

**Meeting of the Federal Open Market Committee on
May 4, 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., starting at 9:00 a.m. on Tuesday, May 4, 2004. 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. Broaddus and Guynn, Presidents of the Federal Reserve Banks of Richmond and Atlanta, respectively

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

Messrs. Connors, Fuhrer, Hakkio, Howard, Madigan, Rasche, Struckmeyer, Tracy, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

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

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

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

Messrs. English and Sheets, Assistant Directors, Divisions of Monetary Affairs and International Finance, respectively, Board of Governors

Mr. Simpson, Senior Adviser, Division of Research and Statistics, Board of Governors

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

Mr. Bassett, 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

Messrs. Connolly and Moore, First Vice Presidents, Federal Reserve Banks of Boston and San Francisco, respectively

Messrs. Eisenbeis, Evans, Goodfriend, Judd, Ms. Mester, and Mr. Rolnick, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Chicago, Richmond, San Francisco, Philadelphia, and Minneapolis, respectively

Mr. Altig, Ms. Hargraves, and Mr. Koenig, Vice Presidents, Federal Reserve Banks of Cleveland, New York, and Dallas, respectively

**Transcript of the Federal Open Market Committee Meeting on
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CHAIRMAN GREENSPAN. Good morning, everybody. This is the last FOMC meeting that Al Broaddus will be attending. I believe he attended his first meeting in 1973.

MR. BROADDUS. In July 1973, I'm told, Mr. Chairman. But I don't remember.

[Laughter]

CHAIRMAN GREENSPAN. You don't remember? Well, I guess the FOMC didn't make a big impression on you at that time!

MR. BROADDUS. It made a big impression; I was just too nervous to remember.

CHAIRMAN GREENSPAN. We will miss you, but of course we will have a luncheon for you after our next meeting. Your official date of retirement is August 1?

MR. BROADDUS. Right, August 1.

CHAIRMAN GREENSPAN. Well, whatever you have to say for the future to the FOMC, we will give you another 32.4 seconds to say it at this meeting.

MR. BROADDUS. I've got more time for a last shot then! [Laughter]

CHAIRMAN GREENSPAN. Would somebody like to move to approve the minutes of March 16?

MS. MINEHAN. So moved.

CHAIRMAN GREENSPAN. Without objection, they are approved. Mr. Reinhart, do you want to make some comments relevant to this set of minutes?

MR. REINHART. I'd just like to report on the first dry run of our experiment in expediting the production of the FOMC minutes. We were able to produce a proposed final version of the minutes and get all twelve voting members of the Committee to indicate by our deadline that they were inclined to vote to adopt the minutes at the next meeting. There was not a lot of slack in our

schedule, though, and we received the last of the members' responses as to their inclinations on the vote pretty close to the wire.

Two factors contributed to the success of the experiment. One was contracting for an outside professional to help provide a typed transcript of the meeting on an expedited basis. That sped up the process of preparing the initial draft of the minutes considerably. For another, there weren't all that many comments on that first draft, so we were able to incorporate them and turn out a revised draft in fairly good order. One problem, which we had anticipated, was getting information to and from Committee members who were out of their offices. Needless to say, we learned a few things about the process, and we will make some minor adjustments, but they will be in the background from your perspective.

Once the minutes were ready, we asked Dave Skidmore of the Public Affairs staff to prepare some hypothetical headlines and the first few paragraphs of a news wire story on the minutes. Then Board and New York staff members independently looked at that information as well as the minutes and tried to estimate the likely market effects of an early release of those minutes. The results, which should be taken with a grain of salt, suggested that there could have been a fairly substantial market reaction, and that was because of the timing. These minutes would have been released on the afternoon of the outsized employment report, and perhaps would have reinforced the market reaction to the numbers released earlier that day.

I'm sure you noted that in this exercise we asked you to indicate whether you were inclined to vote to approve these minutes but not actually to vote on them. The reason was that if we had asked you to vote, we would have to indicate in the next set of minutes that the Committee had taken a notation vote on that decision. That's why two and a half weeks after the meeting we'll

continue to ask you to give us your inclination as to whether you would approve the draft minutes but actually have you vote on them at the next meeting. Thank you.

CHAIRMAN GREENSPAN. Any questions for Vincent?

MR. POOLE. Mr. Chairman, may I ask a question? It seems to me that we ought to consult with counsel as to whether the so-called inclination to vote could be regarded as being the equivalent of a vote and could create a problem in the future. I think that's something on which we should get some expert legal advice.

MR. REINHART. We did.

MR. POOLE. Okay. So it's perfectly okay to put it that way?

MR. REINHART. Virgil thought that the wording of the request we sent around was perfectly appropriate.

CHAIRMAN GREENSPAN. President Geithner is proposing the election of Joseph Tracy as an associate economist of the FOMC. If there are no objections, I will assume that his request is approved.

VICE CHAIRMAN GEITHNER. Thank you.

CHAIRMAN GREENSPAN. Dino Kos, would you start us off?

MR. KOS.¹ Yes. Thank you, Mr. Chairman. I'll be referring to the charts that Carol Low just circulated. In the intermeeting period, stronger economic data and rapidly shifting expectations brought forward the timing of the anticipated tightening cycle and affected a range of asset prices. The top panel of page 1 graphs the three-month deposit rate in black and the three-month deposit rate three, six, and nine months forward in the dashed red lines. The first move up in forward rates followed the strong employment report on April 2. The second move was coincident with the higher-than-expected CPI data on April 14, coupled with other indicators suggesting to market participants that inflationary pressures were building. Also contributing to the shift were comments by the Chairman and other members of the Committee—and even a former member of the Committee—that were broadly interpreted as laying the groundwork for a tightening later this summer. During April, the three-month forward rate moved about 35 basis points higher, whereas the nine-month forward

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

rate moved up about 100 basis points. Not surprisingly, the Treasury curve sold off, and yields moved sharply higher as well. The two-year yield, which tends to be the most sensitive to policy changes, rose about 82 basis points between late March and this morning. As shown in the middle panel, the spread between the two-year note and the target fed funds rate widened to 130 basis points, its widest level since the spring of 2002.

Just as a footnote, I would point out that there has been a lot of talk about what would happen to bond yields if the fed funds target were raised. What perhaps has been lost in the discussion is just how much yields already have risen in only the last five weeks with the mere discussion of a possible tightening. The bottom left panel graphs the two-year to ten-year Treasury spread. If the market were truly worried about inflationary pressures, one would expect the curve to steepen as the long end rises faster than the short end. But the spread has not widened and in fact has narrowed somewhat—especially after the Chairman’s testimony. Similarly, breakeven rates from TIPS have not widened and have also narrowed slightly in the past two weeks. The market is certainly discounting higher interest rates; it is not obvious, however, that higher inflation is also being priced in.

The churning of positions and hedging adjustments as new data came in did cause a bit of congestion in segments of the market. Turning to page 2, the top panel graphs the overnight repo rate for the on-the-run two-year Treasury note since February. The Treasury Department auctions two-year notes monthly so this graph picks up each new issue on settlement. It’s typical for the on-the-run two-year note to trade slightly “special”—translating into an overnight financing rate a bit below the general collateral rate, which itself is normally a few basis points below the funds rate. After the last employment report, the market rushed to sell the curve, especially at the short end. In that situation, those with short positions then need to borrow the security to complete settlement. Given the size of the short base, the demand to borrow that piece of paper quickly pushed the financing rate toward zero. The congestion also caused a rise in fails for this issue, and to a lesser extent some other on-the-run issues, though aggregate fails are still significantly below where they were last summer, when the May ten-year note was in short supply. The increase in the repo rate at the very end of April is due to the issuance of a new two-year note that is trading more comfortably nearer to the general collateral rate.

The mortgage market provided another element to recent price changes. The middle left panel graphs the ten-year yield in red and an estimate of the duration of outstanding thirty-year fixed-rate mortgage-backed securities (MBS) in blue. With the ten-year yield going from 3.75 to 4.5 percent, the MBS duration index nearly doubled from two years to more than three and a half years. There was certainly some MBS convexity hedging, but it probably played a lesser role than it did last summer when duration widened very rapidly from about one-half year to three and a half years. The thirty-year MBS spread, shown on the middle right panel, has widened in recent weeks, but it is still a long way from the highs of last summer.

This may suggest that MBS holders such as banks and hedge funds are still holding on to their levered MBS positions.

Corporate spreads, on the other hand, actually have narrowed since the March FOMC meeting. The investment-grade spread on the bottom left narrowed to about 90 basis points. The better economy seems to be part of the explanation for the perception of improved creditworthiness. The more pronounced move was in the high-yield spread, shown in the bottom right panel, which narrowed about 70 basis points. The reasons are complex and not necessarily consistent. The better economic numbers, perceptions of improved pricing power, and improved balance sheets are part of the explanation but are not fully convincing—especially given the weakness of equity markets and the widening of other spread products. The narrowing of the high-yield index is even more paradoxical, given the wider spreads in emerging-market bonds. The high-yield and EMBI spreads had been tracking each other for about four years now until April's sharp divergence. I'll get back to the emerging-market story a bit later.

Turning to page 3, the dollar is broadly higher since mid-February, driven by many of the same factors that sent interest rates higher. At least in this very recent period, the improved economic prospects in the United States and higher yields have outweighed worries about the current account imbalance. And while U.S. data have improved, European growth has lagged, and that divergence has shown up in interest rate differentials. The middle panels show the Eurodollar and Euribor futures curves out to June 2006 as of April 1 on the left and April 30 on the right. On April 1 the Euribor curve was above the Eurodollar curve except at the longer dates; by April 30 the Eurodollar curve had moved higher and had steepened and was trading above the Euribor curve except at the shorter dates. The bottom panels graph the differential between a sampling of two-year major sovereign yields and the two-year Treasury note. All have narrowed in the past month—in some cases, dramatically.

The dollar's recent moves against the yen are graphed at the top of page 4. Since the last FOMC meeting the dollar has made a round trip, going from 110 yen to 104 yen by the March 31 fiscal year-end date and then back to 110. One factor that did not affect the exchange rate during the intermeeting period was foreign exchange intervention. The Japanese Ministry of Finance last intervened in the market on the date of your previous meeting. The changed tactics had traders scratching their heads initially, but they have since taken the view that Japan's improved economy has made policymakers more comfortable with the exchange rate.

The improved Japanese economy has also shown through to fixed-income and equity markets. The top right panel graphs the continuing, if irregular, rise in ten-year JGB yields. The middle left panel graphs for the past twelve months the rise in the overall Topix index and some of the domestic equities not linked to the export sector, such as real estate, that are doing better. Even more impressive has been the recovery of the banking sector. The middle right panel graphs the stock prices of the big four banks, each of which has risen sharply. Mizuho and UFJ, which had fallen

in 2002 and early 2003, have risen about sevenfold in the last twelve months. The latter appears to have been unaffected by the special inspection that was announced on the day of your last meeting.

Finally, equity and debt values in emerging markets have fallen in recent days. In part that may reflect the implications of an incipient tightening cycle here. But the other factor that may be at play involves an actual or perceived linkage to China. Some emerging markets were affected first positively and later negatively by this linkage. A few weeks ago the strength of many commodity prices was attributed to demand from China. With strong signals in the past few days that Chinese officials are intent on slowing down credit and investment, these popular trades in some case had sharp reversals. Non-oil commodity prices are one example; they have fallen in recent days. As I mentioned earlier, the widening of the EMBI+ spread has been sharp, although as I've said in previous meetings many emerging-market analysts were wary of the narrow EMBI spreads even several months ago. The bottom panel graphs a sample of major emerging-market equity indexes, all of which have turned lower in the past week or two with the changed sentiment.

Mr. Chairman, we conducted no foreign operations in the intermeeting period. I will need a vote to approve our domestic operations.

CHAIRMAN GREENSPAN. The volume of financing in the mortgage markets has come down very sharply and has stayed down for quite a long period now. I would assume, and indeed you implied it, that hedges have already been taken on a goodly part of the positions held. So the impact of a change in yields clearly has been far less than it was last August when the maturity, as you said, went from one-half year to three and one-half years, or whatever it was. What is left out there to be hedged? And what are the vulnerabilities in the event, for example, that we get another 50 basis point rise in the ten-year note?

MR. KOS. Well, I think it's hard to identify what the vulnerabilities are. On the downside, it's the refinancing risk that is being hedged; on the upside, it's the extension risk. As the duration is extending because higher interest rates are pushing off the day of possible refinancing, there's a certain amount of selling that portfolios will naturally do.

CHAIRMAN GREENSPAN. But that doesn't move as rapidly as when we get a big interest rate move and there's a huge option takedown of mortgage positions.

MR. KOS. Exactly. We had a flavor of that in '94 when an unexpected change in interest rates caused a huge amount of extension hedging. So, that's always the risk. Now, what will trigger it is difficult to pinpoint ex ante. But certainly there would be some amount that would need to be hedged as rates increase.

CHAIRMAN GREENSPAN. Presumably there will be a lot of delta hedges moving in with that type of operation.

MR. KOS. Yes. I'm looking at Governor Bies, who may have some direct experience in this area. But again, my guess is that there would be a certain amount of hedging that would still need to be done.

MR. REINHART. Mr. Chairman, you can see in Dino's chart on page 2 that, when rates are unchanged and are expected to be unchanged, the duration of a thirty-year conventional mortgage levels out at around four and one-half years. So we have at most about another half year to go if rates were to rise.

CHAIRMAN GREENSPAN. Well, that's what history tells us—that at the lowest levels of refinancing, duration has been about four and one-half years. But can that change in any way? There's nothing mathematically necessary about it, is there?

MR. REINHART. No, that's more a reflection of the mobility of our population. When rates are unchanged for long enough, the economic incentive to refinance goes away, but people still do prepay their mortgages because they move or they trade up. So, I think the four and one-half years is not immutable, but it's a reflection of deeper demographics.

CHAIRMAN GREENSPAN. A reflection of the house turnover rate?

MR. REINHART. Yes.

CHAIRMAN GREENSPAN. I'm a little surprised that in your charts New Zealand has all of a sudden become a major international power. Considering the fact that the yield spreads between New Zealand and Australia are locked, you must be trying to convey some subtle message here.

MR. KOS. Well, the only message is that, with the euro having brought together a lot of currencies into one, the number of currencies out there with floating rates has been reduced. We basically have the euro and a number of fixed-rate currencies, which are not worth showing, so the number of alternatives in the population is smaller.

CHAIRMAN GREENSPAN. You ought to try the zloty or something.

MR. KOS. It may be too calm.

CHAIRMAN GREENSPAN. There are indications that inventories are building up on the docks in China and that warehouses are beginning to fill, which I presume is related to the recent weakness in commodity prices, especially for steel. Prices for cold rolled sheet, which is the premier steel—especially in China—for car making, have come down quite significantly. And that's a classic inventory play. Are you picking up anything that suggests that there's more to this than just temporary gluts? The data are, of course, nonexistent, but what does one hear about the inventory situation in China?

MR. KOS. We tend to talk to traders rather than to shippers and factory managers, so I would not hold myself out as the expert in this area. Certainly among trading and investment types, I would say that there's a lot of confusion. The sentiment about China has been pretty volatile in terms of whether the economy is overheating or not, what the inventory situation is, and what the policy stance is. Some of the volatility that we're seeing in markets may be reflective of the fact

that people change their minds about those issues from day to day. Now, in terms of inventories, I don't know if Karen has a better handle—

MS. JOHNSON. We don't have any actual real-time data on inventories at that level.

CHAIRMAN GREENSPAN. There is an old classic adage that suggests that, when everybody says "nobody has any inventories," it is telling you that the rate of accumulation is horrendous and that the level is already very high by historical standards but you haven't sated the demand for the still higher level that occurs just before it turns around. And the first sign is a break in price. What has happened to the copper price in the last three or four days, by the way?

MS. JOHNSON. Copper prices are down.

MR. KOS. They're down a bit.

CHAIRMAN GREENSPAN. In the last three or four days?

MS. JOHNSON. Well, they're off their peak. When we put the Greenbook to bed, they had come down from their peak level, and they have come down another 10 cents, I would say, since then. That was largely on news of the macro monetary policy coming out of China rather than on news about real economic activity or inventories or anything else. So, it was in some sense an inference—in effect, that if China's boom cooled, copper would become less viable—on the part of those who trade in futures markets rather than a direct read on what was going on. Now, over the same interval—since we put the Greenbook to bed through Friday, which is the last date for which I have quotes—lumber prices, for example, both spot and in the futures market, went up not down. That's partly because what is driving the lumber speculators or purchasers or hedgers or whoever is U.S. homebuilding as opposed to Chinese construction. And these market players thought they were getting different signals, so the futures curve shifted the other way. Soybean prices, which are being driven by expectations of the beginning of harvesting, also have gone up a bit since the

Greenbook rather than down. But cotton is down a lot off its peak; copper is down noticeably from its peak; and wheat is down from its peak. So a more informed and discriminating shifting seems to be going on, but it is tied to what people perceive to be news about the factors that are driving demand in these markets.

CHAIRMAN GREENSPAN. Industrial activity or more broadly a goodly part of the GDP is better measured by metals prices than by lumber, whose demand is fairly concentrated, or certainly by agricultural products.

MS. JOHNSON. Right. And for metals, I think the story isn't necessarily the same for all of them. But copper in particular was thought to be driven by developments in China.

CHAIRMAN GREENSPAN. Aluminum is peaking, as is zinc and I think tin. Somebody still buys tin, but that's down, too, I believe.

MS. JOHNSON. I have a less detailed picture in front of me regarding aluminum. It appears to have stopped rising as opposed to falling.

CHAIRMAN GREENSPAN. It has flattened out.

MS. JOHNSON. Yes, but copper has already started moving down.

CHAIRMAN GREENSPAN. Okay. Any other questions for Dino? If not, would someone like to move the ratification of the domestic market transactions?

MS. MINEHAN. So moved.

CHAIRMAN GREENSPAN. Without objection they are approved. Dino, would you like to talk about the swap lines?

MR. KOS. It's May, which means it is time to consider the renewal of the swap lines. I did send a brief memo around which covered the renewal of the swaps, and I'm recommending that the Committee renew them. There were also a couple of other items that I mentioned briefly regarding

some things that we're doing with the euro reserves. I'd be happy to answer questions about either item.

CHAIRMAN GREENSPAN. If there are no objections, I will assume that your request is granted. We now move on to the staff report, and I call on Dave Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. After countless meetings and much effort to assemble the Greenbook over the past few weeks, I must admit that it was disappointing to come to work last Thursday to find that our forecast had a half-life shorter than a jar of mayonnaise in the Mojave Desert. [Laughter] As you know, the BEA reported that their advance estimate of the growth in real GDP in the first quarter was 4.2 percent at an annual rate—a full percentage point less than the forecast that we had published only the day before. We spent the last few days poring over the details of that release in order to assess its implications for understanding where the economy has been and where it might be going. That task was made somewhat simpler by the fact that so much of our error was concentrated in inventory investment. Indeed, our projected increase in final sales for the first quarter of 4¼ percent at an annual rate was only slightly above the BEA's estimate of a 4 percent increase, with small differences spread out over several categories of spending. And after incorporating yesterday's data on construction outlays, the BEA would likely raise its estimate of the growth of final sales close to our April forecast.

The inventory discrepancy, however, was more consequential. We had been anticipating nonfarm inventory investment to contribute 1 percentage point to the growth of real GDP in the first quarter, while the BEA is now estimating that contribution to be just ¼ percentage point. About two-thirds of our miss was in accounting for truck inventories, which might seem surprising given that we have reasonably good data on the number of vehicles held in inventory. Unfortunately, the BEA does not use a straightforward translation of those data to estimate inventory investment for trucks. And it appears that our attempts to mimic the more complicated BEA procedures led us far off track last quarter. I hope that you will take it as a sign of mercy and not disrespect if I spare you from the details. But in the final analysis, we saw nothing in last week's data that would lead us to alter our forecast of truck production for the year as a whole. Hence, we believe that, to a first approximation, what was lost in real GDP in the first quarter from truck inventories will be made up later in the year, starting in the current quarter. Owing in part to a smaller estimated drag from the motor vehicle sector, we have boosted our projected increase in real GDP in the second quarter to 5 percent from the 4½ percent figure that we published in the Greenbook. Our miss, however, was not confined to motor vehicle inventories. Other inventory investment also came in below our expectation, and here we do see the data as having some information content. The BEA's translation of the book value figures shows a continued liquidation of real non-auto inventories rather than the stabilization that we had anticipated. In response to this apparent continued reluctance by firms to restock, we are inclined to stretch out the

rebound in inventory investment that we had been projecting to occur over the remainder of this year and into 2005. That adjustment knocks a tenth off GDP growth this year and adds a tenth to growth next year relative to last Thursday's Greenbook.

At this point, you are probably beginning to wonder where the mercy is that I had promised earlier, so I'll leave the trees and return to the forest. And I must say, the forest is looking pretty good. Much as we expected, accommodative monetary policy and a third consecutive year of substantial fiscal stimulus are combining to provide a sizable boost to growth. Importantly, the labor market is beginning to show broader signs of life. Private payrolls rose 160,000 per month, on average, in the first quarter, up from the 60,000 per month pace of the fourth quarter. Hiring intentions as reported by Manpower and in the NFIB survey of small businesses also have been moving up in recent months. Even households' assessments of current labor market conditions have improved some of late. That said, we still believe that it is premature to conclude that the employment situation is firmly on the path of steady improvement. The events of last autumn come to mind. As you may recall, the October employment report showed two consecutive increases in private payrolls close to 120,000 per month, with noticeable upward revisions to preceding months. The long-awaited jobs recovery looked to be under way. But by the December report, those large gains had been revised down substantially, and the initial estimate for December was an increase of just 5,000 jobs. So, the March employment report should be viewed as encouraging but not definitive.

The gains in wage and salary income associated with the recent pickup in hiring have combined with the stimulative effect of last year's tax cuts to provide a substantial lift to household buying power. And households have not been shy about using that buying power. Despite a drop in sales of new motor vehicles, total consumer spending rose 4 percent in the first quarter; and with car sales projected to move up a bit, we expect real PCE to climb at a pace of about 5 percent in the second quarter. Housing activity has remained exceptionally robust, with both sales and construction of new homes at or near record highs. Business spending, too, has continued to increase sharply. Real outlays for equipment and software rose 12 percent in the first quarter, and with order backlogs for capital equipment continuing to rise, the outlook remains quite favorable.

The economy finally appears to be firing on all cylinders. Low real interest rates, tax cuts, and large increases in government spending are fueling aggregate demand, and final sales are advancing briskly. Add to that mix what appear to us to be very lean inventories, and there is considerable tinder for an even hotter economy than we are projecting—a possibility that we explored in an alternative simulation in the Greenbook. Nevertheless, I don't think that you should discount the downside risks surrounding the outlook just yet. As I noted earlier, the improvement in the labor market must still be considered tentative, and the ongoing liquidation of inventories could be a sign that business caution, while fading, has not yet evaporated. Even extracting the signal from the strengthening of final sales over the past year is not

straightforward. Fiscal policy could be proving a more potent source of stimulus to the economy than we have allowed for in our forecast, and thus as this stimulus shifts to restraint next year, the downdraft in demand could be more pronounced than we currently expect. Needless to say, we believe that we have balanced the risks in our forecast for real activity, but the uncertainties remain substantial.

Perhaps the biggest challenge to our forecast over the intermeeting period came not from the real-side data but rather from the inflation figures. With only a few exceptions, the readings that we received on hourly labor compensation and prices were to the high side of our projection. As usual, we can trot out a list of special factors that contributed to some of the fluctuations that have occurred over the past six months. Used cars, apparel, and lodging away from home are among the culprits in the recent pickup in inflation. But the breadth of the surprises that we have experienced thus far this year suggested to us that recent wage and price developments could not prudently be ascribed to special factors alone.

Confronted with last year's sharp decline in price inflation, we had to make an assessment at the turn of the year as to how much of that deceleration reflected a signal about underlying inflation and how much was just noise. We view the recent data as suggesting that we attached too much weight to last year's slowdown and that the underlying inflation rate has been above our earlier estimate. As a consequence, we increased our projection of core consumer prices by between $\frac{1}{4}$ and $\frac{1}{2}$ percentage point, on average, this year and next. I should note that, in response to this upward revision to inflation, we also raised our funds rate path by a similar amount.

Although we raised the level of projected inflation in this forecast, we did not fundamentally change its trajectory. So after a bulge in the first half of this year, core PCE price inflation is projected to move sideways at a $1\frac{1}{4}$ percent annual pace over the remainder of the projection period. That flat path for inflation reflects influences that are individually small and generally offsetting in our forecast. Over the next year and a half, some upward pressure on costs results from a diminishing margin of slack in resource utilization and an end to the acceleration of structural productivity. But the indirect effects of the expected retreat in energy prices and a flattening out of core non-oil import prices after this year's commodity-induced surge are expected to take some pressure off core inflation in 2005.

Obviously, there is plenty of scope to take issue with the assumptions conditioning our inflation projection. Slack could be taken up more rapidly than we expect, especially if labor force participation fails to rebound as anticipated. Energy prices have disappointed both the futures markets and us over the past year by moving up, rather than down. Strong global demand and continuing geopolitical uncertainties could keep prices in these markets higher and for longer than is incorporated in our forecast. And if the dollar were to resume a sharper descent, prices of imported goods and services would rise more quickly than projected, and domestic producers would have still greater latitude to lift their prices.

There are other risks to our inflation outlook as well. For example, despite the upward revision that we have made, our forecast still reads some signal in last year's disinflation. If all of the price deceleration last year was noise, then our projection of core consumer prices remains between $\frac{1}{4}$ and $\frac{1}{2}$ percentage point too low going forward. A more troubling possibility is that we have fundamentally misestimated the amount of resource slack in the economy. The most prominent error made by inflation forecasters in the late 1960s and 1970s was a persistent over-optimism about the NAIRU. That over-optimism had two consequences, both of which were adverse for inflation. First, the economy was allowed to overshoot potential, resulting in a demand-driven increase in price inflation. And second, a failure to recognize and lean against that demand-driven acceleration in prices resulted in higher inflation becoming more firmly embedded in expectations.

There is some evidence to support these concerns. A number of you have reported hearing stories from employers that finding workers with the right skills is difficult; if those types of mismatches are widespread, then the NAIRU may indeed be higher than we currently estimate. The evidence on inflation expectations is mixed. But depending on one's preferred measure, those expectations have been stable to somewhat higher in recent months. We explored the consequences of a higher NAIRU in an alternative simulation in the Greenbook. In that simulation, core PCE inflation increases to around 2 percent in 2005 and would continue to increase beyond the forecast horizon without an adjustment to policy. While a higher NAIRU is a possibility, we don't believe that it fits all of the facts comfortably. Importantly, measures of hourly labor compensation have been running at or slightly below our models, on average, over the past two years—models that incorporate a 5 percent NAIRU. And while there has been some improvement, the labor market still looks more lackluster than hot.

I don't want to leave you with the impression that we see the risks to inflation as skewed to the upside. After a year of very subdued readings on core inflation, the last three months of larger increase may ultimately prove to be the outliers, and our upward revision to the inflation forecast this round may turn out to have been an overreaction. Moreover, models that incorporate a role for the level of the price markup suggest noticeable downside risk to our inflation forecast. The extraordinary gains in productivity over the past few years have allowed firms to rebuild profit margins back to the peak levels observed in 1997. In our forecast, these margins narrow only a bit over the next two years, as unit labor costs accelerate gradually and price inflation remains roughly stable. Models that assign a bigger role to the price markup expect competitive pressures to eventually result in both faster wage growth and lower price inflation, and thus a more rapid return of labor's share of income to its historical norm. A scenario along these lines in the Greenbook pushed core PCE inflation down to $\frac{1}{2}$ percent in 2005.

In sum, I know that as the nation's chief worriers you don't need the staff to explain to you that the backlog of unresolved worries remains high. As always, economic, financial, and geopolitical uncertainties abound. But in surveying the

economic landscape, one cannot help but be struck with how conventional, familiar, and balanced the risks and uncertainties look today in comparison with those that we faced just a year ago. Karen will continue our presentation.

MS. JOHNSON. One element of the external forecast that may be of greater interest than usual is the recent and prospective behavior of import prices, and I thought that I would begin by looking at some of the factors driving changes in those prices. The advance release last week reported that the deflator for total imports of goods and services rose at an annual rate of 10 percent in the first quarter, after increasing only a bit more than 2½ percent over the four quarters of 2003. A large part of this upsurge reflects the upward move in oil prices over the quarter, with the prices recorded for computer and semiconductor imports providing some offset by declining, but less than in the past on the part of computers. In part, the rise in import prices also reflects continued increases in the prices for service imports, which rose quite strongly in 2003 as the dollar depreciated. For the remaining import items, which we term core imports, the annual rate of price increase in the first quarter was 6.6 percent, a bit less than we had estimated in the Greenbook but substantially more than the 1.8 percent recorded last year.

Among the components of core goods, the commodity-intensive categories of foods and non-oil industrial supplies recorded the greatest jumps, with the latter rising at an annual rate of nearly 24 percent. This development is consistent with our model analysis, which suggests that the two most important factors behind the rapid inflation in core import prices last quarter were the exchange rate and commodities, including natural gas.

Looking ahead, our forecast calls for deceleration of core import prices to an annual rate of about 3½ percent over the remainder of this year and to about ½ percent next year. This slowing importantly reflects the recent and projected path for the nominal exchange value of the dollar, which paused starting around the turn of the year following a two-year period of depreciation, has risen slightly on balance so far this year, and is projected to decline only marginally over the forecast period. The lagged effects of previous dollar depreciation were still evident in core import prices in the first quarter, but our projection for the dollar implies that the contribution of the exchange rate will be a small negative to zero starting with the current quarter.

We expect that commodity prices will continue to exert significant upward pressure on import prices over the rest of 2004, largely because of lagged effects from previous increases, but then will hold down import price inflation in 2005, owing to declines expected on average and in most categories. Our index for nonfuel primary commodity prices rose nearly 50 percent in the first quarter, and our model finds that the effects persist for four quarters. Prices in all four categories of commodities—food, beverages, agricultural raw materials, and minerals and metals—rose in double digits in the first quarter, but some have peaked and begun to decline. Among the individual commodity prices that rose most rapidly are those for copper, which have already come off their recent peaks. Similarly, prices for soybeans have stopped

rising; futures prices call for spot soybean prices to fall sharply at midyear as new crops are harvested. Thus although our forecast incorporates a rather abrupt change in the course of nonfuel primary product prices, we believe that the signs of that reversal are already evident. Accordingly, we believe that our forecast for significant slowing in import prices is balanced, with risk on both sides.

The extremely rapid increases in commodity prices during the fourth quarter of last year and the first quarter of this year, particularly for minerals and metals, are linked to the rebound of real output growth in some regions, especially emerging Asia. Within Asia, the pace of growth in China, which has averaged nearly 15 percent over the past three quarters, is seen as a major reason for the strong demand for commodities. Chinese authorities have taken steps to tighten monetary conditions and to slow the rate of growth of bank credit in order to counter concerns about domestic inflation pressures and excessive investment in some sectors. Our forecast sees these efforts as successful, with growth slowing to a moderate 7½ percent rate but not collapsing as some fear. At the same time, we see inflation in China lessening as the rapid increases in food prices abate. Elsewhere in emerging Asia, we expect expansion to continue at a vigorous pace, depending importantly on continued global spending on high-tech goods.

Bolstered by rapid growth in Asia and continuing strength in the U.S. economy, we look for global output to grow at near its current pace over the remainder of this year and to decelerate only slightly next year. Some parts of the global economy, such as Canada and the United Kingdom, should continue to show firmness in domestic demand. In Japan, we look for domestic demand, particularly private investment, to be a source of demand stimulus, but net exports will be an important element in maintaining real GDP growth at around 2½ percent through next year.

The outlook for the euro area is more troubled. We expect that exports will respond to the improved global economy and grow moderately. But given the past appreciation of the exchange value of the euro, imports should rise as well. On balance, we anticipate that the external sector will be a neutral factor and that real GDP in the euro area will expand at about the same 2 percent pace as domestic demand. Such an outcome will not allow for much progress in addressing the macroeconomic problems, such as high unemployment rates and excessive budget deficits, confronting many of the large euro-area countries. It should result in a small tick down in euro-area inflation, permitting the ECB to delay any rate increase until 2005.

Overall, our forecast for real output growth abroad is favorable. When combined with our projection for slight depreciation in the real exchange value of the dollar, it yields a rebound in our forecast for growth of total exports of real goods and services to more than 10 percent over the remainder of this year and only slightly lower next year. Both core goods and services should respond to foreign GDP and relative prices and bounce back from rather weak first-quarter figures to moderate growth on average over the forecast period. In nominal terms, export growth should about equal

or exceed that of imports, notwithstanding the strong performance of the U.S. economy. Nevertheless, the trade deficit is expected to widen further this year and next, reflecting the extent to which imports already exceed exports. Accordingly, the current account deficit is expected to move above \$600 billion in 2005. Dave and I will be happy to answer any of your questions.

CHAIRMAN GREENSPAN. Incidentally, has General Motors reported yet?

MR. STOCKTON. No, we don't have the report on General Motors yet.

CHAIRMAN GREENSPAN. Questions for our colleagues? President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I just wanted to ask Karen a question about China. You mentioned that China's growth had been 15 percent and you expected it to slow to 7½ percent but not collapse, as you put it. There has been a lot of speculation about the risks and potential difficulties associated with a slowing Chinese economy. I was wondering if you could talk about that a bit in this context: We all are familiar with the Asian financial crisis of the late '90s, and I was wondering what magnitudes we would have to see in China in order to come close to what we saw in the late '90s and what kind of spillover effects would stem from that.

MS. JOHNSON. Well, if China's growth fell below, say, 5 percent, I think we'd see fairly significant spillover effects. Seven percent used to be a sort of "target" rate of growth; then it became 8 percent and then it was around 10 percent. But China growing at 7 percent would be a return to what we had seen for quite a few years in the 1990s, which would probably allow for a better allocation of resources than growth of 15 percent is likely to be generating.

The fact that China is not in fact a fully market-based economy is, I think, the bad news and the good news. The bad news part is that it probably is leading to a misallocation of resources and, therefore, to the risk of some over-accumulation of certain items—and the sudden redirecting of effort because somebody may well wake up eventually and realize that the warehouses are full of air conditioners, say, that aren't moving.

On the other hand, it's partly good news because there are no phenomena like CEO risk aversion or tendencies on the part of markets to overshoot or the need for depreciation or balance sheet corrections to work their way through before companies make decisions. If the authorities in China decide that too many resources are being used to produce air conditioners and what they really want are snow blowers, the desired reallocation of resources will happen pretty quickly. So, to my mind, the risk in China is more that resources are being wasted. And given that standards of living in China and much of the world aren't as high as we'd like them to be, that's a very significant and important cost. But I don't think that involves the same systemic cyclical behavior yet that a truly market economy would have.

That said, if the Chinese run into economic problems in terms of their ability to meet the demands of the population for rising standards of living and jobs—or if they fail to deal in an orderly way with the transition from a mostly rural to a more industrialized economy—I don't know what the effects would be. If those efforts hit a rough spot, I don't know that I have any special expertise to suggest what might politically happen in China or how that situation would resolve itself. I do think the spillover to the rest of Asia would be very severe—at least as bad as in the late 1990s.

MR. KOS. May I just add a comment? One difference to note between Asia '98 and China now is that a major issue in the earlier situation was an outflow of capital, but China has a closed capital account. So a capital outflow is something that we're just not going to see to the same degree in the current case. That's one difference that may mitigate the possibility of a sudden financial crisis similar to what occurred in Asia in the late '90s.

MS. JOHNSON. And in places such as Korea and a few other countries, we're not seeing the current account deficits and the need to attract capital; so if the capital were to stop flowing, it

wouldn't have exactly the same consequences. On the other hand, outside of China, domestic demand is not really the driving force in Asia; it is export demand. So in a macroeconomic sense, the Asian countries are vulnerable to development in China and in the United States.

MR. MOSKOW. Thank you.

CHAIRMAN GREENSPAN. Further questions for David or Karen? If not, who would like to start our Committee discussion? President Moskow?

MR. MOSKOW. Thank you, Mr. Chairman. The pickup in the Seventh District economy has become more broad-based. Moreover, our contacts seem much less nervous than they were in March. Many report increased bookings, growing backlogs, and low inventories, suggesting that momentum will continue. Household spending has been robust for some time, and now we are hearing widespread reports of increases in business spending. With regard to the latter, demand is strong for machine tools and for heavy equipment such as agricultural and construction machinery. Reports from all of our shipping contacts have been strong, from trucking to warehousing to cardboard boxes. As for air travel, both United and Boeing emphasized that traffic is finally above September 11, 2001, levels and that load factors are high. Boeing publicly announced increases in production schedules last week and told us privately that they hoped to be able to raise plans even further. A publishing executive told us that advertising is picking up, so the magazine business may finally be emerging from what he described as a "pageless" recovery. [Laughter] Increases in demand are showing through to labor markets. Both of the national temporary-help firms we speak with have seen stronger growth in billable hours in recent weeks. Permanent placements and forward-looking orders have increased, and these firms also are starting to get big orders from large companies.

We've heard a lot of comments about rising prices. First, more firms appear to be passing on input cost increases to their customers. Airlines have now successfully added fuel surcharges to their ticket prices, something they were unable to do a month or two ago. Tool and dye makers and heavy equipment manufacturers are adding surcharges to cover higher steel costs, and these price increases are sticking. Second, we're hearing that strong demand and low inventories are boosting pricing power even outside of steel. For example, one fiberboard container manufacturer told us that the industry's inventories are at the lowest level since at least 1994, allowing him to raise prices some 8 percent from a year earlier. Third, in retailing, one contact indicated that his foreign suppliers were no longer willing to absorb the impact of the lower dollar and have begun to raise prices. In many cases, however, retailers have been able to offset those cost increases by raising their own prices. In the auto industry, a striking feature is the high level of inventories. Not all manufacturers are uncomfortable with these levels, in part because some of the inventories will help cover planned production shutdowns. The industry's forecasts for light vehicle sales for the year are running at or just below 17 million, similar to the Greenbook projection.

Turning to the national outlook, the data on real economic activity since our last meeting have been encouraging. Household spending and business spending have been robust, and firms appear to have gained enough confidence in the sustainability of the expansion to begin hiring in earnest. So, although we'd like to see another month or two of strong numbers before declaring victory, we think we've turned the corner on employment growth. Looking ahead, spending and production seem to be evolving pretty much as anticipated, even with the lower-than-expected numbers for first-quarter GDP. So we're still looking for 2004 growth to be well above potential.

The latest readings on inflation were surprising. We continue to believe that there's a sizable output gap and that some temporary factors are primarily responsible for the recent numbers,

but we can't dismiss the possibility that the output gap is smaller than we've been thinking. We all know how difficult it is to quantify precisely the size of the output gap. The Greenbook indicated that the underlying inflation rate is somewhat higher than forecast at our last meeting. We agree with that assessment, and we believe that the risks on inflation have definitely moved at least into balance. We all will be looking at the data in coming weeks to see if inflation is much more of a concern than we now believe. Depending on the data, we may want to move quickly and more aggressively in tightening than the path laid out in the Greenbook, where we start to raise rates in the fourth quarter of this year.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Thank you, Mr. Chairman. I want to depart a little from my usual practice here and go directly to the national economy and the overall forecast. Frankly, recent developments in our District don't deviate much from what appears to be happening at the national level, so I don't think I would add a whole lot of value this morning by going through specifics about the regional picture.

With respect to the national economy, I don't recall many times over the years—and certainly not recently—when the incoming statistical data over an intermeeting period have changed my view of the near-term outlook and the balance of risks quite as markedly as in this most recent period. The flow of data that David reviewed, from the release of the March jobs report through the first-quarter GDP report, finally provides some fairly compelling evidence that the economy may now be moving toward a balanced growth path and reasonably full employment. The growth in aggregate demand seems to be broadly based, and productivity growth has now slowed to a point where further increases in demand will stimulate additional job growth. Moreover, the core

inflation data over the last few months suggest that the disinflation risk that has worried me and a lot of other people around the table recently may now be behind us.

At the same time, along the lines of some of the cautionary remarks you made, David, the employment gap and the output gap are still sizable. Unit labor costs are still behaving reasonably well, so I'm not yet alarmed about inflation pressures, especially since I think our credibility for low inflation is still high. So it looks like a balanced and, at this point at least, still noninflationary expansion may finally be taking root. But as we all know, in this policy business when we begin to get comfortable that things look good, that's when we have to be careful. So I thought I would use my remaining time—building on some of the comments that have already been made—to talk about how recent developments in the foreign sector, especially in China, could create some risk for the U.S. economy going forward. I should mention that my comments will reflect conversations I've had with Marvin Goodfriend, who just returned from an IMF mission to the Peoples Bank of China. We've had some very interesting discussions, and I'd like to share some of our thoughts with you.

It appears that the recent firming in core U.S. inflation reflects importantly the end of deflation in durable goods prices. When one disaggregates the data—and some of our staff members have done that—this reversal in turn appears to be related at least in part to the strong global demand for manufactured goods, especially in China. China's overall trade balance has apparently now moved into deficit. Clearly, China's boom is outstripping its capacity to produce manufactured goods, and the effects of that are now spilling over to the economies of its trading partners, including to some extent this one, I think. We see effects, for example, on textile producers—especially of industrial fabrics—in the Carolinas. I'm talking not only about business going to China but business coming from China to their companies.

The problem, of course, is that by all accounts the boom in China is unsustainable. Money and credit has been growing at an annual rate of around 20 percent for a couple of years. That's about twice as fast as productivity growth there, as I understand it, so it's not surprising that the deflation of a couple of years ago in China is now giving way to inflation, which I think is currently about 3 percent. I'm comforted by Karen's suggestion that inflation in China may now begin to back down; but looking back to their last boom, which I guess was in the mid-1990s, inflation reached about 20 percent in that period. The Chinese economy now is a lot larger than it was then and therefore has significantly greater potential to affect the U.S. economy. Moreover, investment is a much larger part of Chinese GDP than it is in the United States. And investment, of course, is the most cyclically active GDP component.

Unfortunately, as I think we all know, China still does not have institutions in place that can easily deal with this situation and, in particular, that can easily meet the monetary policy challenges they are already facing. They don't have a strong independent central bank. They don't have a healthy commercial banking system. They don't have fully flexible interest rates. They don't have a floating exchange rate. The authorities basically have had to use controls to deal with these kinds of issues in the past, and they haven't worked very well. With the economy now much larger and at least in the process of transitioning to a market economy, those controls may be even less effective. So, while we may be getting some slowing in inflation in China at this point, the boom could continue for some time and ultimately create a very high rate of inflation there. On the other hand, the authorities could intervene more rapidly and aggressively than they have in some past cycles and precipitate an early recession. We just don't know yet. But it seems to me that the upside risk in the situation is probably the greater risk.

Bottom line, against this background it seems to me that the Committee should make a special effort to determine as best we can the degree to which instability in the Chinese macroeconomy could affect the U.S. economy and potentially U.S. monetary policy going forward. I'm sure Karen and her staff are already working on this. But if the potential effect is found to be large either currently or not too far down the road, I think the Committee may well want to include in its review of global developments an assessment of stabilization policy in China—at least from time to time, and if the situation looks serious enough, perhaps on a regular basis. I won't be around to hear it, but I think it would be a good idea for the Committee to do that. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Thank you. President Poole.

MR. POOLE. Thank you, Mr. Chairman. The contacts that I usually call have a generally upbeat view on the state of the economy. My FedEx contact emphasized particularly that his company is reviewing its capital expenditure plans. The fiscal year for FedEx begins on June 1, and they are expecting capital expenditures in fiscal '05 over '04 to be up about 20 to 25 percent, and all of that growth is for capacity expansion. He also emphasized the importance of the fuel situation. FedEx is concerned not only about fuel prices but fuel availability. They've been looking closely at whether they need to put in place some storage for jet fuel particularly, but so far they don't see any significant availability issues. The firm's contacts with its customers suggest that the latter have a positive outlook and that inventories are going to be rebuilt. Many even expect some scrambling to meet demand given the lean inventory situation.

My UPS contact gave me some data on air cargo from the Air Transport Association. Domestic air freight in the twelve months ending February 2004 was up 9.2 percent, and air freight for the first two months of this year over the first two months of last year was up 6 percent.

International business was up 10 percent February over February, and the expectation is that the March data will be very strong. My contact said that check traffic out of China into the United States is growing at an exceptional pace—up 60 percent in the first quarter of this year over the first quarter of last year. UPS is not planning to add to its capital expenditure plan at this point.

The main point that I get from my contact at J.B. Hunt is that there's a lot of upward pressure on prices for truck shipments. Hunt has been able to increase truck shipping rates for thirteen straight quarters; those rates are up 18 percent in the last three years and 6 percent over the last four quarters. Driver supply is extremely tight, even tighter than in the period prior to the recession, and the rates for drivers are going up. At the beginning of this year, drivers' rates were increased from 30 cents to 32 cents per mile.

My Wal-Mart contact emphasized that the March–April sales data are always difficult to interpret because the date on which Easter falls varies from year to year. But cutting through that ambiguity, sales appear to be on a growth track of about 5 percent. He continues to believe that those at the lower end of the income distribution are stressed financially, as underscored by the paycheck cycles and other information the company looks at, but he thinks those with higher incomes are doing quite well. Wal-Mart has been growing about 8 percent per year in square footage, and its new stores have been doing very well.

I want to make just a brief comment regarding the national economy and the inflation outlook. I asked one of my staff members to make a different kind of calculation than we normally do based on the PCE data. Usually the core inflation measure excludes changes in energy and food prices, but I wanted to look at the ex-energy part because energy has been the dynamic component in terms of what has been going on recently. What I asked my staff member to do was to take total PCE and substitute long-term energy futures—crude oil futures prices—for current energy prices

and run that calculation. It seemed to me that PCE ex energy—or more precisely ex the energy curve—might be a useful way to look at the inflation data. That calculation results in an inflation rate that is about $\frac{3}{4}$ percentage point higher at an annual rate, averaged over the last four quarters. So I think inflation was not really as low last year as we thought it was because, by concentrating on the core inflation measure and taking energy out all together, we were not picking up the fact that long-term energy futures had gone up quite a bit.

In my view, the inflation risks are skewed to the upside at this point. I interpret the staff forecast, which I think is fine as a point estimate, as a median or mode of the probability distribution. And it seems to me that the probability of, say, a $\frac{1}{2}$ percentage point inflation miss on the upside is higher than the probability of a comparable miss on the downside; I'd say the same for a 1 percentage point inflation miss. I note that money growth is rising again after falling in the second half of last year. A couple of people, including the staff, have made comments about inflation and the gap along the lines that the gap may not be as large or the natural rate of unemployment as low as we might have thought. A way perhaps of estimating the natural rate is to look at what happens to inflation. But that's not really helpful in terms of trying to understand where the inflation rate is going because the essence of this problem is to try to predict the inflation rate. The gap may be input to that, but it's not going to be constructive to turn this equation the other way around. That's not going to help us to understand inflation. So I just wanted to offer that comment. It does seem to me that the inflation risks are rising. Certainly there is a lot of commentary in the marketplace to that effect. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. Mr. Chairman, at breakfast this morning, I was challenged to try to describe the current economy in a haiku. By coincidence, that's the way the briefing for this

meeting started out in Dallas a few days ago. And the haiku is, “The story today is about returning growth and rising prices.” And I do think that fits pretty much both the District economy and the national economy. Since Texas unemployment turned the corner last September, job growth has been moderate and steady. There has been a notable improvement along the border, helped along by recovery in Mexican maquiladoras, and border employment rates are back down to pre-recession levels. Retail sales growth for the border area has fully recovered as well.

High energy prices may be a negative to the country as a whole, but they remain a plus for Texas—a smaller plus than they once were, to be sure, but a plus nevertheless. As the Chairman discussed in a recent speech, natural gas prices have been elevated and are expected to remain so for an extended period. In response, we’ve seen a gradual expansion of drilling activity in the District over the past two years. The petrochemical industry, which has seen hard times for quite a while because of high energy input prices and weak demand, is getting some relief now; that industry is benefiting from strong demand from China and southern Asia, leaving the District in a pretty strong position for a change.

The high-tech sector has been a notable laggard but, after over three years of uninterrupted month-to-month job losses, in March we saw a return of net employment gains in high-tech manufacturing. The brighter jobs picture reflects rising orders and production. Contacts in the semiconductor industry expect top-line sales to grow 19 percent this year, bringing sales back to pre-recession levels. Gains are spread across consumer sectors, communications, and computer sales. Equipment manufacturers are experiencing sales growth, too, and see signs that the corporate upgrade cycle is shifting into higher gear.

On the inflation front, cost pressures are now evident across the board, and more and more producers are passing on higher costs to their consumers. Competition from overseas has slackened

because of the lower dollar and rising demand in China. Building materials, fabricated metals, petrochemicals, and oil field equipment have all seen price increases at the consumer end. Increased orders for packaging from retailers have driven paper prices higher. Steel and galvanized metal are in short supply, and railroads are operating at or near capacity. There's a major road project in Dallas that was a year ahead of schedule, but it has been held up now for several months because of the inability to get a certain kind of steel. Among the handful of industries that have not enjoyed increased pricing power are airlines and homebuilders. In the labor market, we still have a large pool of unskilled workers seeking employment, and there's very little upward pressure on wages. However, rapid health care cost increases have discouraged firms from hiring new permanent full-time employees.

On the national economy, the latest CPI, PCE, and GDP statistics suggest that the price pressures that Eleventh District contacts had been reporting earlier this year have become fairly widespread. I'm hopeful that the uptick in inflation is a one-time adjustment that marks the end of disinflation rather than the beginning of any significant upward threat. Nevertheless, I think we need to be wary because the recent inflation rise cannot easily be dismissed as being due to special factors. Core and median inflation measures are higher, too. And we need to be wary because estimates of capacity utilization and the output gap are subject to large after-the-fact revisions. The same is true of our measures of profit margins. While recent data suggest a strong inverse relationship between profit margins and inflation pressures, the markup of prices over unit labor costs has little or no predictive power for inflation in real time.

And finally, we need to be wary because of the very large amount of policy accommodation currently in place. Significantly, the latest Senior Loan Officer Opinion Survey shows a big swing toward easier C&I lending standards and terms over the past two

quarters. The net percentage of banks reporting increased C&I loan demand is strongly positive and rising, too. The balance of risks has clearly shifted, and in my view it's time we cleared the decks by removing language from our press release that might delay action should action become appropriate.

CHAIRMAN GREENSPAN. Thank you. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Things continue to improve in New England. In particular, comments from manufacturers were more upbeat than we've seen in a long time. Though business confidence in Massachusetts is slightly off previous highs, recent surveys indicate particularly positive assessments of national business conditions. Consumer confidence is well above its level a year ago—a bit bouncy but well above. Retail contacts report improving sales, and residential real estate markets remain strong.

You may have noticed that I have not added the caveat about job growth that has become standard in discussions of the recovery in New England. Labor markets have in fact improved—not wildly, to be sure, but they are beginning to look up. This marks a real change even from our last meeting. Data for the region indicate that nonfarm employment rose in March, only the fifth monthly increase in the last three years. The increase was small and the year-over-year trend remains negative, but anecdotes suggest that it's not a fluke. Similarly, the unemployment rate for the region moved down slightly and now is below 5 percent. Beige Book contacts are more likely to say that they're hiring, particularly in manufacturing and related services. One of the Bank's tenants, a large intellectual property law firm, reported a jump in patent work in the biotech and computer services areas as well as an increase in legal work related to patent litigation. They've taken more space in our building and are adding to staff. Small businesses report increasing activity even in firms associated with commercial real estate. And after the extremely cold winter, contacts

in tourism and hospitality report expanding business and some new hiring. Thus, economic activity clearly seems to be on the uptick.

Prices are on the uptick as well. Almost all Beige Book contacts reported concerns about rising costs for metals, wood, plastic, rubber, fuel and other petroleum products as well as rising health care and other insurance costs. Concerns about pricing power remain, but some firms do seem to believe that cost increases can be passed on. Planned salary increases are moderate, at 3 percent or so, and capital spending is increasing but also at a moderate pace.

One thing I found really surprising—and I read through all the notes from our calls with individual contacts—was the number of times that the upcoming presidential election was mentioned as a concern regarding the economic future. A lot of people out there seem to believe that the economy is being pumped up to be primed for October but then will slide after the election. I'm sure that's not the intent of any of us, but I think it probably does reflect some concerns related to the sustainability of the recovery.

In that regard the national data received since our last meeting have been particularly encouraging. While one month's report on employment is not a complete panacea to the labor market softness, the numbers are clearly moving in the right direction. To be sure unemployment insurance claims are moving sideways, and hours worked still have a way to go, but all the surveys that Dave talked about in his presentation suggest that firms expect to pick up their hiring rates. Combine this with rising personal income and expenditures, rising retail sales, a strong housing market, and solid consumer confidence, and continued strength in consumption seems assured, at least over the near to medium term. Business strength is evident as well. Strong profit growth and reasonably accommodative financial markets have led to rising capital goods orders and double-digit growth in investment spending. Despite the increasing value of the dollar, trade seems to have

been only a small drag on economic activity in the first quarter, reflecting stronger growth in many countries around the world.

Does all of this good news answer the question about how sustainable the recovery will be, especially after the dose of fiscal stimulus during the first half of this year wears off? In that regard, our forecast in Boston is a bit less optimistic than the Greenbook's for the second half of '04, but the basic trajectory of the data—solid growth, stronger labor markets, a slowly declining output gap, and flattening price increases—is the same. Our bet as well as the Greenbook's is that the economy will generate enough steam on its own to realize, after what has happened over the past three years, a very favorable trend.

So if we think the recovery is sustainable, the next question is what the stance of policy should be. I realize that there are a couple of ways to look at this question. Looking at employment and inflation trends against what might be accomplished in this high-performance economy, the Greenbook, Boston, and other analysts see an output gap that lasts into 2005. That suggests that caution is warranted before moving rates up, though I agree with a lot of the comments around the table that we have to be really humble about our ability to know either the size of the current output gap or how fast it might close, given the strength that we see going into the rest of this year.

There is another gap as well, the gap between a funds rate at 1 percent and even our lowest guess of a neutral funds rate. I think that gap is something like 150 basis points. Again, it's hard to know how to measure "neutral," and we have to be humble about our ability to do that. But even with a great deal of humility we know we're pretty far away from neutral now. Market risk-taking in an environment of very accommodative policy, combined with what likely is a bottoming out—or probably a turning up at least in the near term—of the path for inflation, seems to me to argue that we ought to start closing the interest rate gap fairly soon. We might need an additional couple

of data points to be sure the recovery is sustainable, and we surely need to take a look at the language in our press statement this time around. But my view is that we ought to be thinking about moving sooner rather than later.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Continuing a pattern that was already evident at the time of our last meeting, economic developments in our Southeast region are upbeat. There's evidence from several fronts that I would point to that demonstrates the growing breadth of our regional expansion. Florida is the strongest state in our area by most measures, and a substantial share of that strength is coming from tourism. Occupancy rates are continuing to rise, and a growing number of foreign tourists are coming to the United States. Convention bookings in Atlanta are now up 20 percent over last year, and business travel reportedly has increased further.

Our manufacturing sector is experiencing a pickup as well, and that is reflected in new orders and production. More goods are being moved and that's showing up in increased demand for trucking, rail, and air shipments. Some of this improvement in manufacturing can be traced to stronger export activity. And while nonresidential construction has yet to show any measurable pickup in most of our markets, activity in the important residential construction sector continues to be vigorous. Certainly there are sectors that still have more repair work to do. In our area, those include a major airline and telecommunications firms. In some cases, the slow recovery is now not so much a matter of economic climate but rather the need for new business models. Of course, we have some firms and some communities highly dependent on industries like apparel and textiles that are still hurting from the structural adjustments taking place in their businesses.

Another positive development since our last meeting is that our bankers are now reporting significant improvement in C&I lending, mirroring reports that Al Broaddus, Mark Olson, and

others made last time. Perhaps an e-mail I received from Ms. Paula Lovell, the recent past chairman of our board of directors, captures the kind of upbeat reports that have now become prevalent. Paula runs her own public relations firm in Nashville, and she wrote me a note last week, which she described as “unsolicited” because, her having served ten years on our board, her views on the business outlook had indeed been solicited. At any rate, she said, “Jack, hope you and the Fed crowd are doing well. I know this is unsolicited, but the flood gates have opened here with our business. I had at least twenty companies call during the first quarter of 2004 to hire us or to call an urgent meeting to ‘get started.’ Everywhere I look there’s money flowing. I think things are really strong.”

Like others, we’re continuing to get anecdotal reports of rising prices and comments that more of the increases in commodity import prices are being passed through to intermediate and final goods. Examples include steel, energy, food, chemicals, plastic, metal, wood building materials, fertilizers, tires, ice cream, and agricultural products like soy, coffee, and meats. While not an Atlanta regional tidbit, the cab driver who brought me from the airport to the hotel here in Washington last night proudly announced that, effective yesterday, there was a 10 percent increase in fares for cabs coming into the District. And he was complaining because his colleagues in a couple of other cities had gotten 15 to 20 percent increases for similar trips. The reasons being given for the now more widespread price increases vary but include low inventories, lack of capacity, increased demand, higher OPEC prices, and regulation.

On the national front, I think we have to be pleased with the way things are unfolding. While the initial GDP numbers for the first quarter were a bit below many estimates, they continued a pattern of three quarters of strong growth that is arguably above long-term trends. And I’m comfortable with consensus forecasts that have robust growth continuing through this year and next.

Perhaps most encouraging is the better balance we're seeing across sectors, with business spending now making a nice contribution to growth and expected to continue to do so. While there is still considerable uncertainty as to the future path of employment growth, the most recent data and anecdotal reports are encouraging there as well.

It's my sense that we're now at a point where we need to spend more time trying to understand price pressures and price prospects and their implications for policy. While we certainly do not yet have any alarming run-up in inflation, I do not think we should dismiss the signals we may be getting from both the data and anecdotal reports. Relying heavily on an output gap model makes me uncomfortable, mostly because the gap is not a directly observable measure and because, as others have already discussed this morning, forecast estimates of the current gap are very different depending on whether one accepts the Board staff's judgmental estimate, the FRB/US model estimate, CBO's estimate, or some other estimate. I'm also less comfortable than some about inflation expectations being well anchored. I think recent data and surveys can be interpreted as saying that we have already had some deterioration.

I believe we're at a point where we can begin to take back some of the extraordinary policy accommodation that's in place without great risk of serious unintended consequences. We can talk about this more in the policy go-around, but if we believe that a further unwanted fall in inflation is no longer a significant risk—a view that several have publicly expressed recently—and that risk was the reason we gave for our last 25 basis points of easing, then a credible case can be made at this meeting or at least at the next one for removing that accommodation as a first step. I also hope that we will talk carefully about any new language we introduce into the statement as we come closer to the time when we can contemplate a policy shift. In our earlier discussions I think many of us expressed uneasiness about making pre-commitments as to the timing or the path of policy

changes. Those kinds of commitments could eventually mislead markets or tie our own hands. It's nice to have come to a point where we can have these kinds of discussions. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. Economic activity in the Third District continues to increase, although there's still little evidence of job growth. In addition, the Philadelphia staff's leading indexes of economic activity continue to signal a pickup in growth in all three of our states over the next three quarters.

Retail sales in our region were up in March and April. Some store executives reported that the size of the average purchase had increased and also that sales of luxury items had risen. Retailers that generally described inventories as appropriate given the current sales pace have revised up slightly their forecasts for expected sales this spring. Auto dealers in our region reported rising sales in March compared with February, but the levels have not matched those of a year ago. They expect sales to remain at about the current pace for the rest of the year, acknowledging that it will be difficult to achieve the high levels of the past several years.

Residential construction activity remains high, although it has eased in recent months. Permits in the tri-state area were flat in the first quarter, and the value of residential construction contracts was down modestly, but sales remained robust. Our contact at one large firm—a luxury homebuilder that is headquartered in our region but has operations throughout the United States—described sales as spectacular, better than at any time in thirty-five years. He has a twelve-month backlog and is raising prices on an ad hoc basis from one area to the next at a rate of about 1 to 3 percent per week. On the other hand, commercial construction remains hampered by high vacancy rates in our office market. According to a recent study, the center city Philadelphia area is

currently oversupplied by 4.5 percent of current stock or approximately 1.7 million square feet, which is equivalent to about two large office towers. Nonetheless, construction has started on the first new tower in the center city since 1991. While 65 percent of that building is already leased, about 50 percent is leased to firms that would be vacating other center city buildings to take advantage of generous tax incentives offered on the new space.

Manufacturing activity in the region continues to expand. Our business outlook survey (BOS) index of general activity increased to 32.5 percent in April, up from 24.2 percent in March. The index has been in positive territory for the last eleven months. The more forward-looking indexes on new orders and shipments improved in April and are at levels we haven't seen since the early 1990s. There was also a noticeable increase in the inventory index in April, as it moved to its highest reading in sixteen months. The employment index from our manufacturing survey improved again in April and has been in positive territory for seven months. More companies in our region indicate that they intend to increase hiring, and help-wanted ads are up. Still, the BLS data show that manufacturing employment in our three states continued to decline in the first quarter and total payroll employment was flat. In fact, job growth in our region has been essentially flat since the second quarter of last year.

We've been receiving reports from some of our directors about the difficulty of finding skilled labor. We continued to explore the labor supply issue in a special question in our April BOS. As I reported last time, our March survey showed that, of the three-quarters of responding firms that had openings, two-thirds of them had difficulty filling positions mainly because of a lack of qualified applicants. Our April survey indicated that a majority of firms are having trouble finding applicants skilled in the use of production machines or with special plant and systems operations skills. More disturbing is the fact that a large number—40 percent to be exact—also said

that applicants lacked the basic “three Rs” of reading, writing, and arithmetic. For the most part, this cannot be attributed to foreign applicants with poor English skills, as only 14 percent of the respondents cited the language issue as a problem. Over half of our firms reported that the gap between required skills and available skills had widened in the last five years. Most of the current weakness in our labor market is likely cyclical. Firms have been extracting as much as they can from current employees, which is typical at this point in the expansion. Still, our survey results suggest that at least some of the weakness may be structural in nature. The implication is that it might take longer for displaced workers to become re-employed, which means that we may be overstating the degree of slack in the labor market. These themes, as you can tell, are being repeated around the table.

Although employment has remained subdued, wages in the Philadelphia region appear to be increasing at a slightly faster rate than in the nation. The same is true for goods prices. Industrial price pressures have increased in recent months, and there is some evidence that firms are beginning to pass on some of the higher costs to their customers, another theme that came up around this table. The prices-received index in our survey is at nearly a nine-year high. A distributor of office furniture in our District reports that manufacturers are passing on some of the increases in steel prices to their customers. Our survey index of future prices paid, which reflects manufacturers’ expectations of prices they will have to pay for inputs in six months, has increased over the past year. I don’t want to make too much of this or overstate the case. By the same token, we’re hearing a lot of this type of news around the table today as well as in our District. It bears watching, to be sure. Having said all that, during April I typically travel around the District, holding a series of meetings with bankers and business leaders; most report seeing signs of improvement, and they are quite optimistic.

Turning to the nation, in my view economic conditions have improved since our last meeting, and I believe the recovery may have reached the point of being self-sustaining. Activity continues to expand at a good pace, even though first-quarter GDP came in a bit lower than expected. Note though, as has already been mentioned, that the weaker-than-expected inventory growth is to a large extent responsible for that shortfall. Consumer spending continues to expand at a moderate pace, and consumer balance sheets remain healthy.

House-price appreciation has been strong, and it appears to have been fueled not only by low interest rates but also by a more sustainable upward shift in the demand for housing. Moreover, roughly 80 percent of outstanding mortgages are at fixed rates, and most ARMs are hybrids with some rate protection. But other types of consumer lending tend to be at more-variable rates than mortgages, suggesting that households may be fully extended and somewhat more vulnerable to rate increases. This potentially negative effect will be muted so long as labor market conditions continue to improve.

When we last met I said that the missing piece was employment growth but that, given the pace of GDP growth, I expected to see employment begin to pick up modestly. The most recent information on the labor market was welcome news. The latest evidence shows that the recovery continues to move more toward a structural balance, which puts it on a more sustainable footing. I see the risks to economic growth as being balanced. At the same time, we're getting an inkling of renewed but still modest pricing power on the part of many businesses, with various measures of inflation firming.

Given the current state of the economy and the outlook, I believe we are getting close to the time when we will need to adjust policy, bearing in mind that we're not considering when to start a tightening regime but rather when to start easing up on the stimulus. Recent speeches by the

Chairman and other members of the FOMC have begun to set the stage, as others have indicated. I think we should take advantage of this. Today's goal should be to increase our flexibility regarding future actions so that we can begin taking back some accommodation whenever conditions warrant without surprising the market. If we determine that we need to change rates sooner rather than later, I do not want us to feel constrained by our policy statements.

To this end, I think we should acknowledge that there has been some improvement in the labor market. I think we need to change our risk assessment regarding inflation. At least to my mind, the risk of an increase in inflation is at least as large as a risk of a decrease in inflation. It's also time to remove our statement about "patience." We added that when we needed an unusual procedure for unusual times. Keeping it in the statement now or replacing it with something else that constitutes an intertemporal commitment would reduce our flexibility going forward. And frankly, I don't think we know the speed at which we will have to respond. That will depend on the information we receive on economic conditions and on our assessment of the outlook. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, the Tenth District economy has continued to improve significantly since our last meeting, with most sectors showing considerably greater strength. Manufacturing activity accelerated in March and April. Production and new orders increased sharply, causing backlogs at a substantial number of the firms we surveyed. Employment rose more modestly, according to our monthly survey, but it has now been above year-ago levels for three months in a row. Optimism about future activity also improved, boosting capital spending plans but leaving hiring plans little changed.

The year-over-year production index edged up to 31 in March and jumped to 46 in April in our region. The year-over-year new orders index fell back to 29 in March and then rebounded strongly to 54 in April. In other positive news, in Wichita aircraft manufacturers reported that demand for business jets is finally picking up because of improved corporate profits and an aging fleet among some of the corporate companies that use these jets. Consumer spending and housing activity have strengthened since our last meeting. Much of the improvement in retail sales has been in the mid-level department stores, which had been lagging behind the big discounters and luxury stores. Similarly, we have seen an increase in demand for high-end goods and second homes in several parts of our region. In our tourist sector, advanced bookings at summer resorts have been very strong, although there is some uneasiness about the impact of higher gas prices on tourism as we move through the summer. Energy activity has continued to expand in response to the high prices for oil but particularly for gas, and there are shortages of workers, rigs, and materials in that industry. Commercial real estate does remain in the doldrums; that's the one exception to the generally positive news. Labor markets are showing some signs of improvement; year-over-year job growth in the District turned positive in March for the first time since 2001.

On the inflation front, wage increases remain minimal, but surging raw materials prices have led manufacturers to raise their output prices. Some firms said that strong demand has enabled them to increase prices across a broad base. I'd also mention a point I found interesting: Firms began their price increases by putting surcharges on steel, for example, or anything else they could, but they are now moving such increases into their base prices. So they have had success in passing on those increased costs and now are trying to institutionalize them into their base price programs. Bullish commodity markets, of course, are helping our agricultural sector across the board, and there's a lot of optimism in that sector as well.

Turning to the national outlook, the economy is expanding at a solid pace; others have highlighted the evidence supporting that. Certainly we could see GDP growth this year of between 4½ and 5 percent. I think there are strong indications that growth in that range is a possibility. With that said, I'd like to talk a bit about developments on the pricing front. I think we are beginning to see higher prices and expectations of further increases in prices. Expected inflation is now rising among consumers and much of the business community in our region. For example, core inflation measures have risen in the last few months, and recent increases reflect higher prices for more than a few components. More troubling, though, are signs that inflation expectations are increasing. There was a one-page article in our local newspaper just this past weekend advising people on ways to prepare for the oncoming inflationary surge. While longer-term inflation expectations may not have changed on net since last fall, I think they are higher than they were during the first three quarters of 2003. I'm not as inclined to say, as suggested in the Bluebook, that long-term inflation expectations appear to be well anchored.

Looking forward, while I do not expect a significant outbreak in inflation in the near term, I think the upside risk to inflation is increasing noticeably. My concern stems from the currently highly accommodative monetary policy in the context of a stronger real economy. The current real funds rate is negative. The Bluebook shows that, for the first time since late 2001, it is below the staff's range of estimated equilibrium real rates. My concern also stems from the past depreciation of the dollar and higher levels of energy, commodity, and various input prices—with steel being only one of them. While I recognize that the direct effect of commodity-price increases and the depreciating dollar on consumer price inflation is generally small, these factors may be influencing the psychology of pricing and inflation expectations. And I don't think that should be minimized. We are receiving an increasing number of reports that efforts to pass price increases up the chain—

as I mentioned in my anecdote earlier—are meeting with success, which may signal further inflation pressures for the future. For these reasons, I expect core inflation to be higher than the Greenbook suggests.

I would add, too—and I know we have another discussion ahead of us—that I think we should be very careful about how we describe the outlook in terms of future monetary policy actions we might need to take. With that, I'll stop for now. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I'm pleased to note that I can summarize my comments by saying that I agree with Al Broaddus. And I'm sorry that I won't have the opportunity to say that again at these meetings, Al. I agree with him with regard to both the national economy and the brittleness of the China situation. I think the likelihood of the Chinese authorities succeeding in slowing down their boom in a smooth way is less than 50-50. We're going to need to monitor that situation. Many of us, myself included, have been saying that the timing of policy tightening will depend importantly on the evolution of the output gap, especially as reflected in labor markets, and of inflation prospects. I will review where I think we are with regard to each of these and my sense of the implications for policy.

On the output gap, accumulated information on labor markets, especially the March employment report, has made it more likely that the strengthening we all expected is finally coming to pass and that slack is being taken up. In effect, the data have reduced one downside risk—namely, that productivity would remain so strong that even the forecasted robust demand would be insufficient to absorb the substantial margin of excess labor and other resources. Productivity growth does look as if it has slowed in the fourth and first quarters to an average of merely 3 percent

from the 4 to 5 percent range of the previous couple of years. But I think we still need to be somewhat cautious in extrapolating these data.

On payrolls, let me make just a couple of remarks. We basically have one month of data in which growth has been more than marginally above the number needed just to tread water in labor markets. And for the first quarter as a whole, the evidence suggests that the output gap did shrink, but not by much. Capacity utilization in manufacturing rose. The unemployment rate fell 0.3 percentage point on a quarterly average basis, but part of that decline was accounted for by another fall in participation rates, and the unemployment rate itself in March was above its first-quarter average. With actual growth exceeding estimated potential by a few tenths at an annual rate, the staff's output gap measure fell only 0.2 percentage point in the quarter, to 2 percent.

The staff has potential growth this year and next at around 3½ percent, in which case we'll need to see demand growth well north of 4 percent to make any real progress on absorbing slack. In fact, growth of around 5 percent is the rate projected in the Greenbook, at least for the remainder of this year, and strong growth in coming quarters seems reasonable to me. Growing business confidence and continued household willingness to spend appear more than sufficient to overcome any drag from higher energy prices, greater geopolitical risks, and a potentially sharp slowdown in China. Still, we haven't seen growth appreciably above 4 percent in this expansion, except in the third quarter of last year, when spending was boosted by child credit checks and the cash from the surge in mortgage refinancings. And productivity still could surprise us on the upside, as it has so often before. In sum, I agree that the economy appears finally to be on a path toward full employment, but some of the evidence is tentative and preliminary. The trajectory so far has been very gentle. And even if we realize the more robust growth projected relative to productivity, slack is likely to erode gradually over coming quarters.

On inflation, the incoming data on prices and compensation certainly have laid to rest my lingering concerns that inflation would continue to fall. The question is whether we are seeing a more persistent strengthening of inflation pressures, which would be reflected in rising inflation itself if we don't act quickly and forcefully. On balance, I don't think so. I see a number of reasons to believe that inflation will remain low and stable, albeit at a higher level than I thought a few months ago.

First, some part of the recent uptick in core inflation is plausibly attributable to the pass-through of a series of one-off price increases—in effect, adverse supply shocks in energy, commodity prices, and import prices. Many commodities have come off the boil of late, as Karen pointed out; petroleum prices have leveled out; and the dollar has strengthened—suggesting that these influences are not likely to be repeated, at least on their recent scale.

Second, slack, continued productivity increases, and the current elevated level of profit margins should work to contain any tendency for inflation to rise. Depending on the measure one uses, core consumer inflation fell between 1.1 and 1.5 percentage points from 2001 to 2003. Even allowing for some understatement of inflation last year owing to special factors, this degree of deceleration of prices is evidence that considerable slack has existed in labor and product markets. Unlike President Poole, I do think we can invert the equation and infer what the slack was by looking at what happened to inflation. With resource utilization currently around or only a little above the levels that prevailed during much of this period, the odds seem high to me that substantial effective excess capital and labor capacity persists and will exert competitive pressures on price increases.

In addition, even with its recent slowdown, productivity growth remains elevated, which will help to contain increases in unit labor costs. The staff sees trend unit labor costs about in line

with price increases this year and next; but even if unit labor costs, actual or trend, increase significantly more rapidly than anticipated, inflation need not rise given the elevated level of price markups. As Dave noted, markups at the end of 1997 were at levels comparable to the very high levels prevailing today. In 1998, 1999, and 2000, unit labor costs rose substantially faster than prices without exerting much upward pressure on rates of inflation.

Finally, long-term inflation expectations do appear to be stable to me, judging from the longer-end of the TIPS-derived yield curve as well the Michigan and Philadelphia surveys. Under prevailing circumstances, I have trouble writing down the model that puts inflation on a rising trend, but I have to admit I am less certain of this than I was a few months ago. Recognizing that there is much about the inflation process that we don't understand, we will need to monitor incoming data on inflation and inflation expectations carefully.

As for policy implications, intermeeting information has made a 1 percent funds rate less comfortable than it was at the last meeting. Inflation is higher—less close to an unacceptably low level and less likely to fall—changing the risk-management calculus. Higher inflation and the rise in short-term inflation expectations do imply a lower short-term real interest rate at a time when demand already seems to be quite strong. Although long-term real interest rates have risen in a stabilizing response to incoming information, that increase is based on market expectations that we will tighten beginning this summer.

Given my forecast that we are not at the early stage of rising inflation even at these funds rate levels, I still believe we should await confirmation that the output gap really is on a trajectory toward closing before we tighten. That said, with inflation higher, risks shifting, and labor markets beginning to firm, we clearly are closer to tightening than we were before if that confirmation comes in over the next few months. So I agree with my colleagues that we need the added

flexibility in our statement. But also, given my expectations that slack will diminish slowly while inflation remains low, the path of tightening consistent with meeting our objectives is likely to be gradual—more gradual than in many past policy-firming episodes. I think it will be important that one way or another markets come to understand this as we prepare to tighten. After only one month of strong employment growth, I would be concerned that, if markets build in a rapid and sizable increase in rates, the resulting substantial tightening of financial conditions could slow the expansion unnecessarily. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Thank you. President Stern.

MR. STERN. Thank you, Mr. Chairman. Much of what I plan to say is going to sound familiar by now. I will start by observing that the trends that have been apparent in the Ninth District for some time have accelerated and we have a rapid expansion ongoing. Recently we've had meetings with our Advisory Council on Small Business and Labor as well as with leaders of a variety of Twin Cities' financial services firms and our board of directors, and almost all of the anecdotes have been distinctly positive. Let me run through some of those quickly.

The manufacturing sector is expanding substantially. Employment is growing in that area, exports are up, investment in equipment and software is growing, and firms in general are seeing top-line growth and are quite pleased with that, needless to say. Labor is generally available in the District, but hiring has picked up, and there is some discussion of the skills mismatch issue that Dave Stockton and others alluded to. Housing remains quite strong, and a number of large projects have been started recently; so at least on the construction side, people are still optimistic. Construction of office space remains weak, but absorption has begun to pick up, and if that continues, it will probably lead to some renewed activity in that arena. Consumer spending has been and continues to be strong.

The really significant change is the one that others have already identified, and that's on the pricing side. The anecdotes are almost universally along the lines that companies are finding the ability to raise prices now and that those price increases are sticking. It's happening across a wide range of goods and services, and I think that has done something positive for business attitudes and confidence. But it is quite widespread, and I must say it gives me a bit of pause.

As far as the national economy is concerned, I have only two or three comments. First of all, from my perspective the situation and the outlook that we're confronting haven't changed very much. I've thought for a long time that the outlook is positive, and the recent data have served to confirm that. As Dave said, the economy does appear to be firing on virtually all cylinders now. On the inflation side, I'm not predicting a significant acceleration of inflation from here; but based on the data and the anecdotal information, there's clearly more action on that front than I would have expected as recently as two or three months ago. Something is going on. It may turn out not to persist, but I do think the likelihood of further declines in inflation—or even a leveling off at the recent pace—has probably diminished. And finally, I can't resist the temptation to add that I question the value of trying to go from the output gap, however measured, to resulting inflation. I just don't think it is in the data.

CHAIRMAN GREENSPAN. First Vice President Moore.

MR. MOORE. Thank you, Mr. Chairman. At a recent large family dinner, my daughter made the remark that it was a pleasure to get to sit at the adult table even if it was only one time. Sitting here today, I can relate to her comment! [Laughter] The Twelfth District's already solid expansion has gained additional momentum recently. Amid signs of increased manufacturing activity in general, the resurgence in the IT sector is especially good news for our District. Sales of most technology products are up substantially from last year, and District IT exports have grown

quickly of late, with much of the increase going to Asia. According to one California contact, this development can be summarized in a single word—a word that you've heard frequently this morning already—China. Conditions have even stabilized in the struggling aircraft sector. Although Boeing's production activity is well below the company's 1999 peak, the recent pace of deliveries and existing order backlogs suggest that the company will produce about the same number of planes this year as last year. Other sectors are showing strength as well. For example, some District markets for new and used homes saw a flurry of activity recently. Homeowners in parts of the San Francisco Bay area faced very weak demand for a sustained period following the IT bust, but now they, too, are seeing double-digit price appreciation and record sales.

Households throughout the District have kept their wallets open more generally, with strong consumer spending reflected in growing sales tax revenues. The vigor of overall activity has translated into significant job gains in most of the District, though California's recent labor market performance has been a disappointment. The state has taken steps to deal with one source of high labor costs by reforming its workers' compensation system. California employers face workers' comp costs that are more than three times the average for the rest of the nation. With the passage of two major bills since last summer, reform is well under way. The second of these bills, in particular, should lead to some short-term rate relief and to larger gains over time.

Progress has been made on the state budget as well. California is on track to issue about \$12 billion worth of deficit finance bonds. The first issuance, totaling almost \$8 billion is scheduled for this week and will consist mostly of fixed rate bonds. The second issuance is expected to be \$4 billion and is scheduled for late May or early June. To attract an additional set of buyers, it will focus on bonds with variable rates. Because these bonds are backed by a ¼ cent diversion of the state sales tax, major rating agencies recently assigned grades to the first issuance that are several

levels higher than those currently assigned to the state's general obligation debt. More generally, a somewhat improved revenue outlook, combined with an emerging spirit of compromise reflected in legislative and public attitudes, bodes well for the state's ability to eliminate its sizable structural shortfall in future years.

Turning quickly to the national economy, our views about the contours of the forecast for economic activity don't differ in any major way from the Greenbook. However, we are assuming a steeper trajectory for the funds rate through the end of next year. Recent employment data certainly increase the odds that the labor market is turning the corner, which would solidify the robust expansion in train. Still, it's our view that the evidence on jobs is a bit too tentative to be completely convincing quite yet.

The inflation data are a little worrisome. It's hard to tell if the data reflect transitory movements following unusually low rates last year or a moderately higher underlying inflation trend. We take some consolation in knowing that at least part of the recent increase in inflation is due to one-time effects from oil prices and the dollar. And the fact that there appears to be some slack left in the economy suggests that containment of underlying inflation is the most likely outcome. That said, uncertainty about skill-matching issues raises some question about the exact amount of slack in the labor market. Another ongoing concern is that longer-term inflation expectations remain at relatively high levels. Overall, we've raised our forecast for core PCE inflation to 1½ percent for this year and expect it to edge back down to an underlying rate of about 1¼ percent for 2005. We see the risks to this forecast as fairly evenly balanced. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN GEITHNER. Thank you, Mr. Chairman. The balance of risks has changed since our last meeting, and the changes seem largely favorable. The outlook for growth seems stronger, with less downside risk. Inflation risks appear more balanced around a higher but still quite moderate path.

The economy of the Second District has continued to improve. The pace of the expansion has increased. Where we were weaker earlier in the year, we are now stronger. There is less caution in the commentary. Employment is increasing quite rapidly, and businesses report plans to increase hiring further in the months ahead. We hear, as do others, lots of reports about skills mismatches and difficulty in filling positions. Inflation in our region is higher than the national average—about double—despite what seem to be higher levels of resource slack and a later onset of recovery. Much of the rise in prices is due to housing, but business contacts in the District report higher input prices and a greater ability to pass on these costs, on goods at least.

For the nation, we continue to expect the economy to expand at a rate of roughly 4½ percent this year even if monetary policy follows the path now reflected in market interest rates. The fundamentals of an improving labor market, moderate compensation growth, and high reported confidence levels seem likely to support a reasonably strong pace of growth in consumer spending. Investment spending seems likely to continue its rapid recent pace, supported by greater confidence in demand growth, strong profit margins, and favorable financial positions. In contrast to the picture at some points over the last few months, it's hard to find evidence of actual or incipient softness in demand. Although we forecast continued strong productivity growth, we expect the pace to moderate and employment to expand at a rate somewhat above estimates of the underlying rate of growth in the workforce. Overall, we continue to support a balanced risk assessment on growth, with a path only moderately above what we consider to be potential.

The inflation outlook has changed more significantly. The acceleration in inflation suggests a more broad-based shift than simply the transitory effects of large changes in a few components of the index. Surveys of establishments show a more generalized increase in the ability to pass on cost increases. Unit labor costs seem likely to have shifted into positive territory in the first quarter—a significant swing, even if the overall rate of increase seems only modestly positive. The TIPS spreads show a significant rise in inflation expectations over the medium term and a very modest rise—one could even say by some measures a small decline—over the longer term. These developments do not, in our view, portend a significant risk of sustained acceleration in inflation in the near term to levels inconsistent with our objective of price stability. We still believe that the size of profit margins, the degree of slack remaining in the labor market, the fading effect of the decline of the dollar, the recent surge in commodity and energy prices, and the pressures of competition will work to contain the degree of acceleration in core consumer prices.

Our forecast is for the core PCE to increase roughly 1½ percent in 2004. We are less confident in that forecast, however, given the uncertainty we face about the path of productivity growth, the size of the output gap, and the relationship between output and inflation in this environment of transition. These developments alter the monetary policy calculation. We need to be more attentive now to the risk that a sustained increase in prices could materialize at an earlier point than had seemed likely, and we can afford, of course, to be less concerned with the risk of an unwelcome fall in the rate of inflation. The risks of being late compared with the risks of moving too early are now more symmetric. We need to adjust our statement accordingly, to position us to be ready to act soon if the numbers confirm the recent trend toward stronger employment growth.

The financial markets seem to reflect a high degree of confidence in our capacity to contain the risks of a significant acceleration of inflation. The stability in long-term expectations that seems

to be reflected in the term structure, however, can't be separated from the substantial degree of monetary policy tightening now priced in over the next twelve months. This is a sign of credibility. On balance, I think we should welcome the degree to which markets have pulled forward their expectations of the timing of the first increase in rates. Thank you.

CHAIRMAN GREENSPAN. Let's break for coffee and be back in ten to fifteen minutes.

[Coffee break]

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Thank you, Mr. Chairman. Business conditions continued to improve in the Fourth District. The pace of improvement appears to have accelerated in recent weeks, and the improvement is rather broad-based across industrial sectors. I'd like to make four general observations about business conditions in the Fourth District. First, businesses appear to be accelerating their capital spending plans for this year and next. Second, they continue to identify opportunities to increase productivity. Third, firms remain very disciplined about their hiring plans. And fourth, the broadly based run-up in raw materials prices that we've been seeing, combined with healthy order books, appears to be affording some companies the opportunity not only to pass along these price increases but also to finally get some additional pricing leverage. I want to expand a bit on these four general observations with a little more detailed information from a few companies that I follow closely.

One company produces customized rubber parts that are used in a large number of products in a variety of industries. Less than six months ago, the CEO of this company was very concerned about his business. His order book was spotty, and his customers kept pressuring him for price reductions. He was worried about losing business to Asian producers. In fact, he was so worried that he finally found an Asian supplier himself rather than produce only from his domestic facility.

Today, his order book is full, he has a backlog, and he has been able to pass along raw materials price increases and expand his margins a bit on top of that. The domestic toolmakers that he buys from suddenly have huge backlogs as well. He is investing in new and sophisticated manufacturing equipment to continue to improve his productivity and is cautiously adding to his workforce. A second company that I follow stamps and fabricates sheet metal. The CEO of this company reports that his orders have picked up sharply in the past month and that he, too, is buying new capital equipment. He is going to establish an operation in China to supply his U.S. customers who are producing there for the Asian markets—a move that he said is actually strengthening his relationships with customers in domestic markets as well. This company also is now able to pass along price increases due to the increased cost of steel and is able to widen its profit margins in the process. Finally, in the course of our Beige Book calls, a number of specialty retailers and department store contacts indicated that they were, for the first time, having some success with scaling back the price discounts that they've been giving.

I believe these companies and their stories represent a growing number of firms in my District and they reflect the strengthening in business conditions that is taking place. I have little doubt that the business cycle is swinging decisively into a new phase. I expect that, as this new phase takes hold, we will see many more markets, including labor markets, firm up because of the increases in demand. A natural element of this business-cycle process should also include, in due course, a rise in the equilibrium real rate of interest.

I see an apparent inconsistency between estimates of resource slack and stories of reviving pricing power and the higher-than-expected inflation report. Among the people that I talk with in the District and in some of the financial press, stories about the return of pricing power have replaced stories about the jobless recovery. I believe that the risks on inflation are balanced. As

President Moskow noted earlier, inflation expectations are relatively stable partly because of our credibility. So indicating that we will begin to unwind our policy accommodation will be necessary to anchor inflation expectations. And if the data continue to indicate strong economic performance and inflation that is higher than expected, I would like us to have the flexibility to react appropriately. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. At our last meeting, I expressed some wariness about relying too much on anecdotes for assessing the economic situation, particularly the inflation situation. Well, as somebody once said, the plural of anecdotes is data. The data since the last meeting do suggest that inflation has stabilized and that the recovery is beginning to take hold. I concur, therefore, that this Committee should begin preparing the ground for a normalization of the federal funds rate. Based on current information, however, my sense is that this normalization can proceed at a deliberate pace for three reasons.

First, it's a mistake to equate the stance of monetary policy with the level of the current federal funds rate, as some seem to do. In part because of our communication strategy, which has linked future rate changes to the level of inflation and resource utilization, monetary and financial conditions relevant to the economy have tightened considerably since our last meeting. For example, since the day before the March FOMC meeting, both the ten-year Treasury rate and the high-grade corporate bond rate have risen about 75 basis points, and the thirty-year fixed rate mortgage has risen about 60 basis points. Judging by the small increase in the TIPS spread, these increases are largely real increases. In addition, the dollar has appreciated about 2 percent since March and more than 4 percent since the beginning of the year. Commodity prices appear to be decelerating. Stock prices have been flat despite strong earnings news. In short, monetary

conditions broadly construed have already begun the process of normalizing, and the impetus being applied to the economy has been correspondingly reduced. Of course, absent major new developments, we need to follow through with the tightening the market now expects, but we should not be overly worried about having fallen behind the curve. The monetary tightening process has begun without us, so to speak, and it will continue to evolve endogenously with incoming news.

A second reason to plan to be deliberate in our tightening is that downside as well as upside risks to the economy do remain, in my view. We have seen only one month of strong job numbers, and although an unwelcome disinflation now appears quite unlikely, the labor market remains in an early stage of recovery, with essentially no increase in the employment-to-population ratio over the past three quarters despite robust output growth. With productivity growth still strong, a high rate of output growth as well as a conviction on the part of employers that rapid growth will be sustained is needed to support new job creation. From a risk-management perspective, as we begin to raise rates we should weigh the risk of significantly impeding the labor market recovery against the risk of having to scramble to adjust to unexpectedly adverse inflation developments.

Third, it is true that recent inflation has been above the desirable level. I hear what people are saying around the table; absolutely, I hear the concerns being expressed. The question before us is whether the situation involves a one-time adjustment or whether the pattern will persist. The data notwithstanding, the case for believing that core inflation will remain comfortably in the 1 to 2 percent range over the next year still seems strong to me. The arguments for forecasting stable inflation go well beyond the level of the output gap, which I recognize is impossible to measure with precision. Besides labor market slack, the arguments for stable inflation also include the impact of continuing productivity growth on unit labor costs, the unusually high level of price-cost

markups, the intensity of domestic–international competition, the likely deceleration of commodity prices, and the recent endogenous tightening of monetary and financial conditions, which I’ve already noted.

Perhaps the principal area of risk on the inflation front is the possibility that inflation expectations may ratchet upward. Given our struggle to improve communications and in honor of Al Broaddus’s last meeting, I cannot resist the temptation to point out how helpful a quantitative medium-term inflation objective would be at this juncture. [Laughter] Clarifying our inflation objective would increase the coherence of our policymaking. It would also help to anchor private-sector expectations of inflation and perhaps reduce the significant inflation risk premiums now embedded in long-term interest rates. Most important, if we provided quantitative guidance about our inflation objective, we would now be able to make a firm, highly visible, and ultimately verifiable commitment to maintaining price stability at this crucial moment in the expansion.

Finally, returning to reality, [laughter] I endorse the Bluebook’s proposal to replace “patience” with the phrase “can likely be removed at a measured pace.” The proposed new phrase implies no commitment whatsoever on our part. The word “likely” clearly conveys that the new wording is intended to be a probabilistic forecast of the evolution of policy conditional on the currently available information. No further change in language would be necessary before tightening—or even after the tightening process begins. In particular, with this wording we can certainly raise the funds rate in June if the incoming data so dictate. The major benefit of this language is that it will calm fears that the Fed is currently planning to repeat the 1994-95 pattern of pre-emptive strikes. In communicating that that is not our present intention, the new wording will serve the very useful function of reducing the chance of an overreaction in the bond market that would damage both the markets and the economy. Thank you.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. Just after our last meeting, Greg Ip wrote a column describing three alternative strategies for the Fed to follow in getting rates back to normal. We could be early and gradualist, wait and make sure, or follow what he called the late and leisurely strategy in which we would actually aim for a rise in inflation.

Taking them in reverse order, I'm not impressed by the late and leisurely strategy. I did give a speech six months ago that argued for a target band for the core PCE of 1 to 2½ percent. While I argued for a band and not a point target, one could infer that my desired target would be about 1.8 percent—roughly what inflation has been over the past decade and slightly above what it is forecast to be now. From that, one might infer that I'd have some sympathy for the late and leisurely strategy, but I really don't. Permitting inflation to rise some before we extinguish it reminds me too much of a controlled burn in the forest fire business; there are many anecdotes of controlled burns getting out of control. In a fine-tuning sense, inflation might be forecast to be slightly below where we desire to see it in the long run, but I would be very reluctant to base policy on a controlled rise in inflation because I don't think we could control the rise.

The second strategy—waiting until we are sure that the expansion is on track and that there is a risk of higher inflation before changing policy—strikes me as risky as well. In the forecasting game, we will never be that sure of anything, if for no other reason than that the data get revised so much after the fact. Waiting until we think we are sure strikes me as an invitation to wait too long. In the case at hand, output has been growing at healthy rates for nearly a year now. The expansion seems to be quite balanced and stable, and it is easy to envision output gaps gradually closing. I'm already pretty sure that there is at least a risk of higher inflation. Exactly how much of a risk is not clear. The Greenbook argues persuasively that much of the recent uptick in inflation is just that—an

uptick. Even the scenario labeled “higher inflation” has inflation bumping up and then stabilizing. One can worry about pass-through effects, but there is an argument that commodity prices are stabilizing, that the dollar has stopped dropping, and that energy prices will decline.

It’s hard to question these arguments on logical grounds though one can have fears. First off, the wide uncertainty ranges in the Greenbook chart indicate that the staff is pretty uncertain about all of this. The commodity-price assumption involves some guesswork about the Chinese economy; the dollar assumption involves some guesswork about Asian central bank behavior; and the oil assumption involves some guesswork about political instability in the Near East. I myself wouldn’t feel hugely confident about any of these guesses, though I don’t question the main assumption. Further, we might dismiss the slight rise in inflation expectations as reflecting the boding of basically uninformed consumers who can’t distinguish price shocks from continuing inflation. We could question the slight rise in TIPS spreads as attributable to technical problems in that market.

Hence, while none of these indicators is a definite sign that inflation is on the rise, all of them together do give me pause. And I might say that the anecdotes I’ve heard around the table today do as well, and in some ways these anecdotes may be more fine-grained than some of the formal data we’re getting. But to be honest, my biggest fear reflects a haunting similarity with the ’60s and ’70s, when those in the economics profession were rather firm in insisting that inflation would not heat up because output gaps were large. Output gaps turned out to be not as large as we thought, and inflation got pretty high. Given all these concerns, the wait-and-make-sure strategy strikes me as another invitation for us to get behind the curve. There are too many uncertainties to be resolved and too many haunting memories.

Having rejected the first two strategies, it shouldn't come as a huge shock that I favor gradualism. As a theoretical matter, gradualism involves taking smaller steps but starting earlier. The disadvantage is that policymakers know a slight bit less when they start the tightening process. The advantage is that, other things being equal, particular rate moves are smaller and less disruptive. After each small step, we can make assessments and either proceed or not proceed. If one wanted a medical analogy, the doctor gradually removes the stimulants when the patient appears to be reviving, monitoring all the while. Since this strategy reduces the chances of falling behind the curve, in general I think it should be preferred. I haven't been ready to start the tightening process until recently, but now I'm reassessing. We know that the inflation process has a lot of momentum. That does seem to be the one thing we can take from all of these experiences. And to me it makes an enormous difference whether inflation is possibly pointed down, as I thought last year, or possibly pointed up, as I fear this year.

I recognize what Ben just said, but let me focus on the follow-through part of the issue that he raised, which is how far monetary policy is out of equilibrium. According to the Bluebook, the forty-year average real funds rate has been 2.7 percent. Adding 1½ points for normal inflation and another small bit for the effect of productivity on real rates, we are at least 350 basis points away from equilibrium. That's a lot of small changes, and those of us who are gradualists had better start thinking about changes fairly soon. I recognize that we could do a lot with our rhetoric and we could always make larger changes later in the process, but that's exactly the course I'm arguing that we should try to avoid if at all possible. I also think it is time to change our rhetoric. In the gradualist strategy, we can be very patient in carrying out our rate increases, but I hesitate to use that word because I think it has become a code for the policy strategy that I don't favor. If I could

paraphrase Rogers and Hammerstein, I'd like to change our rhetoric so that we are in a position in June to declare the time of 1 percent rates all over and start busting out. [Laughter]

CHAIRMAN GREENSPAN. You get the academy "reward." Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. I'd like to discuss two data points: one a survey of bankers and the other an update on fiscal policy. I surveyed a large money center bank, a large regional bank, and a smaller Midwestern regional bank. I was surprised to find that they all were less optimistic than both of our lender surveys and less optimistic than I had anticipated based on what I was hearing from other lenders only recently.

Starting at the money center bank, a point that I probably don't need to repeat is that asset quality across the board is bulletproof. Banks are in excellent shape, and loan quality is in excellent shape. The money center banks are reporting that, while IPO issuance and bond issuance are strong, supply may exceed demand given that loan demand remains light. As a matter of fact, the focus this year has not been on the provision for loan losses, which is backward-looking, but on capital required to support future lending, taking into consideration loan demand, credit insurance, credit default swaps, and any other hedges for other parts of their portfolio. They are scaling back the credit allocations that they had anticipated needing in the future. Also, in their equity funds they are seeing an outflow in the high-yield funds, indicating what they believe is an emerging pickiness among the investors, which I think reflects to an extent the oversupply.

Another comment my contact made was that in his judgment the aggregate portfolio risk was the lowest he had seen in several months. He attributed that to the fact that there is still not a great deal of confidence in the resurging economy. As a matter of fact, he said that, if we were to measure the difference in the approach to the economy of their economists and their traders, we would find that the economists are more optimistic than the traders—although that gap is

narrowing, as has been the case for some time. But it's a difference that we've seen before between people whose views stem from looking at the data and those who assess the outlook based on their feel of the activity in the marketplace.

One point to be added is that the banks are not seeing growth in loan activity by the large corporate borrower, for all the reasons we've talked about before—the improved cash flow, which can increase the debt service capability; the internal financing of fixed investment; and the restructuring of the balance sheet. But there's going to be one very large borrower coming to the market probably in this quarter, and the credit will be fully funded, which will make it appear as if there is actually significant loan growth. A lot of financing in technology, such as equipment purchases, is done by leases, which may or may not be reflected in bank lending activity, and there's still a lot of activity in the commercial lending sector. But, on balance, I was quite surprised that the tone I detected among my contacts was not nearly as optimistic as that in the lenders' surveys. Nonetheless, their comments did reflect the data that we saw in the Greenbook, especially the flow of funds data, which were consistent with only isolated areas of improved activity.

Fiscal policy is not a pretty picture, but it's consistent with a presidential election year scenario. We are probably not going to get any appropriations bills passed other than for defense. We're not going to get a budget bill passed, and we're almost certainly going to be looking at a lame duck session following the election this fall. The good news is that, with the absence of a new appropriations bill, spending will be limited to the appropriations levels from the previous bill. More troubling, however, are the lack of a coherent Republican strategy in the majority across the House and the Senate and the lack of a coherent Democratic strategy across the House and the Senate. So the debate on fiscal policy effectively focuses on whether or not the Congress will produce a transportation bill that, as you all know, is loaded with pork and whether or not, if it is

passed, the President will veto it, a veto that almost certainly will not be sustained. So the news is not good in either of the areas I've examined, particularly on the lenders' side. If we're looking for support for an improving economy, it isn't clear when one looks at the numbers.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. Obviously, as has already been talked about, several pieces of incoming data put the question of rising inflationary pressure squarely on the table before us at this meeting. We've heard anecdotal information from almost everyone who has spoken. The March CPI number obviously has been on the table. Monday's ISM prices-paid index rose 2 points, to 88, which I think was the highest for that index since 1979. So there are a number of pieces of information that give us reason to be actively discussing upward pressure on inflation at this meeting.

Against that backdrop, I think there clearly are two important questions. One relates to where we are starting: Is the level of inflation that we're starting with as low as we originally thought? The second is, What is the outlook for inflation? The first question basically comes down to whether we overestimated the falloff in inflation over the last several quarters. I think the staff here and at the Atlanta Fed—and many others—would say that a number of transitory factors affected the inflation picture in 2003 and led us to believe that underlying inflation was lower than it actually was. That may well be true, but I think the basic contours of the picture really haven't changed dramatically. If one looks at the variety of measures of slack in the economy—at what happened to unit labor costs, measured productivity, unemployment, labor market inflation, et cetera—they all suggest that there was a significant amount of slack last year in the economy and that underlying inflation did, in fact, come off some. That is, we didn't get the picture totally wrong, though we might have overestimated the degree of the falloff in inflation somewhat. That is

obviously comforting because it does mean that we are starting at a relatively low level of inflation. We are not close to reaching the kind of inflation that, under any reasonable view, would be considered inconsistent with price stability.

The second and more important question is whether the pickup in inflation that we've seen recently, as we've heard in this room from anecdotal information and other sources, is such that it would likely require a relatively rapid policy response starting in the very near future in order to maintain a rate of inflation that's consistent with price stability. Here I would come down, though somewhat uneasily, to the general view that the Greenbook probably has it about right—that inflation has clearly stabilized and may pick up somewhat but not to the point that we should fear falling behind the curve.

Let me first talk about the easy part of that assessment. I think the March surprise in the CPI is likely to be adjusted somewhat in the forthcoming data. All of us are well aware that some of what we saw in March reflected transitory effects on the upside, offsetting some relatively noisy data in components such as apparel and lodging away from home. I'm not trying to underplay the March surprise, but I think we should be cautious about putting too much weight on that since it may be adjusted going forward. More fundamentally, though, the question is whether or not the outlook for inflation has deteriorated so much that we need to signal a dramatic change in our views. I would admit that that is a tough call. There are a number of different models of inflation, but by and large I come down again being generally comfortable with the range of outlooks described in the Greenbook.

If one thinks about these various theories of inflation, one must say that some would perhaps lead to some upside concern; the issue of the pass-through of commodity-price increases could again surprise us on the upside. It is true that markets expect commodity prices to come off a bit, as

the Chairman and Karen were discussing earlier, but we have been surprised on that score. It is also historically true that the commodity-price pass-through has not been an important part of inflation dynamics. But again, one should be cautious.

In my view, more worrisome than this issue about commodity prices—where by and large I think the standard wisdom is likely to hold—is the question of inflation expectations and inflation dynamics. Some of us are concerned that a consistent series of upside surprises on inflation might start to become embedded in inflation behaviors and inflationary expectations. That is something certainly to be aware of. Ned talked about mistakes that this institution made in the '60s and '70s. I think many of those mistakes can be traced back to some misunderstandings about the dynamics of the economy but also to a willingness of the Committee at that point to buy into special stories to explain almost every upside surprise. So we should be very careful not to quickly reject this whole negative scenario with respect to inflation and the inflation dynamics that come from upside surprises.

While putting some weight on those things, my general view is that the greater probability is that inflation will pick up only relatively slowly from this point. I would still say that I tend to focus more on the more traditional views of what drives inflation. I think there continues to be a great deal of evidence of some slack in the U.S. economy, though it may be less than we thought it was at the previous meeting or the previous several meetings. Labor markets clearly have not completely recovered. It is true that we've had one good data report, but we have to be careful in interpreting that; we've had a few head fakes in that regard in the past. I would say that the rate of hiring still is showing only some early signs of picking up. The ECI seems relatively well contained, but we probably want to exclude some one-time effects. Trend unit labor costs also, it seems to me, most

likely will be increasing at only a gradual rate. Finally, I would say that the structural productivity story is still in place, while obviously the cyclical components of that will clearly wane a bit.

So, at this stage I come down—admittedly somewhat uneasily—agreeing with the general sense of the Greenbook that inflation is likely to pick up only gradually going forward. This suggests to me that, when we get to the second round of our discussion today, there may be two or three ideas that I would hope we could all agree on. One is a clear recognition that the risks obviously have become balanced with respect to inflation and that we'd lose credibility if we weren't ready to say that. But I don't think that they necessarily have moved to the upside. Second, I think we should continue the process of clearing impediments to raising rates to more neutral levels. We have moved from "considerable period" to "patience." Like Governor Bernanke, I endorse the proposed new language in the Bluebook, and I'd suggest that we continue to move on that path. And third, I think it is very important that we signal as we move forward that a moderate pace of moving rates back to neutral is most likely. By definition, we're going to be driven by the incoming data. But given the range of uncertainties we face now, I think it would be a mistake to lock ourselves into any particular path of rates going forward, implicitly or explicitly. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I will take the opportunity for the last time, I guess, to say that I agree with President Broaddus. As I prepared for this meeting, I too found that the changes since our last FOMC meeting were significant. As I looked at the different indicators I track, I saw more change than I had for quite a long time. I want to talk about three aspects of the data that I ended up focusing on: inventories, employment, and the various inflation indicators.

Let me start with inventory growth. I think we all were surprised about how little inventories grew in the last few months, below even the Greenbook estimates. If one looks at the historical trend in both inventory–sales and inventory–consumption ratios, what is remarkable is that the downward trend of these ratios that began in the '90s has continued—except for a slight flattening in wholesale manufacturing inventories during the recession. In fact, even the Greenbook forecast of inventory accumulation this year, based on the recent changes in the GDP numbers, suggests a level of inventories in 2004 that will be less than that held by companies in 2000, despite double-digit sales growth in the intervening four years. So, what is happening with companies' inventory management practices?

Recently I had an opportunity to be with some financial officers of several different types of businesses, and one of the things I found was that the anecdotal commentary was mixed. Particularly among manufacturing industries, there is still a lot of caution out there. These tended to be firms that had suffered a lot in industries where there is real pressure on profits. Perhaps like the company President Pianalto talked about, they've been worried about building their book of sales and have been trying to get their inventories down even further. On the other hand, folks in the retail industry told me stories about how they continue to be on a path of substantially changing the way they integrate information systems across their companies, going from the prospect books of their sales forces to order books and to inventory management. While a lot has been accomplished in that regard, many of these financial officers felt there were still significant ways that they could continue to improve their management of inventories. Manufacturing firms also are doing this, but again they started more on the cautious side than the retailers, who were talking more about improving their inventory management processes.

In terms of employment, I was glad to see that in March we had for the first time some growth in payrolls. I'm still a little pessimistic because it has been so long since we've seen real job growth. But it clearly is one of the indicators that I'm sure we all hope will be showing sustained growth going forward. Payroll income has not moved a lot in the last couple of years, and I personally am concerned that, after the tax refunds have played out this year and we see a slowing in the pace of equity extractions from housing due to rising mortgage rates, we will need to have significant payroll growth in order to sustain a strong level of final consumption.

And finally on the inflation numbers, it was amazing that after our March meeting every indicator of inflation that came out suddenly showed a reversal in the trend that we saw in 2003. In 2003, every month—and even on a twelve-month rollover measure—rates of inflation continued to fall. But that has really changed, and the anecdotes that many of you mentioned at previous meetings have come to bear. As I looked at the various pieces of the inflation picture, I focused on the question that some of you have already asked: Is something fundamental happening, or is this attributable to unusual events? Clearly, we have issues with some commodities where we're seeing worldwide demand-driven price changes. But overall what is amazing is that prices on the goods side generally have stopped their decline—a decline that obviously helped to lower the overall inflation rate for the last couple of years. And this is true for everything from used cars to apparel; it's not just raw materials or commodities prices. The other side, though, is that the rate of inflation for services—which had been relatively high in the last couple of years—has continued to come down. If one takes out medical services in particular, it is clear that the rate of inflation for other services is continuing to moderate. And since services are such a big part of our economy, if that trend continues I believe it will help to offset some of the lack of price declines on the goods side as we go forward.

Putting all that together, my position is that I do believe that the inflation risks are finally balanced. I would also echo the comments that were made earlier about changing our statement in order to allow us as much flexibility as possible so we can respond to whatever the data show in the next couple of months and can take the appropriate steps when needed.

CHAIRMAN GREENSPAN. Thank you. I think we have covered everybody. Mr. Reinhart.

MR. REINHART.² Thank you, Mr. Chairman. I will be referring to the material that Carol Low distributed to you during the coffee break. Market interest rates staged a remarkable runup over the intermeeting period, spurred on by data releases that surprised investors by their strength and by comments of the Chairman during congressional testimony. As shown in the top panel of your first exhibit, the funds rate expected to prevail one year ahead advanced 85 basis points. The red line in the middle left panel indicates that market participants currently believe that you are on a path to raise the funds rate 3 percentage points over the next two years—and that you'll embark on that journey sometime soon. Indeed, a full $\frac{1}{4}$ point tightening is first priced in by the August meeting, and as shown by the bars at the right, significant weight is placed on the funds rate being at least as high as $1\frac{3}{4}$ percent by October. Nonetheless, no weight is placed on action at this meeting, although surveys suggest that you'll seek to carve out additional elbow room for future action by dropping or modifying the "patience" language.

The revision over the intermeeting period to the outlook for policy prompted a 75 to 90 basis point rise in nominal Treasury yields, which was recorded predominantly in their real components. Despite some narrowing of corporate risk spreads, an average of real corporate yields (weighted by capital spending and plotted at the bottom left) gained 60 basis points since your March meeting. Adding in the appreciation of the dollar and the small net change in equity prices, it would appear that financial conditions tightened appreciably over the intermeeting period—a point Governor Bernanke has made.

An important element in your decision today is whether you view this tightening as commensurate with the revision to the economic outlook. To help frame those deliberations, three alternatives were presented in the Bluebook, which are repeated at the top of exhibit 2. The wording of alternative A was designed to address the worry that market participants may have built in excessively prompt and aggressive policy tightening and that the associated firming in financial conditions could threaten economic outcomes in 2005. Alternative B might be favored if you believe that market participants have pegged about correctly your assessment of the odds of policy action over the next few meetings but you also desire to emphasize that policy

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

firming will be gradual to limit the chance of an overreaction in markets when tightening commences. In contrast, alternative C includes a $\frac{1}{4}$ point hike in the funds rate, which might seem appropriate if you interpret the tightening of financial conditions as the initial signs of building pressures on inflation or increases in equilibrium real interest rates.

Taking these alternatives in turn, the case for A, which makes only minor changes to the wording of the statement and retains the commitment that you'll be patient, likely rests at least in part on dissatisfaction with the slow progress in working down resource slack in most forecasts and perhaps, too, on concern about downside risks to such forecasts. In the staff outlook, as shown in the middle left panel, substantial resources go unused over the next one and three-quarters years, with the output gap lingering at $\frac{3}{4}$ percentage point in the final quarter of 2005, while core PCE inflation still runs at just $1\frac{1}{4}$ percent. Although readings on payroll gains and CPI increases might indicate that businesses have become less hesitant to hire and that some pricing power has returned, the two histograms derived from data since the early 1980s at the middle right serve as a reminder that those monthly readings are very volatile. A 70 percentile range of the monthly change in payroll employment spans 300,000; the comparable figure for CPI inflation is 0.3 percentage points at a monthly rate. Moreover, given the outsized increase in the core CPI last month and the evidence of some tendency toward reversal, you might think that the risks around the next CPI release are skewed to the downside.

The Committee might be inclined to go slowly if recent developments seem reminiscent of the false economic dawn of two years ago. Back in March 2002, as sketched out in the bottom left panel, market participants were also firmly of the view that tightening was imminent and priced in $1\frac{3}{4}$ percentage points of funds rate increases over the balance of that year. Both economic data and the moral fiber of some of the leaders of corporate America subsequently proved shaky, and those expectations unwound, just as (in the bottom right panel) the consensus expectation of the year-end unemployment rate rose.

This time around may really be different. The discussion of alternative B in your next exhibit begins by noting that members might find the staff forecast both plausible and acceptable in its outlook for durable economic expansion and muted pressures on inflation. A notable aspect of the economic releases over the past six weeks was the consistency with which they surprised on the upside. But economic forecasts are always uncertain. Some sense of that can be gotten from the middle panels, which plot the distributions of three-quarters-ahead Greenbook forecast errors for the unemployment rate and four-quarter CPI inflation, centered around the current forecasts for 2004:Q4. Those distributions—derived from the past twenty-five years—are notably spread out. Over the last year or two, we've pointed to the lower tail of the distribution at the right, in conjunction with the zero bound to nominal interest rates, as a rationale for maintaining any unusually easy stance of policy. Now, with the risks of deflation substantially diminished, you may wish to shift your focus more to the upper tail of the distribution. The possibility of significant upside

surprises unfolding in short order may make you uncomfortable with the commitment that “the Committee believes that it can be patient in removing its policy accommodation.” But “patience” was meant to convey two notions: that the Committee believed it could wait awhile before acting and that, once policy firming commenced, it could be gradual in returning the real funds rate to its neutral setting. It is the former, not the latter, that at the moment may seem to be confining.

In the Bluebook, we offered modified language that the “Committee believed that policy accommodation can likely be removed at a measured pace” to emphasize that you see yourselves entering a tightening phase but one that likely will not be as aggressive as in prior episodes. That emphasis seemed important because, as in the table at the bottom left, market participants currently anticipate about 200 basis points of firming in the next year. That is probably influenced by the experience of the three prior tightening phases, in which the funds rate moved an average of $2\frac{2}{3}$ percentage points higher within the first year. But with inflation lower now than in those prior episodes, you may see less need at this juncture for such firming, perhaps viewing as more likely something on the order of the 100 basis point increase assumed by the staff. In the Greenbook, the gradual realization by investors that you will not need to tighten as sharply as they now believe imparts an accommodative offset to your policy firming. Without that offset, you may be concerned that the swing of both monetary and fiscal policies toward more restraint may slow the growth of spending next year even more than is built into the Greenbook.

There are potential costs associated with delaying tightening and conveying a sense of gradualism. The recent increase in short-run inflation expectations—say, as measured by inflation compensation in the Treasury market as in the bottom right panel—may represent a cautionary flag in that regard. But inflation compensation between five and ten years from now seems much better anchored, perhaps encouraging you to believe that a statement along the lines of alternative B would not cause market participants to question your inflation-fighting resolve.

If you think that the odds are higher that inaction might prompt building of inflation concerns, you might opt for alternative C, which is discussed in exhibit 4. In particular, a $\frac{1}{4}$ point firming might be favored if you are of the view that inflation has more than bottomed—that businesses have regained a considerable measure of their pricing power and intend to use it rather than absorb higher costs by cutting into their fat profit margins. In that environment, persistent monetary policy accommodation may spell trouble down the road. And as shown in the middle left panel, monetary policy has probably become more accommodative of late, as higher inflation by some measures has sent the real federal funds rate further into negative territory and the brighter outlook for the economy has been associated with an increase in the equilibrium funds rate. Such concerns would be heightened if you suspected that the natural rate of unemployment was higher than the staff currently assumes. As an alternative simulation in the Greenbook indicated, a natural rate of $5\frac{3}{4}$ percent, instead of less than 5 percent as assumed by the staff, would add more than

½ percentage point to the inflation forecast for next year (as shown in the middle right panel).

One consideration regarding the timing of such a move is that, as in 1994, it could spark significant financial market turbulence. Indeed, as shown at the bottom left, in both episodes the Committee kept rates low for a protracted period. This time, however, market participants seem better prepared, in that the expected path of the federal funds rate (the dashed red line) points decidedly higher than was the case in 1994 (the dashed blue line). Moreover, the large upward revision to expectations over the course of 1994 should not necessarily be taken as evidence of the primary role of a self-feeding dynamic in which policy tightening prompted investors to expect more tightening. Rather, a portion was due to the response to incoming data that suggested a more rapid improvement in the labor market, seen as the downward drift in a consensus forecast of the unemployment rate at the end of the year (shown at the bottom right). That said, you should be prepared for a sharp revision to expectations and heightened volatility should you surprise markets by firming today, especially acting so close in advance to key readings on employment and inflation. That in itself may be sufficient to dissuade you from such an action before making your intentions more clear.

In the last exhibit, I provide an updated version of the table from the Bluebook that gives the statement wording for the three alternatives that I have discussed. Of particular note across the columns is the characterization of inflation risks as now balanced—which was driven by recent data—and the promise that policy tightening would be measured under B and C. Based on feedback I got since the Bluebook was distributed, I offer three changes to the suggested wording, one in the rationale paragraph and two in the risk-assessment portion, with all three highlighted in bold. First, some members were troubled by the characterization that inflation was well anchored, so that has been softened to “contained.” Second, it seems appropriate to stress that the outlook has changed by noting that “the risks to the goal of price stability have moved into balance.” Lastly, to be sure that the qualifier “likely” obviously applied only to the pace that you intended to remove policy accommodation rather than when you’d start the process, I redrafted the last portion of the last sentence to read “policy accommodation can be removed at a pace that is likely to be measured.” That concludes my prepared remarks.

CHAIRMAN GREENSPAN. Questions for Vincent? President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. Vincent, I just had a question about the word “measured.” I guess there are three options here. We have been using the word “patient,” and that gives a certain message to the financial markets. So as you’ve outlined in the Bluebook, we could retain the word “patient,” substitute the word “measured” for it, or we could take it out completely.

As I read the Bluebook, it said that if we put in the word “measured,” interest rates would still go up. If we take out the word “patient” and put nothing in its stead, interest rates would go up further. I was wondering if you could give us some idea of the magnitude of those differences. [Laughter]

MR. REINHART. To what significant digit?

MR. MOSKOW. Whatever you decide!

MR. REINHART. I think we can agree on the sign. The experience of taking out the promise of remaining accommodative for a “considerable period” and substituting what seemed to be a similar concept of “patience” was that it prompted a good-sized market reaction. Similarly, “patience” has now become a loaded word, and the first thing traders will do at 2:15 this afternoon is to look to see if that word is in our statement today. If there is nothing there at all, then I think you should expect a movement up in forward rates on the order of 10 to 15 basis points. Leaving the sentence there but changing the language and using the term “measured” will send them to their dictionaries where they will find that the second meaning in most common dictionaries is “connotes a gradualism.” In my view, that will prompt a reaction on the order of, say, 5 to 10 basis points. I’m looking to Dino to see if he agrees or disagrees.

MR. KOS. My dictionary aligns perfectly with Vincent’s.

MR. MOSKOW. But does your market sense align with his?

MR. KOS. Vincent makes a very good point about the initial reaction in January, when “patience” replaced “considerable period.” And I think he’s right that market participants will look to see if “patience” is in today’s statement. If it is not, there will be a knee-jerk reaction pushing yields higher.

MR. MOSKOW. Thank you.

MR. REINHART. The other point I'd like to make, President Moskow, is that in the total scheme of things, any reaction to the wording today is going to be dwarfed in significance relative to what happens at 8:32 Friday morning after the employment report comes out.

MR. MOSKOW. Right. But basically you're talking about a small number of basis points from the difference in the wording?

MR. REINHART. Yes, but it will also influence how market participants subsequently react to the data. That is, their view of the employment report or the CPI is going to be filtered through the lens of what they think the Committee is going to be doing. In that sense "measured" is a speed bump to them as well, in terms of overreacting to the data. So it's not just a matter of what happens this afternoon; it's what happens over the next six to eight weeks.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I was going to raise a question that goes right to the point that Vincent was just making. The critical issue is not how the market will respond this afternoon but how best we can create language that will align our reaction to the data and the market's reaction to the data. As Roger Ferguson mentioned before, obviously we're going to be responding to the incoming information. I think he said it goes without saying.

MR. FERGUSON. But I had to say it nevertheless! [Laughter]

MR. POOLE. So I think it might help to give some sense of that—to modify this language and say something like "with inflation low and resource slack and given the economic outlook"—to emphasize the point that, if the economic outlook changes as a consequence of the incoming data, then of course it makes sense for us to reconsider the pace at which we would remove the accommodation. I'd put it in those terms. Between now and our next meeting, we'll have two employment reports, and I guess we'll have two CPI reports. If each of those suggests a revision to

the outlook such that the outlook for activity is one standard deviation higher and inflation the same way, that would be quite a major change. And I think it would require us to react a little less gradually than we might otherwise. I agree that gradualism makes a lot of sense if the world comes out according to the staff forecast. But if it doesn't come out that way, we don't want to lock ourselves into a market assumption that we're going to be moving gradually, it seems to me. Thank you.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I'd like to go to this point of what the market's reaction will be. Obviously the market reaction is going to be dependent upon what we do relative to what market participants expect us to do. Their expectations are the relevant issue here. But I don't know how we measure market reaction when we don't have a way of going out there and asking market participants, "What would you think if we said 'measured'?" The market is expecting an adjustment, I would argue—an elimination of the word "patience." But I don't know how to split that hair and say that, if we eliminate "patience," which is what the market expects, but don't put in a word that is somewhere between patience and an imminent move—a word such as "measured" whose second definition is "slow movement"—we're going to get a 10 basis point increase in rates. More to the point, we're then going to have to sit around here next time and worry about whether it is time to be less measured, and that troubles me as well.

I thought that the combination of the speeches and the market's expectations as to the data would allow us the opportunity to do what the market expects by taking out "patience." I just wonder whether we're generating another problem by adding "measured." I don't know what the reaction to that is going to be. Whatever the reaction is, we're going to have to pay for it later when we no longer want to characterize our prospective policy actions as measured. I don't know if that's

a question! [Laughter] You answered the question of what you expect the market to do, though I don't know how one could even begin to answer that question. I think market participants are going to scramble to their dictionaries and ask, "What does 'measured' mean?" And then they'll try to figure out our intentions and how to react.

MR. BERNANKE. Haven't you done surveys on the market's expectations regarding the language? I think you have.

MR. REINHART. In the survey by the Desk, the question we asked market participants was whether they expected us to drop or modify the word "patience."

MR. SANTOMERO. If they expect us to drop it or modify it, I read that as an opportunity to drop it. If we really wanted to know more, I guess we should have asked, but I'm not sure how to do that. There are lots of words in the English language.

MR. REINHART. It's hard to know how to interact with market participants about potential wording. Obviously I am making a guess here, but it does seem, on the basis of reading various newsletters, that the preponderance of economists who write about the issue expect the Committee to modify rather than to drop the word "patience." But that is a guess. I once asked a Nobel laureate what he thought was the best way of finding out how market participants would react to wording in the statement. He suggested that we do what those in the survey industry do—have focus groups and really experiment with traders. My reaction was that the only time I've ever thought about experimenting with traders it involved cattle prods! [Laughter] It's just hard to—

CHAIRMAN GREENSPAN. Traders react to what they think other traders are going to do who react to the way they think still other traders are going to react. To try to anticipate how they will react is a futile activity in my experience. President Hoenig.

MR. HOENIG. Vincent, this may be more of a statement than a question also. But in my experience on this Committee we've never acted in other than a measured way. And I can't see our doing otherwise as we go forward, depending on the data we get. In my view the only thing we accomplish with this word specifically is to put a collar on ourselves and to tell the market that we're putting a collar on ourselves going forward. I think that's what we've done in the past, with the result that, anytime we want to make a change, we have to wait at least one more meeting to prepare the market for the change—using the statement as the vehicle. That is the point Tony was making earlier. We have an opportunity here to drop this language, and I think we should.

CHAIRMAN GREENSPAN. May I just interrupt? I'll anticipate what I'm going to say in my comments to you in a few moments. This language enables us to move the next time. But the wording is very interesting. The word "measured" is referring solely to the rate of increase, not to when the increase will begin. We have no way of knowing what the data are going to show over the next several weeks. As Vincent pointed out, whatever we decide here and whatever the response, the reaction is likely to be a small fraction of what the market will do on Friday. If, for example, we were to go very far and try to move more than the markets expect and we end up with a 50,000 payroll number and 0.1 on the core CPI, we will have moved awkwardly. I'm not sure what the reactions would be to that. But I don't think this proposed language restricts us in the slightest. As you say, Tom, we always move in a measured way. So the use of the term "measured," if I take you literally, should have zero effect because that's the way we always move. Merely stipulating that doesn't change anything.

MR. HOENIG. Partly my concern is what will happen if the payroll numbers come out better than 300,000 again and we have more inflation. Then what are we going to do next time?

CHAIRMAN GREENSPAN. Do you mean what will we say or what will we do?

MR. HOENIG. What are we going to do? We've already told the market if we say "measured" today, what we're going to do next time.

CHAIRMAN GREENSPAN. What we will do is that we will move the funds rate up.

MR. HOENIG. Okay.

CHAIRMAN GREENSPAN. And the first move we make will be a big deal, especially if it's in June and not in August as everyone expects. Unless you want to move either today or in the intermeeting period, which I would not recommend—

MR. HOENIG. I understand what you're trying to do in terms of preparing for the next meeting. My only concern is that, once we put this language in there, when the next meeting comes and we have our policy discussion we'll have to worry about the word "measured"—which I think was President Santomero's point.

CHAIRMAN GREENSPAN. Anything we do, whether it's 25 basis points or 125 basis points is by definition measured. [Laughter]

MR. HOENIG. That makes me feel a whole lot less well.

MR. GRAMLICH. You had a measured rise in your temperature! [Laughter]

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. We're beating to death the issue that I want to raise here, so it's probably not helpful for me to raise it again. We are debating the term "measured." If we take the phrase that includes "measured" out of sentence 8, we're left with a statement that says we think the policy accommodation can be removed. That raises the question: Well, if that's what you think, why didn't you do it? So we'd have to take out the whole sentence if we want to get rid of "patience" and "measured" altogether. But I'm not sure what the market reaction would be to something like alternative B without sentence 8—without any statement whatsoever that reflects, as we've been

doing all along, some sense of bias in our policy intentions. As much as I am in agreement with the view that putting yet another phrase into our quiver will perhaps raise all kinds of consternation about what we mean by it, I think we're left with a hard choice here. So given that hard choice, I think maybe "measured" has to stay.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. May I ask just one other question? Do you see a time when we would take this word out?

MR. REINHART. I think you would take this word out if you envision circumstances comparable to the latter part of 1994 where you'd be moving, say, 50 or 75 basis points. In other words, if it were February 1994 and we were using this framework, we probably would have sent you a Bluebook that said "policy accommodation can be removed at a measured pace." Most likely that would have stayed in the Bluebook until July or August when you felt you were behind the curve and had to do larger increases.

MR. MOSKOW. So while we have a series of 25 basis point increases it would stay in?

MR. REINHART. In some circumstances it might be helpful to keep in the "measured" phrase even in the act of tightening so market participants don't extrapolate that tightening more than you think appropriate.

MR. GUYNN. I have a question of process. Do you want to continue this discussion? I can hold my comments and wait, but I want to weigh in on this issue as well. It's a question of whether we're going to come back to it or not.

CHAIRMAN GREENSPAN. Oh, of course we can come back to it.

MR. GUYNN. I'll hold my comments until later then.

MR. GRAMLICH. Mr. Chairman, at this point I think it would be helpful if you would give your views and your policy recommendation, and then we could all say what we think about this. [Laughter] That may avoid our being surprised, just as we don't want to be surprised by the upcoming unemployment report.

CHAIRMAN GREENSPAN. Okay, let me talk in a measured manner. [Laughter] First of all, I think there's no question now that this recovery is broad, deep, and evolving into a sustainable expansion. Indeed, I have the suspicion that a very unusual factor in this recovery allows us to project it further than is usually the case. Corporate management is very conservative and not prone to anticipate a recovery and, hence, to move ahead of it. Moving ahead of the recovery usually means putting in plant facilities more quickly, expanding the company's labor force well before the additional workers are needed, and making all the other expenditures that corporations have made in past recoveries, with the result that capital investment plus inventory accumulation has invariably exceeded internal cash flow.

In 2003, for the first time since 1975, cash flow exceeded capital investment, which suggests that there is a very considerable hurdle—in terms of spending decisions—to which the business community is still responding. And I suspect that it relates to the corporate scandals and other corporate concerns that have emerged in the last couple of years and are still lingering. We are seeing very considerable gains in corporate profits, and margins are up very significantly. Cash flow in the first quarter was quite strong, and analysts are continuing to raise their estimates for the second quarter. In short, business managers are being pulled along by the data rather than being anticipatory. This is not unusual because we've had a very shallow recession and we're not getting the usual rebound in any respect, with the exception of the very strong growth in profitability.

All of this leads me to conclude—and I think this view is held pretty much universally as well as within this Committee—that we have completed our period of accommodation, which was an endeavor to address the rather substantial contractionary forces that became evident in mid-2000. In retrospect our policy accommodation appears to have worked. Whether we will look back upon this period two years from today and say that our policy was the right policy is going to depend on how we come out of this period of accommodation.

With regard to the outlook for inflation, we have a number of indicators that we look at. For one, as many of you have mentioned, we have the “gap.” I am uncomfortable with the gap analysis basically for two reasons. One is that it requires that we view the inflation projection from the perspective of regression analysis, and that kind of analysis always has a large element of potential error in it. If the projected inflation rate is above the current rate, we’re never quite sure whether there has been a fundamental change in the structure of the economy, which isn’t captured by the regression, or whether the actual inflation rate is eventually going to move up. As a consequence, unless our projections are right on the money all the time, which they almost invariably are not, there are always serious questions about whether our gap regression analyses are really telling us something that we need to know.

Second, there is the question of whether a single figure describes the process. A number of you have mentioned the skilled labor shortage. The very soft rise in wages and salaries in the production worker data is suggestive of the development that we’re all aware of—namely, that the skill differential has been rising fairly dramatically. As a result, we have a shortage of skilled workers and a corresponding surplus of lesser-skilled workers. And as I’ve argued in certain speeches recently, what we are failing to do in this country is to raise the degree of skill in the workforce as a whole sufficiently quickly to create a more balanced skill supply–demand situation

and in the process to remove the surplus of the lesser skilled so that we end up with an overall balance. We don't have that at this stage. I'm wondering whether or not the differential pressures of stronger wage growth in skilled areas and weaker wage growth in lesser-skilled areas create problems in doing this type of evaluation. In my view that is at least open to question.

As a consequence, I think that it is important to look at the structure of underlying costs. Because profit margins tend to be constrained, within limits, the issue we ought to be looking at when we are trying to evaluate the behavior of inflation is not the core PCE or the core CPI but underlying unit costs in the economy, as best we can judge them. One way of analyzing this is to look at a set of data composed of nonfinancial, non-energy corporations that account for maybe 55 percent of the GDP but obviously a significantly higher proportion of the growth of the business sector. If we look at those data, we see that the acceleration in costs has been very limited. Indeed, over the last four quarters this sector has registered an average price rise in the neighborhood of 1 percent. And it turns out that two-thirds of that rise is reflected in higher unit profits and that actual underlying unit costs are rising very modestly, the result of a combination of declining unit labor costs and declining unit interest costs, offset in part by rising costs of energy, indirect business taxes, and business transfers.

I understand the issue of whether we mis-evaluated the data on prices last year and, hence, have been operating under a presumption that inflation had gotten lower than it actually did. But I think that the more important question here is what unit costs are doing. Consequently, trying to get a long-term projection of where inflation is going may require that we start from a higher base than the one we've been assuming is currently the base. As I think David Stockton mentioned, we have now reached the point where changes in unit labor costs have become positive. We have to assume that there has been some upward movement in unit energy costs and probably in unit interest costs.

But one has to remember that, whenever we are talking about unit costs, if the denominator is rising at a fairly rapid pace, it holds down unit costs, all else being equal. So it is not clear to me that unit interest costs are in the process of going up. Nevertheless, I think the point here is that we are not yet in a position where we are seeing underlying cost structures moving significantly. To be sure, they have picked up in the last several months. In fact, my recollection of the data is that productivity growth from December through March, as distinct from the first quarter over the fourth quarter, is in the area of just under 4 percent. In fact, if I sort all the pieces of paper in front of me, I may actually come up with a number. [Pause] Voila! The staff estimate of output growth per hour between December and March is 3.9 percent at an annual rate. Compensation per hour, interestingly enough, is up at a 5 percent rate for the same period, reflecting a 3.1 percent increase in wages and salaries and significant increases in other labor income. The latter increase, as you saw in the ECI, is to a large extent pension costs and medical insurance costs.

So we are beginning to see a process of increasing costs. But the productivity numbers are still sufficiently strong to suppress the overall rise. Remember, the major difference between 1994 and today is productivity growth. In 1994 we didn't have any productivity growth to speak of, and we had to move very fast to contain inflationary pressures. The reason we have been able to be patient in this recent period is that we knew unit labor costs were falling fairly abruptly, and whatever the price data showed was frankly irrelevant in that respect.

I think we have a set of data here that, as far as I can judge, seems to be consistent with a gradual building-up of inflationary forces. But I fully recognize that we can't measure that by looking at different simulations as we try to do in certain respects in the Greenbook. I'm uncomfortable with the very narrow ranges that the Greenbook's alternative simulations show. That's because, if we look back over the last several years or maybe the last decade or so and ask if

we were wrong at times because we misforecast the exogenous variables, I'd say "only partly." Mostly, the reason we were off was that the model structure was changing. The coefficients inside the model were moving, and that created a wholly different environment from the one we had expected. We alter the exogenous variables in our simulations, but we do not change the structure of the models. Of necessity the simulations are based on the assumption of a fixed model structure, and at this stage, I am a little concerned that that may be giving us some false sense of complacency, if that is indeed what we have.

Still, the change in unit labor costs in March, if we're going to take the staff's figure, is zero. And with profit margins apparently continuing to rise, that is suggestive of a unit cost change that on a monthly pattern is not exhibiting any acceleration. In that respect, I think we can state that the pace at which we're likely to remove our policy accommodation is going to be "measured." The data could run away from us, and obviously that would create a problem.

In any event I would say that we have to position ourselves for the possibility of moving at some meeting, unless we want to take the very unusual step of making a move between meetings. That, I will tell you, would create some extraordinary impact in the marketplace largely because we are perceived as highly credible. So, if we eliminate that option, we either move today, or we wait until June. We are not going to move today in part because we are awaiting, and will soon get, a couple of major statistical reports that could cause us some difficulty, to say the least, if they differ radically from what we expect. And the point of waiting until June is to be sure that we are positioned to move at the June meeting if we desire to do so then.

When I say "move," I mean by 25 basis points. I mention that partly because of the experience of February 1994. Those of you who were here then may remember that there was a groundswell opinion within the Committee in favor of moving rates up not 25, but 50 basis points.

And I went berserk for the first time and, I hope, the last time at an FOMC meeting, on the grounds that, whatever we did, the markets were going to respond fairly exceptionally, which in fact they did. So, on the basis of that particular history, I would say that we should not move more than 25 basis points in June. We may move 75 basis points in August. I don't know what we will decide then. But the point at issue is that, if we're not going to move more than 25 basis points in June, then the type of statement proposed in the Bluebook—which was more recently revised by Vincent, and I'll read the specific rewording—strikes me as an appropriate response to the data we now have. The sentence as it now reads is, “At this juncture, with inflation low and resource use slack, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured.”

Frankly, I think that positions us appropriately, considering our lack of knowledge. I know that President Poole has raised the question of putting in something about the economic outlook. I have no objection to that particularly. I'm not sure it adds anything, frankly. It does add words, and I think the fewer words that we put in these statements, the better off we are. You will have observed that we are spending more time on this statement than we have on previous statements, which is fine. Indeed, since we're limiting ourselves to very few issues, in my judgment that says that this process is turning out to be the right way to do this. In any event, to repeat myself, my recommendation is that we stay where we are and make the few changes in the statement that Vincent suggested. I would be curious to hear your reactions and get the conversation going again. Who would like to start? Governor Gramlich.

MR. GRAMLICH. First of all, I support your recommendation, Mr. Chairman. As I said in my earlier statement, I'd prefer to be gradual, and I'd prefer to start early and stay ahead of the curve, understanding that we can change our mind depending on the way the data come in. To be

positioning ourselves for a move of 25 basis points in June is fine and would satisfy my Rogers and Hammerstein test.

On the language, I actually think the sentence in alternative B is brilliant. In my view it does not put a collar on us. Second, we have not always moved in a measured way. Our policy moves weren't measured over the course of '94, and they weren't measured in '01. So to say that we prefer to be measured I think does add to the dialogue. The wording probably does not make our actions as contingent on the data as Bill would like, but it does say that our stance is conditioned on inflation being low and resource use being slack, so it does tie into the data at least to some extent. And to me the phrase "likely to be measured" really is the gradualist mantra. So how could I object to that? I think it's just perfect, frankly.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, I wish we were in a position to move today, but obviously we're not. I'm among those who have a strong preference not to introduce another word such as "measured" into our statement. Again, we're all trying to play English major, I think. But I agree with your comment that we cannot know with any certainty how the data will come in. Indeed, they may run away from us a bit, and we may want to be in a position, if not in June then sometime in the summer, to make more than a 25 basis point move. Vincent, in his response to a question, indicated that he thinks "measured" will, in fact, be interpreted to mean 25 basis point moves, and I just don't think we need to say that. In my view, we have enough credibility that we're going to operate in a reasonable and measured way. I believe we would be doing ourselves and the financial markets a disservice by implying a pre-commitment to a particular path for policy—a commitment that we may later wish we had not made. I think we can operate just fine by dropping the word "patience" and leaving well enough alone. Thank you.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. I support your proposal. I am a little uneasy about the word “measured” for the reasons I indicated. If I may, I’d like to ask you just one question concerning your thought process. You indicated that at the next meeting we may indeed be in a position of responding with a 25 basis point move—to the extent that the incoming data are satisfactory—and that if the economy gets stronger, then we will go 75.

CHAIRMAN GREENSPAN. I don’t know what the next move will be.

MR. SANTOMERO. I’m teasing, of course, just giving an example.

CHAIRMAN GREENSPAN. Remember, though, that we haven’t made an intermeeting move in quite a long while, and one of the reasons is that we haven’t been in the process of making changes in our policy. If we go back and look at the history, we have often moved between meetings.

MR. SANTOMERO. I agree with you. The question I want to ask is this: If we got positive surprises between now and the June meeting and we felt we needed to raise the funds rate target by 25 basis points, would we also conclude that we needed to take out “measured”?

CHAIRMAN GREENSPAN. We might.

MR. SANTOMERO. Therefore, the next move could be more on the order of 37.5 basis points—that is to say two steps, involving both a 25 basis point increase and the removal of “measured.”

CHAIRMAN GREENSPAN. Look, unless something very unusual happens between now and June, I think if our first move were 50 basis points that could create some real market disruption. But if our presumption is that we have to accelerate the pace, then I think “measured” should be dropped in June.

MR. SANTOMERO. If we move and the economy suddenly improves in a manner that is consistent with moving further, it may be more disruptive to have put the word “measured” in the statement than to have left it out.

CHAIRMAN GREENSPAN. It may. The tradeoff here is that a disruption will occur now if we don’t say something like “measured.” And we are at an earlier stage of the economic recovery than presumably we will be later, in which case it’s quite conceivable that we might do inadvertent collateral damage. If the market is likely to respond to this statement by tightening, which we suspect it will, it’s going to tighten more if we don’t use “measured” or some similar word. And subsequently we might find that we’re running into a period where there’s more slack in this economy than we now anticipate. I don’t think it’s a high probability, but the cost of a mistake here today may be much larger than the cost of a mistake later.

MR. SANTOMERO. With that said, I support your recommendation.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. I also support your recommendation. We are obviously deep into the question of how we communicate with markets, and we have a general view, I think, that this is not the time to actually move up the funds rate. So let me focus on the way I think about our communications with markets. My sense of it is that we want to reinforce market expectations if we believe they are about right and we want to change market expectations if we think they’re wrong. And we use communications to do that.

As I look at exhibit 4, it is hard for me to say at this stage that market expectations are fundamentally wrong compared with the judgments I heard expressed in this room—namely, that inflation is relatively low but it might be picking up, though we aren’t really sure and so we have to give ourselves a little more time. I believe that this proposed language is helpful in saying to the

markets that we wouldn't want to work hard to disabuse them of the expectations that have been built in at this stage for a modest tightening probably starting sometime in August. That doesn't mean that that assessment can't change. It may change as the data change, and we may move more aggressively than we anticipate. I'm not sure. But I would definitely say that the word "measured" will help us to avoid triggering any real snapback in expectations in the context of what I continue to view as an economy that is still working hard to get rid of slack. So I'm very supportive of this language.

My second point relates to Tom's question and others about what we can do here. As I read this language—putting on my English major hat—it says basically "at this juncture." So as of today, contingent on the conditions that Ned pointed out—low inflation and slack in resource use—our belief is that the pace at which we will remove policy accommodation is likely to be measured. I sense that to be an accurate reflection of where we are at this stage. If over time, based on a number of data releases that come in, it turns out at some future juncture that this assessment is no longer relevant, I don't think our hands are tied. In my view we can move if we have to move in June. I actually think the markets probably understand that—or at least that seems more likely than not. So I think this language is—I know Ned used the word "brilliant," but I thought we had moved away recently from declaring our statements to be brilliant—certainly extremely good. [Laughter]

CHAIRMAN GREENSPAN. You are indeed measured.

MR. FERGUSON. But supportive.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. I was going to give a less ringing endorsement by characterizing the proposal as better than the known alternatives. [Laughter] Essentially what we're debating is whether a statement with this ending is too soft, too reassuring about the future

path of the fed funds rate. I believe that's the right question to debate. But I think it's important to recognize that this wording gives us the flexibility to move in June, if necessary. Although our risk assessment is balanced, this statement has an overt asymmetric bias, whichever way one looks at it. As Roger just said, the last sentence is qualified in at least four different ways. It says "at this juncture"; it is conditioned on certain fundamentals; it says "likely"; and the word "measured" itself must have a range of possible interpretations. Now, it's difficult to defend the statement both as not constraining and helpful as a signal, but maybe that's its virtue. [Laughter] So I'm comfortable with it, and I support the recommendation.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I, too, support the recommendation. I think the language does give us adequate flexibility at least for the next two or three months, as best I can read the situation. And I'm hard pressed to suggest any better alternative. So I support your proposal.

CHAIRMAN GREENSPAN. President Pinalto.

MS. PIANALTO. Mr. Chairman, I also support your recommendation. I have to admit that, when I first read the "measured pace" language in the Bluebook, I was concerned that it would be interpreted by markets as indicating that we had a predetermined path for moving rates up and that we would be doing it based on a time schedule rather than reacting to information about the economy. And as I said earlier, I was leaning toward wanting the flexibility to react more quickly if the data continue to come in stronger, especially the inflation numbers. I think the new language that Vincent proposed, "is likely to be measured," does give us the added flexibility. So I support your recommendation.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I support your recommendation and all aspects of it. Like President Minehan, I'd be concerned that, if we just dropped the last sentence, the markets would overreact if not immediately then over the intermeeting period. As data come in, they'd start to build in a 1994-type tightening, which is what I think they're looking for and what a lot of the discussion is about in the markets. My personal view—or at least my best guess—is that we won't need to tighten like that. Inflation is lower, and I think the output gap is disappearing but is disappearing slowly. So not signaling the markets that expectations of a 1994-type tightening would be the wrong—and allowing those wrong expectations to get built into the markets—would give us, I think, more trouble than dealing with this word “measured.” So I believe that we need some way of indicating that our best guess is that the firming, when it comes, will be gradual.

I thought the reaction to your testimony, Mr. Chairman, was perfect because you dropped “patience,” everybody noticed it, and rates reacted a little but not a lot. And you balanced that by providing a somewhat more detailed outlook. You said that you didn't expect inflation to rise and you talked about the downside risk that you discussed earlier. Well, we're not doing that here; we're not giving a detailed outlook in our statement. So I think the suggestion of a moderate and measured pace of tightening is a way of substituting for a detailed forecast in an effort to moderate the market's reaction to our statement. Thank you.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. I support your recommendation. I think we may need to move sooner than the markets now expect. But that is going to depend largely on the strength of the incoming data, even in the next week. So I look forward to seeing what is in store for us.

I very much agree with what Don just said. I think if we left out sentence 8, we would be sending the wrong message. We actually could be sending the wrong message in another way. We

could be interpreted as saying that everything is hunky-dory and that we don't have plans to remove the policy accommodation. That could be read as the message in the statement that the risks to the outlook are balanced, whereas sentence 8 does say positively that, all other things being equal, we're going to take the policy accommodation away. We plan to do it in a measured way, but we're going to do it. I think that's an important follow-up to your testimony as well. Whatever way we look at it, I think we're stuck with sentence 8. We're probably going to take grief from some quarters for this new language, but I think we're stuck with doing this. So I agree with your recommendation.

CHAIRMAN GREENSPAN. President Broaddus.

MR. BROADDUS. Mr. Chairman, I'm very comfortable with your recommendation. I feel very strongly that we should use the "measured" language for all of the reasons you have listed. I also agree with Roger's and Don's points—and Cathy's as well. Fundamentally there's still a considerable amount of slack in the economy, as I see it. Also, and this is a point I would emphasize, I believe that we still have credibility for low inflation. This is not late 1993 or early 1994, when we did not have credibility. I know there is some survey evidence of rising inflation expectations, and there are a lot of anecdotal reports as well, but I don't see any really dramatic recent change in inflation compensation or in spreads for indexed bonds in financial markets, especially in the longer-term five-year to ten-year area. Basically, I believe that we need to think differently about the potential benefits of a preemptive tightening of policy—or what might be perceived as a preemptive tightening of policy—in a situation where we have price stability as distinct from a situation where we were at the last stage of ending a twenty-five-year war against inflation. In my view, the language indicating that we can remove policy accommodation at a measured pace would be consistent with these considerations.

Earlier, Mr. Chairman, you told me that I could have about thirty additional seconds to talk today. If I may have about five seconds here, I'd like to quickly share a little anecdote that you may enjoy. Some of you may recall that at the last meeting I was pretty much at one end of the spectrum—even beyond the Kohn camp. [Laughter] I paid for that at the hands of my colleague, Jack Guynn, a few days ago. Jack, of course, is the President of the Atlanta Fed, which is the Sixth Federal Reserve District. But as some of you may know, he was actually born in the Fifth Federal Reserve District, in the Shenandoah Valley. He has a nice younger brother named Doug, who is a very prominent attorney there. I had to make a speech in that area a couple of weeks ago, and Doug very kindly invited me to stay with him. Jack happened to be there as well. Doug has a wonderful house overlooking the mountains, and he gave me a beautiful room to stay in, and for the first time in my career, there was a bouquet of flowers in my room. But Doug kept asking me to look carefully at the flowers. I couldn't understand why until, eventually, I saw that in the flower arrangement there was a carved wooden dove sent by his brother, Jack. [Laughter] Jack, that really hurts! I hope you take some comfort that I'm a bit closer to the center of gravity today.

MR. GUYNN. It was fun!

CHAIRMAN GREENSPAN. Well done. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. I, too, support the recommendation, and I've been looking carefully at both sentence 8, which Cathy talked about, and the March FOMC statement shown in alternative B. If I compare them word-by-word or even phrase-by-phrase, I can see only minor differences—primarily the removal of the word “patient” and the addition of “is likely to be measured.” But as I read the two, I think that alternative B comes across much more strongly, and I think it's the position of the word “remove.” We're not talking about when at some point in the future the policy accommodation will be removed. We're describing the circumstances

or the manner in which it will be removed. Consequently, I would not be surprised—though I’ve never been good at judging what the market response to our statements will be—if there’s a stronger reaction than what many around the table have been suggesting. Having said that, I think the statement is exactly accurate. And recognizing that we review these generally within a six-week time frame, it seems to me that this is the appropriate way to describe where we are as of today.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Thank you, Mr. Chairman. I wasn’t here in February 1994, but I’m certainly going to go back and read the transcript to see when you went berserk! [Laughter]

CHAIRMAN GREENSPAN. My “berserkedness” was partially edited out. [Laughter]

MR. MOSKOW. As for your proposal, I agree with your recommendation on the rate. On the language, I find it hard to disagree with language that people I respect call “brilliant” or “extremely good,” but I must say that I’d prefer a different path. I would prefer to drop the word “patience” and not substitute the word “measured.” I just don’t like putting another word into the lexicon now. I think it is going to pose problems for us down the road whenever we try to take it out. I realize that this wording is going to be approved, but I’d like to make a couple of comments so that the next time this issue comes up my views will at least be in the record.

First of all, on the point that we conditioned it four times, I remember that at the Jackson Hole conference there was a lot of discussion about whether the markets can understand central banks’ conditioned statements, and the clear consensus was “no.” The view was that the conditioning in a statement by a central bank doesn’t mean anything to the markets. They just read it as unconditioned.

Second, on Cathy’s and Don’s point about line 8, the part of the sentence that I think is important—namely, “with inflation low and resource use slack,” which I agree should be

somewhere in the statement—could be moved up to line 3 and incorporated in the rationale section. I think that would describe the situation as it is now without having to provide a forward-looking element—in other words, without adding “measured.” So, on balance, I would prefer to take that word out.

CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, having expressed my opinion somewhat earlier and having listened to all of this commentary, at this juncture I want to give you my measured response to the conversation so far and that is that we have the direction right. I know where we stand in that we need to be looking at the next meeting for some action. And I think that’s the most important thing we’ve decided here today, so I support you in that. I think we would be better served not to have this last sentence, line 8, in the statement. We could convey this message in speeches, as you already have in some ways, over the coming period. The data coming out will decide a lot of this for us and move us toward a June time frame anyway. But I think the more important element of today’s decision is that we cannot move now and we should be thinking about June. In that sense, I support your recommendation.

CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I, too, am still in the camp that would prefer not have a commitment in the statement. But I like the idea that many of us have been expressing in speeches—that the policy accommodation has to be removed. What I struggled with—and I was interested in listening to what was said about it around the table—was the word “measured.” If I were an outsider trying to read the message in that word, I’m not sure that I would know what it means. Are we trying to signal a slower pace than in ’94—a gradual and moderate but not pre-emptive pace? I guess we’ve come up with a word that I don’t know the meaning of. If the idea is

that it says we're going to determine the pace as the facts come in—and we'll determine the level at that time, too—then I think we have the perfect word. I don't necessarily think it means that we wouldn't be as aggressive as we were, say, in '94. I don't know how it relates to the average numbers that Vincent provided here because I don't know what magnitude we're talking about with “measured.” My only concern is what we really want to signal. Are we just going to determine our moves as the facts come in, or do we really want to signal a gradual pace?

CHAIRMAN GREENSPAN. The answer to that is that the facts are going to determine policy and I should hope that the markets are acutely aware of that. If that were not the case, they wouldn't have been moving the federal funds futures around as the data came in. At the end of the day, if we wished to be stubborn, we could keep the federal funds futures at 1 percent indefinitely. It would have certain odd implications for the economy, but we could do that. We could just basically create enough reserves to make that possible.

MS. BIES. I guess I'm asking, Why don't we just say that the pace at which the policy accommodation will be removed will be determined as economic events unfold? I'd prefer to say something like that rather than use a code word such as “measured.”

CHAIRMAN GREENSPAN. I thought that's what you interpreted that word to mean.

MS. BIES. Well, I'm hearing a lot of different interpretations of it, even around this table.

CHAIRMAN GREENSPAN. All of which suggests that when we have nineteen people around a table trying to write a statement, as we've indicated on innumerable occasions, there are difficulties in the process.

MS. BIES. Yes, there are.

CHAIRMAN GREENSPAN. President McTeer.

MR. MCTEER. I also would prefer just to drop “patience” without substituting anything else, but I’ll concede that the argument is over. Just so Al can go out as the lonesome dove, though, [laughter] I would like to point out that I don’t think any of us—well, maybe one or two of us—really believes that the risks to our goal of price stability have moved into balance. To me, our comments indicate that we really believe there’s a risk of rising inflation; and I think we feel that the risk of unwanted disinflation or deflation is behind us. So, while we may not want to move that risk assessment two whole notches in one meeting, if we were totally honest about it, I think we would.

CHAIRMAN GREENSPAN. We had that discussion about our statement earlier, as you may recall—a couple of meetings ago. We said that, if we had retained our old terminology, “asymmetric to the downside” was really how we viewed the outlook on inflation. But our judgment was that we’d create more problems by changing the wording in our statement than not. And I think a two-step move—

MR. MCTEER. I understand the practical problem of going two steps, but I think we ought to at least recognize that. “Like a fish” I think is the term we used in high school.

CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I want to make a couple of points. First of all, with regard to long-term inflation expectations, I’m going to use an analogy with the federal funds futures market. Take the reading for September in the futures market. We interpret that not as providing us with any evidence about the state of the economy other than the market’s expectation of what this Committee is going to do. I think that’s the only information we can extract from that observation. By the same token, I think the long-term inflation expectations that we extract from the inflation indexed bond is really a statement about the market’s expectations on what this Committee is going to do over a period of years. We can’t extract any real information relevant to

understanding underlying inflationary pressures. It's really a statement about what this Committee is likely to do. And once the indexed bond starts to move, the information, just like the September futures reading, will represent the market's changing view about how the Committee is going to react in the future. Once it starts to move—if it moves to the upside—I think it will mean that we are beginning to lose credibility. That's the way I would interpret it.

Second, I agree with Bob McTeer regarding the inflation risks. The problem we have is that it's not very transparent to use language that is ostensibly is about the state of the world and our forecast as a hint about our probable future policy stance. That to me is unfortunate. I don't think there's anything we can do about it right now because I understand that the two-step move would send that signal. However, I think it's unfortunate that we have mixed-up language here that in principle ought to be about the state of the economy or our assessment of it but it is interpreted as an indication of what our policy stance is going to be.

I share the view that going cold turkey in taking out "patience" is probably counterproductive, given the history of "a considerable period," "patience," and now "measured." I think the market is going to read "measured" as a nuance on "patience." I'm concerned about that, and I think we need to try to find a way to extract ourselves from this kind of language. I would like to see language along the following lines substituted at some point: "The Committee expects that its future policy stance will depend on the future pace of economic growth and developments regarding inflation risks." That's just a statement that our policy is going to depend on the incoming data and, of course, the implications of the data for our assessment of the risks going forward. Having a very plain statement along those lines is to me a good substitute for the current language. I don't think we can just eliminate this language cold turkey; that's going to cause all sorts of questions and misunderstandings. We have to substitute something eventually. And I would try to

substitute something that gets us out from under the “considerable period,” “patience,” “measured” progression. Thank you.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I support your recommendation. I think the debate going around the table has less to do with our differences in outlook than that there continues to be some fundamental confusion about how we’re communicating to the market and what our mechanisms ought to be. I just raise the point that we really ought to revisit these issues at some time in the near future. Given where we are today, though, I think that the language being proposed is both useful guidance to the market and protects against the risk of an overreaction in interest rates that would be counterproductive both to the markets and to the economy. Our statement is a forecast; it is not a commitment. And I don’t think that it constrains us unduly, even if it becomes necessary to make larger moves.

CHAIRMAN GREENSPAN. The secretary will read the resolution for us.

MR. BERNARD. As far as the directive is concerned, the wording can be found on page 14 of the Bluebook: “The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee in the immediate future seeks conditions in reserve markets consistent with maintaining the federal funds rate at an average of around 1 percent.”

With regard to the wording also being voted on, taking Vincent’s revised draft, sentence number 6, of course, is unchanged from last time. It reads: “The Committee perceives that the upside and downside risks to the attainment of sustainable growth for the next few quarters are roughly equal.” And then we have the revised wording under alternative B for sentences 7 and 8: “Similarly, the risks to the goal of price stability have moved into balance. At this juncture, with

inflation low and resource use slack, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured.”

CHAIRMAN GREENSPAN. Call the roll, please.

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. Before we adjourn, I think Vincent wants to discuss some audits.

MR. REINHART. Yes. Just last night we received copies of the audit statement on the System open market account and the participation of the Reserve Banks. We'll be circulating those to you in a couple days, and we'll seek a notation vote.

CHAIRMAN GREENSPAN. If there is no other business, we are adjourned. The next meeting is June 29-30, 2004.

END OF MEETING