## Meeting of the Federal Open Market Committee on March 22, 2005

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., at 9:00 a.m. on Tuesday, March 22, 2005. Those present were the following:

Mr. Greenspan, Chairman Mr. Geithner, Vice Chairman Mr. Bernanke Ms. Bies Mr. Ferguson Mr. Gramlich Mr. Kohn Mr. Moskow Mr. Olson Mr. Santomero Mr. Stern

Ms. Cumming, Messrs. Guynn and Lacker, Mses. Pianalto and Yellen, Alternate Members of the Federal Open Market Committee

Mr. Hoenig, Ms. Minehan, and Mr. Poole, Presidents of the Federal Reserve Banks of Kansas City, Boston, and St. Louis, respectively

Ms. Holcomb, First Vice President, Federal Reserve Bank of Dallas

Mr. Reinhart, Secretary and Economist Ms. Smith, Assistant Secretary Mr. Alvarez, General Counsel Ms. Johnson, Economist Mr. Stockton, Economist

Messrs. Connors, Evans, and Madigan, Ms. Mester, Messrs. Oliner, Rolnick, Rosenblum, and Wilcox, Associate Economists

Mr. Kos, Manager, System Open Market Account

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

Messrs. Kamin and Slifman, Associate Directors, Divisions of International Finance and Research and Statistics, respectively, Board of Governors

Mr. Whitesell, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Messrs. English and Leahy, 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. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Mr. Nelson, Section Chief, Division of Monetary Affairs, Board of Governors

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

Messrs. Kumasaka and Luecke, Senior Financial Analysts, Division of Monetary Affairs, Board of Governors

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

Mr. Judd, Executive Vice President, Federal Reserve Bank of San Francisco

Messrs. Eisenbeis, Fuhrer, Goodfriend, Hakkio, Rasche, Sniderman, and Steindel, Senior Vice Presidents, Federal Reserve Banks of Atlanta, Boston, Richmond, Kansas City, St. Louis, Cleveland, and New York, respectively

Mr. Elsasser, Vice President, Federal Reserve Bank of New York

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CHAIRMAN GREENSPAN. Good morning, everybody. We used to start off these

meetings with a vote to approve the minutes of the previous meeting. I thought there was a

mistake when that was not on the agenda for today, but we have a new regime [laughter] and

we're not required to do that. That will cut the time of the meeting by 3.7 seconds. Dino Kos.

MR. KOS.<sup>1</sup> Thank you, Mr. Chairman. At the Committee's last meeting I characterized markets in the preceding weeks as "more of the same," inasmuch as trends, such as the gradual rise of short-term interest rates, a flattening yield curve, narrowing credit spreads, and low volatilities, were continuing their well-established patterns. In the past six weeks, some of those trends ceased, though it is too soon to declare that they have gone into reverse. Questions about the pace of tightening and prospects for inflation in the medium term became a more prominent source of concern among investors.

The top panel on page 1 of your handout graphs eurodollar deposit contracts maturing in June 2005, December 2005, and June 2006. What had been a steady rise in futures rates accelerated after the Chairman's semiannual monetary policy testimony, especially for contracts beyond the front month. The spreads between the June '06 and June '05 contracts widened to reflect this more aggressive expected path of tightening. And while some traders ran to their dictionaries to look up the meaning of "conundrum," perhaps the more important event with regard to the testimony was the expectation among many market participants that the Chairman would use the occasion to signal a pause in tightening or to elucidate the factors that could lead to a pause. Receiving no clarification on either point, the market pushed out the length of the tightening cycle and, at times, even the pace—with both anecdotal comments and some fed funds futures reflecting a stronger sense that the Committee might at some point ratchet up the pace of tightening to 50 basis points.

Yields moved higher at both the short and long ends of the curve. As shown in the middle left panel, the two-year Treasury yield, which had been treading water earlier in the tightening cycle, increased about 40 basis points—thus widening the spread to the target funds rate. As shown in the middle right panel, 10-year yields rose from roughly 4.10 percent at the time of the February meeting to more than 4<sup>1</sup>/<sub>2</sub> percent today. Besides revised expectations of policy and increased worries about inflation, there were also periodic bouts of anxiety about foreign central bank actions to diversify away from dollars and/or Treasury securities. The 10-year yield is now back to roughly the level it was last summer when the tightening cycle began.

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

Until the last few weeks, the combination of a gentle rise in short-term rates and an immovable 10-year yield had substantially flattened the yield curve. The recent price moves did not reverse that trend but did, as shown in the bottom panel, stabilize the shape of the curve, which stopped flattening at about 80 basis points. The last few weeks also featured an increased preoccupation among traders and investors with the prospects for inflation. Several inflation reports were higher than expected, and commodity prices continued to rise. For example, the top panel of page 2 shows the CRB [Commodity Research Bureau] index since January 2004. Unlike other popular commodity indexes, the CRB does not have a large energy component and was more contained during 2004. The recent breakout had contributions from nearly every segment of the index.

Focusing on energy, the middle panel depicts the oil futures curve out to two years for West Texas intermediate [WTI] as of two dates. The green line shows the curve as of October 26, 2004, the day oil prices hit their highs last fall and when the front-month contract topped \$55 per barrel. The curve sloped downward by more than \$10, and, for contracts at the end of that two-year horizon, oil was trading below \$45. The blue line graphs the WTI curve as of this past Friday. The front-month contract was trading at about \$57, but the curve has only a small downward slope; and the contract 24 months out is trading near \$53, suggesting that market participants do not expect much softening in oil prices.

The bottom panel graphs in blue the five-year TIPS [Treasury inflation-protected securities] breakeven inflation rate, which has been rising the past few weeks and is up substantially from a year ago. This rise in the breakeven rate has been contemporaneous with the most recent increase in oil prices. During last fall's oil price rise, the breakeven was falling. Higher oil prices were seen more as a restraint on activity than as a catalyst for inflation. The situation has now reversed, though there are lots of caveats one needs to consider when interpreting breakeven rates. Other market-based measures of inflationary expectations are tame. For example, the five-year breakeven five years ahead has remained in a narrow range, as shown by the red line, and, in fact, is very little changed from a year ago.

One question that has occupied market participants is whether risk is being mispriced. The narrowing of spreads over the past two years and the fall of volatility suggest that investors have been in risk-seeking mode. In the intermeeting period, that trend did not reverse, though it did moderate somewhat.

The top left panel on page 3 shows the investment-grade corporate spread since mid-year 2004; in the top right is the high-yield spread. Both have narrowed substantially in the last year or two. At its lowest level in the period, the high-yield spread was at 266 basis points on March 6. The all-time low for the high-yield spread was 213 basis points in October of 1997. In recent weeks, both indexes widened suddenly, contemporaneous with the rise in Treasury yields and some

specific corporate events. Though sudden, the recent widening was modest compared to other widening episodes during the last two years and relative to the previous narrowing episodes.

Of course, the widening did not affect all issuers equally. The bottom left panel graphs the spreads of investment-grade issuers by credit rating. The AA, A, and BBB sectors are all narrower than they were a year ago, but in the past few weeks the BBB sector underperformed, as investors got nervous about the auto sector in general and General Motors in particular after that company reported disappointing earnings. The bottom right panel graphs the auto sector in green and representative 10-year GM and GMAC bond spreads. GM credit default swaps widened as well. The pessimist will take this price action as suggesting that risks are mispriced and that market participants have not been adequately anticipating deteriorating outlooks. The optimist will conclude from the GM news that markets are discriminating among issuers as new information becomes available and are repricing accordingly.

Turning to page 4, the top panel depicts the EMBI+ [Emerging Markets Bond Index Plus] spread, which also widened in recent weeks but only to levels observed in January. The conclusion of the Argentine debt package, with its large haircuts, did not appear to have a contagion effect on the spreads of other large issuers.

Parts of the outer rim of the risk spectrum did feel a chill, as shown in the middle and bottom panels. The middle panel graphs movements of a select group of emerging-market currencies against the dollar in the period between October and March 7. Several of these currencies had rallied by more than 10 percent. The green bars show the depreciations of the past two weeks.

The bottom panel shows the same set of relationships for the broad equity market indexes of the same group of countries. Yes, there has been some unwinding of these positions in both currencies and equities. But, to date, the retracing has been mild and represents only a fraction of the appreciation observed in previous months. In short, if this is the beginning of a more general unwinding, there is far more to go.

I should also note that the dollar has been firmer against the euro and other major currencies the past few days, which may suggest a bit of risk aversion, as the possibility of a more aggressive tightening cycle is causing a reassessment among the large contingent of dollar shorts.

Finally, turning to page 5, I have graphed the implied volatilities of the S&P 500, representative swaptions contracts, and the major currency pairs. I won't go through them in any detail but would only point out the following: (1) they are still at very low levels; and (2) there are signs for both equity and swaption vols that the downward trend is confronting a bit more headwind at these very low levels, especially if the inflation and monetary policy outlook changes meaningfully in coming weeks.

Mr. Chairman, there were no foreign operations in the intermeeting period. I will need a vote to approve domestic operations. Bob and I will be happy to take any questions about markets or about the memo I circulated last week regarding some changes we are planning to make to the yen reserves portfolio.

CHAIRMAN GREENSPAN. Go over again what is in the CRB index. This is the spot

index. What's in there?

MR. KOS. Yes. Oil is a little less than a quarter of that index.

CHAIRMAN GREENSPAN. That's a big number.

MR. KOS. Yes, it's about 23 percent, but that compares to about two-thirds or three-

quarters weighting that energy has in the Goldman Sachs and the Dow Jones-AIG indexes, for

example. The other components are—

CHAIRMAN GREENSPAN. What else is in there?

MR. KOS. "Softs," as they are called-things like agricultural commodities and metals.

CHAIRMAN GREENSPAN. Agricultural commodities. But grain prices have come

down in the most recent data. I assume iron ore is in there?

MR. KOS. I don't know if iron ore is in there but copper is; copper scrap is in there, I think.

CHAIRMAN GREENSPAN. That couldn't have done that much. Steel, for example, is actually down.

MR. KOS. I don't think steel is in the CRB.

CHAIRMAN GREENSPAN. It's a very unusual index. The reason I raise the issue is because it doesn't look like any commodity index I'm used to watching—unless oil is a very big component. Do we know that? We can factor out the oil part of this. MR. KOS. The biggest contributor to its movement has been oil, but all of the other components also had increases. So they all contributed to it, whereas, in the earlier period, when oil was rising some of the other components actually were declining. So it's a mixture of effects.

CHAIRMAN GREENSPAN. But if you take it as a meaningful index, that's a very impressive move. And the point is that it's the first time I've seen anything like that in the commodities area. I've always looked at the CRB futures, which does look something like this, but I assumed it was a third-order matter. Anyway, enough of that.

MR. BERNANKE. Mr. Chairman, I just wanted to note that the index, I think, is simply an equal weighting of all the various contracts that are traded. It makes no attempt at weighting.

CHAIRMAN GREENSPAN. There's no weighting?

MR. STOCKTON. No weighting.

CHAIRMAN GREENSPAN. Then how does oil get to be 25 percent?

MR. BERNANKE. Because there are a number of different contracts that are traded.

CHAIRMAN GREENSPAN. It takes all of them and they're unweighted.

MR. STOCKTON. It's an unweighted index.

MR. BERNANKE. There is no economic content weighting.

MR. STOCKTON. So wool tops have the same weight implicitly in the index as, say, a contract on gasoline or copper.

CHAIRMAN GREENSPAN. So you have several gasoline contracts.

MR. STOCKTON. And each is included. So it's not a terribly rigorous—

CHAIRMAN GREENSPAN. Could you just take a look at that and let us know what is involved?

MR. STOCKTON. It is the case, however, Mr. Chairman, that there has been a broadbased upward movement in commodity prices in the last four weeks. So—

CHAIRMAN GREENSPAN. Yes, iron ore is up over 70 percent. Copper is up and aluminum is up; steel is not.

MR. STOCKTON. Steel is not. Steel is the principal one that hasn't moved up.

CHAIRMAN GREENSPAN. And the weight of steel is much larger than copper and aluminum combined. So it's an odd sort of commodity index.

MS. MINEHAN. There's a definition of these indexes in a footnote in Part 2 of the

Greenbook on page 33.

CHAIRMAN GREENSPAN. That's the chart I remember. Thank you. Other

questions? Would someone like to move approval of the Desk's transactions?

VICE CHAIRMAN GEITHNER. So moved.

CHAIRMAN GREENSPAN. Without objection, they are approved. Let's turn now to

Dave Stockton and Karen Johnson.

MR. STOCKTON. Thank you, Mr. Chairman. By virtually all measures, the economy has been humming along at a very solid pace in recent months. We are estimating that real GDP expanded at a 4<sup>1</sup>/<sub>4</sub> percent annual rate in the fourth quarter of last year and is likely to grow at about that pace in the first quarter of this year.

The contributors to the expansion have remained much the same. The household sector has, to date, shown no signs of flagging. Consumer spending has been moving up smartly, and housing activity continues to be very strong. Meanwhile, equipment spending by businesses remains on a steep uptrend. And we have even seen some signs of improvement in nonresidential construction, though most of that improvement has been centered in the upswing in drilling activity that has accompanied the jump in energy prices. Inventory investment and hiring—the last major areas in which we could detect the cautious business behavior that had been such a prominent feature of this episode—now appear to be tracing more normal cyclical patterns.

Although the pace of the expansion in real activity is much the same as that of a year ago, the character of the expansion now feels different. While I can easily imagine looking back on these words with regret [laughter], the persistent and widespread improvements that we are now witnessing certainly leave the impression that the expansion is more firmly established and less fragile with respect to adverse shocks than it was in early 2004.

As you know from reading the Greenbook, we think that the recent greater momentum in real GDP will carry forward for a while. That greater momentum in activity and heightened upward pressures on inflation led us to raise the assumed path of the federal funds rate by 50 basis points beyond the very near term. As in past forecasts, tighter monetary policy, diminished impetus from rising equity values and house prices, and fading fiscal stimulus are expected to gradually put a brake on the pace of activity. In our projection, the economy reaches the end of next year with the funds rate in the neighborhood of neutral, output close to potential, and core inflation running around  $1\frac{1}{2}$  percent. Were it to occur, such an outcome would be very pleasant indeed.

Of course, we know that our point forecast, like any point forecast, will occur with probability zero. So what should we worrying about? While my colleagues who attend our lengthy forecast meetings were not exactly thrilled by it, the removal of my arm from its sling in the past few weeks has allowed me, once again, to bring my principal value added to the forecasting process, and that is copious amounts of handwringing. [Laughter]

In the remainder of my remarks, I'd like to focus on three difficult questions with which we had to wrestle in assembling this forecast: First, what should we make of the recent strength in capital spending and what are its implications for the outlook? Second, how should we balance some powerful crosscurrents at work on the supply side of the economy? And third, what is happening with inflation? I'll take them each in turn, although there are some common threads that tie them together.

Let me begin with the changes that we have made to the projection for equipment spending. Our last hope for evidence supporting the partial-expensing pothole in the first quarter of this year largely evaporated with the January data. Domestic shipments of capital equipment were up across the board, and imports of capital goods were strong as well. Likewise, new bookings for capital equipment rose at a brisk pace early this quarter, and the backlog of unfilled orders has continued to mount. To be sure, we are projecting some deceleration in E&S spending in the first quarter, but most of that deceleration reflects a drop in purchases of light motor vehicles, and we don't see the expiration of the tax incentive as the major factor here. Indeed, much of the upward revision to our projection of capital outlays in the first quarter has occurred among long-lived assets—the types of capital equipment that we thought would have been weakest early this year. So, little remains of our elegant story. Our calibrated vintage capital models failed us, and clearly finger-crossing has not proven a terribly robust forecasting technique. We even tried an approach gently suggested to us by Governor Olson at the time of our last forecast—you know, had we thought about trying common sense? [Laughter] We tried, but even that didn't seem to work. In a conversation with our colleagues at Treasury that they asked remain confidential, they indicated having been surprised that an appreciable number of firms with taxable income have simply not taken advantage of partial expensing. Moreover, some firms have taken it for purchases of longer-lived assets, but not for shorter-lived assets. This pattern of behavior might suggest that administrative complexity may have loomed larger as a discouraging factor than we or others imagined. But the facts are likely to remain obscure for a long time, while the IRS tabulates the corporate income tax forms for recent years. For now, we're raising the white flag of surrender and chalking it up as a defeat for models, luck, and logic.

I wouldn't drag you through this discussion if it were just a sideshow in the forecast. But the changes that we made here were of policy significance. We revised up the growth in real equipment spending by 10 percentage points in the current quarter, from a decline of 5 percent at an annual rate to an increase of 5 percent. Moreover, we had previously interpreted some of last year's strength in capital spending as resulting from firms pulling forward outlays to take advantage of the tax break. If that was not the case, then underlying demand was likely stronger than we had previously recognized. As a consequence, we are projecting some of that additional strength to carry over into the first half of this year.

After accounting for follow-on multiplier–accelerator effects, the revisions to our forecast of equipment spending boosted growth of real GDP by nearly ½ percentage point this year and by ¼ percentage point next year. These adjustments more than offset the downward revisions to our projection that were necessitated by the higher expected path of oil prices, which we estimate will trim about ¼ percentage point off the growth in real GDP in each of the next two years.

The faster pace of capital spending incorporated in this projection also had implications for aggregate supply through its contribution to capital deepening. But that was just one of a number of changes we made on the supply side of our projection. As I noted earlier, we have had to contend with two strong crosscurrents in this aspect of our forecast: faster-than-expected growth of labor productivity, on the one hand, and slower-than-expected growth of the labor force, on the other.

With regard to productivity, we appear to be starting this year with another large upside surprise. Our estimate of the growth of output per hour in the first quarter has been revised up by 2 percentage points since the last Greenbook to a  $3\frac{1}{2}$  percent annual pace.

As you know, the surprising strength of productivity over the past few years has required us to take a stand on how much of the recent gains has reflected structural improvements that will persist going forward and how much has reflected the cautious hiring stance of businesses and their ability, at least for a time, to elicit greater effort from their workforces. In other words, we have had to parse these innovations into trend and cycle components. With positive surprises to productivity continuing, the story about caution-induced effort seemed to us to have diminishing plausibility. Both our models and our best judgment suggested raising our estimates of the structural component of productivity in recent years and correspondingly lowering the cyclical component.

In addition to raising the level of structural productivity through the end of last year, we also nudged up our estimate of the growth of structural productivity going forward by about <sup>1</sup>/<sub>4</sub> percentage point per year to about 3 percent per annum. About half of that upward revision reflected the larger contribution from capital deepening that followed from our stronger investment forecast. The other half reflects stronger projected growth of multifactor productivity. Businesses have been making substantial gains in technological and organizational efficiencies in recent years, and we anticipate more of that to continue over the next couple of years than was assumed in our January projection.

While the revisions that we have made to structural productivity, all else equal, would have resulted in a noticeable upward revision to the projected growth of potential output, all else was not equal. Just as we have been surprised to the upside by productivity, we have been consistently surprised to the downside over the past year or so by the weakness in labor force participation. We had been expecting that, as the labor market began to give clearer signs of sustained improvement, more workers would be drawn back into the labor force. We still think that is likely to happen.

But the growing tension between our expectation of an imminent upturn in labor force participation and the reality of its ongoing decline prompted us to overhaul our models in this area, disaggregating age, sex, and cohort efforts at a much more detailed level than we had done in the past. The upshot of that work has been to suggest that more—though certainly not all—of the decline that we have observed in participation over the past few years has been demographic and less has been cyclical than we had earlier thought. At the risk of oversimplifying some complicated interactions, whereas we had earlier thought a continued uptrend in women's participation would about offset the ongoing decline in the participation rate of men, we now think that women's participation may be flattening out even as men's participation continues to decline. All told, we estimate a more noticeable downward tilt to aggregate trend participation, and thus potential labor input is more limited than we had previously projected. On net, the upward revisions to productivity slightly exceeded the downward revisions to potential labor input, and we revised up the growth of potential output by 0.1 percentage point this year and next. These upward revisions were smaller than those we made to actual GDP, and, as a consequence, the GDP gap is a touch smaller in coming quarters than was the case in our January projection.

A slightly tighter economy has added to a growing list of worries that would make any compulsive hand-wringer proud. That list would also contain higher oil prices, larger increases in non-oil import prices, a steep rise in commodity prices, a reemergence of price pressures from intermediate materials, some deterioration in near-term inflation expectations, and a disappointingly large increase in core PCE [personal consumption expenditures] prices in January. To our relief, this morning's PPI for February did not add to this list. The increase in core finished goods—at 0.1 percent—and the increase in core intermediate materials—at 0.5 percent—were right in line with the Greenbook projection.

But taken together, price developments over the intermeeting period have been troubling. The effects of higher oil prices are already being felt at the pump, and headline inflation measures will be up noticeably in February and March. Moreover, higher energy and materials prices are adding to business costs, and higher prices for imports are lessening competitive pressures on the pricing decisions of domestic producers. In response to these developments, we have raised the projected increase in core PCE prices to 1<sup>3</sup>/<sub>4</sub> percent in 2005 and 1<sup>1</sup>/<sub>2</sub> percent in 2006—about <sup>1</sup>/<sub>4</sub> percentage point higher than our previous projection in both years. Still, the basic contours of the inflation forecast remain the same. Such a modest revision might lead some to wonder if the staff should be doing a little more hand-wringing if we wish to avoid an eventual neck-wringing!

But at this point, we believe that only a modest revision is warranted. As you know, for the prices of oil and other commodities, we take our cues from futures markets. And, as they have for much of the past year, those markets are suggesting that a flattening out of prices is just around the corner and that declines will occur by next year. Futures markets have not proven to be terribly reliable guides to prices over the past year, but we simply aren't confident that we can outguess the markets in these areas.

We view the larger increases in core PCE of late as suggesting that the size, passthrough, and persistence of price pressures from energy, imports, and other commodities has been greater than we had earlier expected. But we do not think that we are, as yet, experiencing a broad-based upward push on inflation. One piece of evidence in support of that interpretation is that all of the acceleration in core PCE prices over the past year has occurred among core goods, where the influence of energy, materials, and imports is likely to be largest. Core services have actually decelerated. Moreover, the labor cost picture remains quite subdued. Growth in hourly labor compensation has basically moved sideways in recent quarters. Our projection incorporates some acceleration in wage inflation in response to higher price inflation this year and a gradual tightening of the labor market. But the faster projected growth of actual and structural labor productivity holds down the overall increase in unit labor costs. Indeed, the combination of slightly higher price inflation and lower unit labor costs resulted in an upward revision to the price markup in this projection, which already was above historical norms. In effect, greater pricing power is implicit in this forecast.

As I see it, the most disquieting development on the inflation front has not been the run-up in energy and commodity prices, but has been the apparent rise in inflation compensation over the next three years—at least as best as we can judge by readings from the inflation swaps market. Should a deterioration in inflation expectations eventually come to be reflected in wage- and price-setting decisions, you would be facing a more substantial, persistent, and ultimately costly acceleration of labor costs and prices. As we showed in an alternative simulation in the Greenbook, those difficulties are amplified if monetary policy is slow to respond to heightened inflation expectations, and real interest rates are inadvertently eased.

On the other hand, the most comforting development on the inflation front has been the continued exceptional performance of productivity. Although we have revised up our forecast for actual and structural productivity, we are still betting on a substantial slowdown of structural multifactor productivity. As we showed in another simulation, if that doesn't occur, cost pressures could be considerably less than we are currently anticipating and inflation could drop to the low end of your comfort zone.

Karen will continue our presentation.

MS. JOHNSON. One of the most important changes made to the forecast in this Greenbook relative to that of January is the increase in the projected path for oil prices. That increase reflects developments in global oil markets over the intermeeting period. Since late last week, spot WTI oil prices have been at new highs, over \$56 per barrel, a bit above the peak price reached last October. But there are some significant differences between market conditions then and current ones. Last October, the spike in rates was particularly sharp for the light, sweet crudes such as WTI and was, in part, a transitory response to the impact of hurricane Ivan on supply in the Gulf of Mexico. This time the rise in prices is more general. The price of Dubai, a heavier, more sour crude, has risen nearly \$10 per barrel above its level last October, resulting in a spread between the price for WTI and Dubai of about \$9 per barrel rather than the \$17 recorded last October 25. In addition, the far futures price is now more than \$49 per barrel, over \$10 per barrel higher than in October, suggesting that markets expect prices to be elevated for some time.

No one factor explains the run-up in prices since late January, but a major reason seems to be stronger demand in global markets—currently and prospectively, in the eyes of market participants. This stronger demand is arising from a global economy in which continued expansion at a reasonably robust pace seems likely, albeit with some variation across regions. Also, there are currently some supply risks in the usual trouble spots among oil-producing countries. But over the longer run, the issue seems to be how projected increases in demand will be met by increased supply. Of the 2.7 million barrels per day that global consumption increased during 2004, 30 percent, or 850,000 barrels per day, was accounted for by increased consumption in China. China is now the second-largest oil consumer on the globe; the United States is first.

The staff continues to rely on futures markets for our projection of the spot WTI price. After the first couple of months, the futures curve slopes down and is the basis of our forecast that, by the end of 2006, that price will be somewhat below today's price. However, we also need to forecast the U.S. oil import price, and for us the challenge is to project the spread going forward between WTI and the import price. That spread was quite variable last year, and in January of this year it jumped up again, to over \$9 per barrel. We currently expect that the spread will narrow, on balance, over the forecast period, with the result that the U.S. price for imported oil will decline only slightly from current levels—noticeably less than the decrease embedded in the futures curve for WTI—by the end of next year. However, we could be surprised, and the behavior of that spread is one of the risks to the forecast.

The general increase in global oil prices has been cited by many as a reason for rising inflation expectations and the move up in long-term interest rates across the major industrial countries during the intermeeting period. Ten-year sovereign rates in the major foreign industrial countries generally rose about 20 basis points since your last meeting, somewhat less than the increase in the U.S. rate. The smaller rebound in rates abroad is consistent with the perception that recent economic indicators suggest a more vigorous pace of expansion in the U.S. economy than in the other industrial economies. And foreign rates declined more sharply than did U.S. rates from the end of last June, when you began your current tightening cycle, to the turning point for rates in early February.

However, it may be that the stronger price performance of bonds denominated in the major foreign currencies reflects some shift in portfolio preferences away from dollar assets toward those denominated in the other major currencies. Such an interpretation is consistent with the 1 percent net nominal depreciation of the foreign exchange value of the dollar in terms of the other major currencies over the intermeeting period and the fact that stock market indexes in the foreign industrial countries generally outperformed U.S. indexes over the same interval.

Data for the U.S. current account balance in the fourth quarter were released last week and reported in the Greenbook supplement. At an annual rate, the deficit

widened nearly \$90 billion from the third-quarter figure, with about \$60 billion of that change accounted for by the increase in the trade deficit. Of that \$60 billion, more than half represents the deterioration in the oil import bill. Relative to the figures we put in the Greenbook, net investment income surprised us in the positive direction. That surprise was entirely in net direct investment receipts, as net portfolio income came in about as expected, around \$25 billion weaker than in the third quarter. Direct investment receipts were particularly strong, with the increase more than offsetting a small positive surprise in direct investment payments. The fourth-quarter increment in the current account deficit was financed by somewhat larger foreign official financial inflows and substantially larger foreign private net purchases of U.S. securities, particularly of agency bonds and corporate stocks. The rise in foreign inflows was sufficient to finance a small rise in U.S. net private acquisitions of foreign securities and an unusual but sizable increase from the third quarter of U.S. direct investment abroad.

Looking forward, we expect the trade deficit to widen further both this year and next. With little change projected in the U.S. oil import price, the oil import bill should increase only slightly, and most of the deterioration in the trade balance is expected to occur within the core goods categories—that is, goods less oil, computers, and semiconductors. Accordingly, in real terms we are looking for net exports to make a small negative contribution to GDP growth in each of the two years. We expect the widening of the nominal trade deficit to be nearly matched by further reduction in the net investment income balance, as the negative change to net portfolio income substantially outweighs projected gains in net direct investment income. Accordingly, the current account deficit should widen to exceed \$850 billion, or 6½ percent of GDP, by the end of next year.

We also received February prices of internationally traded goods late last week. Prices for non-oil core imports increased a bit more than we were expecting. February price rises were concentrated in foods, feeds, and beverages and in non-oil industrial supplies; but for January and February combined, all categories of non-oil, core goods other than autos registered significant upward moves. These developments leave us with a projection for inflation of the core import price deflator in the first quarter of nearly 5 percent at an annual rate, higher than the January Greenbook figure and higher than our equations by themselves would suggest. We do not yet have sufficient evidence to conclude that the decline observed in past exchange rate pass-through is being reversed. With the effects of dollar depreciation in the second half of last year and the recent run-up in commodity prices likely to be felt through the end of this year, we expect core import price inflation to be about 2 percent at an annual rate during the rest of this year before slowing noticeably next year, consistent with our outlook for flat commodity prices and only modest further dollar depreciation.

David and I will be happy to answer any questions.

CHAIRMAN GREENSPAN. There has been considerable discussion, David, as you know better than I, about the failure of firms to capitalize a lot of what is currently expensed, especially in conjunction with the installation of a lot of high-tech capital equipment. Is there any way of looking at the data to see to what extent, if at all, they correlate with multifactor productivity as currently estimated?

MR. STOCKTON. Well, we have not undertaken a calculation like that, Mr. Chairman, and it strikes me that it would be relatively complicated to construct. But we could certainly take a look at it. From our perspective—and this is one of the reasons we are giving for the improvement in multifactor productivity—investment in information technology is a general purpose technology. So, beyond just the improvements in the production of information technology equipment, we are now seeing more signs of widespread application of information technology. And the organizational efficiencies that it has allowed have been a factor in keeping multifactor productivity elevated. That's one of the reasons we're still reasonably optimistic about this. While the growth rate will not continue at the pace recorded in the past few years, we think it's going to remain at a pace that is above average by historical standards.

CHAIRMAN GREENSPAN. Well, one would expect to be able to pick it up from the capital expenditures for high-tech equipment, on the presumption that the amount of expensed items would be somehow related to that. But you already do that implicitly in creating a capital services measure, and it would theoretically just show up in the coefficient on the capital services measures. So could one assume that maybe it's already in there in that respect?

MR. STOCKTON. When you say "already in there"—

CHAIRMAN GREENSPAN. Meaning, in other words, it's already being captured to some extent. But that can't be, because that's not the way those numbers are put together. The

question I'm really asking is this: Is there a correlation between outlays on capital expenditures for high-tech equipment and what we now measure as multifactor productivity?

MR. STOCKTON. I don't know the precise answer to that question. I'm not sure if Steve Oliner, who is our expert on this, would have any thoughts on the subject.

MR. OLINER. Mr. Chairman, I think on a year-by-year basis the correlation is going to be loose at best. When we look back over the second half of the '90s, we had a lot of capital deepening in high-tech equipment, which directly contributed to labor productivity growth. It's true that multifactor productivity picked up and was strong—

CHAIRMAN GREENSPAN. But theoretically, if multifactor productivity were zero, you would be capturing all of the impact of capital investment on measured productivity.

MR. OLINER. Right.

CHAIRMAN GREENSPAN. So, to the extent that there's a gap, it's unexplained. I vaguely recall what you are saying, Steve, namely, that multifactor productivity does expand, and, indeed, it has started to expand again now.

MR. OLINER. Right.

CHAIRMAN GREENSPAN. That suggests not a close correlation, obviously, but some relationship. So there may be something to this proposition which, if true, may enable you to improve your estimates. Instead of guessing at multifactor productivity, which has ranged from ½ percent to 2 percent, you may be able to narrow it down quite significantly and actually have input data directly estimating longer-term productivity—if it works. I have no idea whether it works.

MR. OLINER. It is possible. What we're really talking about are the organizational efficiencies that are produced by high-tech investment, which don't necessarily occur contemporaneously with doing that investment. It takes some learning over time.

CHAIRMAN GREENSPAN. Well, have a distributed lag. [Laughter] Your imagination is without limit!

MR. GRAMLICH. May I get in on this one? Steve, didn't your paper with Dan Sichel do that? I thought it did. I thought you had a little routine within multifactor productivity to do exactly what the Chairman was suggesting.

MR. OLINER. Not exactly. What we did was to try to quantify the pickup in multifactor productivity growth from those industries that produce high-tech equipment or semiconductors and computers. That framework was important.

CHAIRMAN GREENSPAN. It's not the ones that use the equipment but the ones that produce it.

MR. OLINER. Right.

CHAIRMAN GREENSPAN. It's the other way around. That's interesting. You still have the floor, Governor Gramlich.

MR. GRAMLICH. No, I just wanted to ask about that issue.

CHAIRMAN GREENSPAN. I see. President Poole.

MR. POOLE. Karen, you noted the enormous role of China in raising energy demand worldwide. Could you give me a sense of the energy demand in India? India is obviously a lowincome country, but it is now growing quite substantially. It's a large country. In both parts of the Greenbook, there is only a very limited amount of information on India. You do have data on Korea and Taiwan, and I'm wondering if we shouldn't be adding to our store of knowledge

here in future Greenbooks. I would think the absolute size of India would be sufficient that you would want to start tracking India as well as Korea and Taiwan, and so forth.

MS. JOHNSON. Well, the answer to your first question is that I don't know the energy demands of India. I don't even think they are on my list. I have a table here listing oil consumption by country, and I'm sure India is not on that list.

But the fact that India is expanding mostly in its service-producing sector, rather than its manufacturing sector, makes me think that that aspect of India's growth is not driving energy consumption particularly. But, as standards of living rise in India, presumably households and the like will start consuming more.

What I can say, though, is that we have recognized that India is suddenly getting to be more important, and we have upped the staff coverage of India. We are going to put India more explicitly into the forecast and will be covering that country in more detail.

MR. POOLE. Good. Thank you.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. Karen, could you give us a fair and balanced view— [laughter]—of the significance of the changes to the Stability and Growth Pact? On net, are they really that bad? The market didn't seem terribly worried about what they mean for fiscal policy going forward. There were some aspects of the revised agreement that might be regarded as a tightening, which I don't really understand. What is your assessment?

MS. JOHNSON. Well, I have not read it or thought about it in sufficient detail to truly answer your question. My sense is that, in part, it was a recognition of the inevitable. That is, it was a political solution to the fact that certain realities of life were confronting several European countries. So rather than continue with the political tension at meetings about who was going to

be penalized and allow the stresses between the larger countries and the smaller countries to keep playing out in the media, they revised the agreement. They felt that if they changed the language, they could accept what was going to happen in any event and reduce the damage it might cause, because countries would be complying in some sense with the revised Stability and Growth Pact rather than the old one.

As for the actual details of the changes, they largely took the form of redefining what goes into the measures against which targets are set and against which penalties are levied for violating the targets. To be honest, I don't have the list complete in my head, but one change had to do with German reunification. For example, certain expenditures get put in a different category and are not part of the relevant measure of the budget deficit against which they are supposed to meet the target.

CHAIRMAN GREENSPAN. That in itself is enough to bring the German deficit well down.

MS. JOHNSON. Other kinds of restructuring expenditures were included. So there was an effort made to—

CHAIRMAN GREENSPAN. The labor reform expenditures were also allowed to be taken out.

MS. JOHNSON. Yes, the pension reform.

CHAIRMAN GREENSPAN. Yes.

MS. JOHNSON. In addition to sort of recognizing the inevitable, such as the German reunification piece, many of the other categories that were accorded new status I would describe as things that everybody agreed should be done. They agreed that it would be regrettable if, in the name of the Stability and Growth Pact, political pressure were exerted to cut back on

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restructuring so as to meet the goal. Now, we all know the Stability and Growth Pact was intended to tell these countries that they should cut other things so they could achieve the target, but that wasn't happening.

The ECB [European Central Bank] made a guarded statement about remaining concerned. The markets didn't seem to react negatively. Down deep the problem, in my mind, is that the way the Stability and Growth Pact was originally structured—and possibly even the way it is still structured—was appropriate for countries that had already re-centered their fiscal activity more or less at a zero balance. The various ways that the limits were stated and the symmetry, and so forth, all assumed each country started from a good place. And then it made perfect sense. Actually, if that had been the case, one would be indifferent to whether it should be the structurally adjusted balance or the actual balance; that is irrelevant if you're starting at zero.

Some of the big countries never got there, and that has been the part of the story that has produced tension ever since 1999, really. These reforms didn't undo that. They didn't say: We wrote a pact centered on zero and that isn't working, so we're going to scrap that and start all over. But they did make these exceptions, which are going to ease the pressures on some of the big countries. So, those countries will not be forced, in a macroeconomic sense, to tighten when it's not such a good idea; nor will pressure be put on them not to do some structural things that they should be doing, because those specifically are the things that have been exempted.

VICE CHAIRMAN GEITHNER. But they didn't accommodate greater cyclical divergence on their path.

MS. JOHNSON. No.

VICE CHAIRMAN GEITHNER. It really is accommodating structural changes that go in the wrong direction to the objectives even if those changes otherwise make some sense.

MS. JOHNSON. Right. But by setting aside a class of expenditures that are going to happen, they have allowed the band, as defined, to embrace the countries. So the fact that they didn't change the cyclical thing doesn't matter so much anymore.

VICE CHAIRMAN GEITHNER. PAYGO does not apply. [Laughter]

MS. JOHNSON. That's correct.

CHAIRMAN GREENSPAN. The basic purpose was to get them beyond the election. The presumption that everything is going to be fine beyond the election has no basis, because the next set of pressures will create different effects. What it demonstrates is that the general view that the system would hold together and work for the big countries is flawed. It worked for the small countries, because the big countries insisted; they essentially have the capacity to give the smaller countries an either/or ultimatum, so to speak. With Luxembourg in the Chair—and they were very strongly against any changes—it took a couple of months to erode a lot of that language and finally get everybody on board, which tells you that this is a very flawed system.

MS. JOHNSON. Yes. But it seems to me what is flawed is not so much the Stability and Growth Pact as the Lisbon Agenda. Despite the rhetoric, the major countries in Europe have not taken steps to deregulate themselves, to become more efficient and more dynamic, and to do all the things that they pledged to do in Lisbon. Had they done those things, the old Stability and Growth Pact would have probably been just fine.

It's not obvious to me that the changes they agreed to just recently are going to move us very far in the direction of the Lisbon Agenda. But these changes will at least eliminate the uncertainty that has been out there in the market about whether these countries will actually be contracting fiscal policy at a time when unemployment is rising, and that kind of thing.

CHAIRMAN GREENSPAN. They're probably going to try to implement a new version of the Lisbon Agenda.

MS. JOHNSON. Yes. And, at some level, Schroeder's initiatives have been appropriate and the right thing to do. But certainly there's not a broad consensus among the European population to go in that direction.

MR. KOS. Mr. Chairman, if I could just add a point on the market effect. As some of you know, Greece issued a 30-year bond recently at 26 basis points above the rate on Bunds, or about ½ point below the U.S. 10-year rate and about 100 basis points below the 30-year rate.

CHAIRMAN GREENSPAN. Can we borrow from the Greeks? [Laughter]

MR. KOS. It's interesting, since they are at about double the 3 percent limit. So the markets are not punishing anybody for not complying.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. This is probably going on a little long, but I'll ask one quick question. I see that you have gone from a negative contribution to growth in the first quarter from equipment spending to a positive one. But in terms of the growth rate for the first quarter, you end up with a projection that's on the order of 10 percentage points under the growth rates predicted elsewhere in the Blue Chip and the Wall Street forecasts, and so forth. I know you've probably done some hand-wringing about that. Any thoughts?

MR. STOCKTON. The most significant component of the slowdown that we're projecting, as I indicated, is a substantial drop in purchases of light motor vehicles. We're basically trying to mimic the BEA [Bureau of Economic Analysis] in terms of calculating the

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share of light motor vehicle sales going to the business sector versus the household side; there is a big swing in that share.

MS. MINEHAN. So, do you think these other forecasts are not incorporating that?

MR. STOCKTON. Well, I'm not quite sure. I don't want to impugn them that way. We could be wrong, obviously, about that component. The nontransportation component we have only a bit slower than it was in the fourth quarter of last year. So at this stage, we are just doing our best straightforward read of the incoming data. We are not imposing any additional add-factors or restraint on the assumption that the partial expensing is pushing things down. That said, this is a very volatile area of the forecast and one in which we have made big errors. And I assume others have as well.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. I'll pass.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Dave, I'm interested in your work on labor force participation. We've been looking at that a bit, too. Can you give me a sense of what's driving the new forecast of a leveling off in labor force participation rates of women?

MR. STOCKTON. As I indicated, one of the refinements that we undertook in this modeling effort was that, in addition to tracking age and sex, we tried to look more carefully at cohort effects. Basically, what we are now seeing is that the participation rates of women coming into the working age population relative to the participation of those exiting it are not as different as they were in years past. In earlier years the participation of women entering the labor force was so much higher than those who were leaving that it was driving an aggregate increase. And now, looking at that more carefully, the difference is less pronounced than it had

been in the past. So our forecast for the participation rate of women is a little flatter, going forward.

MR. STERN. Thanks.

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

MR. MOSKOW. Thank you, Mr. Chairman. Activity continues to firm in the Seventh District. In general, my contacts are more upbeat than they were a couple of months ago, and there is much more confidence that the expansion is on a solid, self-sustaining footing. And we're hearing more news about price increases and price pressures. Nevertheless, activity has not yet heated up to the point that there is broad-based pressure on capacity. The positive news is fairly widespread. Demand continues to be robust for heavy trucks and for equipment used in construction, agriculture, and oil and gas industries. Our contacts in retail trade, including shopping mall operators, and in consumer advertising also tell us that business is good

The news on hiring, however, is more subdued. Notably, the two major temporary-help firms headquartered in our District reported that their growth has slowed since our last meeting. Also, there is an important downside risk for our District's economy: The well-publicized woes of General Motors and Ford could develop into an even larger drag than we have seen to date. It's not clear how the auto market will evolve in 2005. Year-to-date sales have been weak, as automakers appear to be testing the market with lower incentives. Still, the Big Three have not yet backed off their earlier projections that light vehicle sales will run about 16<sup>3</sup>/<sub>4</sub> million units this year. They are hoping that sales will increase as the year proceeds, similar to the pattern in 2004 after they raised incentives. But based on our conversations, it is unclear whether the automakers will be willing to do the same this year.

Given the increasing momentum in the District economy, we took a hard look at resource constraints and price pressures. Heavy vehicle production continues to be constrained by shortages of engines, axles, and especially tires. And Caterpillar expects production to be straining capacity at least through 2005.

On the price front, the environment has clearly changed. For example, the head of a large bank told me that, for the first time in many years, suppliers are telling customers to buy now or pay higher prices in 30 days. Manufacturers' long-term contracts for materials are running out, and several report paying premiums in order to ensure supply and keep production running at full tilt. As more of these long-term contracts expire, cost pressures and pass-through could intensify. Even auto suppliers are digging in their heels and resisting further price reductions.

In contrast, the steel price picture looks better, as you mentioned earlier. As one contact noted, this is perhaps due in part to increased production in China. Also, on the international scene, a major retailer told us that his European suppliers recently boosted prices between 8 and 12 percent after holding the line last year. In response, the retailer shifted some business to suppliers in the Far East.

Turning to the national economy, it's clear that growth is on firm, self-sustaining ground. So our focus should shift more to assessing inflationary pressures, and there are indications that inflation risks may have increased. Recent price data and, as I just mentioned, comments from our business contacts, do have a firmer tone. Oil prices continue to surprise us on the upside, the declining dollar is showing through to higher import prices, TIPS measures of inflation compensation have moved up, and resource slack could be smaller than we thought. In particular, work done by our Bank's economists—and by the Board staff, as Dave discussed—suggests that labor force participation rates may settle out at a lower level than we had been thinking.

These developments have increased our inflation forecast, but quantifying the extent of the inflation risk is difficult. When we run our models using data back to the 1960s, the models forecast higher PCE inflation—nearly 2 percent this year and next year. But the economy has changed a lot, particularly starting in the early 1980s. When we limit the data to the last 20 years, the uptick is diminished. Furthermore, I do not get the impression that a 1970s-type inflationary mentality is creeping into my contacts' decisionmaking processes.

So, on balance, taking everything into consideration, I think we can continue our pattern of measured rate increases, and I don't think we need major changes in the wording of our statement at this meeting. Futures markets expect us to move the funds rate to 3<sup>3</sup>/<sub>4</sub> percent by year-end. But if a more aggressive tightening is warranted, we could easily get to 4<sup>1</sup>/<sub>4</sub> percent just by increasing the funds rate 25 basis points at each meeting. This would be perfectly consistent with our "measured pace" language. But we may need to move more aggressively after this meeting; some warning clouds have clearly developed. We often say we need to be data-dependent. I think it's particularly important now. We'll get two months of price data before our May meeting and, of course, a lot of other data. And we'll want to look carefully at those data in assessing our next steps.

## CHAIRMAN GREENSPAN. President Hoenig.

MR. HOENIG. Mr. Chairman, looking at the economy, we expect growth will be in line with what others have said—in the 4 percent range this year and slightly above 3½ percent next year. With trend growth of about 3¼ percent, obviously the output gap and labor market slack are diminishing. There are a whole host of reasons for that, which Dave already outlined, and I won't repeat them.

I will say that from the Tenth District perspective, our information supports this more robust outlook. Most retailers we contacted said that sales were up from last year's already solid levels. In

addition, travel and tourism continued to improve, as the dollar has helped to increase ski visits and hotel occupancy in the mountain states. Labor markets remain strong, with hiring announcements exceeding layoffs by about a 1<sup>1</sup>/<sub>4</sub>-to-1 ratio since our previous FOMC meeting. And, finally, District manufacturing continues to expand strongly. Production, new orders, and employment all rose in February. Moreover, firms remain optimistic about future activity and plan moderate increases in employment and capital spending going forward this year.

I'll make most of my comments on the inflation outlook, because I do have some concern about that. I was struck by David's point that, as for inflation breaking out, he would put it in terms of a "not yet" statement. But as I view the outlook, I expect, even with the fed funds rate rising as we currently are projecting, that inflation will increase and perhaps could accelerate in 2005 and 2006.

Here are some reasons for that. First, we have been in an accommodative mode of policy for an extended period of time now—years, not quarters—with the fed funds rate below most estimates of neutral over much of that period. Core inflation, by whatever measure you pick—core CPI or PCE or the market-based core PCE—drifted higher last year. Not only did core inflation drift higher, it was unexpectedly higher than earlier projections. This unexpected increase is notable because it occurred even though real GDP growth was as expected and the fed funds rate was being increased. If inflation could increase that much last year in the presence of sizable slack and a rising fed funds rate, I am concerned that, with less slack in the economy this year, we will end up with yet higher inflation.

In addition, a number of indicators suggest continuing inflationary pressures. For example, we have higher cost pressures resulting from higher commodity prices, which we mentioned, and from oil prices and the lower dollar. As a result, we also are seeing high PPI inflation and increases

in unit labor costs that may not be dramatic yet, but they are increasing. Wage pressures are emerging in our District. About a quarter of the employers we contacted said that they've had to raise wages more than normal, particularly for skilled workers.

We are also seeing evidence of increased pricing power in the Tenth District, as firms have more confidence in their ability to raise output prices even without an increase in input costs. For example, we asked our survey participants a special question about whether their ability to raise prices had improved since the beginning of just this year. Of 77 responses, more than half said clearly yes.

The final reason I see an upside risk for inflation is that monetary policy does, in fact, remain accommodative. The federal funds rate is currently below most estimates of the neutral rate. Even with the Greenbook's assumptions of tighter policy, the fed funds rate will end the year below or at the lower end of estimates of the medium-run neutral rate. This poses a significant upside risk to inflation, because it is likely that much of the slack in the economy will have been eliminated by the end of the year. With output close to potential and core inflation elevated, I think we should aim to be comfortably within the range of neutral by the end of the year, not at the lower end.

Overall, with growth above trend, I am concerned that there is an upside risk to inflation even with the funds rate path consistent with the projections we are seeing currently. I believe we should begin moving more aggressively to bring the fed funds rate closer to the long-run neutral rate sooner. I would submit that, as long as the funds rate remains significantly below neutral, the risk that we will need to raise it 50 basis points can be managed. Now, I say that, but I also realize that a 50 basis point increase, while it could be justified, would surprise financial markets. So perhaps we should begin to signal the market that a more aggressive return to neutral is at least possible. But rather than tinker with the language in the press announcement, which makes me nervous, I would

prefer to shorten it and drop any reference to measured pace. After reading the minutes in three weeks, markets will know that a more aggressive policy is possible. In other words, we don't have to provide a long explanation today. And in fact, in testimony you gave earlier, I think you dropped the "measured" language; therefore, I don't think changing that part of the statement would surprise the markets at all. Thanks.

CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Thank you, Mr. Chairman. Like others, I've been both somewhat surprised but certainly pleased at the steady and strong pace of real GDP and job growth we've been experiencing.

This positive experience has been mirrored within our Southeast region. For example, regional retail sales growth in January was 7 percent on a year-over-year basis. This momentum also carried through into February, with inventory accumulation reported to be generally balanced. Factory orders are also continuing to increase.

However, like the rest of the nation, one recent soft spot has been new vehicle sales, which remained weak except for some imports and luxury cars. In contrast, used car sales have improved and, as one might expect, prices of compact and more efficient cars have increased at a faster pace than those of SUVs.

Our tourism and hospitality industry continues to give very positive reports, with rising hotel and motel occupancy rates. It's clear that the weaker dollar has resulted in a surge in foreign tourists, who are not only visiting but also buying houses in Florida. Better job creation in our District continues, led by Florida, and the District unemployment rate edged down further in January to 5 percent.

Our banking contacts and supervisory people report continued consumer loan growth, high asset quality, and low past-dues. At the same time, our bank examiners are reporting a pickup in competition for commercial and real estate lending, especially from money center banks. We received one report of a regional bank losing out on what was essentially a BBB credit. The borrower was offered what amounted to AAA credit financing, at 20 basis points over Libor. Our bank directors have also expressed concern that the flat yield curve is driving lenders out the maturity spectrum where they are taking more risk in search of returns.

I mentioned housing a moment ago. That sector continues to show strength in our region, with more and more anecdotal reports that can only reflect speculative activity along many parts of the Florida coast. Investors are making significant capital gains buying and reselling condo units before the contractor has even broken ground. But such speculation isn't confined to multifamily condo units. We're also seeing some of that same speculation in Florida single-family detached homes, a much larger part of the total residential market, although the very high levels of permits and sales per capita are partly explained by the underlying demand for such houses for relocation and second homes.

Turning to developments at the national level, I find that I can almost repeat the points I made at last month's meeting. The rates of real growth and job creation are very encouraging. My growing concern, which has been heightened slightly over the intermeeting period because of the continued reports of housing speculation and the potential underpricing of risk, is the inflation situation. It's clear from the incoming information on prices—the surge in PCE and PPI data in some recent months, the changes in the Greenbook inflation forecasts, and recent changes in the trend patterns of key components comprising the measures of core CPI—that both goods and services inflation are now showing signs of picking up.

Are we at the point where it's time to change the path of policy? I don't think we are there yet. I continue to believe that we are on the right policy path, at least for now, and that we should resist the temptation at this meeting to deviate from it. While inflation pressures and potential pressures have clearly increased, much of the recent surge we've been seeing in core goods inflation is coming from the rise in used car prices, which we believe is driven by the pullback in new car incentives and the slowdown of used cars coming on the market. In addition, as of January, a large number of components of the core CPI—actually 20—still continue to show declines as compared with 32 components that are showing increases.

Finally, while there has been some deterioration in short-term inflation expectations, longerterm expectations have not moved measurably. While I am comfortable with our current policy path, I believe that what we say in the statement has, in fact, become even more important and more sensitive. While our current policy path seems to me to address the risks as I see them today, I would like us to find the opportunity sometime soon to underscore the need for more flexibility to respond to incoming data. The inflation risks are worrisome and could deteriorate, and we may, in fact, need to use that additional flexibility before too long. I'll comment more later about suggested changes to the statement language. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. There has been little change in the outlook for the Third District since my last report. Economic activity continues to expand at a moderate pace in most sectors in the region, and most of our business contacts expect the current pace of activity to be maintained through the spring.

Recent readings from our business outlook survey indicate that regional manufacturing activity is expanding. The pace is slower than we saw during the initial phase in this sector in late

2003 and early 2004, but that is to be expected. In March, the general activity index fell to 11.4, a fairly sharp decline from last month's reading of nearly 24. I don't read too much into this. The index has been fairly volatile over the past three months, but it remains at a level that is typical of expansions.

Consumers continue to spend at a moderate pace. Winter merchandise has been cleared out through discounting, and spring apparel is selling well. Most of our retail contacts have said that sales are running close to plan.

As was true last month, nonresidential construction in our region remained soft. However, office-leasing activity in the Philadelphia metropolitan area has begun to rise, with five consecutive quarters of positive absorption. Vacancy rates have improved slightly. Residential construction has remained healthy, but it's down from its peak last spring. And house-price acceleration continues, but at a slower pace than earlier last year.

Employment is increasing in the region, but our directors and our other business contacts continue to report on the scarcity of qualified workers. Some firms have resorted to trying to bus people in from other localities, with mixed success. A temp agency customer indicated that they've had no objections to recent wage increases, expecting that they would help ease the labor shortage. But, so far, at least, this has not been the case. The manager for the temp agency said that the likely enactment of a \$2 increase over two years in the New Jersey minimum wage to \$7.15 per hour will have little effect on her business, as her workers already earn more than that. However, the New Jersey Department of Labor estimates that 16 percent of hourly workers earn less than \$7.15 an hour.

There is some evidence that the pricing power of firms in the region is rising. The manufacturing firms we surveyed reported paying and receiving higher prices. One manufacturer

who recently put through a price increase to his customers said he now regrets not having made a larger increase, given the ease with which it was accepted.

In summary, the economic expansion continues at a moderate pace in the Third District. Labor markets appear to be tightening, price pressures may be building, and the outlook among business contacts in our region remains positive.

My assessment of the economic conditions in the nation has changed somewhat since we last met. The incoming data and forecasts seem to be indicating that the underlying economy has more momentum than I thought a month ago. At that time, I had characterized the economy as growing at a moderate pace. I would now say it's growing at a solid pace.

We have transitioned from a consumption-led to an investment-led expansion. Other than nonresidential construction, no sector is showing signs of weakness despite higher oil prices. In addition, the labor market has strengthened. Payrolls have risen at a 1.8 percent annual pace over the last 12 months. That's less than the 2.6 percent annual rate we saw from the end of 1992 to 1997, but remember that at the end of 1992 the unemployment rate was 7.4 percent. With the unemployment rate now under 5.5 percent, the current pace of employment growth is probably about right.

We are at a point in the business cycle at which we need to be very watchful about inflation dynamics and inflation expectations. In the middle of 2003, the 12-month core inflation measures had fallen to around 1 percent and the Committee embarked upon a reflation policy. This policy was successful. Our actions have increased the inflation rate to the midpoint of my acceptable range. Our job now is to set policy to ensure that inflation does not accelerate beyond that acceptable range.

In my view, the signs of a pickup in underlying inflation and in inflation expectations indicate that the risk to inflation has shifted to the upside. There has been a relatively sharp

acceleration in core consumer good prices, oil prices have risen substantially—as we heard this morning—and the dollar has declined considerably. All of this poses a real inflation risk going forward. More significantly, medium-term inflation expectations, as measured by the spread between nominal and inflation-indexed yields, appear to be shifting upward. With forecasts of inflation moving up, albeit not yet to an alarming rate, it would behoove us to respond in some fashion. We all know that we cannot wait until we see a sustained acceleration in inflation if we want to do something about it.

All this suggests that it is important for us to remain vigilant about signs of higher inflation and to take steps now to increase our flexibility in adjusting the funds rate path going forward. Indeed, with the real funds rate still quite low and monetary policy accommodative, I'm putting more weight on the possibility that we will have to raise rates at a faster pace than we anticipated a month ago. It could very well be that a measured pace, interpreted by the market as moves of 25 basis points, still characterizes the most likely path for policy going forward. But, in my view, the possibility that a steeper path may be needed has risen since our last meeting.

If others on the Committee feel as I do, then I think we need to find a way to convey this shift in priors to the public. One way to do that is to reword our statement to clearly acknowledge the increase in inflation pressures. We can do this in the rationale language or in the assessment of risk language or both. Another way is to acknowledge that a faster pace may be necessary in order to fulfill our dual mandate. I'll defer getting into the specifics of the language until the next part of our discussion. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Pianalto.

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MS. PIANALTO. Thank you, Mr. Chairman. Conditions in the Fourth District have been gradually improving across a broad range of industries this year, and business confidence appears to be strengthening as well. Actually, it feels good to no longer be a Beige Book outlier. [Laughter] As it turns out, I am also not a Greenbook outlier. I find myself in broad agreement with the staff's baseline projection. I know I should feel comfortable being in such good company, but I view the projection as the result of competing risks. Both the Greenbook and my business contacts are bringing to my attention the positives associated with productivity growth and the negatives associated with price increases.

Although the rate of structural productivity growth might slow somewhat over the next few years, in my view the decline in the Greenbook multifactor productivity projections seems a little steep. The productivity growth surprises of the last couple of years may persist a bit longer. Business executives that I talk to tell me that they are still very focused on looking for opportunities to enhance productivity and that their capital investments are designed to achieve that goal. The drive for efficiency has become even more pronounced for those companies that are grappling with large increases in energy prices and in the prices of other raw materials. And, of course, many companies continue to experience large increases in medical care costs, adding to the incentives to wring out labor costs and other costs.

The prospect that productivity growth may exceed the Greenbook baseline gives me some optimism about the inflation outlook at a time when the headline inflation numbers keep escalating. Yet the factors driving the price level up do not seem to be going away. Energy prices, as we've commented, have ratcheted up again. And, as multiyear contracts with energy suppliers roll off, many companies continue to face increases in the prices they have to pay. The same situation exists, although to a lesser degree, with retail pricing pressures induced by higher prices of raw materials

and also intermediate products. In addition to these factors, there is also the possibility that past dollar depreciation could show up in the form of higher prices of both imported and domestic products.

The anecdotal information that I have been receiving about pricing has taken on a different tone from last year. Last year, retailers like Wal-Mart and Home Depot would not accept price increases from their suppliers. But the dam seems to be showing some cracks. Recently, I heard from the CEO of a global company that supplies the big-box retailers with adhesive products, such as duct tape. He told me that during a recent meeting with Wal-Mart he explained that he was requesting a price increase. He was told that they weren't accepting any price increases and that they would go to his competitors. Three days later he received a call from Wal-Mart saying that they were going to purchase these supplies from him at the price increases he requested because his competitors had also asked for a price increase.

Also, a large manufacturer of capital equipment who supplies the adhesive industries, among others, told me that he can get price increases for his equipment even though his costs are not rising that dramatically. But because the businesses he is supplying are able to pass on price increases, they are willing to take a price increase from him. So it seems that, at least in this industry, it's more than the adhesives themselves that are beginning to stick. [Laughter]

All things considered, I do think that the pricing environment over the next year or so will be very challenging for companies. I see some evidence that price pressures have been building, yet, if businesses are successful in maintaining strong productivity growth, these pressures might be held in check. The Greenbook illustrates the tension between these two factors and, as I said, I can find myself being either hopeful or worried.

I think our strategy of gradually removing our policy accommodation has convinced the public that we are determined to keep inflation in check over the long term. It will be important for us to earn that same degree of confidence as we go forward and as resources in the economy become more intensely utilized. Although I'm concerned that the possibility of inflation creep over the next year is there, the risks still seem balanced to me as long as we continue to remove our policy accommodation at a measured pace and do so for the foreseeable future. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. Thank you, Mr. Chairman. In recent weeks, we have received evidence of a continuation in the slowing growth in our District that we noted in our Beige Book report. Retail sales, which in the Beige Book were reported as having leveled off, began declining in early March by our indicators. A slump in big-ticket sales has evidently dragged down retail activity in recent weeks. District manufacturing activity continued to expand but at a slower pace than in February. Our March diffusion index, to be released this morning, came in at about neutral, which is down a bit from February.

Interestingly, hardly any of our textile and apparel industry contacts are citing the surge in imports from China as an important factor for them. Their reports on shipment trends are fairly evenly split between expanding and declining. We continue to receive reports of substantially higher raw materials prices across an array of industries.

The housing market remains quite strong in several areas in our District. Concerns over socalled bubble conditions are widespread among our real estate contacts, especially in Northern Virginia and in coastal areas, although prices seem to have topped out in several high-end coastal communities.

In banking, the CEO of a community bank operating in North Carolina and the western portion of Virginia said business is as strong as train smoke. Not being very familiar with train smoke, I asked him how strong a reading that represented. He noted about the only thing stronger was battery acid. [Laughter]

Turning to the national picture, the economy looks noticeably stronger today than it did at the end of January. The Greenbook now estimates that real GDP grew at 4.3 percent in the fourth quarter of last year, substantially higher than the previously estimated 3.5 percent. First-quarter real GDP growth has been revised up substantially. Expected future real GDP growth is essentially unchanged. And there is little revision to the path of potential output over the forecast period. The slowly improving labor market suggests that the output gap is still on track to continue diminishing in the near future.

On the inflation front, unit labor costs continue to be well behaved. The recent spurt in energy and import prices has elevated the overall indexes, but any spillover into the core indexes seems likely to abate. So I'd expect core PCE inflation to return to near 1½ percent after not too long.

The Greenbook forecast is conditioned on a path for the fed funds rate 50 basis points higher than in January, a path that nearly matches the market's expectation over the forecast horizon. All in all, I think this is a good outlook. In my view the most likely risk is that inflation expectations will be driven higher—by a more sustained increase in oil prices, by a sharper depreciation of the dollar, or by a more rapid closing of the output gap than we expect.

The most worrisome evidence of rising inflation expectations is the change in market measures of near-term inflation compensation. For example, the TIPS five-year inflation compensation, which has been drifting up fitfully over the past year or so, has increased by about a

third of a percentage point since the last FOMC meeting. We would expect large oil price increases to generate some movement in these compensation measures based on anticipations of pass-through to consumer energy prices. So the recent increase in the five-year TIPS spread may reflect merely a sort of expected arithmetical pipeline of future CPI increases. And, consistent with this, chart 1 of the Bluebook shows that a substantial portion of the increase is attributable to the first year of the five-year horizon and that compensation for years four and five hasn't moved much.

On the other hand, the Bluebook also shows that significant increases have occurred over the intermeeting period in forward inflation compensation two and three years out, and these movements seem hard to rationalize based on the current pipeline effects alone. Of course, these expectations pertain to the headline CPI figure, which is going to be elevated only temporarily above core inflation, I think. Indeed, the Greenbook calls for core CPI inflation to remain anchored at close to 2 percent, and that's a projection I'm quite comfortable with.

All this suggests that inflation expectations, although they have been creeping up, are not yet a problem. We'll have to adapt our plans, however, if inflation expectations behave in a way that is inconsistent with our intentions. We can start by making sure that our behavior is not exacerbating the problem.

The public learned from the minutes of our February meeting that we had deferred specifying a quantitative target range for inflation. That left open the question of how much more inflation we would be willing to tolerate. If we're not willing to specify a numerical target or upper bound for inflation, then we should find some other way to signal our determination to hold the line on inflation somewhere, preferably before that line is crossed. Thank you.

CHAIRMAN GREENSPAN. President Yellen.

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MS. YELLEN. Thank you, Mr. Chairman. Little has changed in the Twelfth District economy since we last met. It has continued to expand in line with the nation. For that reason, I'll focus my remaining remarks on the national economy.

The data we have received since late January have been remarkably consistent in their upbeat message. Important indicators from the output side—employment in manufacturing production, in particular—gained strength over the past couple of months. The same can be said of most of the major components of domestic demand. The strength in orders and shipments for core capital goods, despite the expiration of partial expensing, was particularly significant. In the Greenbook, all of this good news appears to show up mostly in the form of higher interest rates that offset the upward pressure on growth in the second half of this year and in 2006.

Developments that bear on productivity have also been heartening. First is the recent upward revision to fourth-quarter productivity growth as well as estimates of continuing strength for the current quarter. Second, enhanced prospects for business investment in equipment and software bode well for productivity in the future. Finally, some of the signs of slowing in IT [information technology] investment that were worrisome last year have moderated, although there is still reason for some caution about the outlook. IT investment bounced back in the fourth quarter, and production of high-tech industries has been strong in recent months. Taken together, these developments helped to assuage concerns about a pronounced slowdown in productivity growth, and I remain optimistic that advances in this area will continue to boost output growth and restrain inflation.

Of course, there are always risks. Developments in oil markets are an obvious one, and bond rates are another concern. It is striking that, until recently, long-term rates were falling a bit, even as policy tightened and short-term rates rose. The 10-year Treasury yield even now is below its level in

June when the Committee first raised the funds rate, and this has led to considerable discussion of whether term premiums have fallen to levels that are lower than can be justified by fundamentals. If the term premium is abnormally low now, economic growth could be significantly dampened if the term premium suddenly returns to more normal levels. And the risks here are nicely illustrated by an alternative simulation in the Greenbook. For this reason, the low level of long-term interest rates constitutes a downside real risk to the staff forecast.

Our staff decided to examine this issue more closely. We looked at several model-based approaches to explaining and estimating the term premium for 10-year Treasuries. All of the approaches predict a lower average premium since at least 2001, compared to the average for the 1990s. This result appears consistent with a number of macro developments, including reduced volatility in interest rates, output, and inflation. So a portion of the paradox of why bond rates are so low may be that the term premium has declined for reasons that are justified by fundamentals.

The element of risk for the outlook arises because the approaches we examined suggest that the term premium is even lower than is justified by fundamentals. According to our estimates, longterm rates still remain 30 to 60 basis points below the fundamentals-consistent level, even after the run-up in long-term yields since the last FOMC meeting. Since our previous meeting, the 10-year bond rate has risen by just under 40 basis points. Using the approach that yielded the larger term premium conundrum, our analysis suggests that about one-third—about 12 basis points—of the intermeeting increase is due to the correction of the low term premium. The remaining two-thirds is split between a higher path for expected future short-term real interest rates, presumably due to strong economic news, and higher inflation expectations. The latter concern is reflected in an increase since late January in inflation compensation, especially over the next few years. Part of this increase is probably due to upside surprises in recent inflation data and part of it to increasing oil

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prices. Our analysis suggests that oil developments might have raised 10-year inflation compensation by less than 0.1 percent.

To sum up, our estimates suggest that the term premium has probably increased moderately, about 12 basis points, since our last meeting. But even so, the premium may remain as much as 60 basis points below normal, according to our estimates. Our analysis thus suggests that the risks for the term premium on bond rates are asymmetric. While the Greenbook expectation of a relatively flat path for bond rates through the end of next year may be a reasonable modal forecast, I don't think the risks here are balanced. And, indeed, they seem to be on the side of restraint for demand.

Of course, the recent news on inflation, and, in particular, the core PCE in January, was disappointing. And with oil prices rising further, it seems reasonable to raise the core PCE inflation forecast through 2006 by a tenth or two, to just over 1½ percent. But I do not think we should overreact to January's adverse inflation data, especially in light of the continued containment of wages and salaries and evidence of even greater strength in actual and structural productivity growth than previously assumed in the staff forecast.

In my view, the policy situation has changed notably since the last meeting. We now see stronger momentum in aggregate demand, importantly due to more robust investment spending and slightly disappointing inflation data. This means, as is implicit in the Greenbook forecast, that we now appear to be further from the real short-term neutral funds rate than previously, and monetary policy remains quite accommodative.

What I would like to see today is for us to raise the funds rate by 25 basis points and retain both the "measured pace" language and the characterization of policy as accommodative. At present, I believe the Greenbook path and market expectations are quite well aligned and coincide with my own view of the appropriate path for policy, given current information. In my view the

term "measured pace" remains a good description of the likely path, and I would think it wise to act to confirm market expectations today rather than upset them. I don't think that retaining the "measured pace" language eliminates the Committee's flexibility to raise the funds rate by 50 basis points if it does prove necessary. Obviously, such a move would need to be justified by the strength of incoming data, but with those data I believe the markets would have adjusted to the idea by the time it became appropriate to implement it.

CHAIRMAN GREENSPAN. President Minehan.

MS. MINEHAN. Thank you, Mr. Chairman. Economic activity seems definitely on the upswing in New England. As we discussed conditions with our Beige Book contacts, met with our small business advisory group, and talked in some depth with local temporary-help agencies and software developers—as we did our usual round of contacts—the themes of solid growth and increasing confidence were repeated with some frequency.

Manufacturers, especially those that have some defense business, report very good sales, and, at least in the case of one large manufacturer, an inability to keep up with demand. Labor markets have strengthened as well, and benchmark revisions to employment data indicate that 2004 was a better period for job growth in New England than previously thought. Temporary help agencies report good demand for labor, and help-wanted is stronger, as judged by both traditional measures and the indexed data on the region that are available from Monster.com. Housing remains strong, though we don't see much sign of speculation and there is some softness at the upper end of the price range. Retail business is reported to be good, and both business and consumer confidence has increased.

Contacts in the regional economy appear to be moving from a focus on concerns about demand to a greater focus on emerging issues around supply and cost increases. We talked to a lot

of small businesses in the period since our February meeting, and they almost uniformly report rising costs of raw materials and labor that are starting to impact their prices. In a growing number of cases, these firms have been able to make price increases stick, even to big buyers like Wal-Mart, though, largely, the price increases have been in the form of surcharges.

Skilled workers are becoming difficult to find. Businesses report that they're in a hiring mode and have to pay up to get the people they need. Some companies have begun to hire in advance of need, simply to have a pool of available workers. Capital spending plans seem quite solid, and now there is a mixture of firms spending not only to further increase productivity but also to expand to handle increased business.

Two areas of concern emerged beyond those related to rising costs. The first involves tourism in northern New England. Evidently, while this was a snowy year in the southern part of our region, the northern areas have suffered from both too little snow and the timing of storms, which created weekend travel problems. The second is a continued sluggishness in commercial real estate markets. Given the number of large mergers affecting the region, both in the financial services industry and elsewhere, and the reduction of headquarters staff that has resulted, commercial vacancy rates remain high and rents low—especially in downtown and suburban Boston. I should say the rents are relatively low, since Boston rents tend to be high anyway. This has not, however, seemed to put much of a crimp in the market for purchasing commercial buildings, which continues to be quite strong.

Turning to the national scene, I've been struck by the strength of the incoming economic data, as has everyone else. We in Boston have adjusted our forecast upward, especially in the near term, as has the Greenbook. Using the same assumptions about policy, we end up fairly close to the

Greenbook over the forecast horizon, though our calculations suggest some greater economic capacity and less downward pressure on the unemployment rate.

However, there is not a lot to argue about here, given the continuing upside surprises in overall economic growth and in price pressures. Indeed, it seems clear to me that the underlying rationale we have used in moving policy slowly and gradually to a less accommodative place is becoming questionable. Unlike last year when growth seemed fragile and uncertain, economic growth now seems solid and resilient and in less need of policy accommodation. Overall credit and financial conditions are supportive, if not encouraging, to spending and growth. Business investment is not taking a breather with the ending of the tax incentive, and consumers aren't either, except in their post-holiday purchases of autos.

Surely it is possible to see downside risks from a rise in the saving rate, from an untoward increase in oil prices that impacts demand, or from an impact arising out of the external deficit. But I think it's even easier to imagine upside inflation surprises as rising energy, raw material, import, and labor costs get embedded into economic activity. In that regard, I found the Greenbook alternatives focused on a spending boom and on a boom with rising inflation expectations very interesting. I should also note that while my admiration for the FRB/US model is enormous, I think it's difficult for any model to correctly anticipate the full interplay of economic factors once the unexpected happens.

The baseline, I think, is still pretty much a good, solid forecast. Continued solid productivity growth will keep nascent cost pressures and inflation expectations under control. However, the risks that this will not happen seem to me to have grown and to have become a bit more one-sided. That is, I think we need to be more focused on the risks that rising cost pressures will get out of hand. Perhaps it's not a probable outcome, but, if it does happen, it would be costly. Accordingly, I think a

case could be made for moving faster rather than slower toward that so-called neutral place. Taking larger steps now would have the benefit of affecting market attitudes toward risk in a positive way, largely because it is not what markets expect us to do.

That option has some attraction to me. But it could be too much of a surprise and indicate too much concern about future prospects than perhaps is necessary. However, we could take advantage of this point in time by preparing the markets for greater policy flexibility. That is, we could change the language of the announcement by following the Chairman's example in taking out the reference to a measured pace. In my view, anyway, that would have two benefits. It would continue the process of removing policy accommodation, and it would focus markets better on the uncertainties of the future.

## CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. One of my business contacts, my Wal-Mart contact, started our conversation by saying that the situation is rather strange—his word. Spending coming out of the Christmas season has been higher than anticipated—with same-store sales about 4 percent higher on a year-over-year basis—and they're not sure where this strength is coming from. They are anticipating about that same strength, or maybe even a bit more, going forward. He noted that their inflation situation is not a concern. Their prices overall are flat; food prices are up a little and prices of nonfood items are down a little. The labor market is very stable; Wal-Mart is having no problem at all hiring associates at their stores.

My UPS contact noted an expansion of their capital spending. He said that business from retail mail order firms is very strong. He indicated that his company has some labor concerns. They may be facing a strike later this year—a possible pilot strike is the concern, I think—and they are

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doing contingency planning for it. They do not believe that the rest of the industry has the capacity to fill in, should UPS be shut down.

My FedEx contact noted also an increase in capital spending, up 15 percent for this fiscal year over last fiscal year. He indicated that about two-thirds of that is for expansion of capacity and about one-third for productivity enhancements. Also, he said that they had no concern regarding labor availability. Fuel prices, obviously, are a concern for them.

My contact in the trucking industry had contrary information. He said that demand is softer than anticipated and that there has been a switch from prebookings for truck shipping services to last-minute bookings. He also noted that the driver shortage is getting worse and worse.

A contact in a major software company said that sales had come in a little soft relative to their expectations but attributed it to Intel coming up short on inventory—I think particularly on notebook computers. Apparently Intel was surprised by demand that was higher than anticipated. Also, I might mention that a contact in the banking industry noted that C&I [commercial and industrial] loans year-over-year are now positive and accelerating and that there appears to be a lot of momentum.

Let me turn now to some comments about the economy in general. We have in place a very broad-based and robust recovery. Business fixed investment is taking hold and taking the lead. I think it's highly likely, of course, that employment and income will grow, which will provide support for consumption, as the Greenbook emphasizes. So even if we had a welcome increase in the saving rate, we'd probably see continued strength in consumption.

The Greenbook contains—and we continue to hear elsewhere—a lot of comments on energy prices. In my view, it's very important that we think of energy prices as being demand-driven. This is not a supply shock situation; there's a worldwide demand increase. It may be, for some purposes,

appropriate to think about what the world would look like if energy prices had not increased and how much gets taken off growth. But I'm not sure that that's quite the right way to look at this, because the situation is being driven fundamentally by demand. It's not that output is being constrained by energy; it's that vigorous output growth is driving up energy prices.

As for labor compensation, productivity gains are holding down growth in unit labor costs. That's a source of great stability.

Let me make a general point about this expansion that really took hold roughly six quarters ago. Relative to U.S. business cycle history, this expansion has been one of the most orderly and best predicted. The forecast errors are astonishingly small—much lower than the usual standard errors that we see—and I think that has a lot to do with the very well-balanced and orderly nature of the expansion. This expansion is about as surprise-free as we ever see. I think our policy goal should be to maintain the orderly nature of the expansion as far as we can, and, of course, that includes as an essential element maintaining the stable inflation environment.

I think the staff forecasts for both real GDP and inflation make a lot of sense. As point forecasts, they're as good as one can find. I think the risks around the GDP forecast are probably pretty symmetrical, but I do not believe that the risks around the inflation forecast are symmetrical. I view the inflation forecast more as a median of the distribution than a mean. I think the distribution is skewed to the right—that there's a substantially higher probability that we could have a ½-point upside surprise than a ½-point downside surprise on the inflation outcome. That's all I'll say at this time. Thank you.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Thank you, Mr. Chairman. The broad-based expansion in our District economy persists. Employment is continuing to increase. The manufacturing sector is a standout,

growing rapidly. Demand for construction equipment reportedly is very strong. Backlogs are building in that sector, and there are long lead times. There is an emerging scarcity of some skilled labor. The mining and energy sectors, not surprisingly, are strong. Housing construction activity remains robust, although sales have slowed a bit year-over-year. The concerns expressed by business leaders are the usual suspects: medical insurance costs, rising raw material prices including energy, of course—and rising transportation costs.

Turning to broader issues, based on the tenor of the incoming information on the economy and on my earlier forecast, the national economy continues to look quite good to me. It's still early in the game, of course, but 4 percent real growth this year looks like a reasonable forecast. It would not be a stretch but simply a continuation of what we've experienced in the previous two years.

As far as inflation is concerned, I do not expect a material acceleration in core measures of inflation this year. Nevertheless, I do see signs that there is some buildup in price pressures. Therefore, it seems to me that the risks we are confronting are in the process of shifting, mostly because the risks of a subpar or disappointing performance of the real economy have diminished but also because the inflation pressures have perhaps ticked up a notch.

I think the policy implication of this is that we can continue for now with the program that we have been on of ¼-point increases in the funds rate. But I do think we need to modify the language in the announcement to reflect changing circumstances and to preserve internal consistency.

CHAIRMAN GREENSPAN. First Vice President Holcomb.

MS. HOLCOMB. Thank you, Mr. Chairman. The economy in the Eleventh District has been gaining strength since last November. The most recent data, in combination with anecdotal evidence, point to improved growth in January and February and to a brighter outlook in the months

ahead. Importantly, the recovery in Texas employment growth is becoming more broad-based across the major sectors of the economy. In addition, 2004 marked the first year since 2000 that the private sector showed positive job growth.

As might be expected given the surge in energy prices, the Texas rig count and support services for oil and gas are expanding briskly. The Texas rig count has roughly tripled since 1999 and is up about 30 percent in the last year alone. In spite of the high demand for rigs, our directors report many instances of rigs lying stacked in the field. With experienced rig crews in short supply, concerns about legal liabilities have caused oil companies to leave some rigs idle. Our contacts also report shortages of drilling pipe, because, in their words, China is sucking up every ounce of steel. At our last directors' meeting, one of our banker directors reported the first oil and gas activity in his area in 30 years. An additional sign of the market's responsiveness to the anticipated strength of energy prices is a resurgence of institutional money seeking out energy exploration deals in the Unites States and Canada.

Both our directors and members of our Advisory Council on Small Business and Agriculture report a sharp increase in demand for cattle ranches in rural Texas and for extremely high-end apartments in Dallas and Houston. Several members of these two groups spoke of a paradigm shift taking place, away from holding financial assets toward holding tangible assets, such as land, cattle, oil, and housing. They all noted an abundance of money flowing in, often in cash deals. Another director noted that the flow of venture capital to Texas farms has picked up.

Turning to the national economy, I'd like to provide support for the Greenbook's conclusion about the extra positive thrust in the economy by noting that congressional hearings have been focusing on the use of steroids in major league baseball rather than the economy. [Laughter] If you'll permit me to stick with this theme, we agree that the economy is stacking up to have a pretty

good season in 2005 for all the reasons that have been enumerated. A key question is: What will be the impact when the removal of last year's monetary policy steroids stimulus shows up with the usual lag?

Given the outlook for energy prices built into the Greenbook, as well as the higher fed funds path, it seems that the growth slowdown in 2006 could be greater than anticipated, particularly if financial conditions weaken, as in the higher bond premium scenario in the Greenbook. At the last Dallas board of directors meeting, in response to the Chairman's testimony about the long-term bond rate conundrum, there was some discussion of a somewhat different scenario. The directors were concerned about the potential for a very flat Treasury yield curve, given the market's anticipation of a much higher fed funds rate by early 2006. While the Dallas research staff noted that the slope of the yield curve doesn't have the predictive power it used to, our directors, nonetheless, felt uneasy about this situation. The run-up in Treasury yields over the last couple of weeks has probably reduced their concerns, but this scenario has made them cautious about continued tightening.

Our information supports the Greenbook's projection that business investment in equipment and software will hold up well this year. Over the last six months or so, the Dallas directors have been discussing the extent to which the very low level of investment spending over the 2000 to 2003 period has reduced the level of effective capacity in their industries. A few of our directors believe that some operations may have become economically obsolete, need to be written off, and ought to be replaced with newer technology.

It seems clear that the Committee will be considering holding a retirement party for the term "measured pace" in order to increase flexibility going forward. We would support giving "measured pace" a gold watch after a career of serving the System well. While there is sufficient rationale for continued tightening at this time, the Greenbook assumption of a 3.5 percent fed funds rate by year-

end would require a pause for a meeting or two in the cycle of raising rates, and the current wording is an impediment to doing so.

For today's policy action, I would support a <sup>1</sup>/<sub>4</sub>-point increase as a further step in getting to neutral. As for the more difficult question of determining when we have reached neutral, I will leave that to Mr. Fisher. Thank you. [Laughter]

CHAIRMAN GREENSPAN. Well, we'd like you both to be here to give us the answer! MS. HOLCOMB. I'll whisper in his ear before he comes to the meeting. [Laughter] CHAIRMAN GREENSPAN. Helen, it has been a real pleasure having you here. MS. HOLCOMB. Thanks. I really appreciate it.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. I have no humor in my statement and nothing that differs from the consensus.

CHAIRMAN GREENSPAN. Your straightforward remarks are very humorous. [Laughter]

VICE CHAIRMAN GEITHNER. Careful. [Laughter] The near-term outlook appears more favorable to us, as it does to everybody else. We have moved up our forecast to reflect strongerthan-anticipated underlying growth and somewhat greater price pressure. On the expectation that we will move the fed funds rate up at the somewhat steeper path now priced in the market, we now expect real GDP to grow at a roughly 4 percent pace in real terms this year before moderating to around 3<sup>1</sup>/<sub>2</sub> in 2006. And with this tighter monetary policy assumption, we expect core PCE to come in a bit above 1<sup>1</sup>/<sub>2</sub> percent but not above 2 percent.

As this implies, we are very close to the Greenbook on the broad outlines of the story and quite close in the components, too. We have a bit more investment and less consumption and a little higher net export drag this year. We have productivity growth a bit stronger but compensation

growth and unit labor costs a bit softer. But overall we have a very similar view to the staff forecast on the broad forces supporting the expansion. And we are quite comfortable, as a result, with the case this story presents for tightening policy further and for signaling more tightening to come.

We see the risks as roughly balanced around this slightly higher path for growth and inflation. If there's a case for asymmetry or less balance in our uncertainty, it seems more likely to be on the upside than on the downside. The rise in the two- to five-year inflation expectations in TIPS, in the face of what is otherwise reasonably encouraging news on inflation fundamentals, bears careful monitoring. We now face a lower probability that the core PCE will come in at 1½ percent rather than above, and this itself suggests a higher path for the nominal fed funds rate.

The anecdotal stories seem to have improved alongside the strengthening of private forecasts. Our Empire State Survey shows greater confidence—greater optimism about the next six months—than we've seen in some time. I think we should be relatively comfortable, therefore, with both the direction and magnitude of the change since our last meeting in market expectations regarding the likely path of the fed funds rate. I would be somewhat more comfortable if the market were pricing in a somewhat higher probability of a 50 basis point move at some point in the near term. I say this not because I think we can make the case now that we will need to move by 50 basis points any time soon but simply because we need to make sure that we have the flexibility to do so.

One of the consequences of the structure of our statements these days, at least until very recently, is that the markets have responded to stronger data or more inflation risks by raising the probability of another 25 basis point increase beyond the next meeting or two, but not by pricing in any significant probability of a steeper slope than 25 per meeting. This has contributed to a remarkable reduction in uncertainty about monetary policy expectations, which in turn has reinforced other factors that have worked to bring about this broad pattern now evident of lower risk

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premia across financial markets. Part of this is due to fundamentals, but part seems due to our monetary policy signal.

At the margin, this implied ceiling on the slope of the path toward equilibrium raises the possibility that we will be perceived at some point as taking some risk of getting behind inflation expectations. Buying some insurance against this prospective small cloud on our credibility is prudent risk management. This argues for adjusting our statement to condition or qualify "measured," and for doing so ahead of when we might be forced to. This makes sense even if we don't want to significantly steepen the implied path at this point. Buying this flexibility now may entail some modest steepening in the path, but some risk in that direction is worth it. The additional benefit in gradually exiting from the "measured pace" language as we approach equilibrium, of course, is that it will prepare the ground for a flatter path when that proves appropriate.

Greater confidence in the sustainability of the main forces driving the expansion suggests that the greatest risks to the forecast, apart from some shock, still lie in the imbalances we face in our economy. Those imbalances are evident in the combination of the sustained rise in household debt, the projected increase in public debt, and the deterioration in our net international position. This probably argues for trying to get the real fed funds rate up to a more positive level than might otherwise have seemed appropriate. That will help provide more traction—or at least some traction, since we don't see much traction yet—to the process of adjustment, allowing the forces of gravity to contribute to a more gradual unwinding of these internal and external imbalances and reducing some of the risk in the forecast. A more contractionary fiscal policy stance would make this less necessary, but this does not now seem in prospect. Thank you.

CHAIRMAN GREENSPAN. Thank you very much. Let's break for coffee.

## [Coffee break]

## CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. We are experiencing a mini-inflation scare in financial markets—a development that we need to take very seriously. The primary reason for the scare was the recent rapid increase in the prices of oil and other basic commodities. Other determinants of inflation, it should be noted, seem to be largely under control.

Still-strong productivity growth and subdued wage increases have been sufficient to induce some recent deceleration in unit labor costs. At the sectoral level, recent increases in auto prices seem unlikely to continue, given the industry's inventory overhang. And I note that this morning's report showed a 0.9 percent decline in February in auto prices. Prices of imported consumer goods have also been remarkably tame, rising about 1 percent in the year to January despite the fall in the dollar. And the influx of low-cost apparel imports associated with the end of the Multifiber Agreement should provide more help on that front. Inflation in services is stable, and far future inflation compensation, which effectively strips out oil effects, has not risen.

How serious is the inflation risk posed by rising commodity prices? One view, which, if correct, would be quite worrisome, is that commodity prices are the canary in the coal mine indicators of easy monetary policy and building inflationary pressure. I don't find this view persuasive, and I note that the academic literature has found essentially no support for it. Instead, recent commodity price increases seem to be largely the result of economic developments unrelated to U.S. monetary policy, which I would call supply shocks, although without disagreeing with President Poole. What we're saying here is that China is exogenous. [Laughter] In the case of oil, for example, international agencies have recently revised downward their projections of non-OPEC production while increasing their estimates of global demand for crude, reflecting in part the

likelihood that growth in demand this year will be disproportionately concentrated in energyinefficient countries, such as China.

The weak dollar, which I suspect is responding more to the current account situation than to monetary policy per se, is also affecting the oil price. Since 2000, oil prices have risen 98 percent in dollar terms, but they have also risen by 45 percent even in euro terms and by 76 percent in yen terms.

If the supply shock interpretation is correct, then the effects on core inflation of the recent run-up should be moderate. As is well known, commodities and raw materials make up a small share of producers' costs. For example, the staff estimates that even in a full employment situation, in which firms have some pricing power, a 1 percent increase in the core PPI for intermediate goods should result in less than a 5 basis point increase in the core CPI. By the way, I think that fact helps to reconcile to some extent the benign inflation numbers with the anecdotal reports of price increases, since many of them take place at the intermediate level.

An interesting datum from last week's survey of 22 primary dealers is that, on average, they expect core PCE inflation of 1.91 percent at an annual rate during the third quarter of this year, up only 6 basis points from what they expected for the same period as of the week before the last FOMC meeting.

If we are, indeed, facing a supply shock, then to some extent the situation is analogous to where we were last spring when inflation pressures proved transitory and policy patience paid off. However, all economists have two hands. And on my other hand, I agree that there are also important differences from the situation last spring. The expansion has considerably more momentum today than it did then. Core inflation is approaching the top of my comfort zone, and I would not like to see it go much higher. Finally, futures markets suggest that this time the shocks to commodity prices are expected to be relatively more permanent than they were last time.

For these reasons, the risks to both the output and inflation objectives of a slightly more aggressive policy posture seem fairly modest. My bottom line is that I support raising the funds rate by only 25 basis points today. However, I believe that it would behoove the Committee to modify the statement in a way that signals the possibility of stronger actions in the near future. Thank you.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. I think I will be the fourteenth person to explain why the balance of risks is gradually changing. A few months ago, we were still worried about supposed soft spots but at this point the expansion looks pretty solid. Housing and consumption growth remain strong. The feared pothole in business investment never materialized, which strengthens the forecast in two ways. Not only is there no pothole, but now the strength of investment last year can be attributed to underlying forces, not tax incentives, and carried forward into this year.

The international economy looks pretty vigorous, especially for emerging-market countries, and actual output expansion is now being forecast even for Japan. The Blue Chip forecasts, which I use as a reflection of conditions more than as forecasts, are now being revised upward. The whole picture looks quite strong, and, if anything, the risks are tilting to the upside. Conditions will be very strong if the personal saving rate doesn't rise. A recent bank newsletter was entitled "A Whiff of Inflation in the Air." I actually think it is still possible not to whiff inflation, but there is no denying that the risks are changing.

Oil prices have jumped up again both for the spot price and the far futures price. In contrast to earlier oil shocks, which clearly could be attributed to some disturbance on the supply side, the

present uptick seems more likely due to international demand conditions, making the higher prices less idiosyncratic and presumably more lasting. Other commodity prices have also jumped. The dollar has fallen already, and there will be continuing fears that it will fall further, with these fears presumably lasting until our international liability ratio stabilizes—a prospect that seems more remote by the day.

So far, wages and unit labor costs have been a stabilizing force but wages may become less so as output gaps tighten, and productivity growth rates could at some point stabilize or decline. There is nothing surprising or disappointing in this. If a year ago we had known that output growth would be healthy here and around the world, that output gaps were closing, that oil prices were high, that commodity prices were high, and that the dollar was falling, we all would have been quite worried about inflationary threats.

In a way, over this span the anti-inflation news has been reasonably good. Pass-throughs have proved modest, and wages have been rather well behaved. Productivity has hung in there. But there is still an enhanced risk of inflation.

In recent meetings, I have held out one factor that could get me to be less hawkish—the prospect of real fiscal tightening. This has become less likely, too. There has been a dispute between those who want to cut spending and extend the tax cuts and those who want to maintain spending. When not dealing with steroids in baseball and feeding tubes in Florida, the Congress seems to be working toward one of their unique compromises: Let's extend the tax cuts <u>and</u> maintain spending. [Laughter] There just doesn't seem to be much voice for and hope for real fiscal tightening.

Hence, whether one is looking at output growth, inflationary pressures, or fiscal policy, the risk of falling behind the curve has increased. We have to keep raising rates. I am still in the camp

for 25 basis points per meeting and for keeping the "measured pace" rhetoric for a little while longer, but I am also for tightening up our rhetoric in subtle or even occasionally non-subtle ways.

There has been some dispute about the normative global impact of our low national saving rate, and I would like to say a word about that. When one aggregates the low personal saving and the large budget deficit, the U.S. national saving rate is at a post-war low. How bad is that? Given what appears to be a saving glut around the world, some argue that it's actually a good thing our national saving is low. Otherwise, world long-term interest rates would fall to very low levels. It is definitely good for world savers that our own national saving is low. That maintains their return. But I am still more worried about stimulating world investment than about the returns realized by savers.

We all know that in this country the number of workers per retiree will fall from 3.3 now to 2 in about 30 years—2 is actually high by world standards. With present trends and with present policy, the same ratio will be a little more than 1 for Canada, France, Germany, Korea, Russia, and the United Kingdom, and actually less than 1 for Italy and Japan. That's right. Those two countries are on track to have more retirees than workers. Even in most emerging-market countries, the ratio will not be much above 2.

Barring the unlikely case where national social security systems are totally fully funded, the younger generations in all of these countries are going to need more capital to pay the retirement and health costs of our generation. Hence, I remain much less worried about the upward pressure that our low national saving puts on world interest rates than the downward pressure it puts on world investment. Yes, in the short run our high budget deficit and low national saving are benefiting world savers. But, no, in the long run, I don't think they are benefiting the world. Thank you.

CHAIRMAN GREENSPAN. Governor Ferguson.

MR. FERGUSON. Thank you, Mr. Chairman. At the last meeting, I described the economy as being in what I called a mid-cycle sweet spot, so the obvious question is: What has happened since then? I would say that, in general, my headline is bifurcated. One is, "so far so good;" and two is, "there are a number of caveats".

Let's first look at the "so far so good" part of the headline. As all of you have already pointed out, the economy seems to be gaining momentum. Households continue to be in good shape. The saving rate is, unfortunately, low, but that is supporting consumption. Households are also being supported by an increase in compensation per hour that continues to look quite robust.

As the Greenbook has pointed out, there seems to be no pothole on the investment side, so the business fixed investment component is also kicking in. Nevertheless, as a number of you have already indicated, some concerns have arisen recently on the inflation front. But I think we should also recognize that long-term inflation expectations continue to be well anchored. And importantly, while a number of costs have gone up, unit labor costs themselves continue to be, if anything, quite moderate. All of this suggests to me—though I will point out some caveats—that the incoming data are not flashing a signal that we are clearly behind the curve.

So what are the caveats that seem to be important? Both of them deal with some uncertainties regarding the supply side of the economy. First, we have a question about what is going on in the labor markets. As all of you know, several meetings ago, and then at the AEA [American Economic Association], I put forth some relatively rudimentary analysis that suggested that some of the decline we've seen in labor force participation rates may not turn around very quickly. The staff has done some much more sophisticated analysis and has come to a not too dissimilar conclusion. So I think we do have an obligation to mark down our expectations of the

increase in labor hours that can go into overall potential GDP. The staff has done that, and I support that conclusion.

The second uncertainty with respect to the supply side has to do with productivity growth. This, I think, will be an ongoing question for us for some time to come. I recognize—as do others, including President Yellen—and applaud the fact that there appear to be many positive signs with respect to productivity growth. We had a discussion in this room, for example, in a meeting with the SIA, suggesting that Moore's Law continues to be in shape, which is obviously a very positive thing. And we have seen some upside surprises in income and productivity growth, which, again, is a very positive development.

Having said all of that, the staff takes into consideration the net debt financing of financial firms and the financing gap information, both of which show that firms have a great deal of room left to invest; the staff views those as positive signs that there is some potential upside to productivity. I would say that we should at least be a little cautious in that assessment because those developments may involve some negative signs. So I think there's a little question mark on the capital deepening component of productivity increases. At this stage, I'm generally willing to support the consensus that has emerged around the table, and in the Greenbook forecast, that productivity probably is in good shape. But we need to monitor that.

Another caveat has to do with this issue of energy prices. I, along with Governor Bernanke, realize that energy prices play a relatively small part in inflation in the U.S. economy, particularly against the backdrop of well-contained unit labor costs. However, like others, I recognize that the increases in oil prices seem to have had a dramatic impact on market psychology and may be the thing that could undermine the relatively well-contained inflation expectations that have been beneficial to us. So, with regard to oil prices, I'd agree with others that the supply and demand

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dynamics are such that not only are oil prices likely to be in a higher range, as indicated by the fardated futures, but also that the surprises are more likely to be skewed to the upside. In my view, the recent increases in oil prices reflect some real concerns that world supply will not be able to keep pace with demand growth, as a few of you have already said. In particular, I think the cushion of spare production capacity has narrowed significantly.

In preparation for this meeting, I asked the staff to do an options-derived probability density function of WTI prices. I don't have the results to hand out, but when one looks at the December 2005 function, there is a particularly large skew to the right-hand side. I think this is telling us that there are significant market concerns that prices could surge in the event of supply disruptions. These concerns have pushed up both futures prices—which to me can be interpreted as a mean expectation for future spot prices—and also spot prices today, reflecting, I think, some heightened precautionary motives for holding inventories. So there is a real risk that with very low short-run price elasticity of demand, a supply shock could lead to very big moves in price and potentially unhinge the inflation expectations that we have benefited from. So I think that is another caveat to worry about.

Finally, President Geithner has raised a few times the question of whether or not the predictability of our language has been the source of a reduction in either implied volatilities or spreads over Treasuries. I had the staff do some basic historical charts to look at this issue. We first introduced in the Chairman's congressional testimony in 2003 the notion that we'd keep rates low for a considerable period, and that showed up in our press statement for the first time in August 2003. Since then, obviously, we've gone through other terms such as "patience," "measured pace," et cetera. All of that I think has played to some degree in the reduction of implied volatilities and spreads over Treasuries. But, in fact, if you look at a chart that shows the movement down in

implied volatilities and in the spreads over Treasuries, both started to decline many, many months before our original focus on using the kind of language we've been using. So while I don't necessarily disagree that there are carry trades and that some real risks have emerged, in my view we should not take too much of the blame for that upon ourselves. I think a number of market dynamics have driven that, along with predictability and transparency at the Fed.

That leads me to the final point: What does all this mean for monetary policy? First, I would say, at bottom, that I find the baseline outlook to be credible and reasonable. But it is surrounded by a range of risks that I believe, as do others, are primarily on the upside. Against that background, it seems prudent to continue to execute our pre-announced strategy. The economy is growing well and needs less and less stimulus; therefore, continuing to remove our accommodative policy at a measured pace seems to me reasonable.

Second, given the stage of the cycle, the skew in the general risk assessment that I outlined, and the need to manage market expectations, I think we should use our statement to signal our awareness that inflation pressures may have picked up. The incoming data are indicative of that. If we are wrong on the upside risks, both we and the market will adjust. On the other hand, if we fail to reflect the existence of these upside risks, we could easily be perceived as being behind the curve, with negative consequences in terms of inflation dynamics and, potentially, our own credibility.

Finally, I think the statement, as drafted in the last meeting, clearly links the concept of a measured removal of accommodation with a general sense of the incoming data. And I believe that gives us the kind of flexibility that we need. Therefore, I'm not terribly supportive of removing the "measured pace" concept at this stage. I think we have sufficient flexibility using that phrase, when it is linked to the incoming data, to move more quickly if we had to or to pause if we needed to see

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how things were evolving. So I would caution against making that kind of change in the statement today. Thank you, Mr. Chairman.

CHAIRMAN GREENSPAN. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. Activity has come in somewhat stronger in recent months, and price pressures have been a bit more intense than anticipated at the last FOMC meeting. Evidently, continued good growth in income and high profits are keeping household spending rising briskly and eroding any remaining business caution.

The fact that surprises have been concentrated in investment in both business equipment and housing may also suggest that the low long-term rates—the conundrum—have been having an effect. If, as seems likely, those rates have been reduced in part by declining term premiums, as President Yellen was discussing, and not just by an expected lack of vigor in demand here or abroad, their depressed real level would represent a net stimulus to demand most especially for business borrowers who are facing very low risk premiums. In fact, business borrowing has strengthened considerably in the fourth and first quarters. And after an extended period in which cash flows have exceeded business investment, low interest rates and ebbing caution have produced a positive business financing gap in the fourth quarter, which is projected to continue for the first quarter.

Moreover, the U.S. economy is not the only one in which growth has picked up; the strengthening of demand seems widespread globally after the disappointments in the second half of last year. And I agree with others who have noted that the sharp upward movement in energy and other commodity prices probably reflects in part this global pickup in demand.

The surprise in core PCE prices was only for one month and was small relative to our ignorance of what drives those prices. But it does raise the possibility that energy, other material

prices, and import prices could be passing through to consumer prices more than anticipated. This, coupled with the rise in near-term inflation expectations, does elevate the risk of second-round effects from such relative price movements. And those relative price adjustments have continued in recent weeks.

Still, a number of factors seem to be working to restrain tendencies for inflation to move higher, and we can't ignore those. Importantly, productivity growth was stronger in the fourth quarter, and, apparently, in the first quarter, than anticipated. Whether that suggests faster structural productivity growth than the staff has built in remains to be seen, but revisions to actual productivity growth will help keep pressures off of labor costs and markups. Partly as a consequence, markups in the nonfarm business sector remain at extraordinarily high levels, giving ample scope for future cost increases to be at least partly absorbed in reduced margins. And wage and compensation growth remain essentially flat, indicating to me that slack in labor markets persists, given the upward pressures on compensation that would otherwise be anticipated from rising headline inflation and the rapid productivity growth of recent years.

Bond rates have risen noticeably. To be sure, the upward movement seems mostly to reflect higher inflation expectations, but higher nominal rates could have a noticeable effect on housing markets where buyers seem sensitive to the cash flow implications of their monthly obligations. House price increases should slow quite a bit, in any case, holding back the rise in wealth and boosting incentives to save out of current income. In addition, GDP hasn't been revised up as much as demand. As the trade deficit continues to surprise on the high side, the staff forecast has net exports turning from a drag on activity to a more neutral influence. But until we see the data confirming that shift, I think the possibility of more demand being drained abroad remains a downside risk to the forecast.

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The final and most important force that ultimately will constrain inflation is tightening monetary policy. And the narrowing output gap and the possible emergence of greater inflation pressures do raise questions about how we need to adapt our strategy to keep inflation low and the risks in balance. Two possible responses: One would be to count on extending the gradual path of rate increases to go for longer before slowing or stopping. The other approach would be to increase the incline—prepare to raise rates by 50 basis points soon. For the most part, extending the measured path seems preferable to me. At the same time I think we should make it clear to markets that we are prepared to extend that path, should circumstances call for it, and that we have no firm preconceived notion regarding where our tightening should stop. The gradual approach should enable us to better gauge the ongoing effects of our actions in an uncertain world. It will give us more opportunities to assess the effects of past tightening moves when we know that those effects can vary and will occur with a lag. Hence it will give us more opportunities to calibrate our actions better to the needs of the economy.

To date, announcing that we expect to remove accommodation at a measured pace hasn't materially impeded the markets from responding meaningfully and appropriately to incoming data. Over the last intermeeting period, they extended the anticipated series of gradual rate increases—forward rates two and three years out are up by more than 50 basis points over that period, and this seems completely appropriate to me.

The structure of interest rates still seems to be consistent with achieving our objectives. The staff forecast has inflation declining with about the policy tightening that is built into the market. Even if we're not quite as optimistic on price pressures as the staff, gradual increases in the funds rate in line with market expectations should provide some insurance against rising inflation. Inflation expectations beyond the next few years haven't increased, indicating that market

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participants expect that the policy actions they now anticipate will be enough to insulate the longerterm trajectory for prices from near-term increases in inflation.

As a consequence, "measured" is still my best guess as to how policy rates will evolve, and that's what I would continue to indicate to the public. Nonetheless, our expectation of a measured pace of firming has always been conditional. And one essential condition that we have articulated and emphasized in the last sentence of the announcement is that inflation and its expectations remain well behaved. In my view, that would be consistent with the rate of growth of core PCE prices stabilizing at levels close to or not very much above the experience of the last year. If doubts about our willingness to maintain price stability emerge, I can see the potential for a very difficult selfreinforcing feedback loop through declining confidence in policymaking in the United States and accelerated dollar depreciation. Incoming information suggesting that core prices will continue to accelerate, or that the output gap is closing rapidly, or that longer-run inflation expectations are deteriorating, could well call for deviating from the measured pace with a larger firming action. If the signs were serious enough, I think we could, and should, do that as soon as the next meeting, even if the "measured pace" language remains in place. After an expression of concern about inflation pressures, as suggested in alternative B, the market should not be entirely surprised by such an action under those circumstances. Thank you, Mr. Chairman.

## CHAIRMAN GREENSPAN. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. Economic growth this quarter, as several of you have noted, has been stronger than we earlier had anticipated. Retail sales excluding autos have grown at over a 9 percent annual rate in the first two months of the quarter. Business investment has been strong and does not show a significant decline as a result of companies having moved investments into the fourth quarter to take advantage of the last months of partial expensing for tax

purposes. Manufacturing output has also been growing soundly, and capacity usage is now close to its average of the last decade at 78.5 percent. And employment has been growing at a good pace.

Over the last few months, we have seen core inflation move modestly higher. And we are seeing data that indicate price pressures coming from both the sales and the cost sides of companies. The strong growth of recent months is making it easier to raise prices, and rising costs from both commodities and labor are also adding to cost pressures. This economic expansion is reaching its fourth anniversary, and sales levels now are giving businesses the confidence to be able to raise prices. The Beige Book and comments by several of the Presidents today indicate that businesses are finding it easier to do so. The NFIB survey shows more pricing power for small businesses, and other business surveys are indicating the same. As Dave Stockton noted earlier, rising import prices are also giving domestic companies more pricing power.

On the cost side, the extraordinary pace of productivity growth has slowed in the past year. Productivity grew at a 5.6 percent pace in the year ending in the first quarter 2004, but fell to about one-fourth that pace in the second half of last year. While productivity is still very strong from an historical perspective, it has slowed enough that the direction of unit labor costs has changed. Unit labor costs began rising in the second quarter of 2004, after falling for two years, and grew at 2.3 percent in the last quarter. Thus, with the outlook for continued strong economic growth, I believe that we cannot be as sanguine about the trend in prices in coming months. We need to be signaling that we are more dependent on incoming data, and I think that requires a change from the "measured pace" language to give us more flexibility in the months ahead. Thank you.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. In my comments I want to follow up on President Guynn's and President Lacker's observations about speculative housing investment. We have heard

increasing anecdotal evidence and concern about this issue, and I think the characterization in yesterday's <u>Wall Street Journal</u> that day trading is now occurring in residential housing markets is a further indication of the concern. Of course, the extent to which the speculative purchases make a difference is reflected not only in the possibility of its impacting the pace of the growth in housing values but also the pricing of risk, as Jack suggested. But I think the question has been whether or not the size of the market was significant enough to have an impact. Clearly, the trend was eye-catching, but was the market significant enough to make a significant difference?

Data collected recently and provided by our economists indicate that non-owner-occupied mortgages constitute 5½ percent of the total outstanding and have fluctuated around 7 percent of new originations. With respect to second homes, the numbers were about 2.8 percent of total mortgage loans and 3 percent of new originations. However, this week, the National Association of Realtors revised significantly their sense of the size of the market, based on surveys they had made and also on information from the 2003 Census Bureau report. They indicated that, in their view, 23 percent of all home purchases in 2004 were for investment and an additional 13 percent were for vacation homes. The difference was that through their surveys they have been able to isolate the investment purchaser of single-family homes as distinct from the purchaser of a second home. The implications of that are significant, and the size of the market is much larger than they had perceived. Also, those numbers would suggest that many of those buyers have made multiple purchases of single-family homes, which brings in another element of risk—the risk associated with the debt service capability they need to maintain those purchases in the event of a downturn.

I think it's appropriate that we are going to be looking at the issue of real estate bubbles and the speculative component of that market at our meeting in June. There are a number of indications that mortgage lenders are tightening up: Both PMI and MGIC indicated recently that they have tightened their loan requirements for interest-only loans and for those with low down payments. And we have seen the criteria for loans being tightened in other places also.

With respect to our policy decision today, I think the question is not so much what we should do but how we explain why we are doing it. As Governor Ferguson did, let me take you back 18 months, when we began using the phrase "for a considerable period." Notwithstanding the impact on implied volatility, also implicit in the statement "for a considerable period" was that there needed to be an exit strategy. And the exit strategy—or transition, if you will—went from "considerable period" to "patient" to "measured pace." I don't think today is the time to change "measured pace," but it's time to think about an exit strategy from it. Thank you.

CHAIRMAN GREENSPAN. Thank you. Vincent.

MR. REINHART.<sup>2</sup> Carol Low will be handing out copies of my presentation.

As can be seen in the upper left panel of your first exhibit, the expected trajectory of Federal Reserve tightening now steps up considerably more steeply than was the case at the time of your February meeting. In part, this movement is an example of how words can matter: Chairman Greenspan's testimony, along with other remarks by Federal Reserve officials, apparently led market participants to ratchet up their policy expectations and made them more suspicious of the current pricing of long-term assets. With this fresh look on asset returns, along with higher prices of oil and other commodities and a couple of faster readings on overall inflation, the 10-year nominal Treasury yield moved up to  $4\frac{1}{2}$  percent and now looks less like a conundrum than it did in mid-February.

The information gleaned from options prices, plotted at the right, indicates that market participants think the funds rate will most likely be 3<sup>1</sup>/<sub>4</sub> percent going into your August meeting, but they see outcomes as decidedly skewed to the upside. The implied volatility of money market rates, plotted in the middle left panel, moved off its unusually low level of early February, suggesting a bit more uncertainty about your future actions.

Some more detail about the actual day-to-day volatility of the staff's measure of fed funds rate expectations might be helpful in thinking about your communications strategy. The blue bars in the middle right panel plot the average absolute daily

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

change in the expected funds rate at horizons from three months to eighteen months ahead, observed from the fall of 1998 to the fall of 2003. The red bars do the same calculations for the past year and a half. The point I take away is that the relatively explicit nature of the Committee's guidance about its policy outlook has anchored near-term market expectations but has had no material effect at horizons of one year or beyond. That is, the market still adjusts to news bearing on monetary policy but does so through changes in further-ahead expectations.

How you feel about that observation will most likely color your views on how the Committee's statement should evolve over coming meetings. For some of you, the reduced volatility of near-term expectations evidences an improved alignment of your own and market participants' expectations that reduces the uncertainty confronting investors and allows them to better plan for the future. Others may hold the view that the elimination of near-term uncertainty has encouraged excessive risk-taking and leveraging—perhaps best embodied by the "carry trade" that so preoccupies the popular press—and may be seen as limiting the range of possibilities of your future action.

As can be seen in the bottom panels, financial conditions showed mixed changes over the intermeeting period, as the ratcheting higher of corporate yields in line with those on Treasuries was accompanied by about unchanged equity values and modest depreciation of the foreign exchange value of the dollar. If you believe that these financial conditions are likely to be consistent with relatively favorable macroeconomic outcomes in coming quarters—perhaps (as in the top panel of exhibit 2) along the contours of the Greenbook forecast for resource slack and inflation—you would presumably want to deliver the policy path currently built into market expectations. What you're expected to do is firm <sup>1</sup>/<sub>4</sub> point today and signal that you believe you will continue marching the funds rate higher for some time thereafter, which is what we tried to convey with alternative B in the Bluebook.

As can be seen in the middle panel, a nominal funds rate of  $2\frac{3}{4}$  percent would fit within the range of recommendations for the second quarter from the policy rules that we routinely track. And the resultant real federal funds rate, the solid black line in the lower panel, would move closer to model-based estimates of its equilibrium value.

Of course, a 50 basis point hike in the funds rate today would make up twice the distance to the red band of estimates of the equilibrium rate, but you might not favor such a move for two sets of reasons. For one, market participants would be caught unawares, and you might be concerned that they would conclude that the Committee had discovered itself behind the curve and build in expectations of additional 50 basis point hikes that could significantly constrict financial conditions or roil markets. For another, you might not see the need for a brisker pace of policy tightening at this time. Resource slack probably still remains, and pressures on inflation—although a bit more intense of late—have mostly been held in check.

Thus, issues for today's meeting would seem to be what you anticipate doing at the next few meetings, and, working backwards, what that implies for the language of the Committee's announcement today. Your answers to those questions, in turn, depend on how far you think the funds rate is from neutral. The top left panel of exhibit 3 provides a longer perspective on the path for the federal funds rate currently embodied in financial market prices. Judging from futures quotes, you're expected ultimately to bring the funds rate to 4<sup>1</sup>/<sub>4</sub> percent. That is about the same answer we get from a multifactor model attempting to explain the term structure of Treasury yields, as plotted at the right.

The solid line in the middle left panel plots the average response from the Blue Chip Survey, which asked economists where they expect the three-month Treasury bill rate to be six to ten years from now. Their answer— $4\frac{1}{2}$  percent—is only a bit higher than that inferred from financial prices. The survey also reports the averages of the 10 highest and the 10 lowest responses—plotted as the dashed lines—out of the 50 or so economist participants. The wide span covered by the survey responses underscores the range of views about the destination of your current tightening cycle.

Those of you who identify relatively more with the respondents in the bottom quintile likely foresee pausing in the process of firming sometime soon. Working to reinforce that opinion would be the belief that recent higher inflation readings are largely transitory. In that regard, it is true that businesspeople have talked more of late about passing higher costs through to their customers and hinted about renewed "pricing power." However, as shown in the middle right panel, fairly consistently over time (and for longer than the sample plotted here), the share of the small business respondents to the NFIB survey reporting plans to increase prices has moved closely with real oil prices. You might interpret that correlation as suggesting that anecdotes are heavily influenced by pressures posed by higher energy costs and may, as Governor Bernanke noted, be a feature of intermediate goods and services rather than an independent source of inflationary impetus. In that regard, you might take comfort from the fact that five-to-ten-year-ahead inflation compensation inferred from Treasury yields (and plotted as the red line in the lower left panel) is up only modestly and remains well off its 2004 peak. With longer-term inflation expectations well contained and resource slack apparently being worked down slowly, the Committee may see relatively little cost in continuing along a path of gradual removal of policy accommodation. That may incline you to choose the words of your statement so as, at the least, to keep market participants from marking up their expected path of tightening or, perhaps, even rotate that path down, which is what we tried to do with alternative A in the Bluebook.

Some others on the Committee, however, might look at this same chart with trepidation. Since early February, near-term inflation compensation has risen about <sup>3</sup>/<sub>8</sub> percentage point and longer-term compensation is up about 10 basis points. This could be taken as a palpable sign of inflation jitters that should be dealt with promptly

and forcefully, perhaps leading you to tighten 50 basis points today or to toughen the words of your statement so as to warn investors of such a possibility in May. (In that regard, such a decision might reflect a view of long-run outcomes for the short rate as being more likely than not at or above the Blue Chip average.)

Even if you had a benign point forecast for inflation over the next two years, such as the Greenbook outlook for core PCE inflation shown as the solid line at the lower right, you might not view the outcomes on both sides of that central tendency with equanimity. And the width of the fan chart surrounding that forecast suggests that the odds of a different outcome are sizable. If inflation runs on the high side of the staff forecast, you may well have to pick up the pace of firming and work hard to contain inflation expectations, even as financial disruptions become more possible. In contrast, with the momentum of aggregate demand well entrenched, inflation falling short of what is currently expected could be dealt with more readily. At first market participants would unwind some of the anticipated restraint already embodied in financial prices, giving the Committee some time to calibrate its setting of policy through its communications. Some members may believe that projecting a more forceful sense of resolve now might lessen the risk of an adverse outcome by helping to keep inflation expectations firmly anchored. We tried to accomplish this with alternative C in the Bluebook, which introduced resource slack as a concern and asserts that inflation pressures have intensified.

A common slur about economists is that they are drab and colorless. Not so. This Bluebook set new records for the varieties of hues used for fonts. The best example of this is repeated as your next exhibit, which was in a box in the policy alternatives section. Over upcoming meetings, the Committee likely faces five key issues concerning its statement language. First, as noted in the markup of the February FOMC statement, you will need to determine whether the characterization of the stance of policy—marked in red—should be modified in some way. Second, as noted in blue, the FOMC may need to revise its assessment of the pace of underlying productivity growth in light of the realized and anticipated slowing in actual productivity growth. Third, the assessment of inflation and inflation expectationsnoted in green-may need to be revisited. Fourth, as marked in purple, the Committee may wish to remove the "measured pace" language at some time. This might be the case if the Committee judged that a pause in the process of removing policy accommodation might be called for or, alternatively, if it determined that economic circumstances could require a more rapid policy adjustment some time soon. However, eliminating the "measured pace" language without a replacement would leave the risk-assessment paragraph without a signal about the future direction of policy. That omission raises the fifth issue-noted in orange-regarding the balance of risks assessment.

For reference, the last exhibit repeats the table of alternative statements that staff circulated in the Bluebook with a few changes reflecting comments received since publication. Two design principles served as the basis for alternative B. First, it

seemed important to highlight the Committee's watchfulness about inflation developments. Hence, the rationale paragraph points out that inflation pressures have picked up, with this latest draft a bit tougher on that score than the earlier version. Second, it seemed important to remind people that keeping the risks balanced may take some effort. Hence, the assessment of risks is explicitly conditioned on an appropriate path for policy. The Committee has accompanied its six prior tightenings with an assessment of balanced risks, so observers must by now have inferred that it was based on an appropriate policy. However, I must admit that explicitly stating that conditionality will limit the usefulness of this form of the risk assessment in signaling the direction of future policy moves.

But you may believe that the useful shelf life of this language has already passed. In the Bluebook, alternatives A and C offer an alternative formulation of the risk assessment that could work now or in the future. Both drop the "measured pace" language—in alternative A because it seems to rule out a pause any time soon and in alternative C so as to signal a faster pace of firming—and adopt a risk assessment based on an unchanged policy for the next few quarters. It may be premature to adopt such language now, but having a discussion about such a possibility might be the first step in the process.

CHAIRMAN GREENSPAN. Thank you. Questions for Vincent?

MR. GRAMLICH. Let me ask you about your last few sentences. You said that if we use the alternative B version for the balance of risks, that limits its use in the future because if we ever say the risks are not balanced, then we're confessing that policy is inappropriate in some sense. When I first saw that clause I liked it, but I think if you look at it cross-eyed, it may not be so good. And I agree that we ought to recognize that if we use that wording this time, we probably can't use it again.

MR. REINHART. You can't use it to signal the direction of rates. So if it stands in isolation—that is, if there are no other statements providing guidance in that portion of the announcement—you won't be telling market participants anything particularly useful. A risk assessment based on appropriate policy would only be unbalanced if you thought, first, you were behind the curve; second, if a shock came that was so large and sudden that the lags in monetary policy did not allow you to offset it; or third, if there were a particularly large skew one way or the

other. So, the question is: Is it news to put this clause in the paragraph? I guess I'd have to argue that it really isn't, because how could you have been tightening six times off a risk assessment that was balanced, unless it was implicitly conditioned on appropriate policy. The suggestion in the Bluebook was to make that conditioning explicit because, at this particular point, it would emphasize that it takes some work to keep the risks balanced. But I did want to flag to you that if you go in that direction, at some point along that road you are not going to be happy with the statement.

MS. MINEHAN. I had similar concerns to Governor Gramlich's about the "appropriate policy action" language. And given the length of your discourse, Vincent, which certainly was interesting in supporting the language, and the level of detail that you just went into in describing it, I think it's going to be very hard to explain to others what the heck we're talking about here. I really think all "appropriate policy action" is saying is that we can do our job. We've dealt with situations before where we've moved policy but continued to say that the risks were balanced. And with the "accommodative" language, I think we could continue to say that the risks are balanced and the whole statement would still flow logically.

I'm also concerned in alternative B about the rise in energy prices not notably feeding through to core consumer prices. Core consumer prices are up a full percentage point on a yearover-year basis, and there has been some feed-through. We think it's going to slacken, and maybe you want to put that reference in the future, but I'm not sure that this is what we want to say in this statement. I think we'd be better off leaving that sentence out and just going with "pressures on inflation have picked up in recent months and pricing power is more evident."

MR. REINHART. I think we put that in there because later in the statement you do say that underlying inflation is expected to be contained, and it seemed necessary then to provide at least some offset to the concern expressed earlier about pressure on inflation having picked up.

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CHAIRMAN GREENSPAN. The critical word is "notably"—that the rise in energy prices has not notably fed through to core consumer prices. It's not saying that the pass-through is zero.

MS. MINEHAN. A doubling in the rate of core inflation on a year-over-year basis-

CHAIRMAN GREENSPAN. If you actually trace through the cost structure, energy prices can impact on core prices in only two ways—in unit labor costs or in petrochemical feedstock prices spreading out through various constituent elements in the production processes it affects. The latter is actually a very small part of GDP.

MS. MINEHAN. I guess my point is that I wouldn't make that particular statement. I think that pressures on inflation have picked up and pricing power is more evident. After all, we have to believe that underlying inflation can be contained or else we'd be moving a lot more strongly now. So, I don't think it's inconsistent to stop the sentence—

CHAIRMAN GREENSPAN. Well, there's another reason it's in there. The fact is that we need to put something like that in the statement today because of the current energy price environment. If we have only a marginal statement about the impact of energy prices on GDP, it's going to raise the question: In what cave have they been operating?

MS. MINEHAN. Yes, I was worried about that, too.

CHAIRMAN GREENSPAN. I think Mike is next.

MR. MOSKOW. I wanted to express concern about the phrase "appropriate policy action," too, for the reasons that have been discussed here. I don't think we need it. I realize that it does show that some effort is required to have the risks balanced and that it is somewhat of a signal that we're ready to do more, if necessary. But if we have the references in here to inflation, which I believe are very important, I don't think we need that phrase at this point. And it does open the Pandora's box that Vincent has described so carefully. So my preference is not to use that phrase.

CHAIRMAN GREENSPAN. How would you—

MR. MOSKOW. I would just drop it.

CHAIRMAN GREENSPAN. You would just say: "The Committee perceives the upside and downside risks to the attainment of both sustainable growth and price stability..."

MR. MOSKOW. I would say they "remain roughly equal."

CHAIRMAN GREENSPAN. That's a tough one. We've gotten away with that wording as we've raised the funds rate, on the grounds that we are removing accommodation. So it has had no real significant impact. But in terms of that statement being true, the truth of the matter is that as we continue to move up, it's less credible. I happen to think it makes a good deal of sense to put that phrase in there, but I believe what Ned Gramlich says is quite correct. We're not going to be able to use that again and we probably will not want to.

Basically, there is an inherent contradiction in saying that the risks are balanced but we're tightening. Now, we can say we're not tightening if we're removing accommodation, but we can do that for just so long. And I think we're getting to the point where we have a problem with that language. We've gotten away with it, but I don't think we're going to get away with it very much longer. This particular phrase we put in is, in my judgment, a way to work our way out of that. But I'm not sure how long we can use it.

MR. MOSKOW. We'd have to recognize it's very short-lived.

CHAIRMAN GREENSPAN. Oh, absolutely.

MR. GRAMLICH. Could I make a friendly amendment, President Moskow? It is very dangerous to do this at the eleventh hour. I wish I'd gotten into this sooner, and I apologize for not doing so. But we could go down to the sentence in alternative C for the balance-of-risk statement, and then back to the last two sentences in "B." And I think that outdoes your suggestion, Mike.

MR. MOSKOW. Can you read that?

MR. GRAMLICH. Whether we keep the sentence that Cathy talked about or not, we'd have the sentence that says pricing power is more evident. And then we'd go to "The Committee perceives that if the current target for the federal funds rate were maintained for the next few quarters, it is more likely than not that output would grow at a pace faster than sustainable and that inflation pressures would pick up." That says exactly what we think.

CHAIRMAN GREENSPAN. That may be. But as I said to one of my colleagues earlier, if we use that language, I hope you're not standing next to the market when that comes out, because I think it raises too many issues that we don't need to raise at this stage. Your arguments are, in my judgment, generally valid, but I would hold off on them. I think we can correct this problem at the May meeting. In my view, that wording is a little too edgy and risk-laden to try it at this stage; it's too soon.

SPEAKER(?). Just so I'm clear, how would you suggest we correct it at the May meeting?

CHAIRMAN GREENSPAN. Basically, by the May meeting, we're going to know a good deal more about how this particular issue is emerging. We may find that the staff's productivity numbers, which move growth in unit labor costs down, are beginning to show up in the marketplace and it will make a lot of this discussion moot. Or we may find that we don't have data fully through the first quarter and only have approximations for the numerator of output per hour. And we don't know that we're not going to get a significant revision coming from BLS [Bureau of Labor Statistics], which would alter the employment data for November, December, January, and February on the upside. And all of a sudden that 3<sup>1</sup>/<sub>4</sub> or 3<sup>1</sup>/<sub>2</sub> percent productivity increase will disappear, and we have higher unit labor costs and we have other things going on.

My impression is that we've had a good deal of change from the last meeting, but I suspect that going into May 3 there will be a lot more change in the pace than we have now. We can project out, but our ability to forecast where we're going to be on May 3 is not all that terrific. President Guynn.

MR. GUYNN. Mr. Chairman, I'm not sure I followed all the alternatives, but let me weigh in on the draft language in cell B5 as well. If we're going to make that kind of change in the language, I think there's a better way to do it that will be a better transition in terms of the guidance we offer. I would suggest another alternative—I guess it's the fifth alternative on the table—using words like "Conditional upon the current path of policy, the risks to the attainment of both sustainable growth and price stability are roughly balanced." That does a couple of things: It seems to me linked to the path of policy that I heard most of us around the table say we are comfortable with; and it gets around the problem that Bill Poole talked about in terms of our inability to find words to describe the distribution of risk. I think something like that is a better transitional paragraph.

CHAIRMAN GREENSPAN. Try that again. That is not a bad idea.

MR. GUYNN. "Conditional upon the current path of policy, the risks to the attainment of both sustainable growth and price stability are roughly balanced." To me it combines a number of things I heard around the table. Also, I want to say that I come out of the same cave as Cathy on the B4 cell. Although we didn't have any quid pro quo when we voted for early release of the minutes, one of the effects that a lot of us hoped for was that we could simplify our statement. It seems to me that we have a chance to do that by dropping that whole last sentence in B4 about energy prices and consumer prices. I think we could depend better on the minutes that come out in three weeks to

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flesh out that risk as well as others that we've talked about. To me it's a great opportunity to simplify the statement a little.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. I think there's a disadvantage in validating the market's current expectations so explicitly. There are two ways to think about framing our policy assumption or giving a signal. One is to say, "with policy unchanged, et cetera." The other is to say, "taking the expected path now priced in the markets, we think X." That's an approach a number of central banks have taken.

To me it doesn't make sense to make that significant a change in our basic signal at this time; I think there's a lot of risk in a validation that explicit. In my view, there's actually a lot of virtue in the combination of these changes to the statement, because they condition and qualify "measured" without taking that word out. So it's a move in the direction of giving us more flexibility without claiming we think there's been any abrupt change in the balance of risks. As Vincent said, we can fall back on making explicit what has been implicit—which is that the risks have been balanced only if we commit to do the right thing. If you don't believe we're going to do the right thing, ...

MR. GUYNN. May I try just one more thought? I meant to say this earlier. I think Jerry Jordan, wherever he is on his sailboat, would smile at B5, because I think we're saying exactly what Jerry tried to get us for years to say: If policy is set appropriately at the meeting, the risks should always be balanced. I think it actually neuters the entire balance-of-risk statement.

CHAIRMAN GREENSPAN. May I suggest something? I think you're addressing an issue for the May meeting. We have to be careful about how far we move at this particular stage. All the issues that have been raised with respect to this question are valid ones, and what we're doing is struggling to find the best way to handle it. To date, I think we have been remarkably fortunate in

our phraseology and our expectations, and we have not run into something that came out of left field of which we weren't aware. But if we reach too far at this stage, we may find that we're pressing. And as Roger indicated, we have degrees of volatility with respect to the future. Indeed, what Vincent also showed is that the markets are adjusting to Federal Reserve policy in a way that cannot continue. In other words, we don't have the omniscience to be able to look out sufficiently far to continue what we have been trying to do—and have been able to do more successfully than we have any right to expect. So, I think we have to be a little careful about this. Quickly, because we have other colleagues who want to speak to this.

SPEAKER (?). I have one concern with "measured," and that is that it means 25 basis points.

CHAIRMAN GREENSPAN. It does and it does not. And I hope that in the minutes because I'm going to say something about it—we try to take away that notion that "measured" means 25 basis points. President Santomero.

MR. SANTOMERO. The only thing that concerns me about the sentence we've been working on is this: I'm not sure it actually does anything good. Where we were, to my mind, may be better than where we're going. I'm not sure what "should" means in the context, and I'm not sure the conditioning actually moves us ahead. We may be better off staying with the wording in the February statement, which is ambiguous as to policy action and doesn't talk about normative statements like "should." That has the benefit of not moving us in the wrong direction, so we can address where we want to be in May.

CHAIRMAN GREENSPAN. One possibility—I'm not necessarily arguing for this—is instead of the "appropriate policy" to say "with current policy actions." But I think this is a discussion for the May meeting. The reason I say that is not that the arguments essentially are

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wrong, but because this is such a fundamental shift that to try to do it in this type of environment is probably not wise.

MR. SANTOMERO. It's only if we shift at all.

CHAIRMAN GREENSPAN. I know, but the problem is that if we don't shift—if we retain the same statement on upside and downside risks as the last time—I think we'll run into trouble. President Lacker.

MR. LACKER. There's something highly ironic about this whole discussion to me. We initially introduced the balance-of-risk statement in order to communicate about the direction of policy without talking explicitly about interest rates or policy. We were relying on this sort of simple version of a policy rule whereby the public could generally decode what we were talking about. Then in 2003 we hit a problem because we had both rising real growth and falling inflation, and we needed to disentangle it into two different parts. After that, we trumped it with another statement that is now widely seen as conveying the real information about the direction of policy. So the balance of risks is seen as communicating about the direction of the economy and, ironically, we're putting "policy" into the balance-of-risk statement in order to clarify its meaning about the economy.

CHAIRMAN GREENSPAN. Let me ask one thing about all of this discussion. This draft language was in the Bluebook originally. Why haven't you communicated all of your concerns? That's precisely the purpose of having that in the Bluebook.

MR. GUYNN. We have.

CHAIRMAN GREENSPAN. Did they all convey this to you, Vincent? MR. REINHART. Yes.

CHAIRMAN GREENSPAN. Well, you obviously didn't convince him. [Laughter]

MR. LACKER. Mr. Chairman, where I was going on this was to say that we have the minutes now to convey in a rich format what we view as the likely direction of the economy and of policy. I think we're having trouble with this, and we are going to have trouble with this—and I don't have any view about whether now or May is the right time to change the language—because we're placing more weight on the balance-of-risk statement.

CHAIRMAN GREENSPAN. Why don't we handle this by replicating part of this argument in the minutes to convey what the issues are rather than argue it now? Well, we should argue it now. [Laughter]

MR. LACKER. The ultimate place I was going was to suggest that sometime soon we consider dropping this whole statement.

CHAIRMAN GREENSPAN. That we can do.

MR. LACKER. I hope that is the decision. As for the balance-of-risk assessment, I don't think we need it in the statement. I don't think it serves any purpose.

CHAIRMAN GREENSPAN. That is a valid issue to put on the table. President Poole.

MR. POOLE. It's important, as we've said before, that the minutes be true to the transcript, but it's also important that the statement be true to the whole process. We don't want to say something now that's going to be misleading. I think the minutes need to convey the difficulty that the Committee has had in coming up with alternative wording that is not misleading to the market, and that that's the reason for leaving the statement as is. The minutes can try to give a full explanation.

Around the table there's probably a majority—I didn't do a count but I'll make a guess who believe that the inflation risks are tilted to the upside now from whatever the point forecast is.

At least that's the way I'd put it. I believe that is probably the majority sentiment. So, strictly speaking, saying that the risks are balanced isn't an accurate reflection of the views around the table.

In any event, I don't think we can solve this issue, as you're emphasizing, at this point. But the minutes need to explain very carefully the difficulty the Committee has had with the wording for the statement. And the minutes should note that this will be on the agenda for the future to make sure that we have statements at the conclusion of the meeting that are accurate and do not mislead.

CHAIRMAN GREENSPAN. Right, and that we're keeping for the moment what we have there, because to go back to the original is worse.

MR. POOLE. I think that's the only practical alternative at this point.

CHAIRMAN GREENSPAN. To go back to the original is worse.

MR. POOLE. No, I would just keep it as is. I agree.

MR. BERNANKE. I agree with President Poole.

CHAIRMAN GREENSPAN. Can we all agree on that particular phraseology? We will try to represent in the minutes the substance of this discussion to telegraph where we are, going forward, including our discussion of all the various alternatives. And we'll leave it for the May meeting to work this out. My recollection is that, when we started off with these statements, it was always the view that they would have to evolve as we moved from one stage to the next. We knew we would have to decide how to do that, because to try to fix the format didn't work. We're demonstrating that the fixed formats don't work. We've evolved it into a different form of communication, and so far we've been successful in doing that. But let's agree, as I assume we're saying, to leave the statement as it is and proceed to qualify this however we wish to in the minutes, which, obviously, you will all have a chance to evaluate. And then we can open up the issue in some detail in May.

MR. GUYNN. I have just a quick suggestion: If we're really going to tackle this in May, we ought to try to get drafts of what we're going to work with out earlier than a couple of days before the meeting so we have more time to share our views.

CHAIRMAN GREENSPAN. There's no reason why we can't.

MR. GUYNN. That would be my plea.

CHAIRMAN GREENSPAN. Yes, that's easy enough. [Laughter]

MR. GUYNN. Sorry, Vincent.

CHAIRMAN GREENSPAN. Finally, I hope, President Minehan.

MS. MINEHAN. I just want to be sure I understand what you mean by leaving the statement the way it is. I assume you mean taking the alternative B language and leaving it the way it is.

CHAIRMAN GREENSPAN. Correct.

MS. MINEHAN. Okay, though I'm not real happy with that. But I get your point that a move of 25 basis points, with an emphasis on inflation pressures that haven't been there in the past and a reference to how difficult the decision was not to take away the "measured" language will prepare everybody for what we might do at the May meeting. In that case, if all goes as we expect it to go—and that's a big "if," I know—we probably will be able then to talk about removing the "measured pace" language. I also hope, along the lines of President Lacker's suggestion, we can talk about taking away the balance-of-risk language. I don't think it's serving us well anymore.

CHAIRMAN GREENSPAN. Well, that's on the table. And I think we should not be fixated on any past structure of the statement.

MS. MINEHAN. I also agree with President Guynn that just having the weekend to look this over was not enough time. It was a little like ordering Chinese food—choose two from Column

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A, two from Column B, and two from Column C. We can't do this with only a day or two to review it.

CHAIRMAN GREENSPAN. I think that's a valid request, and I see no reason why we can't separate that from the Bluebook generally, because it really doesn't rest all that much on either the Greenbook material or the rest of the Bluebook. Unless something extraordinary happens in the period from now until late April, it doesn't strike me that how we come out on this issue is going to be dependent on either the Greenbook or the Bluebook. Okay, are there any further questions? [Laughter]

SPEAKER(?). What do you think we ought to do? [Laughter]

CHAIRMAN GREENSPAN. Well, I had an hour and 27 minutes worth of comments prepared, but basically let me just say this: I think the reason we're having these sorts of difficulties is because we're running into what I suspect may well be the tail end of the stimulus that has occurred in the world economy from extraordinary changes in globalization in the past 10 years. The best way to see that is to look at how the pattern of the propensity to invest domestic saving in domestic investments has changed. That's because one of the best measures of globalization is essentially the correlation coefficient between pairs of domestic saving and domestic investment by country. One way of stating it is to use the terminology of home bias—to look at the extent of home bias that exists in the world. Starting in the early 1990s, home bias began to break down. We've seen a broadening effect, which arguably has been the major factor in creating a disinflationary environment. And that essentially has enabled us to have this extraordinary period of economic growth, productivity increase, and remarkably low rates of inflation. Coupled with that, obviously, has been a partially, but not wholly, independent change in technologies that has allowed unit costs to move lower.

I suspect, but do not know, that we may be nearing the end of that process. We are now looking at a different model, at least for the United States, given the fiscal policy problems that we will have as we get into the next decade. And remember that the latter tranches of the 10-year Treasury note are moving into that decade enough to impact on rates currently. My suspicion is that we're going to see real long-term rates and real mortgage rates begin to move up and that the capital gains we have seen in both the stock market and in housing values will become a lesser source of funds for borrowing. There will be less financing using realized capital gains—or, indeed, even unrealized gains—and that will have a significant impact on consumption expenditures.

Remember, 15 to 20 percent of personal consumption expenditures do not relate to income; they are the consequence, at least econometrically, of the wealth effect. Therefore, a significant amount of personal consumption expenditures has been financed; and it looks from the way the balance sheets are coming out, that these expenditures have been financed largely from mortgage debt. The big rise in mortgage debt has essentially been the source for putting into cash for consumption purposes a fairly significant part of capital gains.

Real long-term rates may go up. It's hard to forecast, but looking at the long-term fiscal situation, I'm not exactly optimistic, especially in light of what happened last week. The likelihood that the fiscal problems will be addressed has weakened. I believe Governor Gramlich characterized it quite appropriately. So I think the longer-term issues essentially are beginning to guide us now with respect to the shorter term.

In my judgment, the median forecast for the United States is reasonably well captured in the Greenbook; and it may indeed be the mean forecast. I would even venture the possibility, although it's arguable, that the probability distribution of these outcomes may, in fact, be roughly symmetrical. But what is not symmetrical is the loss function. As I think Cathy Minehan mentioned

earlier, if we were to become a bit more aggressive in tightening policy in this context and it turned out to be wrong—in other words, if actual unit costs and price inflation simmer down a bit so far as core inflation is concerned—the damage to the economy and to policy would not be all that great. It is obviously negative in the sense that the outcome is different from what one expected—but not compared to the policy problem we'd run into if we maintain a posture that presupposes the median outlook, namely, the Greenbook outlook, and we are wrong. In the latter case, I think the costs would be great and the damage very difficult to recover from.

For those of us who remember how we struggled in 1994 with the pattern of adjustment and how we were trying to get ahead of the curve—and eventually had to move 75 basis points in one month—I trust the memory is such that we don't want to go there again. We were very fortunate that we got a soft landing in 1995, but it was fortune, not great policy. We may have thought that we tried in advance to communicate to the market that we were going to move in February 1994. They were not listening, and we ran into all sorts of difficulties.

Therefore, I conclude at this particular stage that we have to start moving in the direction where our previous conversation left us. So I would recommend a move in the funds rate of 25 basis points and the alternative B language that is in this vector.

MR. HOENIG. Mr. Chairman, I'm okay with this. I do want to say, though, that your last comment on the loss function is really a major concern of mine. To the extent that we are too slow on moving back into the neutral zone, I think the danger is that later on we will have to go higher faster and the impact on the economy will be more significant at that point. I think we're at that point, and that's why at the May meeting it is so important that we make some hard choices. And I am worried about that.

CHAIRMAN GREENSPAN. I agree with that. Governor Kohn.

MR. KOHN. Thank you, Mr. Chairman. I agree with your proposal, and I agree with your analysis that the loss function is shifting and that we need to be very careful not to get behind the curve here. I think the proposed language will put people on notice that we understand that that loss function is shifting and that this is where our concerns are. So, I agree with the proposed language.

I'd like to make a few comments on the previous discussion. The difference between the alternative B and alternative C balance-of-risk statement—namely, what to assume about policy—was exactly one of the issues that divided the second Ferguson Subcommittee. I was, at that point, in what is now the alternative C column, and I was a tiny minority on that—at least, I felt like a tiny minority on that subcommittee. But we've been around this several times. And, actually, most of you didn't like the alternative C language, though I think it ultimately could be useful.

I do worry somewhat about President Minehan's proposal to remove both the balance-of-risk language and the "measured pace" language. I think something forward-looking ought to remain in the statement. Maybe it doesn't need to be formulaic; maybe, as suggested, when we debate it, we could change it from time to time. I think it's important that markets aren't more certain than we are about our actions, but, to the extent that we can tell them something true about what we're going to do and where we expect things to come out, I believe asset pricing will be better. I don't think we should be inserting uncertainty into the market just to insert uncertainty into the market. If we know something about or have a sense of where we're going, somehow saying that in some way will make asset prices more reflective of reality.

My third point is that there is a tradeoff here between how quickly the draft statements get out to the Committee—and get more or less written in cement—and the reaction to what goes on at the meeting and to very current information. I think we're in a very difficult position: As soon as the statement gets put to bed, then incoming data can't be reflected in it and what happened at the meeting is very, very hard to reflect there. So I think we need to recognize that that tension, which will never actually be resolved, is there as we try to get the statement wording out earlier and earlier.

CHAIRMAN GREENSPAN. The critical issue is: Do we know something? There's going to come a time when we can't forecast and we have no idea what our next policy move will be. And to be forward-looking in that context is, obviously, inappropriate.

MR. KOHN. Right. But I think if we said that, that would be useful information. If we said we don't know which way rates are going to go next—that we're not sure and it depends on the information that comes out—that would be useful for the market to know.

CHAIRMAN GREENSPAN. Governor Gramlich.

MR. GRAMLICH. Thank you, Mr. Chairman. First off, I accept your recommendations in total, and I also apologize for making the point I made so late in the game. I wish I had been quicker to see the problem, and I would have said something earlier. But I accept the argument that at this point we probably ought to go with alternative B.

There are, as I see it, two huge issues in terms of the economy: One is whither personal saving and the other is whither inflation. We've talked a lot about those and hopefully we will have more information on them in May.

I think most people around the table agree with the fact that the revision in wording that we have put in the balance-of-risk statement today means that we probably can't use that statement in May or at all any more, so that issue will take care of itself. Whether I was with Don or not before, I can't remember, [laughter] but I do like something like the statement in alternative C now. I've never been uncomfortable with the "measured pace" language. I think it actually has served us well, and I'm not sure I'm ready to get rid of it. A number of people around the table have said that various measures seem to be showing a little more stability now, and I think that just could be due

partly to the fact that we have tried to be a little forward-looking in our statements. So I don't want to give that up. I don't have a careful thought on how we ought to be forward-looking, but I don't want to give it up.

CHAIRMAN GREENSPAN. President Moskow.

MR. MOSKOW. Just two comments, Mr. Chairman. I agree with your recommendation on the rate increase and on alternative B after this extensive discussion. I found the discussion very helpful and, though it may have been a little long, in my view it was useful to have it. As for forward-looking statements, I personally think that the balance-of-risk statement has outlived its usefulness. Whether we should include some other kind of forward-looking comment is something that at this point I'm agnostic about. I'd like to hear more discussion and comment about that, and hopefully we'll have an opportunity to talk about it at the May meeting.

On a process point, I think getting the draft statement out to the Committee before the Bluebook is a constructive step. I don't want to build this into a bureaucratic procedure, but I think it would be helpful to have a chance to see the comments made by other members of the Committee on that initial draft. I, too, expressed concern about the phrase "appropriate policy action"—I believe it was last Friday—but there was little time for looking further at possible revisions. So I just think it would be helpful if we had a chance to see what other people had to say about the initial draft of the statement.

## CHAIRMAN GREENSPAN. President Poole.

MR. POOLE. Thank you, Mr. Chairman. I support the 25 basis point increase. I want to emphasize a point that Don Kohn brought up. Since our last meeting, the forward market estimates on the funds rate are up by 25 basis points. If we had perfect control over the term structure of

interest rates or all the forward forecasts, in terms of the impact on the 10-year rate, there's a perfect substitution between an extra 25 basis points now and an appropriate move out in the future.

The advantage, I think, of pushing it out in the future is that it keeps the current increases on a very predictable path, which I believe should be a goal in and of itself. If we were to move 50 basis points—and this may come up in the future—I think there's an argument for doing it when it's a clear response to some new piece of information. But to do it almost out of the blue is going to create a lot of uncertainty, and the market is not going to know why we are doing it or what to make of it if it's not a clear response to something new in the information set. So, given that there is this substitutability between that and the extension of the 25 basis point increases, it seems to me we should work in the latter direction rather than take the market by surprise. I don't know of any good case where creating uncertainty for its own sake is advantageous. I think we want to go very much in the other direction. If at some point we move by 50 basis points without a clear case for doing so, it is going to be very hard to gauge or forecast the likely effects and impact of that. Thank you.

## CHAIRMAN GREENSPAN. President Santomero.

MR. SANTOMERO. Thank you, Mr. Chairman. I can support the proposal to raise the fed funds rate 25 basis points and I can accept the wording in alternative B. I must admit that Governor Gramlich's amendment—or maybe it was Governor Kohn's amendment, I'm not sure which makes some sense to me because I think that's more descriptive than notions like "should be" or "with appropriate policy." It's just clearer and, if you will, more direct. But at this point, I'm fine with your recommendation.

Going forward, I think the process question is an important one. It's not just a matter of when do we get the page, if you will, it's also a question of how does one respond and what does one know in anticipation of the conversation here. So, I would encourage the staff to work that through

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a bit and make it a little more transparent as we proceed and as the communication becomes more and more valuable.

CHAIRMAN GREENSPAN. Governor Olson.

MR. OLSON. Thank you, Mr. Chairman. I also agree with the <sup>1</sup>/<sub>4</sub> point increase, and I know there's a lot of anticipation looking forward to the May meeting. I look forward to it now with some trepidation. [Laughter] I am fearful that creativity may be epidemic by the time we get there. While I was not here in 1994, I was here in 2003, when we made significant changes in our statement in successive meetings, and that significantly confused the marketplace. I would think that our experience has taught us that there is value in taking incremental steps in terms of how we communicate, particularly as Bill Poole has suggested, when the economy is moving in a manner that is significantly predictable. So, I would encourage us to keep that history in mind when we think about the changes that we might make in May.

CHAIRMAN GREENSPAN. Vincent Reinhart.

MR. REINHART. Mr. Chairman, not that I'd like to reopen alternative B, but I was wondering in paragraph 5 whether or not it would be appropriate to refer to "appropriate monetary policy" rather than just "appropriate policy" because it's obvious that not many of you believe that either fiscal or trade policy is likely be appropriate anytime soon.

MS. MINEHAN. Of course, the public wouldn't expect us to be commenting on it, either.

CHAIRMAN GREENSPAN. Any objection to putting "monetary" in there to qualify that? Hearing no objection, so ordered. Governor Bies.

MS. BIES. Thank you, Mr. Chairman. I support both the 25 basis points and alternative B, as amended.

In terms of the dialogue we've just had about how we communicate, while it's very painful every time we go through one of these exercises, I believe this is one of the things that we need to think through because the transparency that we're building is very important to the marketplace. When I look at the rationale statements, I think they are sending more messages as we do these press releases.

In the brief time that I've been on the Board of Governors and participated in the FOMC meetings, we seem to be stressed when we get to the point where our direction of policy is changing. So part of this stress is over the transitional language. The more we seem to be locked into formulas and words, the more difficult we make these transitions. That is a factor in how we think about communication; we really need to look at what seems right for one meeting and how we get out of that as we move forward. Maybe having these draft statements a little earlier and being able to think about them for more than a couple days ahead of the meeting will help. But I think longer term, painful as it may be, we do need to have discussions about transitional language, because that's when the market is going to look for guidance. And words like "appropriate policy action" I don't think communicate a whole lot to the Street. They may get us through today's meeting, but I think we have to be more transparent as we make the transition we need to make.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. I, too, favor the 25 basis point increase, and I'm comfortable with the language of alternative B. Looking forward, I do think we have an obligation to communicate clearly about policy prospects, to the extent that we can. And if this involves from time to time sharing our uncertainty with market participants, then so be it.

CHAIRMAN GREENSPAN. Governor Ferguson.

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MR. FERGUSON. Thank you, Mr. Chairman. I support your recommendation of 25 basis points and I support alternative B. On the broad issues, I think we have to continue to attempt to have in our statement some forward-looking language, as painful as it may be. I did not support the move toward having the minutes come out earlier as a tradeoff. I know that was in some people's minds, but I think in the statement itself some forward-looking language about the economy is useful. It is sort of modern-day central banking practice, and anything other than that, I think, is a step backward and is likely to have a detrimental impact not only on our credibility but also on the market functioning.

On the word "measured," as I said earlier, I think that's conditioned upon the expectation of inflation being relatively well contained. And if that condition in fact turns out not to be true, then we could move more quickly, and I don't believe it would be undercutting our commitment, if that's what it is, to "measured pace." To me it would just be a way of interpreting the measured pace.

On the process of getting this language out to us earlier, I look forward to seeing how the Secretary manages to do that, and I will attempt to be as constructive and helpful in that process as possible. It does remind me that this year—many of you didn't follow this sport—there was a snowboarding championship won by a 23-year-old woman who did her world famous patented step called "the crippler." I expect to see a "crippler" coming to monetary policy as Vincent attempts to get this language out that much earlier. [Laughter]

## CHAIRMAN GREENSPAN. President Guynn.

MR. GUYNN. Mr. Chairman, we've obviously begun an important conversation. If it wasn't evident before, it is now, how painful and difficult this is going to be. I also appreciate the reminder of the need to be sure that we don't unnecessarily shock the markets as we try to get our

words right—or as right as we can make them. So I look forward to the discussion of this next meeting, and I intend to vote for your recommendations today.

CHAIRMAN GREENSPAN. President Pianalto.

MS. PIANALTO. I also support the recommendation for a 25 basis point increase in the funds rate. I was concerned, when I first read on Friday the language in paragraph 5 in alternative B, that it would be confusing. The discussion today helped me to understand the meaning behind the language, and I hope that we'll be able, through our minutes, to explain that to the markets, also. I understand that there will a three-week lag, and we'll see what happens in these three weeks.

I'm also in the camp that believes the balance-of-risk language has been useful, but I think it has served its purpose and it's time to look at a different approach. As we've noted today, we should be able to rely on the minutes to communicate more fully, and I think the experience of early release of this next set of minutes will help us to see if that is true. I would prefer to keep our statement on the shorter side—and less forward-looking—and rely more on the minutes to communicate.

CHAIRMAN GREENSPAN. Governor Bernanke.

MR. BERNANKE. Thank you, Mr. Chairman. I support the recommendation. I think the addition of the phrase "appropriate policy action" is actually useful, because it will emphasize that our forecast is conditional on continued tightening rather than being an unconditional forecast.

I agree with Governor Kohn and Governor Ferguson, among others, that it's important to provide as much information as we have about future developments in the economy and policy. And I think perhaps we should consider the alternative C language that Vincent Reinhart has suggested.

Finally, I would just like to raise the issue of process. Of course, it's very useful to get information out as soon as possible, but I think we have to recognize that the statement does have to

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reflect the discussion at the meeting and the condition of the economy. Therefore, it needs to be understood that we have some flexibility to make changes nearer to the meeting. I think that's an important point to recognize. Thank you.

CHAIRMAN GREENSPAN. President Lacker.

MR. LACKER. I, too, support your policy recommendation, Mr. Chairman, and I can support the language in alternative B for now. Also, I didn't realize I was under an obligation to communicate about the language before the meeting, and I apologize for confusing the meeting in that regard.

I don't think that we ought to pull information of a forward-looking nature out of the statement on net, but I made the suggestion I did about returning to the balance-of-risk assessment statement, because my sense is that what's labeled line 6 here is really bearing the weight of conveying our sense about the future. And I wouldn't want to reduce the statement if it meant less transparency and a less forthcoming communication with the public.

I would point out that with this addition of the phrase "appropriate monetary policy action" we've essentially put the nail in the coffin in the original version of the statement. It now decidedly conveys no information about policy except that we want it to be appropriate, which presumably everyone always knew. [Laughter]

Let me just comment about alternative C. We're in this evolving economy and communicating with the public, and we expect certain reactions of them and they expect us to have policy evolve and react in a certain way. Alternative C is a zero probability event, and I'm not quite sure I see the value of communicating by describing a counterfactual future that is so far from reality. I think we can find other ways to convey a sense of what looks likely to us going forward.

CHAIRMAN GREENSPAN. President Yellen.

MS. YELLEN. Thank you, Mr. Chairman. I support your recommendation to raise the federal funds rate 25 basis points. I can also support alternative B, although I have significant discomfort with the balance-of-risk statement in line 5. I agree with President Lacker's comment that it has now been made essentially meaningless and can't stay there long.

I would simply echo the opinion given by many people around this table that it is very important that we continue to communicate our views and what we know about future policy. I like the line 6 way of doing that. Obviously, we have to change the language as circumstances change and devise at some point an alternative to "measured," but writing an English sentence or two to explain where we think policy is going is, I think, the best thing to do. And I think we need to do that even when we get to the point where the expectation is that policy will remain unchanged and we will be watching news to decide where we go from there.

I've never been a fan of the balance-of-risk statement. I know there have been a number of committees that have tried to look at how to revise it. I suppose it's worth doing that again, but my sense is—I agree with President Lacker—that it is fatally flawed. But I believe that communication is very important and we should try to communicate in a less formulaic way.

CHAIRMAN GREENSPAN. Vice Chair.

VICE CHAIRMAN GEITHNER. I support your recommendation to move 25 basis points, and I support alternative B as described here. Actually, I think it's a pretty good statement, considering the alternatives. [Laughter] It does two important things in that it conveys an evolution in our signal in two respects. It acknowledges the change in the outlook in important dimensions, and it conveys more qualification and conditions on our serenity in a way that introduces more uncertainty. I think it's also desirable that it does so in a nice, relatively delicate way, and I believe it's a pretty good outcome—again, relative to the alternatives.

It's less clear to me what is going to make sense at the next meeting. Obviously, we're probably going to want to look at a broader range of changes to the statement, but I don't know what those are going to entail. And I suspect there's some risk that we're going to find that we're more comfortable with a less dramatic evolution than may be implied for the statement.

Let me make one comment on the minutes. There's a risk that the minutes, if they look more like a transcript, would suggest that we were all over the map, with a very thin consensus regarding anything about how to craft a signal for monetary policy. To me that would not do justice to the Committee and the discussion. I think the minutes would be best designed—I know we can't massage them ex ante—if they just acknowledge the reality that we want to take a look at a number of different dimensions about the signal when we convene in May and if they convey some of our motivation for wanting to look at that. I think that can be done without going so far as to suggest that our views are all over the map on this and that we're fundamentally uncomfortable.

CHAIRMAN GREENSPAN. We do have an inherent contradiction in having the minutes discuss how the minutes are going to be phrased! [Laughter] President Minehan.

MS. MINEHAN. Presumably, we'd not address that too much in the minutes; we can leave it to the transcript that will be released five years from now.

I'm in agreement with the 25 basis points. As I said before, I can go along with keeping alternative B the way it is. I have some concerns about it, and I'm not alone, but I think we've spent enough time on that.

I want to address, however, this issue that has been raised about the balance-of-risk statement, just preparatory to our May discussion. I think we should look at the time period from the middle of 2003 to now as being a very different, almost unique, period—at least it is in the 10 or 11 years that I've been around the Federal Open Market Committee. We knew with some certainty that

we were at a place where the fed funds rate and interest rates at the short end—everywhere on the curve, in general—were at historical lows. We knew that there was an incredible degree of uncertainty from a lot of things. And we knew that wherever neutral was, as my colleague President Santomero said at one point, it was above where we were. So the direction of the path for policy was clear, and we could convey that with some level of certainty. In my years on the Committee, that is a rare event. We sometimes know with a reasonable degree of certainty our likely next move, but we don't know what policy will be six or eight months down the road. We can't confirm the course of the fed funds curve.

So, if we say what our policy action was and why we did it, I think that has enough forward content to it. If one looks at the statements of the late 1990s, before we got into the balance-of-risk assessment, they had enough forward-looking content to them. We could add or subtract from that, depending on where we are, but that would keep it short and simple. We wouldn't have six or seven sentences that we'd have to mix and match in order to come up with something that, individually, we feel comfortable with.

In my view we need to think about our communication with the outside world as a broad range of things. We have testimony; we have speeches; we have an earlier release of the minutes; and we have our announcements. We have a whole range of vehicles to use to help us communicate. The announcement after the meeting doesn't have to do everything all in one place. And since it's coming out in a very timely way, I think it's better to make it short and give it a little bit of forward context. I'd say as much as needed to tell why we took the action we did but then leave it at that. That to me would be the best approach—unless it's absolutely necessary, as it has been over the last year and a half or more, to say something that's more forward-looking.

CHAIRMAN GREENSPAN. Thank you. Helen, did you want to say anything?

MS. HOLCOMB. Sure. I do support your 25 basis point recommendation and your proposed language. The need for a more flexible directive has been discussed at each of the four meetings I've attended, so I'm looking forward to seeing how you resolve it in May and whether or not I can understand what you did when I read it. [Laughter]

CHAIRMAN GREENSPAN. You've had the final word.

MS. SMITH. I'm reading from page 25 of the Bluebook. The wording would be: "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 increasing the federal funds rate to an average of around  $2\frac{3}{4}$  percent."

And then B modified is: "The Committee perceives that, with appropriate monetary policy action, the upside and downside risks to the attainment of both sustainable growth and price stability should be kept roughly equal. With underlying inflation expected to be contained, the Committee believes that policy accommodation can be removed at a pace that is likely to be measured. Nonetheless, the Committee will respond to changes in economic prospects as needed to fulfill its obligation to maintain price stability."

CHAIRMAN GREENSPAN. Call the roll.

MS. SMITH.

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

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Governor Olson	Yes
President Santomero	Yes
President Stern	Yes

CHAIRMAN GREENSPAN. The Federal Open Market Committee will be in recess until the Board of Governors meets and returns with its response to discount rate requests.

[Recess]

CHAIRMAN GREENSPAN. By unanimous vote, the Federal Reserve Board accepted all requests for discount rate changes.

MR. FERGUSON. All requests for changes of 25 basis points.

CHAIRMAN GREENSPAN. Yes, I'm terribly sorry. The Board approved all requests for changes of 25 basis points. There was a maverick there.

The last agenda item is to confirm that our next meeting is scheduled for May 3. More importantly, I will confirm that lunch is being served.

## END OF MEETING