor's fiscal recovery plan.

On March 2, voters overwhelmingly passed Propositions 57 and 58. Proposition 57 lets the state issue up to \$15 billion in general obligation (GO) bonds to finance accumulated deficits from the current and previous fiscal years and to supplement revenues in the upcoming fiscal

year. Proposition 58 is Proposition 57's quid pro quo. Once the \$15 billion is gone, lawmakers are barred from additional borrowing to meet budget shortfalls. Moreover, they must put aside money to accumulate a state reserve fund. Rating agencies and market participants seem encouraged by the vote. Moody's and Standard & Poor's upgraded their California outlook statements, and spreads on California GO bonds narrowed slightly. State administrators have placed Prop 57 on a fast track. An initial offering of \$6 billion in bonds is planned for early June. The state will use the proceeds, along with deferrals of payments to certain state programs, to finance its accumulated deficits of \$8.6 billion. Once the accumulated deficit is taken care of, the remaining bond allowance can be used to fund current and future spending. Governor Schwarzenegger supports this option, wanting to avoid drastic cuts. But several legislators are urging tax increases or spending rollbacks to restore balance. With the state facing a \$15 billion structural gap in the upcoming fiscal year, California's fiscal health likely will require a combination of all of these elements.

Turning to the nation, recent data have been mixed and taken together are moderately weaker than we expected. While the data are still broadly consistent with the economy's being on a robust path of growth, they do heighten concern about downside risks. Disappointing payroll employment and consumer spending are particularly relevant in this regard since the household sector seems to be the main source of downside risk to a robust investment-led expansion. In any event, we have lowered our forecast for the current quarter to 4.3 percent and reduced our projection for the year as a whole by 0.4 percent, to 4.7 percent. Under this scenario, resource utilization would rise a bit over the year, and the unemployment rate would fall below 5.5 percent by the fourth quarter. Here the latest data on payroll employment and labor force participation continue to raise questions about the amount of labor market slack going

forward. The most recent data on core inflation continue to indicate that we are close to price stability. Our expectation for core PCE price inflation in 2004 remains at 1 percent, and for core CPI inflation it is around 1¼ percent. As I mentioned, the latest edition of the Blue Chip economic indicators includes long-range inflation projections suggesting that the Fed is going to allow inflation to rise to around 2¼ to 2½ percent over the next ten years. Given that this is the last time I will participate in these meetings, I'd like to say that I hope the Blue Chip panel turns out to be wrong on that one! [Laughter]

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. There has been little change in the economic outlook for the Third District since our last meeting. The Philadelphia staff's leading indexes of economic activity are signaling a pickup in growth in all three of our states over the next three quarters. Current conditions show continued improvement in activity in most sectors since our last meeting. Retail sales continue to rise at a moderate pace in the District, but some of the improvement in February compared with a year ago reflects the damping effects of last year's Presidents' Day weekend snowstorm.

Residential construction activity remains at a fairly high level, although there has been somewhat of a pullback in the first few months of the year, which may be weather related. Commercial construction remains hampered by high vacancy rates in the office market, but this is not a new development. Manufacturing activity in the region continues to expand.

The index of general activity in our March business outlook survey, which remains confidential until this Thursday, will show a reading of 24.2 percent, down from February's 31.4 percent but nonetheless indicating continued expansion. The more forward-looking indexes of new orders and shipments have trended down since the post-recession highs of December, but

they remain at higher levels than during the first 1½ years of the recovery. While the manufacturing sector continues to expand, it is not yet creating jobs—despite the fact that the survey’s employment index has reached levels that typically signal job growth in the manufacturing sector.

We explored labor market issues in a special question of our survey this month. Nearly three-quarters of the firms said that they had job openings in the last three months, and three-quarters said that they expected job openings over the next six months. Some of this reflects turnover, as about 40 percent indicated that they expect a net increase in jobs over the next half-year. Nearly two-thirds of the firms with openings reported that they’ve had difficulties filling these positions, and most said it was because of a lack of qualified applicants. This is a theme that came up in a couple of places. Obviously, there’s an interaction between wage offers and labor supply, but less than 20 percent of the firms told us they had trouble hiring because applicants were asking for too much money, and less than 15 percent reported that the applicant had another opportunity. These results are consistent with the view that at least some of the weakness in the labor market reflects a structural change, a skill mismatch if you will, in the midst of productivity increases and technological advances.

The labor market remains the weak spot not only in manufacturing but for the District economy as a whole. The recent re-benchmarking of the payroll data has resulted in a downward shift in job levels in Pennsylvania and New Jersey. Instead of showing an increase in jobs since the start of the recovery, New Jersey now shows no change, and Pennsylvania shows a sharp decline of 1½ percent. I say “sharp decline” because that was before I heard the decline in Massachusetts, which was actually rather startling. Delaware has fared better. There was a substantial upward revision of job levels in Delaware, but still we have seen no job growth in

that state since the recovery began. Overall, before the revisions, reported job growth since the start of the recovery had been slightly better in our three states than in the nation. But the new data release reverses the ranking, mostly as a result of job losses in the western part of Pennsylvania and in northern New Jersey. At least I can still take comfort in the fact that we have not lagged the nation as we did in the 1991-92 recovery. I think that's one of the reasons that my contacts in the Third District are positive and optimistic about the recovery this time.

Turning to the nation, my overall assessment of economic conditions and the outlook for the national economy has not changed much from our last meeting. Activity continues to expand at a strong pace, although employment remains soft. Business investment has strengthened, supported by strong profit growth. Consumer spending continues to expand at a moderate pace. Thus, the recovery is achieving more structural balance, which puts it on a more sustainable footing. Core inflation remains quiet in spite of commodity price increases.

The missing piece is employment growth, as many have said, but it's difficult to see how it can remain missing for much longer, given the pace of GDP growth. Productivity simply cannot continue to grow at the extremely rapid rate we have been seeing. My sense is that as output continues to expand, productivity growth will decline and employment growth will pick up to a moderate pace this year. This is similar to the current Greenbook forecast, which revised downward the pace of employment increases from the January forecast. As is true for everyone here, I've been quite interested in gaining more insight into the labor market situation. To that end I spoke to a large payroll processor with a significant presence in our District. The company processes 16 to 17 percent of all paychecks in the United States and has as clients a range of different-sized firms. Their data on the number of pays processed show that small firms, defined as having 50 or fewer employees, have been adding workers over the last six months while large

firms with over a thousand employees per firm have continued to cut workers. Payrolls at mid-sized firms have been about flat. The company's data also indicate that wage growth has picked up in the last couple of months and that the amount of overtime pay has been rising. In the past, this pattern of employment and income growth has been an early indicator of a future rise in employment. Certainly, there's some risk that it might not come to pass, but these are hopeful signs and a new data set to look at.

Even in the wake of the weak employment data, in my view the downside risks to the outlook are considerably smaller than was the case a year ago. And I continue to view the risks to output growth as balanced. In fact, if we had better employment numbers, I would be more concerned about the risks on the upside. Given the current state of the economy and the outlook, I see no reason to change our current policy stance. But I'd encourage us to continue discussing the conditions that would cause us to adjust policy and the steps we need to take now to ensure that we have maximum flexibility to respond to changing events.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Recent economic developments in our Southeast region continue to be positive. Retailers are reporting that sales are still running well above year-ago levels. Our important tourism and hospitality industry has improved further, and reports are now quite positive, especially from South Florida. Unusually cold weather in the North has resulted in a larger-than-usual migration of snowbirds from Canada, and a weaker dollar has stimulated an influx of foreign visitors from Europe. Low mortgage rates continue to buoy our single-family housing markets. And we're seeing small improvements in selected segments of the nonresidential sector, mainly due to institutional construction. While vacancy

rates remain relatively high in most of our large office space markets, it appears that both office and industrial markets have at least stabilized.

The sentiment of our regional business leaders remains positive and upbeat, and we are hearing some of the same reports on capital spending, particularly for software and equipment, as are reflected in the national data. Our bankers, unlike those in Al Broaddus's District, are generally disappointed that the business borrowing they thought they saw in the pipeline earlier in the year has often not materialized. Apparently, much of the capital spending in our region is being financed out of profits.

We cannot shed much new light on the disappointing employment picture from what we are seeing and hearing. Most of the job growth we're able to track in our region is coming from Florida, and much of that is in low-skill jobs in the hospitality industry. A few manufacturing firms report that they are adding to payrolls. Ironically, and paralleling the comments of Cathy and Tony, several of our District directors and Small Business Advisory Council members reported a shortage of highly skilled workers, such as engineers and computer specialists. We even heard reports of difficulty finding good workers for minimum-wage jobs in the service sector in some areas of the region.

We keep looking to our directors and other contacts for indications of imbalances and pricing pressures that they might see developing, and we've begun to get hints of both. A number of folks are expressing growing concern about potential overbuilding and worrisome speculation in the real estate markets, especially in Florida. Entire condo projects and upscale residential lots are being pre-sold before any construction, with buyers freely admitting that they have no intention of occupying the units or building on the land but rather are counting on "flipping" the properties—selling them quickly at higher prices.

The list of goods and services with outsized price increases is beginning to grow. In addition to insurance and health care, which have been on that list for some time, we're hearing about a number of others. Builders have begun to complain about increases in prices for lumber and other inputs. Trucking prices are up in the aftermath of some shakeout in that industry and new limits on driving time. The large run-up in steel prices is trickling down to end users, with some steel goods now being priced only upon shipment. The higher oil and gas prices are being passed through. My son, who is a residential real estate developer, reports that the cost of steel fence posts has doubled over the last year and that the price of asphalt is measurably higher. He has now rewritten his lot sales contracts to be able to pass through such higher costs. One of my corporate directors reports that not only has his use of auditing services nearly quadrupled but that the auditing firm had the gall to raise its fees! Cruise ship operators, even with all the capacity they've added in recent years, have reportedly raised some prices and scaled back discounts and deals. Although these selected price increases and the return of some pricing power in a growing economy are not expected to translate into higher near-term inflation measures, it has been quite a long time since I've heard so much chatter about price increases. I think it's a reminder that, as supply and demand move back into balance in sector after sector, we need to be alert.

On the national front, I remain very optimistic about the outlook. We do seem to be on a path with broad-based footing, and good growth over coming quarters seems quite likely. Our own VAR models are suggesting growth close to 4 percent or perhaps a bit less; even so, those forecasts are still well within the new error bands provided for the Greenbook forecast. I would like to join others in applauding the staff for that refinement in the forecasts that come out of the Greenbook.

As most of us have suggested this morning and at other times, the lack of more-solid job growth is clearly disappointing. While I think we understand and can explain to some degree the sluggishness we're seeing, it's my sense that the error bands around expected employment gains over coming quarters are quite wide. My own staff is of the view that even the scaled-back estimates and the later timing of job growth in the Greenbook could still be a bit optimistic. Understanding the implications of that for our forecast of GDP growth and for policy is important.

Among the longer-term risks that I've emphasized at other recent meetings is the unsustainable fiscal situation, which others have talked about and which is still not resolved. In preparation for this meeting, my staff and I talked about the growing accumulation of U.S. securities by both the Japanese and the Chinese, as noted in the Greenbook and discussed briefly this morning. As I understand the numbers, their holdings now account for more than a quarter of outstanding Treasuries, and the pace of acquisition actually has quickened. It would be interesting to hear some more discussion about how those purchases have interacted with our own Desk operations and the possible implications for our policy and policy process should those governments slow down their purchases or let their holdings run off as they mature.

Finally, in line with my earlier comments about the selected return of some pricing power as supply and demand move back into better balance, you won't be surprised that I would judge the inflation risks to be balanced now. While we still have some uncertainties and some drags on activity to work our way through, we may not be able to be as patient for as long as some people think. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, the Tenth District has continued to expand since our last meeting, and business contacts remain relatively optimistic about the rest of this year. Consumer spending and tourism have remained solid through the ski season and into this period. Housing activity has eased somewhat, as is true elsewhere, but it generally remains strong in our region. Manufacturing activity also continues to strengthen, as production, new orders, and employment all have risen. In other positive news, manufacturing firms reported a further increase in capital spending and in spending plans. And business leaders express optimism about economic growth over the rest of this year throughout our region, with stronger feelings in the eastern part—in Kansas City and that area—and a little less optimism in the Denver area.

Commercial real estate has remained weak, and most firms continue to show less enthusiasm for new hiring than for capital spending. There seems to be a sense that the cost of capital is less than the cost of labor and that, therefore, it makes sense to go with the capital spending. I'll give you one piece of anecdotal data in support of that. Located in our region is a major distributor of propane across the United States. They have used new technology—call center, global positioning, and communications technology—to move their product from starting point to distribution point. Using this technology, they are anticipating, to begin with, a reduction of at least 10 percent of their drivers and, longer run, as much as 25 percent because of the improvements in moving out their product. They came to the conclusion that investing in this technology produced a much greater return on capital than continuing to operate in the old way. I think that's part of what we continue to see in the job market. Let me also mention that we are hearing more anecdotal reports of delays in the ability to bring orders forward. When firms order goods to be used in manufacturing, they are experiencing longer delays in receiving

those goods. So in that sense the environment is fairly strong in terms of our experience with economic growth.

At the national level, activity continues strong. Our projection in comparison to the Greenbook forecast has no major differences. On average, for 2004-05 we're in the same range of about 4½ percent GDP growth. What I would say to you here—although I'm not advocating any immediate change in our policy stance—is that I think conditions are developing that could allow future price pressures to emerge. First of all, both monetary policy and fiscal policy, as everyone knows, have been delivering quite a bit of stimulus. As one person said, "There's a lot of yeast in this dough, and it's moving."

I would also say that the anecdotal reports suggest that we are going to see more delays in deliveries—barring shocks, obviously. And there is more talk of passing on price increases; that is becoming much more prevalent than it was just two or three months ago, or actually even a month ago. So I'm wondering, in terms of positioning ourselves in the sense of our ability to move rates up, if being tied to developments in the job market is really in our longer-run best interest. We may have to be alert to this emerging situation as capital spending continues to bring us greater productivity increases. Despite some views to the contrary, I think that inflationary pressures may emerge before the job market turns around. Thank you.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. The trends that have been evident in the District economy for some time are continuing, so economic activity is expanding further. Let me just start with inflation where, at least in our District, to date there seem to be few signs of any broad-based price pressures and no real concern about inflation, although there are some

concerns about prices of particular products and services. I'll say a bit more about that in a minute.

One distinct bright spot in the District is spending on equipment and software. That has become evident over the last several months, and based on the anecdotal reports we've been getting, the strength in such spending continues. Interestingly, the state and local government budget situation has not turned out to be quite as dire as earlier expected. That is due in part, of course, to policy changes that were made and in some cases to the fact that revenues are running above earlier projections. There is, however, a transit strike under way in the Twin Cities, and the principal issue there seems to be benefits—especially who is going to pay for the cost of health benefits.

Both manufacturing and mining in the District are expanding, and employment is going up modestly in those two sectors. Maybe more important in terms of the labor market situation, there really is little talk from our sources these days of further large reductions in payrolls. That's certainly consistent with what we're seeing in the initial claims data. So at worst, employment is stabilizing; at best, it's growing in some industries. Consumer spending has been reasonably strong thus far this year, but people are getting more concerned about higher energy prices, and the implications of that for home heating and gasoline bills may curtail discretionary expenditures going forward. So far, though, there doesn't seem to be any significant evidence of reduced spending, as best I can judge. And finally, in construction, housing does remain a bright spot in our area.

As far as the national economy is concerned, I have only a few comments to make because I haven't changed my outlook for the national economy at all. I believe the outlook is quite positive, and the incoming data haven't provoked me to reassess that view. While I would

describe the incoming data on the national economy as positive, they perhaps are not as positive as some expected earlier. But I do think there's a danger in over-emphasizing high-frequency data. There's a lot of noise in them. We've all had a lot of experience looking at data that seem to tell one story one month and a different story two or three months later, after some additional observations and revisions. Fundamentally, I think that the national economy is in good shape and that we can look forward to good growth both this year and next.

I have one final comment, and that is on the productivity issue. I've been suspicious for some time about the deceleration in productivity projected in the Greenbook. It has been pushed off a bit. But to the extent that what we are seeing turns out to be more fundamental—more secular rather than cyclical—the implications are either for the same growth in GDP and smaller employment gains or for more-rapid growth in real GDP. In any event, though, I for one hope that rapid productivity gains continue.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. Economic conditions in the Fourth District have continued to strengthen since our last meeting. My business contacts are telling me that their order books are beginning to fill up, and bankers are saying that their commercial loan portfolio pipelines are also filling up. The business executives that I've spoken to since the last meeting are still finding excellent opportunities to increase productivity, and they are spending on capital equipment with that goal in mind. As many others who have spoken ahead of me already said, most of the anecdotal information on capital spending is that businesses are spending on computers, computer networking equipment, and software. However, I just learned that a major steel producer is going to restart a basic oxygen furnace and continuous caster operation in Cleveland to satisfy the growing global demand for steel. And it was only four

months ago that the domestic steel producers were lobbying for an extension of steel tariffs.

Other business contacts are telling me that it's no longer possible to scoop up at distressed prices some of the nearly new machine tool equipment that's out there. My contacts seem to be saying that all of the good bargains are now gone.

In my discussions with District business executives about their hiring plans, I'm still hearing a great deal of reluctance to add people to the payrolls. Business managers have become very adept at expanding output without adding to the workforce; as others have said, firms are using new technology and are redesigning their business processes. And it's not just that new hires add to wage and benefit costs. I'm hearing executives say that, by holding down their head count, everyone in the company is becoming more creative about ways to increase productivity.

Large companies—and increasingly medium-sized companies—are expressing an interest in and have more and more experience with outsourcing to foreign suppliers. In some cases they are getting manufactured components from foreign suppliers, but in other cases they are getting services, such as software development, call centers, back office operations, and even some research and legal services. I, too, don't want to make a lot of this or overstate the amount of activity that is moving offshore, but I am amazed at the number of new instances I keep hearing about, especially from medium-sized and smaller companies. What this growing volume suggests to me is that businesses continue to feel intense pressure to rethink their business operations. I believe that this kind of restructuring we've been hearing about is still going on, and I think it's going to continue to boost the pace of productivity growth.

I reported at our last meeting that several of my business contacts were dealing with rising prices, and that trend has accelerated. In most instances the price increases continue to be in commodities, construction materials, and metals. But I'm hearing more reports now that

many firms are able to pass some of these price increases on, a point others have mentioned as well. Even though we know that there has been little effect from these price increases on goods at the retail level, for the first time I am hearing people say that they are more willing to contemplate passing on some of these price increases. That suggests to me that this long period of disinflation we've been living through is bottoming out. I know that in an economy where we think there is still a considerable amount of slack it would be unusual for inflationary pressures to emerge at this point. However, the rising prices of commodities, energy, housing, and health care combined with the falling dollar and a very accommodative macro policy have led to a situation that is beginning to generate some concerns among my directors, and that also worries me. I do think that monetary policy appears to be on the right course, but I hope that we're not confronted with a situation where our preoccupation with weak labor markets leads us to discount the inflationary signals that may arise. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. It's 11:05 a.m. Why don't we recess for a short coffee break.

[Coffee break]

MR. REINHART.² Mr. Chairman, in front of you is a chart of the forward rate yield curve that you spoke about during Dino's briefing. The red line is the ten-year-ahead one-year-forward rate less the one-year rate, and the black line duplicates the line that Dino showed on his chart. And, yes, it is the case that the spread is quite high when we look at it in forward rate terms, and the amplitude of the swings is greater.

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

CHAIRMAN GREENSPAN. It's interesting that the red line in 2001-04 is rising whereas the other one is flat, which of course reflects our moving the funds rate down. That alters the meaning of the chart. Anyway, Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Recent data have underlined the virtues of patience in our current monetary policy strategy. Demand has been strong—I'm about to line up against my colleagues to my right, so to speak, [laughter] though not all of my colleagues—but it has been slightly less than expected; and importantly that demand is feeding through to the labor markets even more slowly than anticipated. One effect of this combination is to leave the economy with a somewhat larger estimated output gap last quarter and this quarter and one that is closing more slowly than we'd like. Moreover, the decline in equity prices and the widening in a few risk spreads indicate some retrenchment in private-sector optimism, which is echoed in consumer confidence surveys and perhaps, based on the information that President Moskow provided from the business people he talked to, in business confidence as well. One can't help but believe that higher energy prices, perhaps terrorism risks, and job market weakness are contributing to a slightly more sober outlook. After declining for three years, underlying inflation may be flattening out, as the Greenbook states, but the evidence seems inconclusive to me. The three-month rate of core PCE has come up, but from an extraordinarily low level, and core CPI continues to decelerate.

I agree with the staff that recent data and attitude shifts aren't surprising enough to suggest a change in the basic story. Although housing has come off the boil a little faster than anticipated, consumption is only a tad weaker than projected; its rate of growth seems to be picking up from the fourth quarter to the first quarter. To date, tepid labor markets, higher energy prices, and low saving rates don't seem to be exerting much restraint on household

expenditures. Most notably, business spending on capital equipment remains quite strong, with no signs of tapering off. And the pickup in industrial production, still favorable readings from purchasing managers, and sharp increases in commodity prices all indicate that the turnaround in manufacturing is continuing, even if a little less rapidly than anticipated. All in all, evidence suggests that monetary and fiscal stimulus is continuing to bolster private demand, which with government spending also rising should keep overall growth brisk. Accommodative policy should also narrow the output gap—and faster than it has been. I don't have any new insights here. Every logical argument indicates that a gradual strengthening of labor markets should be in train, but we haven't seen much of it yet, which in my view reinforces the arguments for remaining patient.

Nonetheless, some observers have been arguing that our patience should be wearing thin sooner rather than later. One argument is that policy is very accommodative by historical standards and that many of the reasons for adopting such an accommodative policy no longer pertain. Demand has strengthened substantially, and the threat of pernicious deflation has receded. A second concern is that policy accommodation—and the expectation that it will persist—is distorting asset prices. Most of this distortion is deliberate and a desirable effect of the stance of policy. We have attempted to lower interest rates below long-term equilibrium rates and to boost asset prices in order to stimulate demand. But as members of the Committee have been pointing out, it's hard to escape the suspicion that at least around the margin some prices and price relationships have gone beyond an economically justified response to easy policy. House prices fall into this category, as do risk spreads in some markets and perhaps even the level of long-term rates themselves, which many in the market perceive as particularly depressed by the carry trade or foreign central bank purchases.

If major distortions do exist, two types of costs might be incurred. One is from a misallocation of resources encouraging the building of houses, autos, and capital equipment that won't prove economically justified under more-normal circumstances. Another is from the possibility of discontinuities in economic activity down the road when the adjustment to more-sustainable asset values occurs. Neither of these concerns, in my view, is sufficient to overcome the arguments for remaining patient awhile longer.

First, the current degree of policy accommodation seems consistent with macroeconomic stabilization and a sensible approach to uncertainty. Policy may be unusually accommodative by historical standards; but those standards, for a variety of reasons, haven't been a very good guide to recent developments in that the stance of policy has yet to result in a material decline in labor market slack. And rapid productivity growth continues to hold down unit labor costs and inflation. Uncertainty in the current situation seems greatest about the rate of growth of potential GDP, as President Poole pointed out, as well as the level of the output gap and how the gap will be reduced. This uncertainty argues, in my view, for awaiting firm and convincing evidence both that labor market slack is on a declining trend that is likely to be sustained after rates rise and that inflation has stabilized before considering policy action. The former will tell us something about the relationship of demand to potential supply and the latter that the remaining output gap isn't that large.

Second, maintaining highly accommodative policy seems consistent with a risk-management framework to possible deviations from the most likely outcomes. The low level of inflation and the high level of the output gap mean that the welfare costs of economic growth running a little stronger than expected are considerably lower than the welfare costs of it running a little weaker than expected.

Third, I believe that at least for a while the macro imperatives are likely to outweigh any threat to financial or longer-term economic stability from accommodative policy. Any unusual distortions in asset prices that might intensify a subsequent correction are probably small. Domestic risk spreads aren't obviously too low for the beginning of an economic expansion. The upward tilt of the implied path of forward rates and note and bond yields looks relatively gentle. The level of those rates may be a bit low, but they don't seem way out of line unless activity is much stronger or inflation much higher than I anticipate. House prices are elevated relative to rents—and will look even more so when rates begin to rise—but are more likely to correct by rising less rapidly than by crashing. Eggs will get broken when rates begin to rise, but the capital in most intermediaries is high, and the system is resilient.

While central banks in the United Kingdom and Australia seem to be tilting policies in a firming direction owing to asset-price concerns, those economies are generally operating at higher levels of resource utilization than we are, and their house-price inflation has been much higher than ours. In our situation, a high burden of proof would seem to be on policies that would slow the expansion, leaving more slack and less inflation in the economy in the intermediate run to avoid hypothetical instabilities later. In short, Cathy, I understand your concerns, but until the labor market takes a more definitive and sustained turn for the better or until inflation looks as if its trend has changed, I'd be quite hesitant about allowing such concerns to have an effect on policy. Thank you.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. First, I'd like to compliment the staff on the new uncertainty calculations. It's very important to have them because without them one tends to measure uncertainty by comparing forecasts. Since forecasters talk to each other and

probably talk in terms of means, this what I'll call "conversational approach" greatly understates true uncertainty. Now the staff is giving formal statistical estimates of uncertainty. I like the graphics, too, because we have an estimate of where the alternative simulations fit in these uncertainty bounds.

On the forecast itself, we may be getting to the end of a swing of upgrading. For the past half-year or so, most data have come in ahead of expectations, and most forecasts were steadily upgraded. This is the first meeting in some time where the Greenbook has actually downgraded the forecast, albeit only slightly. The main reason, of course, was a disappointing employment growth number, but some other indicators are showing a bit of weakness as well. While the Greenbook forecasters have downgraded their estimates, the Blue Chip forecasters are not there yet; they are still upgrading. This suggests a new way to evaluate forecasters—not only in terms of group mean square errors but also in terms of how alert they are to picking up turning points. Since I've been here, I have a general sense that those preparing the Greenbook are pretty alert—much more so than the Blue Chip forecasters—but this matter should be studied further. Moreover, it's way too early to tell whether this recent downgrade is a mere blip or the start of something more meaningful. Nevertheless, the new development certainly bears watching.

Since the basic economic situation is so little changed, and since I speak after Don who leaves me very little new to say, [laughter] there is not much to talk about here that has not already been discussed many times over today or at a previous meeting. Let me focus instead on the macro implications of an issue that all of a sudden has become hot politically—the potential widening of the income distribution.

Typically in recoveries, the income distribution closes, as lower-income workers gain more than higher-income workers. This time it seems that the pattern will be reversed, as indeed

it was in the '80s. Evidence that the income disparities will soon widen is all around us. Profits are very high relative to wages. The Greenbook shows that the price markup on unit labor costs is at a record high. The profit share of total output is at least at a cyclical peak, and wage growth remains relatively sluggish. Based on data now available, I'm fairly sure that income disparities will widen significantly in this recovery. This in turn raises the question of what impact that will have. There seem to be widening disparities among households. From the financial statistics we see that the wealth-income ratio is rising, but the financial obligation rate remains high, and loan-delinquency rates have risen to a local high. From labor statistics we see that labor force participation rates are dropping, mainly among groups likely to be affected by the cycle. Moreover, there's a sharp rise in quit rates for those who gave up looking for a job because they couldn't find work. Similarly, the duration of unemployment is rising even as the overall unemployment rate falls. There is a similar income-related disparity in consumer sentiment. Three years ago there was a 4 percentage point spread between consumer sentiment of median-income families and low-income families; now that spread is closer to 10 points. Nearly as much widening has been apparent on the high side of the scale. Whatever consumer sentiment means—and I have never managed to figure out exactly what it does mean—low-income groups now have a good deal less of it than high-income groups by a very great margin. [Laughter]

While it is easy to find evidence that income disparities are widening, it is harder to identify macro implications of this shifting distribution. Imagine first that a dollar has shifted out of wages and into profits. The marginal income tax rate for workers is 20 percent, and the household marginal propensity to consume (MPC) is 75 percent. These, by the way, are stylized Research and Statistics Division estimates. So the drop in wages would lower consumption by about 60 cents. If the marginal tax rate on profits is 35 percent and the wealth consumption

coefficient is .035, the 65 cent rise in profits would raise stock prices by a little over \$16 and consumption by about 60 cents. It's a total wash. And it would even go the other way without the marginal tax rate differences. One gets similar results from a shift of income within the household sector. Marginal propensities to consume for different income groups seem close enough that there is likely to be little change in overall consumption from the distributional shift apart from that due to differences in marginal tax rates.

So while it looks as though a very significant disparity in the income distribution could open up, it is hard to find major overall macro effects from this source, apart from the unlikely suspect of different marginal income tax rates. At the same time, these conclusions are tentative. The internal group MPCs are not as reliably estimated as is the overall MPC, and there could be further effects on confidence, social tension, or who knows what else. Here again the distributional shifts are likely to be large enough that the issue bears watching.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. I'll do this briskly. Economic developments in the Second District remain quite favorable. Business and consumer confidence have weakened some, employment has fallen a bit, and in our Empire State survey the forward-looking six-months-ahead expectations show somewhat diminished optimism, but the numbers are still reasonably strong. Manufacturers report stronger pressure on input prices, with particular concern in steel and energy, as many of you have said. Perhaps more significantly, they are reporting higher prices received and expectations of more pricing power ahead.

The parts of the New York business and financial community with national and global businesses continue to report a reasonably positive view of the outlook. They are a bit more

cautious than they have been, less because of concern about actual diminished growth in demand or profits than because of uncertainty about the sustainability of the expansion if employment growth fails to strengthen, the implications of the political calendar on the economic policy debate, and renewed concerns about terrorism risks. Greater confidence in productivity growth is not leaving people with as warm a feeling about the future as one might think is justified.

In our view, the basic elements of the expansion appear to be on the same path as they did at our last meeting. With powerful support from the forces of monetary policy, accommodative financial conditions generally, and the structural acceleration of productivity growth, we expect the economy to continue to expand at a reasonably healthy pace for the next few quarters. Consumer spending may moderate a bit, but real income growth should continue to support expenditures at a comfortable rate. We expect investment to continue to strengthen at a quite rapid rate, supported by confidence in demand growth, competitive pressures to upgrade, ample profit margins, and very favorable financial conditions. We've moved our forecast up a bit, but we are somewhat lower in terms of GDP growth for 2004 and 2005 than is the Greenbook. The main differences are in the expected path of consumption and a larger negative contribution from net exports. We see consumer expenditures slowing somewhat because we anticipate a gradual rise in the private saving rate—we are more optimistic about virtue. We are less positive about impetus from asset prices, inflation, and interest rates. We also see productivity growth staying at a more elevated level longer and falling less than does the Board's staff, and as a result we expect more-moderate employment growth. On balance, though, we share the staff view that growth will continue at a level somewhat above what we consider to be trend or potential.

In our judgment, the core inflation numbers are likely to remain low, but we may now have reached the point where the rate of increase will stop falling. Unit labor costs should start to rise modestly as productivity growth moderates, but the increases should be quite modest for a while. We suspect that the surveys on pricing pressure and a growing ability to pass on those price increases mean something in terms of a diminished probability of further falls in inflation.

On balance, we see the risks to this outlook for growth and inflation as quite close to symmetric. Relative to our last meeting, the chances of a substantial upside surprise on output growth seem diminished. And until we see employment growth strengthen and unit labor costs turn, there will continue to be some chance of a further decline in core consumer price inflation. Even if—or when, I should say—those conditions materialize, we consider it unlikely that inflation will accelerate over the forecast period to a range above our comfort level.

So on this basis, we see monetary policy as appropriately calibrated to these conditions, and we believe that could prove to be the case for some time. However, the Committee's success in convincing markets that it will be patient is contributing to conditions in financial markets that could cause us and the macroeconomy—and even Don Kohn—[laughter] some discomfort. I think we should be uncomfortable now with the extent to which expectations of the turn in the fed funds rate have receded. With the overall risks close to balance, we have less need for and face more risk in a communication signal that is still interpreted as designed to hold interest rate expectations down well beyond the immediate policy horizon. This is not an encouragement that we act now to dial back that signal. But we need to consider thinking about doing it soon, if only to increase our future room for maneuver. Thank you.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. In preparation for this meeting, I focused again on business C&I loans, and for the first time in the two-and-a-half years that I have been following that information source, we are starting to see some measurable growth. It would be one thing simply to report that, but it's quite another, at least in my mind, to go back and think about how long it has taken for us to get here. When I first began looking at these numbers, business loans were in a decline. From a decline and a sense of very negative feedback, they went to no new information and then to early indications of some bottom fishing and options taking. After that there was some talk of activity but no measurable activity and then some activity but it was still not showing up in the C&I numbers. Finally it is in the C&I numbers. In addition, we have gone from a time when banks and the securities industry were clearly cutting back on marketing and on their parameters for loan approvals to a point where they've become very aggressive. So, I think in a real sense this measure reflects not only the underlying economy but to a certain extent the psychology. And as Presidents McTeer and Moskow have indicated, there are indications that both have picked up.

So if one were to use the trend in C&I loans as a barometer, it would seem to reinforce the Greenbook analysis of the strength in the underlying economy, with the lag in employment growth being the anomaly. We made a significant shift in our communication six weeks ago when we moved away from the "considerable period" language and expressed the need for patience. It seems to me that patience is still in order in our communication at this time.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. In my intervention here, I'll talk about three things: first, what has happened during the intermeeting period and how I interpret it;

second, why it has happened or what the hypotheses are; and third, the implications in this room for policy.

First, as all of you know, what has happened is that the data have been distinctly mixed, as I think David said, but somewhat on the downside or at least below expectations. Three or four things have caught my attention. Obviously, the labor market numbers have been somewhat weaker than we anticipated. Importantly, though, demand for new vehicles has been a little sluggish. Dealer inventories seem to be rising a bit. I'm going to come back to talk about that a touch. And housing activity, while still strong, is also somewhat below expectations.

I think someone mentioned that there are those in the private sector who put together something called a "surprise" index. They've observed that, during the second half of 2003, the surprise index tended to be positive, which is to say that the data came in higher than expectations. Since December of last year the data, generally speaking, have come in below expectations. So I think there is some warning sign there that either expectations are far out of the line or the economy, while still strong, is not quite as strong as people had thought. The staff has taken this on board by marking down their forecast. The output gap is probably up, and the employment gap is up. The main focus there, obviously, has been the question of job creation, which has been quite sluggish.

So why is it that, years after the formal end of the recession, we still seem to be dealing with what appears to be yet another jobless recovery? That leads me to topic 2, which is why it has happened. There are a number of theories and hypotheses, and I'd like to go through them quickly. One is that the rapid increase in benefit costs has discouraged businesses from bringing on new workers. I tend not to put a lot of weight on that since I think, by and large, benefit costs are relatively small compared with the overall costs of hiring workers. But there probably are

some industries where that factor is important. The other hypotheses that I'd like to spend a little more time on have already come up, with one exception. One is that structural productivity growth may be higher than we had thought before. I tend to put a little more weight on that argument. Having looked at some other periods of increases in productivity growth, I think we're in the middle of one of the strongest of those periods compared with the others.

Historically they have run up to twenty years or so, and this one started about nine years ago, so I suspect there may be more to come here. One of the things we may be seeing with regard to the story on structural productivity is that it's a little stronger than we had originally thought. That said, obviously it will have to come off a bit for cyclical reasons in order for job creation to pick up. So I lay that out as one option. Tony mentioned another option, which is a bit of a mismatch in skills, and that again may lead to slower job creation.

But the third possibility—one that hasn't been talked about much—is this so-called business gloom. I find that gloom frustratingly psychologically driven, but I think there's an analytical underpinning to it that we at least ought to take a moment to focus on. I have a concern that one of the reasons businesses are somewhat gloomy is that they are aware that much of the increased consumption they've seen has been driven by stimulus and that stimulus is undoubtedly likely to wane during the course of the year. That is certainly the case for fiscal stimulus, though it's hard to say with respect to monetary policy at this stage. But since the expectation is for no further decreases in interest rates, I think most people would say that the stimulus from monetary policy also will start to wane a bit. In the context of that uncertainty, I think businesses are concerned about how sustainable the growth in consumption is going to be. They have been holding down hiring and also labor income. No one has focused on it yet, but while real labor income increased in the fourth quarter of last year by about 2 percent over the

previous period, that was the slowest quarterly rise in labor compensation last year. The rate of increase has been slowing gradually during the course of 2003, and that, I think, is a bit of a problem. I believe that has played into the relatively weaker, though still strong, demand for consumer durables—both autos and housing—that I noted earlier. Auto inventories are starting to build, and housing activity, while still strong, is slowing somewhat.

Another point I'd make here is that the other factors that have been holding up consumption, including equity wealth and home prices, may start to soften over the forecast period. So while consumption for households is still on a relatively strong footing, I don't see it strengthening. I think there's a risk that it may weaken a bit because I suspect that all of the factors that have been supporting it are going to be weaker and not stronger going forward.

That said, it's clearly the case that businesses continue to fix their balance sheets. And we've seen an increase in capital investment, which I think is part of the productivity story. So I don't expect things to fall apart completely from the business side. But I do believe there's a bit more downside risk than perhaps others in the room feel there is, at least as I interpreted the comments I've heard. Don introduced the concept of announcing how we're lining up. I guess I'm lining up with the Kohn–Broaddus view that there's perhaps a little downside risk.

Now, let me go to the third topic—the implications of all this for policy. As I listened today, I heard two or three different themes mentioned that I'd like to discuss. One is the issue of inflation and pricing pressure. I heard a number of stories about bottlenecks, speed effects, and so forth. It struck me that primarily what we're hearing about are a few minor imbalances in supply and demand in a small number of industries that may not have the ability to change their output as quickly as others. But I'm not sure, in the context of a widening output gap, that those problems are likely to feed into inflationary pressures that we really have to worry about. I'm

not denying that pricing pressures may be picking up in some areas or that there are important markets where supply and demand imbalances may be leading to price increases. But I'm not sure at this stage, in the context of a squishy—that's a technical term I sometimes use—[laughter] labor market, that we're likely to see a big pickup in inflation.

A second theme involves the question of whether or not we are at risk of overstaying our welcome at these very low interest rate levels. Don obviously has done a superb job in going through the technical elements of that, which I will not in any way attempt to mirror. I would associate myself with those comments because Don, after all, is a great former member of the staff and now a distinguished Governor. But having said that, I would point out something that hasn't come up yet—that, in the staff's most recent assessment, the real equilibrium interest rate has come down somewhat. So while rates are at historical lows, monetary policy may not be as accommodative as we had thought. As I noted, some imbalances may be building up with interest rates this low, so we shouldn't be complacent about it. But we should recognize that monetary policy may not be as accommodative as we thought.

The third theme relates to communication. The point I'd make is that markets are expecting very few changes. Given how fragile the markets are and given my view that perhaps there's more downside than upside risk, I would again caution that we be very careful about making any significant changes in our statement. Thank you.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I will align myself with the Kohn axis—

MR. KOHN. As long as it's not an axis of evil!

MR. BERNANKE. —which proposes that monetary policy patience is appropriate for current macroeconomic conditions. However, the issue has been raised by Vice Chairman

Geithner and others that our current policy stance may contribute to potential financial imbalances down the road. The history of using the monetary policy instrument rate for correcting financial imbalances is a very checkered one, to say the least. So I think the question arises as to whether there is some other tool or instrument that we might use to approach the question of potential financial imbalances, and that's what I'd like to talk about in my few minutes.

Many of the questions and comments we receive as FOMC members have to do with perceived and actual risks to financial stability. Just to take a few examples, we have all on occasion been asked whether there's a bubble in the market for residential housing; whether the narrowing of risk spreads on corporate bonds is justified by reduced default risk or is instead the result of investors reaching for yield; whether household and firm balance sheets will remain strong when interest rates rise; what risks to the financial system are posed by the activities of the government-sponsored enterprises; and how Basel II and other regulatory developments are likely to affect the structure and profitability of the domestic banking system. There are, of course, many others. Such questions are obviously important but are extremely difficult for each of us as individual FOMC members to respond to, and certainly not in detail. One's inclination is to answer by painting a benign picture so as not to cause unnecessary public concern. On the other hand, financial conditions do change, and it's our collective responsibility both to monitor those changes and to communicate truthfully to the public what we see.

The central banks of most industrialized countries have responded to this challenge by issuing regular reports known as financial stability reports, usually on a semiannual or quarterly basis. Financial stability reports give central banks and related institutions a means to provide systematic and objective information about financial conditions over a range of sectors. I asked

the staff to provide me with examples of such reports, and they quickly came up with copies of reports from thirteen different institutions. For the record, here is the list of major institutions whose financial stability reports were provided to me by the staff: The Bank for International Settlements, the International Monetary Fund, the European Central Bank, and the Central Banks of Australia, Austria, Canada, United Kingdom, Finland, France, Germany, Norway, Spain, and Sweden. All of these reports are on the Web, and I would be happy to provide URLs to anyone who is interested.

These reports are fascinating reading, and I commend them to you highly. Indeed, most of them discuss the situation in the United States as well as in their own countries. The material covered by the various reports is diverse, as you may imagine, as is the amount of analytical detail. Typically, however, the reports begin with a general macroeconomic background and then present both data and qualitative information on the financial conditions of banks and other intermediaries, households, and firms. Other sections of the reports discuss developments in security markets, international finance, and aspects of the financial infrastructure including regulatory developments. Much of the material in these reports is in the public domain, but the reports draw the data together and provide an analytic overview. In addition, boxes, research notes, and even full-length articles on special topics are included. These reports allow central banks to present their assessments of financial conditions in a way that is both objective and responsive to the concerns and questions of the public. By calling attention to emerging financial problems, as well as by focusing policymakers' attention on them, these reports may even help diffuse potential risks of financial instability.

It seems to me that we might want to consider the possibility of providing the public with some type of regular financial stability report, perhaps as part of the Monetary Policy Report to

the Congress or in some other existing venue or perhaps as a stand-alone document. I suspect that much of the material in the report would be easily obtainable as a byproduct of regular briefings in the Greenbook cycle. However, as I think under no circumstances should we impose an unfunded mandate on the staff, an assessment of the marginal cost of providing such reports should be a key part of any investigation of the possibility. If there is any interest in the group in pursuing this idea either now or at some future time, I would personally be more than happy to work with the staff to develop a more detailed proposal for the FOMC to consider. Thank you.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I want to start by also acknowledging the range of forecasts the staff has provided. I think it really will help us be more aware of how variable the outlook can be. As someone who spends a lot of time worrying about Basel II and advising bankers that they need to understand the variability of outcomes, I'm glad to see we're walking our talk and putting it in our own FOMC materials. So, thank you.

Since the last meeting, as many of you have said, the data have been mixed. On net, our forecast is a little weaker in terms of GDP and employment, with inflation about unchanged. Overall the pace of the recovery, while still strong, is slowing. In looking at this, I tried to focus a bit on the different sectors of the economy, and I ended up spending most of my time looking at the corporate sector. As we've been noticing since the second half of last year, corporate profit levels are rising quickly, and corporate cash flow is very strong. In fact, internally generated cash flow has been greater than capital expenditures for several quarters now. Why is it then that businesses have increased their investment in equipment and software but still haven't picked up their spending in some other areas? I think that this gap in spending on different facets of their operations may come from a couple of interesting aspects of their

finances. Throughout this whole period, corporations have been paying down equity on net. Overall their balance sheets have strengthened in leverage, but they are generating more profits than they can use and, therefore, are retiring stock.

Another observation is that corporate net issuance of debt has been quite large until very recently. In fact, the numbers in the last couple of quarters are amazing to me. While a lot of debt has been issued, we've also seen, as Governor Olson noted, a paydown in bank loans and commercial paper. So companies have been lengthening their liabilities—taking advantage of the long period of low interest rates to help strengthen their financials. In the last two months' data, however, we're seeing some changes. We're beginning to see for the first time in a while commercial loan growth in the banking system and commercial paper growth in the financial markets. There has actually been a net expansion of debt so far this quarter. Part of this may be due to the start of inventory building, but again, this has been very, very modest. Corporations in effect are trying to maintain their high profit margins. In fact, from the data in the Greenbook we can see that the Street expects double-digit earnings growth for corporations out into the next couple of years. To the extent that companies have very lean, top-line revenue growth—and particularly with a limited ability to raise prices to get that revenue growth—they are struggling to maintain the bottom line.

One of the odd things in corporate finance is that the wider your profit margin, the harder you have to work on keeping costs down in order to generate earnings growth. I think that's in part what is happening now. Firms are showing wide operating margins to the Street, the Street is extrapolating them into earnings growth, and these firms find that they have to scramble harder on the expense side. What really makes me uncomfortable is that, of the government sector, the household sector, and the business sector, we have net saving today in only one sector, and that's

the corporate sector. Until the corporate sector turns from a net saver to a net investor, I'm pessimistic about getting very rapid growth going forward.

CHAIRMAN GREENSPAN. Thank you very much. We'll turn to Vincent Reinhart.

MR. REINHART.³ Thank you, Mr. Chairman. I'll be referring to the material that was just handed out. This is another meeting about words, not action. Your discussion about policy would seem likely to center on how to characterize the economic situation and risks to the outlook so as to retain your flexibility going forward. As is evident in the current readings on federal funds futures plotted in the top left panel of the first exhibit, over the intermeeting period market participants moved closer to the staff's assumption that the funds rate will hold at 1 percent for the remainder of the year. Indeed, futures quotes are now consistent, as shown in the top right panel, with the onset of tightening being pushed back about three months—to sometime near year-end.

This message is similar to what primary dealer respondents reported to the Domestic Desk in a survey last week (the middle left panel). All twenty-three dealers anticipate that the stance of policy will remain unchanged at this meeting, and about one-third expect no action until 2005. The dealers apparently do not anticipate any significant change in the language of your announcement, either. It is also worth noting, as in the middle right panel, that market participants are fairly confident about the near-term path of short-term rates, at least as judged by the low level of volatility implied by options on Eurodollar futures. This strongly held sense in markets that policy will be on hold for some time, along with the phrasing of the last announcement—and the sense of quietude in many of the telegrams on the discount rate sent in by the boards of directors of the Reserve Banks in the past few days—explains the lack of policy alternatives in the Bluebook, a document with the official title “Monetary Policy Alternatives.” To provide some perspective, the bars in the bottom panel parse the reaction in markets at your meetings over the past five years into that owing to the surprise on the policy rate and the residual, which presumably is due to the words of your statement. The message to take from the chart is that words seem to figure importantly as to how markets react to your decision.

You might think that we've taken that principle to an extreme in the centerpiece of the most recent Bluebook, the table I've included on the next page. The three columns of the table present variations on the wording of the announcement according to your view of the economic outlook. Alternative B, given in the middle column and explained in more detail on the next page in exhibit 2, suggests only the most minor variation of the wording that would be required to square the statement with economic developments over the intermeeting period. To be sure, readings on the economy of late have been disappointing, as is shown in the top left panel by the staff's estimate of the cumulative effect on the two-year Treasury yield of surprises in key economic data releases, similar to indexes of market “surprises” that Governor

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

Ferguson mentioned. But the market reaction to such disappointments, on net, also produced, as shown in the top right panel, a significant decline in investment-grade corporate yields that worked to offset a decline in share prices and an appreciation of the dollar. Thus, financial conditions, on net, probably do not differ much from those prevailing at the time of the January meeting.

While encouraging the expectation of more-accommodative policy would support spending going forward, the lags in monetary policy might lead you to believe such effects would mostly be felt when the economy was in less need of support. As shown in the middle left panel, the period when any action taken today would have its maximum leverage on the economy is next year, when the staff anticipates that real GDP will be growing at 4 percent, following this year's projected 5 percent expansion. With inflation tame, the Committee might feel that preserving current financial conditions would best foster the achievement of its objectives. Such an attitude is consistent with the assurance made in the last sentence of the January announcement, at the right, that the "Committee can be patient in removing its policy accommodation," an assurance that market participants evidently took to heart in shaping their near-term expectations. If that is the case, as in the bottom panel, you could stress that spending is continuing to expand at a significant pace. I'd note that the description of the labor market in the second bullet is a little different from that in table 1 of the Bluebook. The feedback I got since distributing the Bluebook made me think that the Committee would be more comfortable relating that "although job losses have slowed, new hiring has lagged." Such an announcement would likely sink quickly among the waves of economic news and be associated with little market reaction. Touching any other element of the January announcement would probably prompt a more sizable response, which is discussed first for an easier alternative in exhibit 3.

As is plotted in the top left panel, the simple summary of the Greenbook is that the staff now believes that the output gap will run about $\frac{1}{2}$ percentage point deeper than previously expected. That implies that about $\frac{3}{4}$ percent of the nation's resources are expected to go unused at the end of 2005. The fitful performance of the labor market, seen by the shallow bars in the middle left panel, might pose a threat that outcomes could be even worse than that. If households begin to doubt their income prospects in the context of a poorly performing job market, spending may not fare as well as in the staff forecast. The Committee might put some weight on an assessment of such adverse alternatives. If the Committee's characterization of the economy leads market participants to expect a tighter stance of policy and adverse outcomes for aggregate demand materialize—such as a compression of household spending—the cost in terms of lost output might well be higher than if the Committee seems to be inclined to ease and the economy snaps back quickly. While investors do not expect action at this meeting, to be sure, as shown in the middle right panel, the distribution of possibilities for later this year implied by options on Eurodollar futures rates has a noticeable portion of its mass below 1 percent—and more so than at the January meeting. If you thought that you likely would be keeping policy on the easy side longer than currently priced into financial markets, the Committee might want to

highlight, as in the bottom panel, the darker shades to recent economic releases. In particular, it could point out, as in the second bullet, that “resource utilization generally appears likely to remain somewhat below levels consistent with the economy operating at its productive potential for some time” and could even tilt the balance between inflation and disinflation more clearly into the negative zone.

While such a shift seems consistent with the last few weeks of data, the Committee might have more in mind the longer sweep of your policymaking history. As shown at the top of your last exhibit, the real federal funds rate has been negative for the past ten quarters. Although a few staff models would suggest that the equilibrium short rate may well be negative—that is the lower bound of the blue region—you may well find it disquieting to be in an area traveled rarely by central bankers who are favorably remembered. [Laughter] Moreover, the estimate of the equilibrium real short rate derived from financial markets—the thin line plotting the far-ahead real forward rate derived from quotes on indexed debt—is now, and has been for a while, well above the actual real short rate.

A sense that the staff has a more benign view of the threat of a pickup in inflation than other forecasters can be gotten from the latest Blue Chip survey of forecasters. Twice a year, the folks in Arizona ask about expectations over the next five to ten years for several variables, including real GDP growth (plotted in the middle left panel) and CPI inflation (plotted in the middle right panel). As to the first panel, such far-ahead projections of output growth would seem to reveal private-sector economists’ notion of potential output growth. If so, forecasts of potential output growth, with a median of just above 3 percent and spanning a confidence range from $2\frac{3}{4}$ to nearly $3\frac{1}{2}$ percent, might be read as suggesting that pressures on resources could emerge more quickly than in the staff forecast. As to the second panel, and as President Parry noted, despite the good performance of inflation over the past few years, longer-term inflation expectations may remain above your longer-run target and, judging by the dispersion of the responses, may be less anchored than you’d like.

Words to express such cautionary notes are given in the bottom panel, with the important changes contained in the paragraph assessing the risks to the outlook. In particular, if you think that you may be more likely to tighten than seems built into market prices, you might want, as in the fourth bullet, to tip the balance of inflation risk to neutral, from its current slight tilt toward disinflation, and qualify your “patience.” The latter could be done, as in the last bullet, by noting that “the Committee recognizes that the stance of monetary policy has been quite accommodative for some time.” That would likely be taken in markets as a marker that your patience was wearing thin.

CHAIRMAN GREENSPAN. Questions for Vincent? I don’t have terribly much to say because as others have indicated, most has been said. Just let me point out a few issues. The rate of productivity growth is beginning to slow; and over the last several months, the high-

frequency data show a marked deceleration from the elevated pace we saw earlier. Thus far, however, that slowing has not been accompanied by much growth in employment. So the issue is not whether the growth of productivity is falling; it is already significantly lower. The interesting question relates to employment and whether its recent weakness reflects statistical noise or whether there's something going on that we did not anticipate. I must add that an assortment of recent labor market data suggests that there was a significant pickup in February and March. If that is indeed the case, it may be that the weakness in January and possibly in February was due to weather-related problems.

Committee members have increasingly discussed the possibility that the persistence of low market interest rates is fostering increased efforts to reach for higher yields in financial markets. In my view, this is probably one of the most important issues confronting us because, clearly, the longer we maintain very low interest rates, if indeed there is significant reaching for better yields, the more the liability side of business balance sheets is going to be peppered with securities that may not be all that viable in a rising interest rate environment. I'm not sure how we can evaluate that risk, but it is an obvious issue that should be concerning us. And I think that, more than any other issue, is probably what is going to move us eventually toward tightening.

The difficulty that I have with tightening any time soon is that the economy may not yet have reached the point where we can confidently say that this recovery is fairly solid and robust going forward, even though the current data clearly are exhibiting considerable strength. Ordinarily, I would have hoped to move toward adjusting our risk assessment of inflation to full balance in our press statement for this meeting. The reason is that, if we are beginning to contemplate a tightening action, we should gradually de-emphasize our reference to patience. A

move in that direction today would be consistent with continuing to adjust our statements meeting by meeting and fostering a momentum that might enable us at the appropriate time to tighten with a minimum effect on rates.

My own judgment is that it would be desirable when we move to have been so transparent about our intention to do so that financial markets will not respond all that much. This means that we have a very interesting but difficult job to do in trying to alter the general attitudes in financial markets. Ideally, the day we move everybody should have a sense that our action is consistent with our previous statements about the outlook.

This raises an interesting question about whether we ought to be moving toward a balanced risks statement on inflation or stay where we are. Before the data began to turn somewhat negative, I was hopeful that we could definitely move in the direction of balance. Now I'm a little concerned about doing so. The reason is that, if we move today toward balanced inflation, we will essentially have created a sequence of doing something—not tightening, but moving in that direction—at every recent meeting. That would then create a problem for us at our next meeting if we don't want to move at that time. So, I am marginally inclined not to change our inflation statement at this point. But I must say it is a very close call. The sole reason I would argue for not moving is to avoid creating momentum toward a policy action if, indeed, the economic expansion is slowing down.

So I come out in favor of leaving the inflation risks sentence unchanged. But if there is considerable interest in changing it, I would certainly want to consider the arguments for doing so. I do think we would be taking a risk that I don't believe we need to take at this point. In my view we are in a position where we can sit with patience for a considerable period! [Laughter] I

recommend that we change the language in the first operative paragraph of our statement along the lines that Vincent has indicated but that we not change the balance of risks sentences.

What we have in the draft statement and what I'd like to put on the table for discussion is a first sentence in the operative paragraph that talks about underlying productivity as providing important ongoing support to the expansion. That is not a change. The second and third sentences incorporate some updating. They read: "The evidence accumulated over the intermeeting period indicates that output is continuing to expand at a solid pace. Although job losses have slowed, new hiring has lagged." The fourth sentence is unchanged and reads: "Increases in core consumer prices are muted and expected to remain low." That's all I have to say at the moment. Comments anybody? President Poole.

MR. POOLE. Thank you, Mr. Chairman. I support your recommendation for minimal change. I would, however, move to balance on the inflation statement, and I'll tell you why. In my view, that is certainly an accurate reflection of the probability distribution. In fact, while I believe that the risks are close to balanced, my own judgment is that the probability of a ½ point surprise on the upside is a bit higher than that of a ½ point surprise on the downside. I also think, though, that the effect of that change in our statement is going to be totally dominated by the next employment report. We saw how large the reaction was in the bond market to the February report. If we have another weak jobs report—or whichever way the number goes—I think it's going to overwhelm the effect of that minor change in our inflation assessment. In short, to me balance is an accurate reflection of the risks with regard to inflation, and I think the impact on the markets of our stating that is likely to be quite transitory.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. I support your suggestion, Mr. Chairman. I'm actually not altogether averse to going to balance on the inflation assessment. But given that we're coming off a period of downgrading our forecast of economic activity, I think I'd rather leave the statement alone for another month. I'm not entirely averse to that minor change, however, if that's all we do.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I just want to clarify that I was not advocating that we move rates at this meeting or even at the next meeting. But I do think there are developments that we ought to keep in the back of our minds as we consider the stance of policy. Clearly, there continues to be an output gap. And clearly, the incoming information suggests that economic activity has been less strong than it was earlier, though it continues to be strong. And like everybody else, I don't know why the pace of hiring has been as slow as it has been or whether it will get slower or speed up more quickly than we expect.

I could go along with your recommendation, Mr. Chairman, but I fall more into President Poole's camp, and to some extent I agree with what Ned just said. I'd rather say that the probability of a rise in inflation is about equal to that of an unwelcome decline—use the phrasing in alternative C—because to me that more closely describes what the markets and others are seeing. I think it also conveys a very slight edging up in our concern—not a promise of a move the next time or the time after that or even the time after that—about how long interest rates have been as low as they are. So, on the margin, I would come down with President Poole on this one.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Mr. Chairman, I think it's a close call on whether to balance our inflation concerns. But after hearing your comments, with which I tend to agree completely, I

have a slight preference for staying where we are. I think we're in a situation today where the fewer changes in the operative paragraphs, the better.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I certainly support your proposal. I also think that it's a very close call with regard to the balance on inflation. I must admit that recent developments in energy prices and the value of the dollar have led me to conclude that it probably would be better to talk in terms of balanced inflation risks. But for now, I could support your recommendation. I think a change in our statement about the inflation risks is imminent; it's just a matter of exactly when it will be made.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. I, too, would have at least a mild preference for going to balance on the inflation risks. The reason is that, as I listened to the discussion today, it struck me that we heard more anecdotes that seemed consistent with the possibility of building inflationary pressures. So on that basis, as well as other factors, balance seems genuinely appropriate to me. That's where I would come out on the issue.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I could support your recommendation, but I share the view of President Stern and others in that the discussion around the table today sounded, at least to my ear, as if we do see the inflation risks as balanced. In fact, I think we may have stayed with the phrase "unwelcome decline in inflation" too long. Those words in the statement don't seem to be reflective of the discussion we had this morning. So I would have a preference for a balanced risks statement on inflation. Thank you.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. It will come as a surprise to no one that I have at least a mild preference for staying with the inflation risk toward the downside. In my mind, we haven't yet actually seen evidence—we have a lot of anecdotes but no real evidence—that inflation has even stabilized. It is true that core PCE has moved up, though from extremely low levels. But the core CPI continues to decelerate even on a three-month basis. So I'd prefer to be more certain that actual inflation has stopped falling before I can be convinced that the outlook calls for moving to balance on the inflation risks.

My second point is that I think we all expect total inflation to decline relative to last year. At least the FOMC members projected inflation of 1 to 1¼ percent this year, which is about ½ point less than it was in 2003. Now, a lot of that reflects a projected decline in energy prices, and perhaps it's not unwelcome, but the total is expected to fall.

And finally, from my perspective, in a risk-management sense, any decline in inflation from current levels—if it's more than a tenth or so—is more unwelcome than any increase. I think inflation is at such a low level that a decline has more welfare costs potentially over time than a rise. I don't expect much to happen, but in my cost-benefit analysis, the downside risks get a little more weight than the upside risks.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I have just a couple of points. First, I can support your recommendation, although I had a marginal preference for the wording “about equals.” I think “about equals” is shaded somewhat to the left of “appears almost equal.” That is to say, we have lots of words in the English language, and “about equals” is an epsilon to the right of “almost equals.” My guess is that we could come up with another word if we wanted to.

We could do this ad infinitum on a scale between “really equal” and “sort of equal.” [Laughter]
So my preference on the wording is not a strong one.

Let me take this opportunity, however, to make a comment about the Bluebook. One of the changes this time in the structure of the Bluebook was the elimination of the three options on changes in the funds rate. I think that made absolute sense, given where we are, but I also believe it could cause us a problem down the road. Other things being equal, I would prefer to have the three options presented, and we can dismiss them if we don’t find them relevant. I say that because I can see a world sometime in the future, perhaps with a different Chairman, where there’s a minority view for either increasing or decreasing rates and the opportunity to support such a move is made difficult if it’s not in the Bluebook. This is not to take away from the obvious decision we’re making this time. But as a general matter, I think that it makes some sense to leave that structure in the Bluebook and spend the extra page on it.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Mr. Chairman, I also can support your recommendation on the language, given your comment that, if we make a change, the markets are going to view that as the first step in a sequence and will expect changes at our subsequent meetings. But I do have to admit that I also have a mild preference for going to a balance of risks on inflation. Again, though, I can support your recommendation on the language.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, I’d prefer that we move to a balanced statement on the inflation risks because I think the risks in fact are relatively balanced now. But I would not choose to disagree with the stronger preferences that might be held by others around this table

who believe that we really should not be making a change at this time. That's the more important decision at this point, I think.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. While I am sympathetic to the concerns that others have expressed, my view is that we shouldn't make any changes, and I'd keep this slight shading in the balance of risks language as it is. I have that view for a couple of reasons. One is that the market seems to be expecting very little change and I see no reason to surprise the market by doing something else at this stage. Last time we made what to everyone in this room was a relatively small change—moving to the “patience” language—to give us some flexibility. The market reacted quite strongly. I'm not quite sure why we have to do anything like that this time around. For reasons that you pointed out, Mr. Chairman, we're not exactly starting on a new path just yet.

Second, I would find it hard to explain, in the context of data that have been weaker than expected, why the Committee would alter its view of the inflation picture in the opposite direction. That seems inconsistent with some of the other language changes we want to make.

Third, a point I made earlier, I think one's assessment depends to some degree on one's view of where we're starting in terms of the inflation dynamics. As I said, I'm sympathetic to the concerns expressed about rising inflation; we've heard a lot of stories and anecdotes about markets where prices seem to be picking up. But I'm not sure we need to start signaling a greater worry about inflation at a point when our own forecast is for output growth to slow and for the output gap to widen. Again, that seems internally inconsistent. Therefore, I would leave the wording in the statement as it is, at least at this stage, and wait to see if the incoming data tell us how the forecast might change. If we wait until May to make this language change, I don't

believe people will think that we are behind the curve. So, for those three reasons, I would support your recommendation.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. First, Mr. Chairman, let me associate myself with Tony's comments about the Bluebook. I also felt that it was very well thought out this time, but I would be comforted, Vincent, by your putting in all three options, which would indicate that we're expected to have action alternatives most of the time going forward.

On policy, Mr. Chairman, I may be an outlier even in the Kohn camp. In fact, after I finish my comments here, I might be kicked out of the Kohn camp! I guess I have an extreme view, but let me just express it because I think it needs to be said. As I look at the economic situation, it seems to me that the evidence we have on the labor market to date suggests that the slack in that market is not diminishing but increasing. To me, that is fundamental. I've been thinking about what is going to happen to the inflation rate and where the risks lie on inflation going forward. In my view Don made a very good point that there is limited evidence, at best, that disinflation actually has ceased and some evidence that it may be continuing. I was also impressed by Roger's comment in the economic discussion that, with the kinds of imbalances we seem to have, there is a likelihood of increases in some relative prices. I don't discount those price increases entirely, but in this environment the risk that they will generate a quick acceleration of inflation still seems to me to be less than it would be otherwise.

So, I don't think we're giving enough weight to the disinflation risk. After long reflection, I have concluded that we ought to give it greater weight, so I'm basically in an alternative A mode. I realize I'm defining the extreme of the range of views here, but I wouldn't be satisfied even with the language in alternative A as far as the assessment of risks is concerned.

The statement there is that the probability, though minor, of an unwelcome fall in inflation has diminished in recent months. I don't know whether I agree with that. I'm not at all sure that's the case.

Therefore, my own preference—and, again, I realize this is an extreme view—is, first of all, to get the possibility of an easing in policy in the statement, or at least to recognize that possibility. That has been off the table now for a long time, and I think it's time to consider putting it back on. So the way I would write the two sentences, if it were my call, would be something like this: “The probability of an unwelcome further fall in inflation has risen modestly in recent weeks and once again appears to be somewhat greater than the risk of a rise in inflation. Consequently, while policy eventually will need to become less accommodative as the economy improves, somewhat greater accommodation may be appropriate in the interim.”

MR. FERGUSON. Thereby making the Chairman's recommendation seem terribly moderate! [Laughter]

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I appreciate the anecdotes regarding price pressures, but I'm somewhat wary of them. I think many of them reflect the salience of the commodity and energy price changes we've seen. But first, we know that those are a small part of total costs. Second, there may be some confusion between high costs and rising costs, and of course, only rising costs contribute to inflation.

Also, I want to associate myself with Governor Ferguson's point that the news since our last meeting has been primarily of a weakening in the expansion, particularly in terms of the employment statistics, and of a strengthening in the dollar. The latter has not been talked about a great deal, but the downward trend in the dollar has been arrested. So, Mr. Chairman, I would

like to support the statement you have proposed, with the bias downward, understanding that we may well want to come to a balanced assessment on inflation sometime soon.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I agree with your recommendation for no change in policy. I would prefer balanced risks on inflation. I think most of the weakness we've seen recently has been on the real side rather than the inflation side. It's just too much of a Phillips curve type of analysis for me to view the two as a tradeoff in that way. I would even suggest changing the word "patience" this time. I agree with Tony that there are a lot of words we can use, and I fear that if we start using that one time after time, we'll get in the same bind we did with the "considerable period" phrase. So, I would be happier if you had found a word that was equally as strong as "patience"; I think it would be helpful just to change that word so we don't get locked in. Back when I played tennis, if you were about to receive a serve, you didn't stand flatfooted. You would keep moving your feet so you'd be able to go either way. And I think the word "patience" leaves us flatfooted.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Mr. Chairman, I'm comfortable with your recommendation both on policy and on the statement. I think it's true that the anecdotal information on prices is worse since our last meeting. But the numbers haven't moved. And our statement already reads that the risks on inflation are quite close to balance. "Almost equal" is quite close. [Laughter] On that basis, I'm comfortable with the suggestions you proposed.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Mr. Chairman, I support your recommendation, and I would prefer to keep the slight bias emphasizing that there is a possibility of disinflation. One of the things that makes

me uncomfortable about making a change—going back to my comment that I like the fan charts—is that inflation is “fanning” around 1 percent, and I personally think 1 percent is a low number. Also, there are economic consequences of what is going on. How companies manage their earnings statements and how financial institutions operate at extremely low interest rates have implications for the economy. That, plus the fact that we haven’t seen in the data actual evidence of a stabilization in inflation, leads me to prefer to retain the bias toward weakness.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Mr. Chairman, if it is a close call as to whether or not we would bring the inflation risks into balance—and I think it is a close call—then I have a strong preference for changing the statement as little as possible. It seems to me that, in the past when we have made significant changes in the statement, the market has overread their significance and has been confused about what we were trying to communicate. The changes that have been proposed for the statement today in my view reflect the minimal change in the outlook that has taken place in the intermeeting seven-week period. And I think we ought to go with a statement that suggests that the outlook has changed only minimally. So I support your recommendation.

CHAIRMAN GREENSPAN. This is a very close decision actually—not so much in the numbers but in the fact that all of us, as best I can judge, could go either way if we had to. It’s just too close to call. I think Governor Olson probably correctly summarized where we stand. And there’s a lot to be said for President Poole’s argument that it’s really not going to matter all that much because what will matter is what the data show. So in a way I think it’s probably best for us to do nothing and let the market essentially move the expectations on the federal funds rate. Therefore, let’s have a statement read that essentially involves no change.

MR. BERNARD. I'll begin with the directive wording, which is at the bottom of page 11 in the Bluebook: "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 1 percent." Moving on to the risk assessment, which is part of the formal vote, that would be the language under "B" on page 12: "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. With inflation quite low and resource use slack, the Committee believes that it can be patient in removing its policy accommodation."

CHAIRMAN GREENSPAN. Since we will be approving the statement as well, could you distribute the draft statement, please, just to be sure? It's in effect what Vincent had indicated, so I trust there are no surprises. [Pause] If there are no comments, please call the roll.

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Geithner	Yes
Governor Bernanke	Yes
Governor Bies	Yes
Governor Ferguson	Yes
Governor Gramlich	Yes
President Hoenig	Yes
Governor Kohn	Yes
President Minehan	Yes
Governor Olson	Yes
President Pianalto	Yes
President Poole	Yes

CHAIRMAN GREENSPAN. We now have to go back to the agenda item we deferred at the beginning, which was a discussion of the minutes of the previous meeting. There were important issues raised. Vincent, do you want to comment?

MR. REINHART. In retaliation for the hard questions President Parry has asked the staff over the years, I will be delaying the start of his lunch! [Laughter] In doing so, I'll be referring to the memo I circulated last night. Commenting on the January draft minutes, one policymaker suggested trimming the first four paragraphs covering the Committee's discussion of its communications policy. Four others recommended that only paragraph 3, which reviewed issues related to expediting the minutes, be shortened. I've included the full set of comments beginning on the second page of the memo, showing potential additions in bold and potential deletions as bracketed material in italics.

Not to sound defensive, I started drafting the minutes on the assumption that you intended to be transparent about your discussion of transparency. Providing a full and accurate record of the meeting seemed to require describing the different aspects of your discussion about the risk assessments, the minutes, and economic forecasts. To my mind, the contribution of paragraph 3 was to lay out the pros and cons of expediting the release of the minutes—in particular, the arguments against elevating the role of the minutes, including feedback on the Committee's deliberations—which have not previously been well articulated in the public domain.

That said, two changes do seem appropriate. For one, the last sentence of the first paragraph—that's lines 7 through 9—concerns the working group, which was directed solely to arrive at formulaic language for the risk assessments. That sentence would seem to be positioned better in the second paragraph, which is centered on the risk assessments, so that people do not read too much into the working group's formation and dissolution. For another, the last sentence of the third paragraph—lines 38 through 40—suggests that it was premature to expedite the minutes, seeming to imply that at some point the minutes would be expedited. On further reflection, the one-sided nature of that statement appears presumptuous about your future decisions, suggesting that a more neutral description would indicate that you have not reached a decision. I believe that covers four out of five of the objections on that part of the minutes.

The rest of the possible changes have policy import, which is why I'm coming back to the Committee. In particular, do you want to shorten the description of your discussions about the formulas for the risk assessment, the minutes, and the economic projections? You might favor such a cut on the grounds that it's not worthwhile to talk about procedural issues in public. But the main points have mostly already made it into the press, and this offers you the opportunity to frame the main issues in a balanced way. I would also add that reducing the discussion to its bare bones would offer more than a few commentators the opportunity for irony about the Committee's

views on transparency, something I certainly wouldn't pass up! If you do, I take that as direction on preparing the next set of minutes. That is, I should downplay today's discussion of your prior discussion of transparency. [Laughter]

Let me close with this observation. Given your decision to experiment with accelerating the production of the minutes, you will not have the luxury of an extended discussion of the minutes for this meeting and those for the remainder of the year.

CHAIRMAN GREENSPAN. Let me first follow up on your transparency assessment. I think Cathy Minehan has raised an interesting point. I would say this: We run the risk, by laying out the pros and cons of a particular argument, of inducing people to join in on the debate, and in this regard it is possible to lose control of a process that only we fully understand. We have a ratchet in here where, if we were to move forward, we can't go back. So the concept of transparency is a very important concept but one that should be approached with a recognition that we cannot move back and forth on it. I'm a little concerned here that by raising certain issues we may not be able to backtrack. I hadn't thought about it when I originally read the draft minutes, but in seeing the concerns that other people had, I think there's something here that we have to consider. I do not recall so many people raising questions about the minutes before because I think most of us read the minutes passively. That suggests to me that, if there were really a strong focus on them, we'd find a greater degree of disagreement among us about their content. Now, I don't know whether what I just said is true. I suspect it is just on the basis of my experience. What was it—four or five people who commented?

MR. REINHART. Five.

CHAIRMAN GREENSPAN. I was not one of them, so I would make the count six. It would be useful to discuss this even at the expense of delaying our tribute to our guest of honor—is that what we're calling you today?

MR. PARRY. The old guy!

CHAIRMAN GREENSPAN. Does anybody have any thoughts on this? I must admit that I didn't think about some of these issues until I saw the comments others made, but I'm a little concerned about other people getting into the debate when they know far less than we do. I don't know what Michelle has to say on this but my impression is that, if we go in that direction, we may find ourselves coming to a conclusion that is not based on our best judgment. She's nodding in agreement.

MR. BERNANKE. Mr. Chairman?

CHAIRMAN GREENSPAN. Yes.

MR. BERNANKE. I do have a concern about paragraph 3. It's not just a question of hiding or reducing the information available; I think that paragraph actually misrepresents the substance of the conversation in that it seems to suggest that the reason for not releasing the minutes earlier is purely logistical, which is certainly not correct. There were arguments of substance on both sides, and to suggest that the arguments against are purely logistical risks giving the impression that our convenience is more important than revealing information to the market.

CHAIRMAN GREENSPAN. May I make a suggestion? This could get to be a very long discussion, and we don't need that. Do you have time to make changes?

MR. REINHART. I have all the time you want. The Committee, however, will have to vote on the minutes.

CHAIRMAN GREENSPAN. Oh, I understand that. Let me make the following suggestion: Those who haven't commented should provide comments to Vincent. The reason I say that is that we may very well find that those who didn't comment actually strongly support the minutes as written, and it's important to know that. We could then do—we've done this on

numerous occasions on other matters—a notation vote. If there is a problem in trying to find out who is where or what the issues are, Vincent can get on the phone and talk to each of you and make a judgment. In my view, that’s the best way to resolve this, and I think it’s worthy of being resolved. It’s an important issue.

MR. REINHART. For the Reserve Bank members, this will be the first experiment with notation voting electronically. You’ll have to do that kind of vote in two weeks anyway for the minutes of this meeting, which we will be circulating at that time.

CHAIRMAN GREENSPAN. Okay. Any comments relevant to this?

MR. GRAMLICH. I have a question. We log in our preferences to Vincent. Then what does he write down as the final word, the majority vote?

CHAIRMAN GREENSPAN. He will try to infer from your comments, and I think we all trust him in this respect, a way to rewrite the minutes that he thinks will gain a majority vote. Then we will find out whether he is accurate. [Laughter]

MR. GUYNN. A quick question prompted by Vincent’s last comment that we won’t have the luxury to have this type of discussion in the future. A couple of meetings back, when we were talking about expediting the minutes, you suggested that one way to deal with resolving comments to the Secretary was to have a subset of the Committee to help with the editing. Are we going to talk some more about that? As we go through this experiment, are we going to use that kind of process, or are we simply going to leave it entirely to Vincent?

CHAIRMAN GREENSPAN. No, at this time the only thing Vincent will be involved with is finalizing the minutes for the previous meeting. That has nothing to do with how we proceed going forward on this.

MR. REINHART. President Guynn, in the experiment with expediting the minutes, we're going to post drafts of the minutes every evening so you'll be able to see how the comments evolve. Then we'll deal bilaterally with Committee members if people have specific comments. When we talked about the possibility of forming a subgroup of the Committee, we ran into the legal issue that the FOMC cannot delegate matters of monetary policy. If the minutes are viewed as a part of monetary policy, you can't—

MR. GUYNN. Will we see each other's comments? This is the first time I think we've ever had the luxury of seeing who made what kinds of comments. Will we see each other's comments, and by attribution, in the future?

CHAIRMAN GREENSPAN. Now, wait a second. May I ask a question? If we have a subcommittee that is putting out a draft of the minutes to be voted on, none of us is in any way forgoing our legal commitments. It's the delegation of the vote that's the legal issue. A subcommittee to facilitate that process is, in my judgment—I don't know what the General Counsel has to say on it—

MR. GUYNN. I thought that's what you suggested in earlier conversations. The idea was to have some group look at the comments on the staff's draft and make some shared judgment about whether the suggested changes should be made.

CHAIRMAN GREENSPAN. It doesn't matter how it's done because the ultimate decision is made finally by a notation vote. On this one, I think it's probably not necessary to appoint such a group, but that doesn't change the previous discussion.

MR. GUYNN. Thank you.

CHAIRMAN GREENSPAN. Any further comments? If not, the next meeting is May 4.

END OF MEETING